

Commissioners  
Lea Márquez Peterson - Chairwoman  
Sandra D. Kennedy  
Justin Olson  
Anna Tovar  
Jim O'Connor



Matthew J. Neubert  
Executive Director

ARIZONA CORPORATION COMMISSION

DATE: APRIL 19, 2021

DOCKET NO.: RU-00000A-18-0284

TO ALL PARTIES:

Enclosed please find the recommendation of Assistant Chief Administrative Law Judge Sarah Harpring and Administrative Law Judge Julia L. Matter. The recommendation has been filed in the form of an Opinion and Order on:

RULEMAKING  
(ENERGY RULES)

Pursuant to A.A.C. R14-3-110(B), you may file exceptions to the recommendation of the Administrative Law Judge by efilings at [www.efiling.azcc.gov](http://www.efiling.azcc.gov) or by filing an original and thirteen (13) copies of the exceptions with the Commission's Docket Control at the address listed below by 4:00 p.m. on or before:

APRIL 29, 2021

The enclosed is NOT an order of the Commission, but a recommendation of the Administrative Law Judge to the Commissioners. Consideration of this matter has tentatively been scheduled for the Commission's Open Meeting to be held on:

MAY 4 AND 5, 2021

For more information, you may contact Docket Control at (602) 542-3477 or the Hearing Division at (602) 542-4250. For information about the Open Meeting, contact the Executive Director's Office at (602) 542-3931.

A handwritten signature in black ink, appearing to read "Matthew J. Neubert", with a horizontal line extending to the right.

MATTHEW J. NEUBERT  
EXECUTIVE DIRECTOR

1 **BEFORE THE ARIZONA CORPORATION COMMISSION**

2 COMMISSIONERS

3 LEA MÁRQUEZ PETERSON CHAIRWOMAN  
4 SANDRA D. KENNEDY  
5 JUSTIN OLSON  
6 ANNA TOVAR  
7 JIM O'CONNOR

8 IN THE MATTER OF THE NOTICE OF  
9 PROPOSED RULEMAKING REGARDING THE  
10 ARIZONA CORPORATION COMMISSION'S  
11 ENERGY RULES.

DOCKET NO. RU-00000A-18-0284

DECISION NO. \_\_\_\_\_

12 **OPINION AND ORDER**

13 DATES OF ORAL PROCEEDINGS: January 19 and 20, 2021

14 PLACES OF ORAL PROCEEDINGS: Via Teleconference

15 ADMINISTRATIVE LAW JUDGE: Sarah N. Harpring, Julia L. Matter, and Belinda A.  
16 Martin<sup>1</sup>

17 APPEARANCES: Maureen Scott, Deputy Chief of Litigation and Appeals,  
18 Legal Division, Wesley Van Cleve, Assistant Director,  
19 Legal Division, on behalf of the Utilities Division of the  
20 Arizona Corporation Commission.  
21  
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24  
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26

27 <sup>1</sup> Administrative Law Judge Belinda A. Martin presided over the oral proceedings. Administrative Law Judge Julia L.  
28 Matter reviewed the record for this matter in its entirety and prepared the Recommended Opinion and Order, with assistance  
from Assistant Chief Administrative Law Judge Sarah N. Harpring.



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**BY THE COMMISSION:**

This matter involves rulemaking to create a new Article 27, entitled “Energy Rules,” in Arizona Administrative Code (“A.A.C.”) Title 14, Chapter 2, the chapter containing the Arizona Corporation Commission’s (“Commission’s”) rules for fixed utilities. The new Article 27 is designed to establish mandatory efficiency and clean energy standards for public service corporations to follow in generating, procuring, and delivering electric service, with more flexible requirements for gas service. The new Article 27 also replaces the current resource planning and procurement process with a process that includes earlier Commission oversight and greater stakeholder involvement. In addition, this rulemaking repeals the Resource Planning and Procurement Rules (14 A.A.C. 2, Article 7), the Environmental Portfolio Standard Rule (A.A.C. R14-2-1618), the Renewable Energy Standard and Tariff Rules (14 A.A.C. 2, Article 18), the Electric Energy Efficiency Rules (14 A.A.C. 2, Article 24), and the Gas Energy Efficiency Rules (14 A.A.C. 2, Article 25) and amends A.A.C. R14-2-2302 and R14-2-2307 in the Net Metering Rules.

\* \* \* \* \*

Having considered the entire record herein and being fully advised in the premises, the Commission finds, concludes, and orders that:

**FINDINGS OF FACT****Process and Background for the Rulemaking****Existing Rules**

1. The Resource Planning and Procurement Rules,<sup>2</sup> adopted in 1989, require utilities defined as Load Serving Entities (“LSEs”) to meet the electric needs of their customers by choosing the best mix of resources with input from stakeholders in a transparent process. In Decision No. 71722 (June 3, 2010), the Commission amended the original Resource Planning and Procurement Rules to include consideration of a diverse portfolio of purchased power, utility-owned generation, renewables, demand-side management (“DSM”), and distributed generation. The Commission’s Resource Planning and Procurement Rules outline a process for each LSE to file an Integrated Resource Plan

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<sup>2</sup> A.A.C. R14-2-701 through R14-2-706.

1 (“IRP”). Each LSE’s proposed IRP assesses how it will meet forecasted annual peak and energy  
 2 demand through a balance of supply-side and demand-side resources over a specific time period. LSEs  
 3 are required to submit an IRP proposal every two years that outlines its future 15-year resource plan,  
 4 including a general outline of the procedures it will use to allow for public input and participation  
 5 before the plan is completed.

6 2. The Environmental Portfolio Standard (“EPS”) Rule,<sup>3</sup> adopted in Decision No. 63364  
 7 (February 8, 2001) and later modified in Decision No. 63486 (March 29, 2001), imposes requirements  
 8 for an LSE to obtain a specified percentage of total retail energy sold in a calendar year from new solar  
 9 resources or renewable electricity technologies.

10 3. The Renewable Energy Standard and Tariff (“REST”) Rules,<sup>4</sup> adopted in Decision No.  
 11 69127 (November 14, 2006), require affected utilities to satisfy an annual renewable energy  
 12 requirement, beginning with a 2006 standard of 1.25 percent of retail kilowatt-hours (“kWh”) sold and  
 13 increasing to a 2025 standard of 15 percent of retail kWh sold, by obtaining renewable energy credits  
 14 (“RECs”).<sup>5</sup> The Commission amended the REST Rules to clarify and update how the Commission  
 15 deals with renewable energy compliance in Decision No. 74882 (December 31, 2014).

16 4. The Net Metering Rules,<sup>6</sup> adopted in Decision No. 70567 (October 23, 2008), provide  
 17 consumers the opportunity to be compensated for installing a distributed technology resource, such as  
 18 rooftop solar panels, and to be compensated for energy generated in excess of their energy needs.

19 5. The Electric Energy Efficiency (“EEE”) Rules,<sup>7</sup> adopted in Decision No. 71819 (August  
 20 10, 2010), require an affected utility to achieve cumulative annual energy savings, measured in kWh,  
 21 equivalent to a percentage of an affected utility’s retail electric energy sales for a specific calendar year.  
 22 By December 31, 2020, an affected utility was required to achieve, from cost-effective DSM Energy  
 23 Efficiency (“EE”) programs, cumulative annual energy savings equivalent to at least 22 percent of its  
 24 retail electric energy sales for calendar year 2019.

25  
 26 <sup>3</sup> A.A.C. R14-2-1618.

27 <sup>4</sup> A.A.C. R14-2-1801 through R14-2-1816.

<sup>5</sup> A.A.C. R14-2-1804(B).

28 <sup>6</sup> A.A.C. R14-2-2301 through R14-2-2308.

<sup>7</sup> A.A.C. R14-2-2401 through R14-2-2419.

6. The Gas Utility Energy Efficiency (“GEE”) Rules,<sup>8</sup> adopted in Decision No. 72042 (December 10, 2010), require affected utilities to achieve, through DSM and renewable energy resource technology programs, by December 31, 2020, cumulative annual energy savings, expressed as therms or therm equivalents, equal to at least six percent of the affected utility’s retail gas energy sales for calendar year 2019.

#### **Background & Procedural History for this Rulemaking**

7. On August 22, 2016, then-Chairman Doug Little<sup>9</sup> opened Docket No. RE-00000Q-16-0289 (“REST Rules Docket”) for the Review, Modernization and Expansion of the Arizona REST Rules and associated rules. Written comments were received from interested persons in that docket from November 2016 until the opening of this docket.

8. On January 3, 2017, in Decision No. 75859,<sup>10</sup> the Commission established a methodology to determine the value and cost of distributed generation, approved an export rate and tariff for new interconnected residential solar customers, and ordered the Commission’s Utilities Division (“Staff”) to file potential modifications to the current Net Metering Rules<sup>11</sup> to comport with changes since their adoption. Staff filed a memorandum opening Docket No. RE-00000A-17-0260 on August 17, 2018.

9. On February 24, 2017, in Decision No. 75976, issued in a rate case for Trico Electric Cooperative, Inc. (“Trico”), the Commission approved an export rate for new distributed generation customers and grandfathered Trico’s existing distributed generation customers under full retail rate net metering.<sup>12</sup> Subsequently, the Commission also approved export rates for new distributed generation customers and grandfathered existing distributed generation customers under full retail rate net metering for Arizona Public Service Company (“APS”), in Decision No. 76295 (August 18, 2017); for Sulphur Springs Valley Electric Cooperative, Inc., in Decision No. 76465 (November 17, 2017); for Mohave Electric Cooperative, Inc., in Decision No. 76471 (November 20, 2017); for Graham County

<sup>8</sup> A.A.C. R14-2-2501 through R14-2-2520.

<sup>9</sup> Chairman Little left the Commission in October 2017.

<sup>10</sup> The Decision was issued in Docket No. E-00000J-14-0023, *In the Matter of the Commission’s Investigation of Value and Cost of Distributed Generation*.

<sup>11</sup> A.A.C. R14-2-2301 through R14-2-2308.

<sup>12</sup> Official notice is taken of this decision.

1 Electric Cooperative, Inc. in Decision No. 76693 (May 22, 2018); for Duncan Valley Electric  
 2 Cooperative Inc., in Decision No. 76897 (September 20, 2018); for Tucson Electric Power Company  
 3 (“TEP”) and UNS Electric, Inc. (“UNS Electric”), respectively, in Decision Nos. 76899 and 76900  
 4 (September 20, 2018); and for Navopache Electric Cooperative, Inc., in Decision No. 77130 (March  
 5 13, 2019).<sup>13</sup>

6 10. On May 12, 2017, then-Commissioner Boyd Dunn<sup>14</sup> opened Docket No. E-00000Q-17-  
 7 0138 (“Biomass Docket”) to investigate using forest bioenergy from public lands for energy, noting  
 8 that biomass fuel is a carbon-neutral renewable energy source that can reduce the risk to the public  
 9 from wildfires.

10 11. On January 30, 2018, in the REST Rules Docket, then-Commissioner Andy Tobin<sup>15</sup>  
 11 filed a proposed Energy Modernization Plan. On February 22, 2018, in the same docket, Staff filed a  
 12 Notice of Inquiry to evaluate the proposals set forth by Commissioner Tobin, outlining a list of  
 13 questions and inviting comment from interested persons. Then, on July 2, 2018, Staff filed a summary  
 14 of the responses received to the Notice of Inquiry and recommended that the Commission initiate a  
 15 new rulemaking and direct Staff to examine and propose revisions to the Resource Planning and  
 16 Procurement, EEE, GEE, and REST Rules.

17 12. On July 5, 2018, in the REST Rules Docket, Commissioner Tobin filed draft proposed  
 18 rules to implement his proposed Energy Modernization Plan, which he called the “Clean Resource  
 19 Energy Standard and Tariff” (“CREST”) Rules.<sup>16</sup>

20 13. On August 14, 2018, the Commission, at a Staff Open Meeting, directed Staff to initiate  
 21 the informal rulemaking process to evaluate the proposals for Arizona energy modernization.

22 14. On August 17, 2018, Staff docketed a memorandum requesting to have a docket opened  
 23 for purposes of exploring possible modifications to the Commission’s energy-related rules. As a result,  
 24 this docket was opened. Staff’s memorandum indicated that the following subjects would be  
 25 considered: (1) the REST Rules, (2) the EEE Rules, (3) the GEE Rules, (4) the Net Metering Rules, (5)

26  
 27 <sup>13</sup> Official notice is taken of these decisions.

<sup>14</sup> Commissioner Dunn left office in January 2021.

<sup>15</sup> Commissioner Tobin left the Commission in May 2019.

<sup>16</sup> See Correspondence by Commissioner Tobin filed July 5, 2018, in the REST Rules Docket.



the Resource Planning and Procurement Rules, (6) the Retail Electric Competition Rules (which include the EPS Rule),<sup>17</sup> (7) electric vehicles, (8) interconnection of distributed generation facilities, (9) blockchain technology, (10) technological developments in generation and delivery of energy, (11) forest bioenergy, (12) baseload security, (13) the statutory Biennial Transmission Assessment, and (14) other energy-related topics.

15. On October 4, 2018, in this docket, Commissioner Tobin docketed his Arizona Energy Modernization Plan and CREST Rules, proposing amendments to A.A.C. Title 14, Chapter 2, Article 18. In a cover letter, Commissioner Tobin explained the significant work that had been done by the Commission to gather information and stakeholder input on various energy-related topics. In particular, the cover letter referenced 22 other dockets<sup>18</sup> containing a documentary record supporting the proposed Arizona Energy Modernization Plan and CREST Rules, and 14 workshops<sup>19</sup> conducted

<sup>17</sup> A.A.C. R14-2-1601 through R14-2-1618.

<sup>18</sup> Docket Nos. E-01345A-08-0569 (*In the matter of the application of Arizona Public Service Company for approval of Demand Response Program*), E-01345A-10-0123 (*In the matter of the application of Arizona Public Service Company's Electric Vehicle Filing*), E-00000V-13-0070 (*Resource Planning and Procurement in 2013 and 2014*), E-00000XX-13-0214 (*In the matter of the Commission's investigation to address energy efficiency/demand side management*), E-00000J-14-0023 (*In the matter of the Commission's Investigation of Value and Cost of Distributed Generation*), E-00000V-15-0094 (*In the matter of Resource Planning and Procurement in 2015 and 2016*), E-01345A-15-0182 (*In the matter of the application of Arizona Public Service Company for a ruling relating to its 2016 Demand Side Management Implementation plan*), E-00000J-15-0182 (*Demand-side management and peak demand reductions*), E-01933A-15-0239 (*In the matter of the application of Tucson Electric Power Company for approval of its 2016 REST Implementation Plan*), E-01933A-15-0322 (*In the matter of the application of Tucson Electric Power Company for the establishment of just and reasonable rates and charges designed to realize a reasonable rate of return on the fair value of the properties of Tucson Electric Power Company devoted to its operations throughout the state of Arizona and for related approvals*), E-00000J-15-0347 (*In the matter of the inquiry into the rooftop solar industry in Arizona*), E-01345A-16-0036 (*In the matter of the application of Arizona Public Service Company for a hearing to determine the fair value of the utility property of the company for ratemaking purposes, to fix a just and reasonable rate of return thereon, to approve rate schedules designed to develop such return*), E-01345A-16-0176 (*In the matter of the application of Arizona Public Service Company for a ruling relating to its 2017 Demand Side Management Implementation Plan*), E-00000J-16-0257 (*In the matter of inquiry into reducing system peak demand costs*), the REST Rules Docket, E-00000C-17-0039 (*In the matter of the Arizona Corporation Commission Investigation Concerning the Future of the Navajo Generating Station*), E-00000U-17-0057 (*In the matter of Demand-side Management progress reports due by March 1, 2017 and status reports due by September 1, 2017, pursuant to Arizona Administrative Code R14-2-2409*), E-01345A-17-0134 (*In the matter of the application of Arizona Public Service Company for a Ruling relating to its 2018 Demand Side Management Implementation Plan*), the Biomass Docket, E-01933A-17-0250 (*In the matter of the application of Tucson Electric Power Company for approval of its 2018 Energy Efficiency Implementation Plan and for a waiver under A.A.C. R14-2-2419*), E-00000Q-17-0293 (*In the matter of evaluating Arizona's current and future baseload security*), and E-00000J-18-0266 (*In the matter of Commissioner Dunn's Inquiry into Electric Vehicles, Electric Vehicle Infrastructure, and Electrification of the Transportation Sector in Arizona*).

<sup>19</sup> Energy Efficiency Cost Effectiveness (March 18, 2014), Energy Efficiency Cost Recovery (March 31, 2014), Incorporating Energy Efficiency into Integrated Resource Planning (April 17, 2014), Rooftop Solar Industry (October 14, 2015), Integrated Resource Planning and Emerging Technologies (February 26, 2015), Integrated Resource Plans (July 18, 2016), Reducing System Peak Demand Costs (August 4, 2016), Demand-Side Management and Peak Demand Reduction Programs (November 29, 2016), Integrated Resource Plans (November 29, 2016), Battery Storage Technology (March 20, 2017), Coal Markets (April 6, 2017), REST Review (June 7, 2017), Baseload Security (November 9th, 2017), and Forest Bioenergy (December 5, 2017).



1 by the Commission on various energy-related topics. Included with the filing were reports,  
2 presentations, and other documentation compiled from the related dockets and workshops.

3 16. On November 7, 2018, at its Open Meeting, the Commission voted to begin a workshop  
4 process concerning retail electric competition in Arizona, starting in December 2018. The Commission  
5 also directed Staff to prepare, for consideration in December 2018, an electric vehicle policy and a  
6 policy for an electric generation buy-through program similar to the previously-approved AG-X  
7 program applicable to APS, TEP, and UNS Electric.

8 17. On November 20, 2018, a Stakeholder Meeting was held on Electric Vehicles,  
9 Infrastructure, and the Transportation Sector.

10 18. Also on November 20, 2018, Commissioner Dunn and then-Chairman Bob Burns<sup>20</sup>  
11 submitted a letter to the docket requesting that interested persons provide estimates regarding the costs  
12 and benefits of forest biomass energy use as a renewable energy source.

13 19. On November 29, 2018, Chairman Burns submitted a letter to the docket including  
14 questions and issues to discuss at the December 17, 2018, Open Meeting, regarding a draft Electric  
15 Vehicle policy.

16 20. Also on November 29, 2018, Commissioner Justin Olson submitted a letter to the docket  
17 regarding a workshop to be held on December 3, 2018, on retail electric competition, asking  
18 stakeholders to provide information on how retail competition has affected rates in states with a market  
19 for electricity supply.

20 21. On November 30, 2018, Staff filed a memorandum to the Commissioners proposing a  
21 timeline for workshops to gather stakeholder input on the redesign of the Commission's energy-related  
22 rules.

23 22. On December 3, 2018, a Retail Electric Competition Workshop was held.

24 23. On December 7, 2018, Arizonans for Electric Choice and Competition and Calpine  
25 Energy Solutions, LLC filed a Joint Motion to Adopt Policy Statement and Bifurcate Retail Electric  
26 Competition Rules.

27  
28 <sup>20</sup> Commissioner Burns left the Chairman position and office in January 2021.

1       24.     On December 10, 2018, a Stakeholder Meeting was held on Forest Bioenergy.

2       25.     Also on December 10, 2018, Staff filed a draft Policy Statement Regarding an  
3 Alternative Generation/Buy-Through Program for Commission consideration. Comments on the  
4 policy were filed by several organizations and individuals.

5       26.     On December 11, 2018, a Stakeholder Meeting was held on Electric Vehicles,  
6 Infrastructure, and the Transportation Sector.

7       27.     Also on December 11, 2018, Commissioner Olson submitted a memorandum to the  
8 docket regarding the constitutionality of retail electric competition.

9       28.     On December 12, 2018, Staff docketed a Staff Policy Statement for Electric Vehicles,  
10 Electric Vehicle Infrastructure, and the Electrification on the Transportation Sector in Arizona. On  
11 December 14, 2018, Staff submitted a proposed amendment to the policy. Comments on the draft  
12 policy were filed by several organizations and individuals.

13       29.     At the Open Meeting on December 17 and 18, 2018, the Commission adopted three  
14 separate energy-related policy statements: a Policy Statement Regarding the Role of Forest Bioenergy  
15 in Arizona (“Biomass Policy”), issued in the Biomass Docket; a Policy Statement Regarding an  
16 Alternative Generation/Buy-Through Program (“AG-Y Policy”), issued in this docket; and a Policy  
17 Statement for Electric Vehicles, Electric Vehicle Infrastructure, and the Electrification of the  
18 Transportation Sector in Arizona (“EV Policy”), also issued in this docket. The Commission also  
19 provided direction on the timing of Staff’s draft energy-related rules.

20       30.     On December 19, 2018, a separate docket was opened for purposes of considering  
21 possible modifications to the Commission’s Retail Electric Competition Rules, Docket No. RE-  
22 00000A-18-0405 (“Competition Rules Docket”).

23       31.     On January 25, 2019, Commissioner Sandra Kennedy submitted a letter to the docket  
24 asking Staff and interested persons to consider a proposal to increase the REST to 50 percent by 2028.

25       32.     On February 6, 2019, the Western Way docketed a report on the *Economic and Fiscal*  
26 *Benefits of Rural Utility-Scale Renewable Energy Facilities in Arizona*, which included a case study  
27 on the economic and fiscal benefits associated with a solar energy facility with battery storage in Yuma  
28 County.

33. On February 8, 2019, Commissioner Kennedy submitted a letter to the docket regarding an offer from Arizona State University (“ASU”) to provide a tool for modeling and evaluating the integration of electric generating sources into the grid.

34. Also on February 8, 2019, Commissioner Kennedy submitted a letter to the docket proposing a REST update, including increasing the REST to 50 percent by 2028, increasing the carveout for distributed energy and adding an equal distributed storage requirement, using microgrids and distributed solar with storage, restoring and expanding incentives for distributed solar, and providing benefits to tribal communities impacted by the transition away from coal generation (“KREST I”).

35. On February 11, 2019, Staff filed a letter outlining the dates and topics for upcoming stakeholder meetings and workshops.

36. On February 13, 2019, Staff filed an additional letter providing notice of scheduled stakeholder meetings and workshops to be held on February 22, March 14, and March 26, 2019.

37. On February 20 and 21, 2019, Staff filed a letter rescheduling to February 25, 2019, the February 22, 2019, Stakeholder Meeting and Workshop to discuss possible modifications to the Commission’s REST, EPS, and Net Metering Rules.

38. On February 21, 2019, Commissioner Olson filed a letter in the docket requesting that the Commission prioritize a discussion on retail electric competition.

39. On February 22, 2019, in Decision No. 77090,<sup>21</sup> the Commission ordered all utilities subject to the REST Rules<sup>22</sup> to begin working with Staff to develop a comprehensive plan for biomass generation as part of each utility’s REST plan.

40. On February 25, 2019, the scheduled Stakeholder Meeting and Workshop on the REST, EPS, and Net Metering Rules was held.

41. On February 28, 2019, Staff filed a letter in the docket requesting that interested persons file comments and proposed language regarding the REST, EPS, and Net Metering rules by March 25,

<sup>21</sup> The Decision was issued in the Biomass Docket .

<sup>22</sup> Decision 77090 identified the following utilities as subject to the REST Rules: Arizona Public Service Company; Tucson Electric Power Company; UNS Electric, Inc.; Ajo Improvement Company; Morenci Water and Electric Company; Duncan Valley Electric Cooperative, Inc.; Graham County Electric Cooperative, inc.; Navopache Electric Cooperative, Inc.; Trico Electric Cooperative, Inc.; Sulphur Springs Valley Electric Cooperative, Inc.; and Mohave Electric Cooperative, Inc.

1 2019. Staff also announced that another Stakeholder Meeting and Workshop would be held on April  
2 17, 2019.

3 42. Between February 28 and March 29, 2019, a number of organizations and some  
4 individual stakeholders filed responses.

5 43. On March 11, 2019, Commissioner Kennedy filed a memorandum in the docket  
6 regarding the ASU LightWorks Initiative to develop energy modeling tools.

7 44. On March 13, 2019, at a Staff Open Meeting, the Commission discussed the February  
8 25, 2019, Stakeholder Meeting and Workshop; Staff requested that Commissioners make filings in the  
9 docket to provide additional direction concerning the provisions to be included in the energy-related  
10 rulemaking; and Staff provided information concerning its plans to hold upcoming Staff Workshops  
11 on retail electric competition, EV Policy implementation, EEE and GEE, and block chain technology.  
12 Commissioners also discussed the best path forward and their varying objectives as well as potential  
13 legal issues related to retail electric competition.

14 45. On March 14, 2019, an Electric Vehicles Stakeholder Meeting and Workshop was held.

15 46. On March 25, 2019, Staff filed a draft Implementation Plan for the EV Policy.

16 47. On March 26, 2019, another Electric Vehicles Stakeholder Meeting and Workshop was  
17 held.

18 48. Also on March 26, 2019, Commissioner Kennedy submitted a letter to the docket  
19 regarding new electric vehicle technology.

20 49. On April 1, 2019, Chairman Burns filed a copy of a March 2019 draft report from the  
21 U.S. Department of Energy Grid Modernization Laboratory Consortium on the Benefit-Cost Analysis  
22 for Utility-Facing Grid Modernization Investments.

23 50. On April 3, 2019, Staff filed a letter in the docket rescheduling the April 17, 2019,  
24 Stakeholder Meeting to occur on April 29 and 30, 2019, and adding topics to be covered. Staff stated  
25 that for the Stakeholder Meeting, it would have prepared, for review and discussion, possible  
26 modifications to the Commission's energy-related rules.

27 51. On April 4, 2019, Commissioner Tobin filed a letter in the docket regarding biomass  
28 energy, encouraging the Commission to revise the REST rules to address biomass fuels as included in

1 the Biomass Policy.

2 52. On April 5, 2019, Commissioner Olson submitted a letter to the docket regarding his  
3 position on the REST, proposing to replace the REST with a requirement that regulated utilities invest  
4 in the most cost-effective mix of energy generation methods.

5 53. On April 12, 2019, Commissioner Kennedy filed a letter in the docket proposing that  
6 the energy-related rules include incentives for rooftop solar and energy storage, and to promote  
7 microgrids.

8 54. On April 25, 2019, Staff filed a Staff Report regarding modifications to the  
9 Commission's energy-related rules, specifically the REST, Resource Planning and Procurement, EEE,  
10 GEE, EPS, and Net Metering Rules. Staff set forth its initial proposed draft energy-related rules ("First  
11 Draft") and included a summary of comments filed by stakeholders in this docket and in the Biomass  
12 Docket. Staff also announced two Stakeholder Meetings to discuss the First Draft, to be held on April  
13 29 and 30, 2019, and requested that interested persons docket written comments. Staff indicated that  
14 it would submit a separate proposal regarding retail electric competition at a future date. Staff stated  
15 that in creating the First Draft, Staff had considered written stakeholder comments, information from  
16 workshops, and Commissioner proposals. Staff stated that it also had considered recent trends in  
17 legislative revisions, key policy design features, regulatory utility compliance with interim targets, past  
18 and projected impacts on renewables development, and historical compliance costs.

19 55. On April 26, 2019, Commissioner Dunn filed a letter in the docket including proposals  
20 for, *inter alia*, a clean energy standard and revised REST, a distributed renewable storage requirement,  
21 a revised distributed renewable energy requirement, incentives for the use of forest bioenergy, DSM  
22 focused on peak reduction programs, incentives for off-peak electric vehicle charging, a revised EE  
23 standard, relaxed requirements for Arizona's electric cooperatives, and potential deletion of the GEE  
24 standard. Commissioner Dunn requested that Commissioners, Staff, stakeholders, and the public review  
25 and provide comments on the proposals.

26 56. On April 29, 2019, Staff hosted a Stakeholder Meeting to discuss the First Draft.

27 57. On May 10, 2019, Staff docketed a Memorandum and Proposed Order for an EV Policy  
28 Implementation Plan, for potential deliberation at the Commission's May 2019 Open Meeting



1           58.     On May 16, 2019, the Western Way docketed a March 2019 report prepared for the  
2 Western Way and the Yuma County Chamber of Commerce by Development Research Partners,  
3 entitled *The Economic Benefits of Arizona Rural Renewable Energy Facilities* (“AZ Rural Economic  
4 *Benefits*”).

5           59.     On May 30, 2019, at its Staff Open Meeting, the Commission engaged in discussion  
6 concerning the major provisions that should be included in the energy-related rules and the process that  
7 should be used to move forward with the energy-related rules. The Commissioners generally expressed  
8 support for a clean energy standard.

9           60.     On May 20, 2019, the Arizona Department of Environmental Quality (“ADEQ”)  
10 submitted comments on the possible modifications to the energy-related rules, which focused on health  
11 impacts, ozone pollution and the regulation thereof, air quality benefits from a clean energy goal,  
12 potential benefits from energy produced using biomass, and benefits from the use of electric vehicles  
13 (“ADEQ Comments”). ADEQ cited several sources for its data.

14           61.     On June 3, 2019, a Procedural Order was issued regarding eFiling.

15           62.     On June 7, 2019, Staff docketed a second Memorandum and Proposed Order for an EV  
16 Policy Implementation Plan, this time for potential deliberation at the Commission’s June 2019 Open  
17 Meeting. Commissioner Olson submitted three proposed amendments on June 7 and 10, 2019.  
18 Commissioner Dunn submitted a proposed amendment on June 10, 2019, which was revised on July  
19 10, 2019. Commissioner Kennedy submitted two proposed amendments on June 10, 2019, which were  
20 revised on June 11 and 12, 2019. Commissioner Kennedy also submitted a third, fourth, and fifth  
21 amendment on July 9, 2019. Chairman Burns submitted a proposed amendment on July 9, 2019.

22           63.     Also on June 7, 2019, Chairman Burns submitted a letter to the docket regarding clean  
23 energy standards, asking interested persons to provide comments on a list of possible standards and to  
24 address a list of questions.

25           64.     On June 12, 2019, at its Open Meeting, the Commission discussed and received  
26 extensive comment on the EV Policy Implementation Plan, but did not hold a vote.

27           65.     On July 2, 2019, Staff filed a Memorandum including Staff’s Second Revised Proposed  
28 Draft Rules for the Possible Modifications to the Commission’s Energy Rules (“Second Draft”). Staff



1 included a summary of written comments filed by interested persons between April 29 and May 30,  
 2 2019, and again requested interested persons to file written comments. Staff indicated that the Second  
 3 Draft had been created following the April 29, 2019, Stakeholder Meeting and written comments  
 4 received from interested persons. Staff stated that the following major changes were made from the  
 5 First Draft: (1) definitions were added; (2) the articles were rearranged; (3) applicable resources were  
 6 updated, including classifying EE as a clean resource; (4) the renewable energy goal was set at 45  
 7 percent by 2035; (5) the clean peak goal was set at 20 percent by 2035; (6) the distributed renewable  
 8 storage requirement was set at 10 percent by 2035; (7) a requirement was added for electric utilities to  
 9 offer performance-based incentives for energy storage systems, with specific caps; and (8) EE was  
 10 applied to electric and gas utilities. Staff also announced that another Stakeholder Meeting would be  
 11 held on July 30, 2019.

12 66. At the July 10 and 11, 2019 Open Meeting, after passing several amendments, the  
 13 Commission approved an EV Policy Implementation Plan.

14 67. On July 30 and 31, 2019, Staff held a Stakeholder Meeting and Workshop addressing  
 15 retail electric restructuring and the Second Draft. On July 30, 2019, Staff also docketed the stakeholder  
 16 presentations provided for the Stakeholder Meeting and Workshop.

17 68. Also on July 30, 2019, a joint stakeholder group comprised of 25 organizations<sup>23</sup>  
 18 submitted a proposal for modifications to the Commission's energy-related rules. The proposal  
 19 included enforceable standards for 100 percent clean energy by 2045, 50 percent renewable energy by  
 20 2030, 10 percent distributed generation by 2030, and 35 percent cumulative EE savings by 2030.

21 69. On August 1, 2019, in Docket No. E-00000V-19-0034 ("IRP Docket"), APS filed its  
 22 2019 Preliminary IRP, which provided estimates of a range of costs and carbon impacts for the APS  
 23 system from a variety of technology options.

24 70. On August 2, 2019, in this docket, in response to a request from Commissioner

25 <sup>23</sup> American Council for an Energy-Efficient Economy, Arizona Faith Network, Arizona Interfaith Power and Light,  
 26 Arizona Solar Energy Industries Association, Arizona Public Health Association, Black Mesa Water Coalition, CHISPA  
 27 Arizona, Conservative Alliance for Solar Energy, Diné C.A.R.E., E4TheFuture, Elders Climate Action, Environment  
 28 Arizona Research & Policy Center, Natural Resources Defense Council, Our Mother of Sorrows Catholic Church,  
 Physicians for Social Responsibility, Sierra Club, Solar Energy Industries Association, Solar United Neighbors, Southwest  
 Energy Efficiency Project, Sunrun, Tó Nizhóni Ání, Tucson 2030 District, Vote Solar, Western Grid Group, and Western  
 Resource Advocates.

1 Kennedy, APS filed a letter identifying the groups that had participated in APS's IRP stakeholder  
2 process, which involved eight stakeholder meetings beginning in December 2018.

3 71. On August 7, 2019, the July 30 and 31, 2019, Stakeholder Meeting and Workshop  
4 continued for stakeholder presentations and discussion concerning the Second Draft. On the same date,  
5 at a Staff Open Meeting, the Commission discussed issues raised at the Stakeholder Meeting and  
6 Workshop held on July 30 and 31, 2019, as well as how to obtain additional information from  
7 stakeholders and other states.

8 72. On August 15, 2019, Commissioner Olson submitted a letter to the docket regarding  
9 amendments to the REST Rules, proposing that the Commission consider capping the funds that  
10 utilities could spend in excess of the lowest cost method of energy generation.

11 73. On September 6, 2019, Staff filed a Memorandum providing notice of a September 19  
12 and 20, 2019, Stakeholder Meeting and Workshop to discuss each LSE's 2019 preliminary IRP and the  
13 Second Draft. Staff also requested that interested persons file written comments in this docket and the  
14 IRP Docket.

15 74. On September 11, 2019, at a Staff Open Meeting, the Commission obtained information  
16 from the Arizona Department of Agriculture's Weights and Measures Services Division concerning  
17 the legal requirement for providers of public electric vehicle charging to sell fuel on a kWh or joules  
18 basis rather than on a time basis. The Commission also discussed the effectiveness of the EEE and  
19 GEE Rules and, concerning the Competition Rules Docket, the process for considering Retail Electric  
20 Competition Rules.

21 75. On September 19, 2019, a Stakeholder Meeting and Workshop was held to discuss, *inter*  
22 *alia*, the IRP Docket and this docket.

23 76. On September 25, 2019, Sierra Club, Grand Canyon Chapter ("Sierra Club") submitted  
24 an *Arizona Coal Plant Valuation Study: Economic Assessment of Coal-Burning Power Plants in*  
25 *Arizona and Potential Replacement Options*, prepared for Sierra Club by Strategen Consulting, LLC  
26 ("Strategen") and dated September 18, 2019 ("*Arizona Coal Plant Valuation Study*").

27 77. On October 15, 2019, Chairman Burns filed a letter outlining a proposed IRP process  
28 based on discussions at meetings of the National Association of Regulatory Utility

1 Commissioners/National Association of State Energy Offices (“NARUC/NASEO”) Task Force on  
2 Comprehensive Electricity Planning, in which Chairman Burns and his policy advisor participated.

3 78. On December 27, 2019, in compliance with Decision No. 77289, TEP, UNS Electric,  
4 and APS filed a joint statewide transportation electrification plan.

5 79. On December 31, 2019, Arizona Electric Power Cooperative, Inc. (“AEPCO”) filed  
6 comments criticizing the *Arizona Coal Plant Valuation Study*.

7 80. On January 8, 2020, Commissioner Kennedy filed a letter describing the Kennedy  
8 Renewable Energy Standard and Transition Plan II (“KREST II”). KREST II included a 50-percent  
9 renewable energy standard by 2028 and a 100-percent carbon-free emissions standard by 2045,  
10 eliminated the distributed generation carveout from the REST rules and included a requirement for 10  
11 percent of retail sales to be sourced from distributed generation, proposed a task force to address  
12 renewable energy development on tribal lands, proposed a Commission investigation of securitization  
13 and reinvestment of bond funds for energy transition costs, included resiliency and reliability  
14 provisions, and required utilities to address their water use.

15 81. On January 15, 2020, at a Staff Open Meeting, the Commission discussed KREST II as  
16 well as the best process to get additional information from stakeholders and move forward with revising  
17 the Second Draft. Staff informed the Commission that Staff would be providing another revised draft.

18 82. On February 19, 2020, Staff filed Staff’s third revised draft of proposed modifications  
19 to the Commission’s Energy Rules (“Third Draft”). Staff indicated that it had revised the Second Draft  
20 following feedback received at workshops, written comments submitted to the docket, and a review of  
21 relevant energy policies from across the U.S. Staff stated that the major changes included new  
22 reporting requirements, standards instead of goals, revised standards, programs to encourage new  
23 technology and allow for greater participation in the IRP process, and a more defined compliance  
24 framework. Staff summarized the changes in detail and again requested that interested persons provide  
25 written comments. Staff also stated that the Third Draft would be considered at a Stakeholder Meeting  
26 and Workshop to be held on March 10 and 11, 2020.

27 83. On February 25 and 26, 2020, a Stakeholder Meeting and Workshop was held  
28 concerning the Competition Rules Docket.

84. On March 10 and March 11, 2020, Staff hosted a Stakeholder Meeting and Workshop to discuss the Third Draft.

85. On March 11, 2020, Ceres docketed a February 20, 2020, report prepared by Strategen, entitled *Arizona Renewable Energy Standard and Tariff: 2020 Progress Report* (“*Arizona REST 2020 Progress Report*”), which provided an analysis of the costs and benefits of the REST Rules since their adoption.

86. On March 12, 2020, Western Resource Advocates (“WRA”) docketed a presentation regarding a *Western Interconnect Clean Energy Study* commissioned by it and the Clean Air Task Force and completed by DeSolve, LLC and Carbon Impact Consulting, which had been provided during the Stakeholder Meeting and Workshop (“*Western Interconnect Clean Energy Study*”). The *Western Interconnect Clean Energy Study* included modeling results performed using the Gen X Configurable Electricity Resource Capacity Expansion Model included in a November 27, 2017, MIT Energy Initiative Working Paper.

87. Also on March 12, 2020, a group of 32 organizations<sup>24</sup> (“Joint Stakeholders”) filed the same proposal originally filed in this docket on July 30, 2019, including proposed Joint Stakeholder Rules.

88. Also on March 12, 2020, Commissioner Lea Márquez Peterson filed a letter to the docket requesting cost analyses and customer impact reports to aid in creating a final rules package and in evaluating various energy policy proposals.

89. On March 13, 2020, Interwest Energy Alliance (“Interwest”) filed a copy of its presentation made at the March 11, 2020, Workshop, which provided data supporting a clean energy standard, the use of renewables, the use of an energy implementation plan, and the use of all-source requests for proposals (“ASRFPs”) and independent monitors.

90. On March 18, 2020, the Joint Stakeholders filed a copy of the presentation made on their behalf at the March 2020 Workshop. Also on March 18, 2020, The Nature Conservancy filed a copy of its presentation made at the March 2020 Workshop, in which it cited multiple sources of data

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<sup>24</sup> The additional organizations are: Grand Canyon Trust, Yavapai Climate Change Coalition, Oculus-Studio, League of Women Voters Arizona, Solar Gain, Citizens’ Climate Lobby Arizona, and the Earth Justice Ministry of Unitarian Universalist Congregation of Phoenix.

1 concerning, *inter alia*, federal air quality violations in Arizona and sources of carbon emissions.

2 91. On March 19, 2020, the Joint Stakeholders filed a response to Commissioner Márquez  
3 Peterson's March 12, 2020, letter, listing and summarizing a number of studies that, *inter alia*, analyze  
4 public opinion about energy-related and climate-change-related issues among Arizona voters, the costs  
5 of clean energy, the economic and non-economic benefits of the REST, the value of rooftop solar, the  
6 economic and non-economic benefits of EE, the costs of EE, and the benefits of transitioning away  
7 from coal generation.

8 92. Also on March 19, 2020, Ceres filed comments supporting clean energy, renewable  
9 energy, and EE standards, citing several resources for supportive economic and non-economic data.

10 93. Late on March 19, 2020, the Joint Stakeholders filed their policy recommendations for  
11 the energy-related rules.

12 94. On March 20, 2020, Commissioner Márquez Peterson filed a letter to the docket  
13 outlining the policy positions she supported and requesting that the Commission adopt a Policy  
14 Statement regarding the Commission's energy policy to guide the process of adopting new rules. *Inter*  
15 *alia*, Commissioner Márquez Peterson supported a 100-percent clean energy standard to be achieved  
16 by 2050, use of energy implementation plans and ASRFPs, and data-driven decisions regarding  
17 renewables, EEE, distributed generation plus storage, and deployment of electric vehicles.

18 95. Also on March 20, 2020, Conservatives for Responsible Stewardship provided a copy  
19 of its presentation made at the March Workshop, which included data on the cost of energy by resource  
20 type, the pricing of solar-plus-battery power purchase agreements, and the level of solar irradiance in  
21 Arizona.

22 96. Also on March 20, 2020, Interwest filed a response to Commissioner Márquez  
23 Peterson's March 12, 2020, letter, providing responsive data from multiple cited sources.

24 97. On March 23, 2020, APS also responded to Commissioner Márquez Peterson's letter  
25 by filing two presentations that previously had been shared at workshops. One was an APS presentation  
26 on its Clean Energy Commitment. The other was a presentation prepared by E3:  
27 Energy+Environmental Economics ("E3") in August 2019, providing APS IRP Stakeholder Screening  
28 Tool Final Analysis Results and including data, *inter alia*, on the costs and carbon impacts for various



1 energy scenarios.

2 98. Also on March 23, 2020, Commissioner Olson filed a letter explaining his position on  
3 the proposed energy-related rule modifications, including that the Commission should replace the  
4 REST with a requirement that utilities invest in the most cost-effective mix of energy generation  
5 methods or, alternatively, should impose a cap on costs exceeding the lowest cost method and that  
6 ASRFPs and independent monitors should be used.

7 99. On March 25, 2020, Chairman Burns filed a letter in the docket clarifying his policy  
8 positions for the Commission's energy-related rules and explaining where the Commission was in the  
9 rule-making process. Chairman Burns provided a link to data on recent renewable energy prices in  
10 western states.

11 100. Also on March 25, 2020, Commissioner Kennedy submitted a letter to the docket  
12 regarding her policy positions for the Commission's energy-related rules. Commissioner Kennedy  
13 cited the Intergovernmental Panel on Climate Change's 2019 Report for Policymakers to support the  
14 need for aggressive decarbonization to mitigate global warming; stated that she supported a 100-  
15 percent clean energy standard by 2040, but could support a 2050 deadline to obtain the support of a  
16 majority of Commissioners; and further stated that the data in the docket submitted by numerous  
17 stakeholders supports a 50-percent REST by 2030 and a 35-percent EE standard by 2030.  
18 Commissioner Kennedy cited several data sources in her letter.

19 101. On April 6, 2020, Sierra Club filed a response to the December 31, 2019, comments  
20 filed by AEPCO on the *Arizona Coal Valuation Study*. The response was in the form of a report  
21 prepared by Sierra Club and Strategen to answer AEPCO's concerns and to provide clarification and  
22 additional data.

23 102. On April 8, 2020, Southwest Energy Efficiency Project ("SWEEP") filed a letter  
24 supporting significant modifications to the Commission's IRP process and the use of EE standards, and  
25 providing a copy of the presentations made by SWEEP at the March 10, 2020, Workshop, entitled  
26 *Energy Efficiency: Standards Versus IRPs* ("EE Standards vs. IRPs") and *The Effectiveness and Value*  
27 *of Energy Efficiency Resource Standards* ("Effectiveness & Value of EE Standards"). Both  
28 presentations cited data sources.



1           103. On May 7, 2020, Commissioner Kennedy submitted a letter to the docket requesting  
2 stakeholder input on the potential engagement of a third-party administrator for the DSM programs for  
3 all Class A utilities.

4           104. On May 11, 2020, the Mayor and City Council of Tucson filed Resolution No. 23166,  
5 dated April 21, 2020, supporting the Commission's adoption of a clean energy standard of 100 percent  
6 by 2050.

7           105. On May 14, 2020, Chairman Burns submitted a letter to the docket regarding his  
8 proposed modified IRP process, which he believed would obviate the need for use of a third-party  
9 administrator for DSM programs as proposed by Commissioner Kennedy. Chairman Burns stated that  
10 unlike the Third Draft, his proposal would integrate EE and DSM into the IRP process by treating them  
11 as any other generation resource for purposes of a utility's ASRFP and cost recovery. Chairman Burns  
12 stated that his proposal also would include substantial stakeholder participation, Commission approval  
13 of a utility's load forecast, Staff or Commission approval of the ASRFP, and Commission approval of  
14 a utility's action plan.

15           106. On May 19, 2020, Ceres filed a letter along with an April 2020 report created by Energy  
16 Innovation Policy & Technology LLC and Cleanenergy.org, entitled *Making the Most of the Power*  
17 *Plant Market: Best Practices for All-Source Electric Generation Procurement* ("Best Practices for All-  
18 *Source Procurement*"). The report cited numerous sources for the data presented therein.

19           107. On June 11, 2020, Sunrun filed a letter requesting that the Commission include in the  
20 energy-related rules distributed renewable energy and distributed renewable storage requirements and  
21 directives for distributed renewable storage aggregations. Sunrun supported having the energy-related  
22 rules limit the distributed generation definition to non-utility-owned generation resources.

23           108. On June 26, 2020, in the IRP Docket, APS filed its 2020 IRP ("APS 2020 IRP"), which  
24 analyzed multiple portfolios to achieve 2030 and 2050 resource goals, including a goal of delivering  
25 100 percent clean, carbon-free, affordable electricity by 2050.

26           109. Also on June 26, 2020, in the IRP Docket, TEP filed its 2020 IRP ("TEP 2020 IRP"),  
27 which stated its long-term strategy was to transition fully to clean energy.

28           110. On June 30, 2020, the Mayor of the City of Phoenix filed a letter supporting expanded

1 investment in renewable energy and a clean energy standard of 100 percent by 2050, with interim  
2 targets in 2030 and 2035.

3 111. Also on June 30, 2020, the Coconino County Board of Supervisors filed a letter  
4 supporting a clean energy standard of 100 percent by 2050, with interim standards for 2030 and 2040.

5 112. On July 2, 2020, the Mayor and City Council of Flagstaff filed Resolution No. 2020-  
6 09, declaring a climate emergency and calling on the State of Arizona, among others, to initiate a  
7 transition and climate emergency mobilization effort to mitigate global warming and create high-  
8 quality, good-paying jobs with comprehensive benefits for those who will be impacted by the transition.

9 113. On July 6, 2020, two members of the Mesa City Council filed a letter on behalf of the  
10 City of Mesa encouraging the Commission to adopt a clean energy standard of 100 percent by 2050,  
11 with interim standards for 2030 and 2040.

12 114. On July 9, 2020, the City of Tempe filed a letter supporting Commission adoption of a  
13 clean energy standard of 100 percent by 2050, with an interim target for 2030.

14 115. On July 13, 2020, a subset of the Joint Stakeholders filed a letter supporting the use of  
15 securitization and other methods to facilitate a just and equitable transition to clean energy in Arizona,  
16 along with a November 2018 Sierra Club report, entitled *Harnessing Financial Tools to Transform the*  
17 *Electric Sector*, and a second document appearing to be an excerpt from a larger document, entitled  
18 *Tradeoffs in Financial Transition: "Levers and knobs."*

19 116. On July 15, 2020, at Open Meeting, the Commission discussed but did not vote on the  
20 Third Draft.

21 117. The specific written comment filings described above are only a small portion of the  
22 written comments received by the Commission between October 26, 2018, and July 16, 2020. In all,  
23 informal written comments and information on various energy-related topics were submitted to the  
24 docket by numerous individual stakeholders and by or on behalf of the following entities:

- 25 • 3Degrees Group, Inc.
- 26 • AARP
- 27 • Advanced Energy Buyers Group
- 28 • Advanced Energy Economy
- Ajo Improvement Company

- Alliance for Industrial Efficiency
- Alliance for Transportation Electrification
- American Council for an Energy-Efficient Economy
- American Council on Consumer Awareness, Inc.
- American Express
- APS
- Arizona Chapter of the Physicians for Social Responsibility
- Arizona Competitive Power Alliance
- ADEQ
- Arizona Electric Power Cooperative, Inc.
- Arizona Faith Network
- Arizona Free Enterprise Club
- Arizona Interfaith Power and Light
- Arizona Petroleum Marketers Association
- Arizona PIRG Education Fund (“PIRG”)
- Arizona Public Health Association
- APS
- Arizona Solar Energy Industries Association (“AriSEIA”)
- Arizona Technology Council
- Arizona Transit Association
- Arizonans for Electric Choice and Competition
- Ball Corporation
- Biosphere Systems International Foundation
- Black Mesa Water Coalition
- BYD North America, Ltd.
- Calpine Energy Solutions, LLC
- Center for Economic Integrity
- Center for Resource Solutions (“CRS”)
- Ceres BICEP Network
- ChargePoint, Inc.
- CHISPA Arizona
- City of Flagstaff
- City of Fountain Hills
- City of Mesa
- City of Phoenix
- City of Scottsdale
- City of Tempe
- City of Tucson
- Clean Power Technologies, LLC
- Coconino County Board of Supervisors
- Conservative Alliance for Solar Energy
- Conservatives for Responsible Stewardship
- Consumer Federation of America
- Consumer Reports
- The Crosier Fathers and Brothers of Phoenix

- Crosier Village Ministries
- Diné C.A.R.E.
- Direct Energy Business, LLC
- E4TheFuture
- Earth Justice Ministry of Unitarian Universalist Congregation of Phoenix
- Elders Climate Action
- Electrify America, LLC
- eMotorWerks
- Energy Storage Association
- Environment Arizona Research & Policy Center
- EVBox
- EVGo
- First Solar, Inc.
- Freeport Minerals Corporation
- Grand Canyon State Electric Cooperative Association, Inc. ("GCSECA")
- Grand Canyon Trust
- Green Earth Energy & Environmental, Inc.
- Green Machine Power, LLC
- Greenlots
- HM3 Energy
- Ingersoll Rand
- International Brotherhood of Electrical Workers, Arizona State Association
- Interwest
- Just Energy
- Kids Climate Action Network
- League of Women Voters Arizona
- LEAN Energy US
- Morenci Water and Electric Company
- National Energy Marketers Association
- National Housing Trust
- Natural Resources Defense Council
- Nature Conservancy in Arizona
- Northern Arizona University's Ecological Restoration Institute
- Oculus-Studio
- ON Semiconductor
- Our Mother of Sorrows Catholic Church
- Paired Power
- Pascua Yaqui Tribe
- Phoenix Arizona Electric Auto Association
- Physicians for Social Responsibility, Arizona Chapter
- Pima County
- Plug In America
- Power Development
- Prescott Electric Vehicle Association
- Primavera Foundation

- ProgressNow Arizona
- Proterra, Inc.
- Reclaim
- Residential Utility Consumer Office (“RUCO”)
- Retail Energy Supply Association
- Salt River Project Agricultural Improvement & Power District
- Schneider Electric
- Siemens Digital Grid
- Sierra Club
- Solar Energy Industries Association
- Solar Gain
- Solar United Neighbors of Arizona (“SUN Arizona”)
- Sonoran School District
- SWEEP
- Southwest Gas Corporation (“SW Gas”)
- Southwestern Power Group II
- Staff Matters
- Sunrun, Inc.
- Tesla, Inc.
- Tó Nizhóni Ání
- Tucson 2030 District, Inc.
- TEP
- Tucson Electric Vehicle Association
- Tucson Urban League, Inc.
- U.S. Energy Recovery, LLC
- UNS Electric
- Vote Solar
- Western Grid Group (“WGG”)
- WRA
- Western States Petroleum Association (“WSPA”)
- Western Sustainable Agriculture Working Group
- The Western Way
- Wildfire: Igniting Community Action to End Poverty in Arizona
- Yavapai County Climate Change Coalition

118. On July 17, 2020, Staff docketed a Memorandum and Proposed Order with revised energy-related rules (“Fourth Draft”). Staff stated that based on correspondence from the Commissioners, written comments, and Workshops, and because of current national trends and developments in technology, Staff recommended repealing the Commission’s Resource and Procurement Rules, REST Rules, EEE Rules, GEE Rules, and EPS Rule; modifying the Net Metering Rules; and adopting new energy-related rules in a new Article 27 of A.A.C. Title 14, Chapter 2. Staff stated that its recommended rule changes were necessary and in the public interest.

1           119. On July 24, 2020, Commissioner Burns filed his Proposed Amendment No. 1, which  
2 proposed technical changes to the form of the order.

3           120. Also on July 24, 2020, Commissioners Burns and Kennedy filed the Burns & Kennedy  
4 Joint Proposed Amendment No. 1, which included revised energy-related rules to replace the Fourth  
5 Draft.

6           121. On July 29, 2020, Staff filed a Memorandum and Revised Proposed Order, which  
7 superseded the Proposed Order filed on July 17, 2020, and contained changes to portions of the Fourth  
8 Draft ("Revised Fourth Draft").

9           122. Also on July 29, 2020, Commissioner Dunn submitted three proposed amendments.  
10 Commissioner Dunn Proposed Amendment No. 1 added language to clarify that a prudency  
11 determination would be made within the context of a rate case or later proceeding before the  
12 Commission. Proposed Amendment No. 2 added provisions to allow Staff to hire an independent  
13 consultant at the expense of the utility to assist in evaluating the utility's Clean Energy Implementation  
14 Plan. Proposed Amendment No. 3 updated the clean energy standard with interim goals.

15           123. Also on July 29, 2020, Commissioner Olson filed his Proposed Amendment No. 1, with  
16 changes designed to ensure that the proposed rules would not increase costs for ratepayers.  
17 Commissioner Olson also filed a Proposed Amendment No. 2, intended to strengthen the ASRFP  
18 process and to provide more flexibility for cooperatives.

19           124. On July 30, 2020, Commissioner Dunn filed Proposed Amendment No. 4, proposing to  
20 modify the distributed renewable storage standard to require electric utilities to procure 5 percent of  
21 aggregate peak demand capacity from storage and 50 percent of that 5 percent from distributed  
22 renewable storage, and to eliminate the requirement that the energy storage system be paired with a  
23 renewable energy resource.

24           125. Also on July 30, 2020, Staff filed a redline document showing the changes between the  
25 Fourth Draft and Revised Fourth Draft. Staff indicated that the changes included minor corrections  
26 and clerical changes to conform with rulemaking standards, and substantial changes to the sections of  
27 the rules relating to Renewable Energy Resources, Electric and Gas Energy Efficiency, Commission  
28 Approval and Acknowledgement, Commission Enforcement, and Cost Recovery and Prudency. Staff



1 subsequently filed a redline document showing modifications from the Third Draft.

2       126. Also on July 30, 2020, Chairman Burns filed Burns Proposed Amendment No. 2, which  
3 proposed changes to the form of the order and also included a new attachment of proposed rule changes  
4 to replace the Revised Fourth Draft.

5       127. Also on July 30, 2020, Commissioner Márquez Peterson proposed six amendments.  
6 Márquez Peterson Proposed Amendment No. 1 proposed to replace the technology-based standard in  
7 the Fourth Revised Draft with an emissions-based standard. Márquez Peterson Supplemental  
8 Amendment No. 1 proposed an interim target based on emissions reductions. Márquez Peterson  
9 Proposed Amendment No. 2 replaced the IRP and Resource Procurement processes with an ASRFP  
10 and Load Forecast and Needs Assessment process. Márquez Peterson Proposed Amendment No. 3  
11 proposed a 35-percent DSM standard by 2030. Márquez Peterson Proposed Amendment No. 4  
12 proposed replacing the distributed renewable storage mandate with a requirement for tariffs to  
13 incentivize distributed storage. Márquez Peterson Proposed Amendment No. 5 proposed modifications  
14 relating to cooperatives.

15       128. Also on July 30, 2020, a Special Open Meeting was held at which extensive public  
16 comment was received from numerous and diverse stakeholder organizations as well as individual  
17 stakeholders. After discussion, the Burns & Kennedy Joint Proposed Amendment No. 1 was  
18 withdrawn, and it was determined that another Open Meeting would be held to discuss the Revised  
19 Fourth Draft and the various proposed amendments thereto.

20       129. Also on July 30, 2020, the Arizona Free Enterprise Club filed *Lazard's Levelized Cost*  
21 *of Energy Analysis*—Version 13.0, dated November 2019 (“*Lazard LCOE Analysis*”), a study  
22 concerning the cost-competitiveness of renewable energy generation technologies as compared to  
23 conventional generation technologies.

24       130. On July 31, 2020, Staff filed a presentation made by the National Energy Marketers  
25 Association at the July 30, 2020, Special Open Meeting.

26       131. On August 4, 2020, Commissioner Dunn submitted a letter to the docket regarding the  
27 process for adopting the new energy-related rules, advocating for a process that considered the Revised  
28 Fourth Draft and all filed amendments.

1           132. On August 5, 2020, at its Staff Open Meeting, the Commission discussed a proposal by  
2 the Chairman regarding the process and procedure for moving forward with rulemaking but did not  
3 take a vote.

4           133. On August 26, 2020, in the IRP Docket, UNS Electric filed its 2020 IRP (“UNSE 2020  
5 IRP”), which UNS Electric described as continuing its shift toward generating its own cleaner energy  
6 and away from purchased power, and toward its goal of supplying 50 percent of its energy to retail  
7 customers from renewable resources by 2035.

8           134. On September 11, 2020, Chairman Burns filed Burns Proposed Revised Amendments  
9 Nos. 1 and 2. Burns Proposed Revised Amendment No. 1 proposed changes to the order as well as  
10 extensive changes to the Revised Fourth Draft, largely consistent with the withdrawn Burns & Kennedy  
11 Joint Proposed Amendment No. 1. Burns Proposed Revised Amendment No. 2 proposed extensive  
12 changes to the Revised Fourth Draft focused primarily on the requirements and processes for Load  
13 Forecast and Needs Assessment development and approval, ASRFPs, and Resource Plan approval.

14           135. On September 16, 2020, Commissioner Kennedy submitted five proposed amendments.  
15 Kennedy Revised Proposed Amendment No. 1 proposed to expand on the existing Energy Efficiency  
16 Resource Standard and to establish a separate Demand Response Standard. Kennedy Revised Proposed  
17 Amendment No. 2 altered and added definitions, provided for implementation of the renewable energy  
18 resources standard on a faster schedule, required the Commission to develop community solar program  
19 rules, and provided that tribal communities and other impacted communities would be given priority  
20 for interconnection of renewable energy projects. Kennedy Proposed Amendment No. 3 proposed a  
21 requirement for LSEs to prepare a Climate Change Resilience Plan as part of their IRPs. Kennedy  
22 Proposed Amendment No. 4 proposed a requirement for regulated utilities to comply with a Carbon  
23 Reduction Standard. Kennedy Proposed Amendment No. 5 proposed a requirement for electric utilities  
24 to develop a distribution system plan that identified areas with reliability issues and evaluated the  
25 feasibility of using distributed generation technology to solve those issues.

26           136. On September 17, 2020, the Mayor of the City of Scottsdale filed a letter supporting the  
27 Commission’s move toward adoption of clean energy rules and supporting EE and renewable energy.

28           137. On September 22, 2020, Commissioner Olson filed two revised amendments. Olson

1 Proposed Revised Amendment No. 1 proposed changes designed to ensure that the proposed rules did  
2 not increase costs for ratepayers. Olson Proposed Revised Amendment No. 2 related to the ASRFP  
3 process and flexibility for cooperatives.

4 138. On September 23, 2020, Commissioner Dunn submitted a letter to the docket outlining  
5 questions and requesting information in anticipation of the September 24, 2020, Open Meeting.  
6 Commissioner Dunn also filed a Revised Amendment No. 1 with the same purpose as the original.

7 139. On September 24, 2020, a Special Open Meeting was held at which a presentation was  
8 made by ASU regarding water usage savings from solar photovoltaic energy generation in place of coal  
9 generation. During the meeting, a number of Commissioners' proposed amendments were described,  
10 numerous stakeholder comments were made regarding those proposed amendments as well as broader  
11 energy policy, and discussion occurred among the Commissioners.

12 140. Also on September 24, 2020, CRS filed a letter advocating for the use of RECs as a  
13 mechanism for tracking, accounting, compliance, and verification for the Commission's renewable  
14 energy or clean energy standards. CRS cited several sources to support its position.

15 141. On September 25, 2020, Commissioner Márquez Peterson filed a Revised Amendment  
16 No. 2 and a separate document explaining its provisions and changes, which she stated were made in  
17 conformance with discussions at the September 24, 2020, Special Open Meeting.

18 142. On October 2, 2020, Commissioner Márquez Peterson submitted a letter to the docket  
19 requesting that the issues of forest biomass and the Cholla Power Plant conversion be placed on the  
20 next Open Meeting agenda.

21 143. On October 8, 2020, Commissioner Márquez Peterson filed two proposed amendments.  
22 Márquez Peterson Proposed Amendment No. 9 proposed a requirement that each regulated electric  
23 utility procure a proportional share of 60 megawatts ("MW") of power from forest biomass. Márquez  
24 Peterson Revised Amendment No. 1 combined her Proposed Amendment No. 1 and Supplemental  
25 Amendment No. 1, and altered the planning targets for proposed emissions-based approaches.

26 144. Also on October 8, 2020, Chairman Burns submitted a letter to the docket explaining  
27 the proposed amendments that he supported and what amendments he believed could be combined and  
28 how.

1           145. On October 9, 2020, Commissioner Dunn submitted a letter to the docket explaining his  
2 position on the various proposed amendments.

3           146. Also on October 9, 2020, Commissioner Márquez Peterson filed a Second Revised  
4 Amendment No. 2 and an Alternative Amendment No. 5 to align with her Second Revised Amendment  
5 No. 2. The Second Revised Amendment No. 2 made some of the changes requested by Chairman  
6 Burns in his October 8, 2020, letter.

7           147. Also on October 9, 2020, Commissioner Kennedy filed a Proposed Revised Amendment  
8 No. 4, which incorporated a compromise set forth by WRA, with some modifications, requiring  
9 regulated utilities to comply with a 100-percent carbon reduction standard by 2050, while also meeting  
10 interim targets.

11           148. On October 13, 2020, Commissioner Márquez Peterson filed two proposed  
12 amendments. Márquez Peterson Revised Amendment No. 3 made a change to the definition of “cost  
13 effective.” Márquez Peterson Proposed Amendment No. 8 addressed the impact on communities from  
14 the retirement of conventional power plants.

15           149. On October 14, 2020, Commissioner Dunn filed two proposed amendments addressing  
16 distributed storage standards and the requirement for an Energy Storage System (“ESS”) tariff. Dunn  
17 Proposed Revised Amendment No. 4 included portions of Márquez Peterson Proposed Amendment  
18 No. 4, Kennedy Proposed Amendment No. 2, Burns Revised Proposed Amendment No. 1, and Dunn  
19 Proposed Amendment No. 4. Dunn Second Revised Amendment No. 4 combined Márquez Peterson  
20 Proposed Amendment No. 4, Burns Revised Proposed Amendment No. 1, and Dunn Proposed  
21 Amendment No. 4.

22           150. Also on October 14, 2020, Commissioner Kennedy filed two proposed amendments.  
23 Kennedy Proposed Second Revised Amendment No. 1 incorporated language from Burns Revised  
24 Proposed Amendment No. 1 and Kennedy Revised Proposed Amendment No. 1, the DSM capacity  
25 approach from Commissioner Márquez Peterson Amendment No. 3, and Kennedy Revised  
26 Amendment No. 1. Kennedy Proposed Revised Amendment No. 4 addressed the Clean Energy  
27 Standard, REST, and Carbon Reduction Standard, combining Kennedy Proposed Amendment No. 4,  
28 Márquez Peterson Proposed Second Revised Amendment No. 1, and Dunn Proposed Amendment No.

1 4.

2 151. Between July 17 and October 14, 2020, comments regarding the Fourth Draft, Revised  
3 Fourth Draft, and various Commissioner amendments were filed by numerous individual stakeholders  
4 and by or on behalf of the following organizations:

- 5 • WSPA (multiple)
- 6 • Grand Canyon State Electric Cooperative Association, Inc. (multiple)
- 7 • Proctor Engineering Group, Ltd.
- 8 • WRA (multiple)
- 9 • SW Gas (multiple)
- 10 • TEP
- 11 • APS (multiple)
- 12 • Vote Solar, Sunrun, AriSEIA, SUN Arizona, Coalition for Community Solar Access
- 13 (jointly)
- 14 • WGG, Tó Nizhóni Ání, SWEEP, Sierra Club, Dine CARE, and WRA (jointly)
- 15 • SWEEP (multiple)
- 16 • Interwest (multiple)
- 17 • Pima County Governmental Center
- 18 • Sierra Club
- 19 • Arizona Interfaith Power & Light, Environment Arizona Research & Policy Center,
- 20 Yavapai Climate Change Coalition, American Council for an Energy-Efficient
- 21 Economy, and Citizens Climate Lobby Arizona (jointly)
- 22 • PIRG and Wildfire (jointly)
- 23 • RUCO
- 24 • TEP and UNS Electric (jointly and multiple)
- 25 • Arizona Free Enterprise Club
- 26 • City of Scottsdale
- 27 • Arizona Electric Power Cooperative, Inc.
- 28 • Vote Solar, Sunrun, SUN Arizona, and AriSEIA (jointly and multiple)
- CRS
- PIRG, SWEEP, and Wildfire (jointly and multiple)
- WGG

152. On October 14, 2020, at its Open Meeting, the Commission extensively discussed a  
number of policy positions and proposed amendments, voting to approve an amendment identified as  
ACC No. 1, which was based on amendment language proposed in a filing made by PIRG, SWEEP,  
and Wildfire. It was then determined that the Open Meeting would be recessed until a future date.

153. On October 15, 2020, in the IRP Docket, the New York University School of Law  
Institute for Policy Integrity (“Policy Integrity”) submitted comments concerning the monetization of  
emissions impacts, which referred to several reports on the value of distributed energy resources and



1 pollutant reductions.

2 154. On October 23, 2020, Commissioner Kennedy filed her Proposed Second Revised  
3 Amendment No. 4, containing proposals related to the carbon reduction standard.

4 155. On October 26, 2020, Commissioner Dunn filed a Proposed Amendment No. 5 relating  
5 to the ASRFP and IRP processes. The amendment combined Burns Revised Proposed Amendment  
6 No. 2, Dunn Proposed Amendments Nos. 1 and 2, Kennedy Proposed Amendment No. 5, Márquez  
7 Peterson Proposed Revised Amendment No. 2 and Proposed Amendment No. 8, and Staff's proposal  
8 for the IRP Process as contained in the Revised Fourth Draft.

9 156. On October 28, 2020, Commissioner Olson submitted a letter to the docket attaching  
10 Olson Proposed Amendment No. 3, encouraging the Commission to adopt a limit on how much utilities  
11 could recover from ratepayers for compliance with the proposed rules above what it would cost the  
12 utility if the rules did not apply.

13 157. On October 28, 2020, Commissioner Márquez Peterson submitted a letter to the docket  
14 requesting information from APS and TEP on the cost of converting 50 percent of the utilities' internal  
15 combustion fleets to electric vehicles by 2032. Commissioner Márquez Peterson also submitted a letter  
16 to the docket regarding her concerns with requiring utilities to convert their vehicle fleets to electric  
17 vehicles.

18 158. Between October 15 and 29, 2020, comments regarding the Fourth Draft, Revised  
19 Fourth Draft, and various Commissioner amendments were filed by numerous individual stakeholders  
20 and by or on behalf of the following organizations:

- 21 • WSPA
- 22 • Arizona Power Authority
- 23 • GCSECA
- 24 • Vote Solar, Sunrun, AriSEIA, and SUN Arizona (jointly)
- 25 • WGG, Sierra Club, SWEEP, and PIRG (jointly)
- City of Tucson
- TEP

26 159. On October 29, 2020, Commissioner Kennedy filed her Proposed Third Revised  
27 Amendment No. 4 with minor language changes for consistency and clarity.

1           160. Also on October 29, 2020, Commissioner Olson filed Olson Proposed Amendment No.  
2 3, which would cap at \$1 million the amount an electric utility could spend to comply with the rules  
3 beyond the amount the utility would spend if the rules did not apply.

4           161. Also on October 29, 2020, Commissioner Dunn filed Dunn Proposed Amendment No.  
5 6, the purpose of which was to apply a resource-based approach rather than an emissions-based  
6 standard to distribution cooperatives.

7           162. On October 29, 2020, the Commission reconvened the Open Meeting recessed on  
8 October 14, 2020. The Commission again discussed a number of proposed amendments. The  
9 Commission voted to pass Commissioner Dunn's Second Revised Amendment No. 4, with revisions  
10 requested by Vote Solar, Sunrun, SUN Arizona, and AriSEIA. The Commission also voted to approve  
11 Commissioner Kennedy's Proposed Third Revised Amendment No. 4, with verbal amendments;  
12 Commissioner Dunn's Proposed Amendment No. 6; an amendment created by the WGG and proposed  
13 by Chairman Burns, with verbal amendments; Commissioner Márquez Peterson's Alternative  
14 Amendment No. 5; and a Staff Correction Amendment, with verbal amendments.

15           163. On November 5, 2020, at its Staff Open Meeting, Staff reported that a conforming order,  
16 to include the rule language as amended, was being prepared and that the conforming order would be  
17 docketed within days.

18           164. On November 10, 2020, Staff docketed the conforming Memorandum and Proposed  
19 Order with the amended rule language ("conforming order").

20           165. Also on November 10, 2020, Staff filed three proposed amendments to the conforming  
21 order. Staff Proposed Amendment No. 1 proposed clarifications to the resource planning and  
22 procurement process in the amended rule language. Staff Proposed Amendment No. 2 addressed the  
23 Clean Energy Implementation Plan section in the amended rule language. Staff Proposed Amendment  
24 No. 3 addressed superfluous terms in the amended rule language.

25           166. On November 12, 2020, Chairman Burns filed Burns Proposed Amendment No. 3,  
26 which proposed to remove the amended rule language's requirement for utilities to install resources  
27 based on technology.

28           167. On November 13, 2020, Staff filed a Revised Proposed Amendment No. 1.

1           168. Also on November 13, 2020, at a Special Open Meeting, the Commission considered  
2 the conforming order and amended rule language, voted to approve Staff's Proposed Amendments Nos.  
3 1, 2, 3, and 4 (two with verbal amendments), and ultimately voted to approve the conforming order and  
4 amended rule language as further amended ("Energy Rules").

5           169. On November 23, 2020, the Commission issued Decision No. 77829, requiring the  
6 following:

7                   (a) That Staff file, by November 27, 2020, a Notice of Rulemaking Docket Opening  
8 ("NRDO") and a Notice of Proposed Rulemaking ("NPRM") with the Office of the Secretary of State  
9 for publication in the *Arizona Administrative Register* by December 18, 2020, to initiate the formal  
10 rulemaking process for the Energy Rules as adopted at the Special Open Meeting held on November  
11 13, 2020;

12                   (b) That the Commission accept formal written comments on the NPRM until January  
13 22, 2021;

14                   (c) That the Hearing Division hold telephonic Oral Proceedings to receive public  
15 comment on the NPRM on January 19 and 20, 2021, and that the Preamble for the NPRM include  
16 information regarding the Oral Proceedings;

17                   (d) That Staff ensure the Preamble to the NPRM complies with A.R.S. § 41-1001(16)  
18 and contains information on how the public can provide written and oral comments;

19                   (e) That Staff file a draft Economic, Small Business, and Consumer Impact Statement  
20 ("EIS") by January 11, 2021, that addresses the economic impacts of the proposed rules and conforms  
21 to the requirements of A.R.S. § 41-1057(A)(2); and

22                   (f) That Staff file, by February 26, 2021, a summary of all written and oral comments  
23 concerning the NPRM received between November 23, 2020, and January 22, 2021, with Staff's  
24 responses; and a revised EIS or a memorandum explaining why no revision to the previously filed EIS  
25 is necessary.

26           170. On December 1, 2020, Staff docketed a copy of the NRDO and NPRM as submitted to  
27 the Secretary of State on November 27, 2020.

28

1           171. The NRDO and NPRM were published in the *Arizona Administrative Register* on  
2 December 18, 2020, officially commencing the formal comment period for this rulemaking. The  
3 NPRM is attached hereto and incorporated herein as Exhibit A.

4           172. On January 14, 2021, Staff filed an EIS.

5           173. On January 19, 2021, in accordance with A.R.S. § 41-1023, an Oral Proceeding was  
6 held to allow adequate discussion of the substance and form of the Energy Rules and to allow persons  
7 to ask questions and present oral argument, data, and views on the Energy Rules. Due to the COVID-  
8 19 pandemic, the oral proceeding was conducted telephonically. Before public comment was taken,  
9 Staff provided a summary of the proposed rules. Public comment was then provided by 17 individual  
10 stakeholders and by representatives from WRA, Arizona Public Health Association, Arizona Interfaith  
11 Power and Light, the American Lung Association, Interwest, SW Gas, the Western Way, CRS, WGG,  
12 and Chispa Arizona. Staff was given the opportunity to respond to the public comments, and the  
13 presiding Administrative Law Judge (“ALJ”) asked clarifying questions of some of the commentors.  
14 Staff and the ALJ encouraged those who had provided public comment to submit their comments in  
15 writing as well.

16           174. On January 20, 2021, a second Oral Proceeding was held, again telephonically. Public  
17 comment was provided by seven individual stakeholders and by representatives from PIRG, Sierra  
18 Club, Solar Energy Industries Association, SWEEP, SUN Arizona, TEP and UNS Electric, Arizona  
19 Technology Council, Arizona Youth Climate Coalition, and the U.S. Energy Storage Association. Staff  
20 again was given the opportunity to respond to the public comments, and the ALJ again asked clarifying  
21 questions of some of the commentors. Staff and the ALJ again encouraged those who had provided  
22 public comment to submit their comments in writing.

23           175. Also on January 20, 2021, the American Lung Association filed comments supporting  
24 the Energy Rules, providing data concerning air pollution in Arizona and providing the results of a  
25 November 2020 Global Strategy Group survey of Arizona voters regarding their concerns about  
26  
27  
28

1 climate change and their desire to move toward clean energy (“GSG Poll”). The American Lung  
2 Association also referenced its report entitled *2020 State of the Air* (“*State of the Air*”).<sup>25</sup>

3 176. Also on January 20, 2021, the Joint Stakeholders filed comments supporting the Energy  
4 Rules, providing an index of analyses, studies, white papers, reports, and original research documenting  
5 the public interest case for clean energy investment and adoption of the Energy Rules. The Joint  
6 Stakeholders also included a list of the written comments (350 between December 6, 2018, and January  
7 6, 2021) and oral comments (62 between April 30, 2019, and March 11, 2020) provided in this docket  
8 to support the Energy Rules.

9 177. On January 22, 2021, Commissioner Olson submitted a letter to the docket raising legal  
10 concerns with the Energy Rules in light of the Arizona Supreme Court’s decision in *Johnson Utilities,*  
11 *L.L.C. v. Arizona Corp. Comm’n*, 249 Ariz. 215 (2020) (“*Johnson Utilities*”).

12 178. Also on January 22, 2021, SWEEP filed a report prepared for SWEEP by Strategen,  
13 dated January 21, 2021, and entitled *AZ Energy Rules Analysis* (“*AZ Energy Rules Analysis*”). The  
14 report provides an independent analysis of the likely ratepayer impacts of the proposed Energy Rules.

15 179. On February 1, 2021, WRA and the Arizona Center for Law in the Public Interest  
16 submitted comments responding to Commissioner Olson’s letter regarding the Energy Rules and the  
17 Arizona Supreme Court’s decision in *Johnson Utilities*.

18 180. At the February 2, 2021, Open Meeting, the Commission briefly discussed the  
19 scheduling for the summary of written and oral comments and revised EIS to be filed by Staff.

20 181. On February 17, 2021, Commissioner Anna Tovar filed a letter sent to the  
21 Commissioners from Arizona State Speaker of the House Russell Bowers, Senate President Karen  
22 Fann, Representative Gail Griffin, and Senator Sine Kerr. The letter raised concerns with the  
23 Commission’s authority to adopt the Energy Rules, the EIS filed by Staff, and the Commission’s lack  
24 of procedural rules or a written policy on its rulemaking process. We respond to this public comment  
25 in Exhibit C hereto.

26 182. On February 18, 2021, at its Staff Open Meeting, the Commission discussed the EIS.  
27

28 <sup>25</sup> *State of the Air* is available at [stateoftheair.org/assets/SOTA-2020.pdf](http://stateoftheair.org/assets/SOTA-2020.pdf).



183. On February 19, 2021, Staff filed two reports by the Western Electricity Coordinating Council: *The Western Assessment of Resource Adequacy Report*, dated December 18, 2020, and *Western Assessment of Resource Adequacy Subregional Spotlight: Desert Southwest*, dated January 29, 2021.

184. Also on February 19, 2021, Commissioner Kennedy submitted a letter to the docket explaining the sources of data relied on by her in voting to approve the Energy Rules. Commissioner Kennedy referred to the following dockets, asking that they be considered part of the evidentiary record for this matter:

- Docket No. E-01345A-16-0036: *In the matter of the application of Arizona Public Service Company for a hearing to determine the fair value of the utility property of the company for ratemaking purposes, to fix a just and reasonable rate of return thereon, to approve rate schedules designed to develop such return;*
- Docket No. E-01933A-19-0028: *In the matter of the application of Tucson Electric Power Company for the establishment of just and reasonable rates and charges designed to realize a reasonable rate of return on the fair value of the properties of Tucson Electric Power Company devoted to its operations throughout the state of Arizona and for related approvals;*
- Docket No. G-01551-A-19-0055: *In the matter of the application of Southwest Gas Corporation for the establishment of Just and Reasonable Rates and Charges designed to realize a Reasonable Rate of Return on the Fair Value of the properties of Southwest Gas Corporation devoted to its Arizona Operations;*
- Docket No. E00000V-15-0094: *In the matter of Resource Planning and Procurement in 2015 and 2016;*
- the IRP Docket;
- Docket No. RE-00000C-09-0427: *In the matter of the Notice of Proposed Rulemaking regarding Electric Energy Efficiency Rules;* and
- Docket No. RE-00000C-05-0030: *In the matter of the Notice of Proposed Rule Amendment for the Environmental Portfolio Standard Rules.*

We take official notice of the filings made in these dockets.

185. On February 22, 2021, WRA filed a letter in the docket citing the Intergovernmental Panel on Climate Change's Special Report, *Global Warming of 1.5°C*, dated 2018, to support the need

for decarbonization. WRA also recommended that Staff review and include in its revised EIS a number of documents filed in the IRP Docket and this docket, with their filing dates:

- IRP Docket:
  - The TEP 2020 IRP, June 26, 2020
  - The APS 2020 IRP, June 26, 2020
  - The Joint Stakeholders' Alternative IRP, February 2, 2018
- This Docket:
  - Policy Integrity, *Valuing Pollution Reductions*, January 22, 2021
  - Western Interconnect Clean Energy Study, January 22, 2021
  - AZ Energy Rules Analysis, January 22, 2021
  - Lazard LCOE Analysis, July 30, 2020
  - Sierra Club, Western Grid Group, and Citizen Groups, *Harnessing Financial Tools to Transform the Electric Sector*, July 13, 2020
  - Best Practices for All-Source Procurement, May 19, 2020
  - EE Standards vs. IRPs, April 8, 2020
  - E3, *APS IRP Stakeholder Screening Tool*, March 23, 2020
  - Arizona REST 2020 Progress Report, March 11, 2020
  - CNA Military Board, *Advanced Energy and U.S. National Security*, December 19, 2019
  - Arizona Coal Plant Valuation Study, September 25, 2019
  - The Western Way, *The Economic Benefits of Arizona Rural Renewable Energy Facilities*, May 16, 2019

We respond to this public comment in Exhibit C hereto. Further, we note that we have taken official notice of the documents listed as having been filed in the IRP Docket and that the documents listed as having been filed in this docket are already part of the record for this rulemaking.

186. The information and data contained in the documents filed in the dockets listed in Commissioner Kennedy's letter of February 19, 2021, and in the documents listed in WRA's letter of

1 February 22, 2021, were used by the Commission in the development, consideration, and approval of  
2 the Energy Rules.

3 187. On February 26, 2021, Staff filed a summary of the written and oral comments received  
4 on the NPRM between December 3, 2020, and January 22, 2021, with Staff's responses to those  
5 comments. Staff's summary and responses are attached hereto and incorporated herein as Exhibit B.  
6 Staff did not make any recommendations for changes to the proposed Energy Rules in response to the  
7 comments received.

8 188. Also on February 26, 2021, Staff filed a Revised EIS, which is attached hereto and  
9 incorporated herein as Exhibit D.

10 189. On March 16, 2021, Commissioner Jim O'Connor filed his Proposed Amendment No.  
11 1. The amendment requires LSEs to submit estimated cost-saving and cost-increase comparisons to at  
12 least one least-cost scenario resource portfolio prepared without regard for carbon emissions targets for  
13 the periods of the Action Plan, the IRP, and the resource lifetime, presented year-by-year and for the  
14 net present value.<sup>26</sup>

15 190. On March 30, 2021, Chairwoman Lea Márquez Peterson filed a letter stating that she  
16 had decided to place the Energy Rules on the agenda for the Contingency Open Meeting in April or  
17 the Regular Open Meeting in May and suggesting that Commissioners begin preparing any  
18 amendments they would like to propose. The Chairwoman expressed continued support for 100  
19 percent zero-carbon energy by 2050 but stated that because the primary drivers of cost are the interim  
20 targets in 2032 and 2040, and the Commission did not yet know what those costs would be, additional  
21 cost data was needed and should be a primary guide to the process. The Chairwoman stated that the  
22 Commission has a duty to maintain healthy utilities and set reasonable rates and needs to compare the  
23 costs of the Energy Rules portfolio supported by Commissioner Sandra Kennedy and the lowest cost  
24 portfolio supported by Commissioner Justin Olson. The Chairwoman stated that the Commission's  
25 work should not be delayed and that a cost analysis and any supplemental rulemaking should move  
26 forward in parallel, with votes on both the Energy Rules and IRPs to occur in the fall.

27 \_\_\_\_\_  
28 <sup>26</sup> The amendment, if adopted, would constitute a change that is "substantially different" from the Energy Rules as published  
in the NPRM under A.R.S. § 41-1025, requiring a supplemental notice of proposed rulemaking.

191. Between December 3, 2020, and April 7, 2021, more than 250 formal comments on the Energy Rules as included in the NPRM were provided by individual stakeholders and various utilities, business organizations, governmental entities, and advocacy organizations.<sup>27</sup> As shown in Exhibit C hereto, those comments represent hundreds more stakeholders.

#### **Stakeholder Meetings and Workshops**

192. As stated above, Staff and the Commission hosted a number of Stakeholder Meetings and Workshops while developing the Energy Rules. Participants in the workshops included representatives from utilities, government agencies, energy efficiency and environmental advocacy groups, utility investors, large industrial consumers, advocates for renewable resources, competitive power providers, advocates for distributed generation, product suppliers, research entities, and others. Stakeholder Meetings were held to discuss various topics related to the Energy Rules on November 20, 2018; December 3, 10, and 11, 2018; February 25, 2019, March 14 and 26, 2019; and February 25 and 26, 2020. A Stakeholder Meeting and Workshop was held on April 29, 2019, to discuss the First Draft. A Stakeholder Meeting and Workshop was held on July 30 and 31 and August 7, 2019, to discuss the Second Draft. A Stakeholder Meeting and Workshop was held on March 10 and 11, 2020, to discuss the Third Draft.

193. The Stakeholder Meeting and Workshop held on November 20, 2018, addressed electric vehicles, electric vehicle infrastructure, and the electrification of the transportation sector in Arizona. Twenty-nine individuals representing stakeholder organizations including electric vehicle makers, electric vehicle charging station companies, electric utilities, electric cooperatives, and various energy policy advocacy groups attended and participated in the Workshop with Staff.

194. The Stakeholder Meeting and Workshop held on December 3, 2018, specifically dealt with retail electric competition. The agenda for the workshop invited stakeholders to attend and address a list of questions pertaining to retail electric competition, including costs and benefits, implementation issues, legal impediments, compatibility with existing Commission rules, and potential retail electric competition models. Fourteen stakeholders provided public comment, and the attendees discussed

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<sup>27</sup> Although the formal comment period did not begin officially until December 18, 2020, when the NPRM was published, we treat as formal comments those that were filed after the issuance of Decision No. 77829 approving the Energy Rules. Exhibit C, attached hereto, summarizes and provides the Commission's responses to these formal comments.

1 whether the existing Retail Electric Competition Rules could be modified to comply with *Phelps*  
2 *Dodge*,<sup>28</sup> the need for updated protocols, the potential positive and negative impacts for residential and  
3 commercial customers, stranded costs, the need for strong consumer protection and Commission  
4 oversight, models from other states, and legal challenges.

5 195. On December 10, 2018, under the Biomass Docket, the Commission held a Special  
6 Open Meeting/Stakeholder Meeting on the role of forest bioenergy in Arizona. Eleven organizations  
7 were represented at the workshop. Attendees discussed Staff's draft policy on forest biomass.

8 196. On December 11, 2018, the Commission held a Special Open Meeting/Stakeholder  
9 Meeting on electric vehicles, electric vehicle infrastructure, and the electrification of the transportation  
10 sector. Nineteen organizations were represented at the workshop. The attendees discussed questions  
11 that had been docketed by Chairman Burns on November 29, 2018, and that pertained to an initial  
12 policy regarding regulated electric utilities and potential requirements for electric vehicle  
13 infrastructure.

14 197. On February 25, 2019, the Commission held a Stakeholder Meeting and Workshop  
15 regarding possible modifications to the REST Rules, the EPS Rule, and the Net Metering Rules.  
16 Thirteen participants, Staff, and the Commissioners discussed forest biomass issues, nuclear energy,  
17 the cost and effectiveness of battery storage, renewable energy versus clean energy, providing choices  
18 and flexibility to users, solar and wind power, reducing carbon, stranded assets, net metering, and retail  
19 electric competition.

20 198. On March 14, 2019, the Commission hosted a Stakeholder Meeting on electric vehicles.  
21 Fifteen participants, Staff, and three Commissioners discussed how to implement the Commission's  
22 EV Policy adopted in Decision No. 77044.

23 199. On March 26, 2019, the Commission held an additional Stakeholder Meeting to discuss  
24 a Draft Implementation Plan for the EV Policy. Nineteen participants attended along with Staff and  
25 four Commissioners.

26 200. On April 29, 2019, the Commission held a Stakeholder Meeting and Workshop to  
27

28 <sup>28</sup> *Phelps Dodge Corp. v. Ariz. Elec. Power Coop.*, 207 Ariz. 95 (App. 2004).



1 discuss the First Draft. Twenty-five individuals and entity-representatives attended, along with Staff  
 2 and four Commissioners. Staff's counsel began by describing the rulemaking process, noting that the  
 3 First Draft was a preliminary document and that the Commission was in the informal phase of the  
 4 rulemaking process. Staff gave a presentation on the First Draft and discussed next steps in the process.  
 5 Stakeholders requested clarification from Staff on definitions outlined in the First Draft, including  
 6 approval and prudence determinations, competition, peak, book life, and the difference between electric  
 7 utilities, affected utilities, and LSEs. Stakeholders also discussed energy implementation plans to meet  
 8 renewable and clean energy goals and action plans, forest biomass and restoration, battery storage, cost  
 9 recovery methods for EE programs, and net metering. Chairman Burns indicated that he was interested  
 10 in further discussion of community choice aggregation and microgrids.

11 201. On July 30 and 31 and August 7, 2019, Staff hosted a Stakeholder Meeting and  
 12 Workshop to discuss the Second Draft and other energy-related topics.<sup>29</sup> Approximately 45 individuals  
 13 representing themselves or various entities appeared to participate in the workshop or provide public  
 14 comment over the three-day period. The workshop included the following presentations, discussions,  
 15 and public comment related to the Second Draft:<sup>30</sup>

16 (a) Staff gave a presentation on the Second Draft, explaining that the Resource Planning  
 17 and Procurement, REST, EEE, and GEE Rules had been integrated into the draft and that changes had  
 18 been made to the Net Metering Rules. Staff stated that special consideration should be given for  
 19 cooperatives, and that utilities should use the most cost-effective energy resources, promote renewable  
 20 energy technology, reduce greenhouse gas emissions, and reduce water consumption. Staff noted  
 21 structural changes had been made in the Second Draft, including splitting the Energy Resources section  
 22 into Clean Energy and Renewable Energy for clarity, and splitting the Resource Planning section into  
 23 Reporting Requirements and Planning Details.

24 (b) A representative from TEP gave an overview of the state's and the utility's energy  
 25 goals, the 2019 IRP Advisory Council, greenhouse gas reduction goals, and creating a more sustainable

27 <sup>29</sup> The Stakeholder Meeting and Workshop also was noticed under the Biomass Docket, Docket No. RE-00000A-18-0137  
 (In the matter of the Proposed Rulemaking to Modify the Resource Planning and Procurement Rules), and the Competition  
 Rules Docket.

28 <sup>30</sup> Presentations and comments also were given on the proposed Retail Electric Restructuring Rules.

1 energy future.

2 (c) A representative from SW Gas provided an overview of the company's EE  
3 programs; discussed the positive results from its commercial, low-income, and residential programs;  
4 and outlined the benefits of the GEE Rules. In addition, a representative discussed improving air  
5 quality and reducing emissions through the use of compressed natural gas, renewable natural gas, and  
6 power to gas. He explained the power-to-gas process that uses electricity to break apart a water  
7 molecule to create renewable hydrogen or renewable natural gas.

8 (d) A representative from APS stated that APS is looking for ways to transition to clean  
9 energy and increase its supply of clean energy resources for customers. He stated that APS was  
10 working on submitting RFPs for solar and wind and encouraged the Commission to adopt a clean  
11 energy standard and a carbon reduction requirement.

12 (e) A representative from E3 outlined key resource planning studies and building blocks  
13 for clean energy, including nuclear, renewables, fuel switching, clean imports, electrification, energy  
14 storage, and demand management. He provided scenarios on different policy options, contrasting  
15 renewable and carbon standard portfolios.

16 (f) A representative from Power Development discussed global warming and  
17 environmental impacts, and explained how the IRP process could be modified to address those issues  
18 in a cost-competitive way.

19 (g) A representative from Sunrun gave a presentation on the benefits of distributed solar  
20 and storage, noting the importance of identifying how to connect customers with storage and how to  
21 determine where storage would add the most grid value. He recommended implementing a bring your  
22 own device ("BYOD") program.

23 (h) A staff attorney from WRA provided comments on behalf of 25 public health, faith,  
24 tribal, business, environmental, and public interest organizations. He opposed Staff's Second Draft  
25 and indicated that the group had developed an alternative proposal that included a 100-percent clean  
26 energy mandate by 2045, a more comprehensive and effective IRP process, and support for  
27 communities impacted by plant closures. He explained the details of the clean energy standard,  
28 renewable energy standard, distributed renewable energy requirements, and enhancements to the IRP

1 process. In response, Staff raised concerns with mandates, which Staff said typically result in  
 2 surcharges. A representative from RUCO also responded, urging the Commission not to implement  
 3 mandates because of issues with the prudence determination, unintended consequences, increased  
 4 costs, and lack of flexibility. A representative from SWEEP, a member of the group, also responded  
 5 and explained that EE is the least-cost option and that bill costs can be mitigated by expensing EE costs  
 6 rather than recovering them through surcharges. A representative from Sierra Club, also a member of  
 7 the group, advocated for mandating standards. The representative from Power Development  
 8 responded, encouraging the Commission to set goals rather than mandates and to have an RFP process  
 9 that encourages utilities to maximize renewables, which would also encourage competition.

10 (i) A representative from the Western Sustainable Agriculture Working Group stated  
 11 that she supported the distributed generation carve out to reach renewable goals, and supported a  
 12 mandate of 50 percent renewable energy by 2030.

13 (j) A member of the public provided comment in support of implementing a mandate  
 14 for renewable energy.

15 (k) A representative from PIRG provided comment in support of EE and the IRP  
 16 recommendations. She encouraged the Commission to act regarding the expiring EE standards.<sup>31</sup>

17 (l) Another member of the public provided comment on the current state of energy and  
 18 moving forward using an economic, business-based approach.

19 (m) Another individual provided comment sharing concerns with nuclear energy and  
 20 agreeing with TEP that making retail competition a statewide endeavor would help with stranded  
 21 assets.

22 (n) A representative for GCSECA provided public comment on behalf of cooperatives.

23 (o) A representative from E3 provided information on the cost and carbon impacts for  
 24 APS and explained how the Renewable Portfolio Standard and carbon targets lead to clean energy  
 25 investments.

26 (p) A representative from First Solar indicated that it had docketed language changes  
 27

28 <sup>31</sup> The EEE Rules do not include an expiration date and are not subject to expiration by operation of law.

1 on the Second Draft regarding solar plus storage facilities.

2 (q) A representative from Conservatives for Responsible Stewardship recommended  
3 mandating clean energy targets.

4 (r) A representative from Interwest also recommended mandating clean energy targets,  
5 and implementing interim procurement requirements. He also agreed with separating clean peak  
6 energy and renewable energy.

7 202. On February 25 and 26, 2020, under the Competition Rules Docket, Staff hosted a  
8 Stakeholder Meeting and Workshop to discuss possible modifications to the Commission's Retail  
9 Electric Competition Rules. Staff, all Commissioners, and representatives from 20 entities attended.  
10 Staff made a presentation on competitive energy markets in other states. The participants discussed  
11 draft rules filed by Chairman Burns and Commissioner Olson. Fifteen participants made presentations  
12 on various topics including community choice aggregation, consumer protection, stranded costs,  
13 reliability and capacity, competitive markets, and the negative impacts on ratepayers from retail electric  
14 competition.

15 203. On March 10 and 11, 2020, the Commission held a Stakeholder Meeting and Workshop  
16 to discuss Staff's Third Draft. Approximately 47 individuals representing themselves or various  
17 entities appeared to participate in the workshop or provide public comment over the two-day workshop.  
18 The workshop included the following presentations, discussions, and public comment related to the  
19 Third Draft:

20 (a) Staff provided an overview of the changes in the Third Draft.

21 (b) A representative from Tó Nizhóni Ání provided a presentation on rules proposed by  
22 the Joint Stakeholders for a just and equitable transition. She also discussed tribal clean energy  
23 development, the impact of coal plant closures on the Navajo Nation, the lack of just and equitable  
24 transition support for clean energy projects, and suggestions for Commission support for the Navajo  
25 Nation.

26 (c) A representative from Conservatives for Responsible Stewardship gave a  
27 presentation on taking the conservative path on energy and the environment, cost-effectiveness, gas  
28 generation, TEP energy cost projections, solar and storage processes, and solar potential versus the

1 current renewable energy standards of western states.

2 (d) A representative from SWEEP gave a presentation on EE standards versus IRPs,  
3 and explained why EE is a valued resource as the least cost resource to meet customer needs. She also  
4 discussed the different types of EE benefits, how to invest in EE, the effectiveness of EE standards, EE  
5 cost recovery, EE performance incentives, and utility options for meeting customer needs, comparing  
6 supply-side investments to customer-side investments. She provided data on the differences that EE  
7 policy adoptions have made in comparison to IRPs.

8 (e) Two representatives from Ceres provided a presentation on the benefits of the REST  
9 Rules, including avoided fuel costs, renewable energy costs, reduced peak demand costs, technology  
10 cost reductions, emissions reductions, and water savings. They also discussed the costs of clean energy,  
11 corporate demand and support for clean energy standards, investment and job creation in the state, solar  
12 industry investments, and strengthening the REST Rules. They also discussed a 2020 progress report  
13 comparing the western states.

14 (f) A representative from Interwest provided a presentation on energy rules  
15 modernization and the benefits to utility customers and the public from implementation of the REST  
16 Rules. He stated the gross benefits have totaled nearly \$2 billion.

17 (g) A representative from the Joint Stakeholders discussed the Joint Stakeholders'  
18 proposal and the preference to maintain the existing articles in A.A.C. Title 14, Chapter 2. In addition,  
19 the Joint Stakeholders proposed a 50-percent REST by 2030 and a clean energy standard of 100 percent  
20 by 2045. She further discussed the Joint Stakeholders' proposal for distributed generation and storage  
21 targets, EEE, just transition, and increased stakeholder engagement and accountability in the IRP  
22 process.

23 (h) Representatives from TEP and UNS Electric provided a presentation on their  
24 renewable energy portfolio and service areas. They discussed TEP's current IRP process; its new  
25 advisory council and greenhouse reduction goal; concerns relating to fossil fuel regeneration; using  
26 carbon dioxide ("CO<sub>2</sub>") emissions as the proper measuring tool; and key planning objectives such as  
27 affordability, risk, and reliability. They indicated that every three years they will provide an  
28 implementation plan where EE is a key component.



1 (i) Counsel for Sunrun provided a short video on clean and reliable energy. He also  
2 discussed a BYOD tariff, including thermostat programs and battery storage, and the advantages of  
3 using those types of programs. He also discussed the Third Draft and made suggestions.

4 (j) Representatives from WRA presented information regarding the GenX Model and  
5 the modeled costs associated with different resource portfolios. They also shared policy  
6 recommendations from WRA.

7 (k) Representatives from SW Gas gave a presentation on the Third Draft, sustainability,  
8 EE as a driver of savings and emissions reductions, renewable natural gas, power to gas, compressed  
9 natural gas, and the growing interest in carbon capture.

10 (l) A representative from APS gave a presentation on the company's Clean Energy  
11 Commitment and described how APS proposes to meet its goals, including reaching its goal of 65  
12 percent clean energy by 2030. She discussed the importance of energy storage and expressed APS's  
13 support for the consolidation of energy policies in the Third Draft. She stated that APS believes  
14 flexibility is an important principle that equates to affordability.

15 (m) A representative from GCSECA expressed concerns with the Third Draft and how  
16 the energy implementation plan and IRP provisions would apply to cooperatives.

17 (n) The workshop concluded with Chairman Burns offering motions to provide  
18 direction to Staff for further amendments to the Third Draft. Staff indicated that no further workshops  
19 were planned and that Staff would be making final revisions to the Third Draft to then be presented at  
20 an Open Meeting for a vote by the Commissioners to commence the formal rulemaking process.  
21 Chairman Burns first made a motion to direct Staff to make the EE Standard 35 percent clean energy  
22 by 2030. The motion failed. Next, Chairman Burns made a motion to direct Staff to include a Clean  
23 Energy Standard of 100 percent by 2050. The motion passed.

#### 24 **Open Meetings**

25 204. As shown above, since August 2018, the Commission has, at 18 separately noticed Open  
26 Meetings, not including the Stakeholder Meetings and Workshops described above, received public  
27 comment and other information concerning, and discussed and considered, numerous energy-related  
28 topics as well as the precursor drafts to the Energy Rules.

1        205. On August 14, 2018, at a Commission Staff Open Meeting, the Commission directed  
2 Staff to begin the informal rulemaking process to evaluate Commissioner Tobin's CREST Rules and  
3 the proposals from other Commissioners to develop revisions to the Commission's energy standards  
4 and related rules.

5        206. At the November 7, 2018, Open Meeting, the Commission discussed both forest  
6 bioenergy under the Biomass Docket and possible modifications to energy-related rules in this docket.  
7 Staff noted that it was proceeding with rulemaking to include the REST Rules, biomass, blockchain,  
8 gas and electric EE, and IRPs. The Commission directed Staff to work on a policy to implement a  
9 method for working on the forest biomass issue. The Commission also directed the creation of a  
10 workshop on retail electric competition.

11        207. On December 17 and 18, 2018, at its Open Meeting, the Commission:

12                (a) In the Biomass Docket, considered and voted to approve the Biomass Policy, which  
13 was issued as Decision No. 77045 on January 16, 2019, and addresses the use of biogas and biomass  
14 as renewable energy resources;

15                (b) In this docket, considered and voted to approve the AG-Y Policy, which was issued  
16 as Decision No. 77043 on January 16, 2019, and directed APS to expand and modify its current  
17 alternative generation program to allow medium-size commercial customers to participate, or to  
18 propose a new alternative generation/buy-through program for medium-size commercial customers in  
19 its next rate case, and directed TEP and UNS Electric to propose an alternative generation/buy-through  
20 program for medium- and large-size commercial and industrial customers in their next rate cases;

21                (c) In this docket, considered and voted to approve the EV Policy, which was issued as  
22 Decision No. 77044 on January 16, 2019; and

23                (d) In this docket, provided direction to Staff on the timing of Staff's next revised draft  
24 of the energy-related rules.

25        208. At the March 13, 2019, Staff Open Meeting, Staff explained that it had held a workshop  
26 to discuss possible modifications to the energy-related rules and asked stakeholders to docket  
27 comments addressing proposed changes. Staff asked Commissioners what each would like to see in  
28 the rules. Commissioner Olson stated that the Commission should instruct utilities to invest in the most

1 cost-effective methods of providing electricity. Commissioner Tobin stated that he wanted a broader  
2 plan that included new technologies with room for other technologies to expand. Chairman Burns  
3 expressed an interest in expanding rooftop solar programs. Commissioner Dunn indicated that nuclear  
4 power should be maintained as a viable and clean energy source. Additionally, Staff indicated that it  
5 would be holding workshops on electric vehicles, gas and electric EE standards, and blockchain  
6 technology. Chairman Burns provided information on innovative programs to address peak times and  
7 to create reserves of energy and on community choice aggregation programs. He also recommended  
8 implementing retail electric competition on a smaller scale. Commissioner Kennedy suggested  
9 designating test sites for forest biomass. Staff requested that the Commissioners docket a list of  
10 priorities.

11       209. On May 30, 2019, at its Staff Open Meeting, the Commission engaged in discussion  
12 concerning the major provisions that should be included in the energy-related rules and the process that  
13 should be used to move forward with the rulemaking. The Commissioners generally expressed support  
14 for a clean energy standard.

15       210. At the June 11 and 12, 2019, Open Meeting, the Commission discussed the EV Policy  
16 Implementation Plan, and no votes were taken.

17       211. At its Open Meeting on July 10, 2019, the Commission received public comment on  
18 and discussed and voted to approve the EV Policy Implementation Plan, which was issued on July 19,  
19 2019, as Decision No. 77289.

20       212. At the August 7, 2019, Staff Open Meeting, the Commission discussed issues pertaining  
21 to retail electric competition.

22       213. At the September 11, 2019, Staff Open Meeting, the Commission discussed the EEE  
23 and GEE Rules and whether they would expire on December 31, 2020. Staff advised that the rules  
24 would stay in place unless the Commission took further action to amend the rules. The Commission  
25 also discussed a process for drafting revised Retail Electric Competition Rules.

26       214. On January 15, 2020, at a Staff Open Meeting, the Commission discussed KREST II as  
27 well as the best process to get additional information from stakeholders and move forward with revising  
28 the Second Draft. Staff informed the Commission that Staff would be providing another revised draft.

1        215. At the July 14 and 15, 2020, Open Meeting, Staff informed the Commission that it  
2 intended to docket a revised draft of the energy-related rules the following day, along with a proposed  
3 order.

4        216. At the July 30, 2020, Special Open Meeting, the Commission discussed various  
5 proposed amendments to the Fourth Draft or Revised Fourth Draft. Public comment was provided by  
6 or on behalf of 33 individual stakeholders and organizations. No vote was taken.

7        217. At the August 5, 2020, Staff Open Meeting, the Commission discussed a proposal by  
8 the Chairman regarding the process and procedure for moving forward with the Revised Fourth Draft.

9        218. At the September 24, 2020, Special Open Meeting, the Commission again discussed  
10 proposed amendments offered by each Commissioner to the Revised Fourth Draft. In addition, Ron  
11 Lehr, former Chairman of the Colorado Public Utility Corporation, provided comments on Colorado's  
12 experience. Public comments also were provided by or on behalf of 28 individual stakeholders and  
13 organizations. The Commission discussed the mutually-agreeable language in the proposed  
14 amendments and determined that the various offices of the Commissioners would work on revised  
15 amendment language for a future open meeting. No votes were taken.

16        219. At the October 13 and 14, 2020, Open Meeting, the Commission again discussed the  
17 proposed amendments and exceptions to the Revised Fourth Draft. The following actions were taken  
18 by the Commission:

19            (a) The Commission approved the PIRG/SWEEP/Wildfire Amendment No. 2,  
20 docketed on October 14, 2020, which was designed to align the positions of several Commissioners.  
21 The amendment provided a new definition of "Cost Effective" to mean "prudently invested" as defined  
22 in R14-2-103(A)(3)(i) and as determined in a rate case. It also modified the Clean Energy Plan  
23 Implementation Rule, including by adding a requirement that an LSE's resource portfolio include a  
24 demand-side resource capacity equal to 35 percent of the LSE's 2020 peak demand by January 1, 2030.  
25 In addition, the amendment contained provisions to align the DSM planning and approval process with  
26 the IRP process, and to ensure that existing Commission-approved programs and cost recovery for  
27 those programs would continue until cost recovery is addressed in a utility's next rate case.

28            (b) The Commission did not approve Olson Amendment No. 1, filed on July 29, 2020,

1 which would have required utilities to use a resource portfolio that achieves the lowest cost method of  
2 meeting customers' energy needs.

3 (c) The Commission approved a verbal amendment to Commissioner Kennedy's  
4 Revised Amendment No. 4, changing the 50-percent carbon emissions limit by 2030 to 50 percent by  
5 2032, but the item was not moved as amended. The Commission reached a general consensus that  
6 emissions would be the model moving forward.

7 220. At the October 29, 2020, Open Meeting, which was a continuation of the October 13  
8 and 14, 2020, Open Meeting, the Commissioners sought comments from representatives of WRA, the  
9 WGG, and GCSECA. In addition, the Commission took the following actions on amendments:

10 (a) The Commission passed Commissioner Dunn's Second Revised Proposed  
11 Amendment No. 4, with verbal changes. The amendment added definitions and provisions relating to  
12 ESS Tariffs, requiring electric utilities to establish incentive programs for distributed storage.

13 (b) The Commission passed Commissioner Kennedy's Third Revised Proposed  
14 Amendment No. 4, with verbal changes. The amendment required electric utilities to achieve a 100-  
15 percent reduction in carbon emissions below Baseline Carbon Emissions Levels, by January 1, 2050,  
16 with interim standards of at least 50 percent by January 1, 2032, and at least 75 percent by January 1,  
17 2040. In addition, the amendment required electric utilities to include in its Clean Energy  
18 Implementation Plan a schedule for the retirement of each generating unit that produces carbon  
19 emissions. The amendment also included provisions for determining a utility's Baseline Carbon  
20 Emissions Level, provided a process for public input on that determination, and included provisions  
21 for third-party verification of a utility's identified carbon emissions.

22 (c) The Commission did not pass Commissioner Olson's Amendment No. 3, which  
23 would have limited an electric utility's expenditures to comply with the renewable and clean energy  
24 requirements at \$1 million above what the utility otherwise would spend if the requirements did not  
25 apply.

26 (d) The Commission passed Commissioner Dunn's Amendment No. 6, which continued  
27 to apply a resource-based approach instead of an emissions-based standard to distribution cooperatives.  
28 Specifically, it provided that Commission approval of a distribution cooperative's Clean Energy



1 Implementation Plan describing the existing and planned clean and renewable energy resources and  
2 programs would substitute for the requirements in the new Article 27.

3 (e) The Commission did not pass Commissioner Márquez Peterson's Amendment No.  
4 9, which would have required each electric utility to procure a proportional share of 60 MW of power  
5 from Arizona-derived forest biomass.

6 (f) The Commission passed the WGG Amendment, docketed on October 13, 2020, with  
7 verbal changes. The amendment included a timeframe for Commission review of ASRFI language  
8 after a concern is raised by a Resource Planning Advisory Council ("RPAC") member, added a  
9 provision to give preferential treatment to renewable and clean energy sources located in coal-impacted  
10 communities, created additional exemptions from the IRP and resource procurement processes, and  
11 explicitly granted Staff the authority to hire consultants to support the expanded IRP and resource  
12 planning processes.

13 (g) The Commission passed Commissioner Márquez Peterson's Alternative No. 5,  
14 which proposed changes relating to cooperatives, including a requirement that a load-serving  
15 cooperative meet with and consider the input of a RPAC consisting of the cooperative's board of  
16 directors.

17 (h) The Commission passed a Staff Correction Amendment, allowing Staff to request  
18 additional information from an electric utility and to seek an order from the Commission requiring the  
19 utility to fund an independent consultant to assist Staff if the utility's Clean Energy Implementation  
20 Plan does not contain sufficient information to allow Staff to analyze the submission for compliance  
21 with the Energy Rules.

22 221. At the November 5, 2020, Staff Open Meeting, the Commission discussed the status of  
23 a conforming order to be filed by Staff that would incorporate amendments already passed.

24 222. At the November 13, 2020, Special Open Meeting, the Commission approved several  
25 amendments to the conforming order and ultimately voted to approve the Energy Rules and commence  
26 the formal rulemaking process. The Commission approved the following amendments:

27 (a) The Commission passed Staff Revised Amendment No. 1, which clarified and added  
28 defined terms, clarified the difference between an IRP and a resource portfolio, removed redundant

1 language, and replaced the section on implementation of the Action Plan with more robust provisions.

2 (b) The Commission passed Staff Amendment No. 2 with verbal changes, which added  
3 a definition for Clean Energy Resource; added a provision requiring Staff, within 120 days after a Clean  
4 Energy Implementation Plan is filed, to file a memorandum and proposed order for the Commission's  
5 consideration; and made other language changes.

6 (c) The Commission passed Staff Amendment No. 3, which addressed superfluous  
7 terms.

8 (d) The Commission passed Commissioner Burns Amendment No. 3, which eliminated  
9 the requirement that by December 31, 2035, at least 50 percent of an electric utility's retail kWh sales  
10 be derived from renewable energy resources, and that by December 31, 2050, 100 percent of an electric  
11 utility's retail kWh sales be derived from clean energy resources.

12 223. At the February 18, 2021, Staff Open Meeting, the Commission discussed the EIS filed  
13 by Staff and the legal requirements for the EIS. Staff indicated that it would be providing a revised  
14 EIS.

#### 15 **Description of the Rulemaking**

16 224. As published in the NPRM, this rulemaking would add a new Article 27, entitled  
17 "Energy Rules," with 18 new rules, to A.A.C. Title 14, Chapter 2, the chapter containing the  
18 Commission's rules for fixed utilities. This rulemaking also would repeal the following rules, to be  
19 replaced by the new rules in Article 27: Resource Planning and Procurement Rules in A.A.C. Title 14,  
20 Chapter 2, Article 7; the EPS Rule in A.A.C. R14-2-1618; the REST Rules in A.A.C. Title 14, Article  
21 18; the EEE Rules in A.A.C. Title 14, Chapter 2, Article 24; and the GEE Rules in A.A.C. Title 14,  
22 Chapter 2, Article 25. This rulemaking also would amend A.A.C. R14-2-2302 and R14-2-2307 in the  
23 Net Metering Rules.

24 225. The Energy Rules apply to each public service corporation regulated by the Commission  
25 under Article 15, § 2 of the Arizona Constitution that provides electric or gas service to the public; that  
26 has more than half of its customers in Arizona; and, for a gas utility, that is a Class A utility. The  
27 Energy Rules will cause regulated electric utilities to increase their use of clean and renewable energy  
28 technologies, ESS, and EE measures, while maintaining safe and reliable service to meet the needs of

1 their customers, by requiring an increasing level of reduction from a baseline carbon emissions level  
2 through the regulated electric utility's energy resource selections, coupled with mandatory standards  
3 for demand-side resources, EE, and ESS. Additionally, the Energy Rules create a new resource  
4 planning process for LSEs, including approval processes for an electric utility's load forecast and needs  
5 assessment and ASRFI, and a new ASRFP process that must be used for virtually all new resource  
6 procurement. All of the new resource planning processes include significant and meaningful  
7 stakeholder involvement, which is expected to result in a more thoroughly vetted Resource Portfolio  
8 that takes into account all stakeholder interests. For gas utilities, the Energy Rules replace the current  
9 GEE Rules' standards, the last of which was to be met by December 31, 2020, with a requirement for  
10 a gas utility to file an Energy Efficiency Report every third year, describing each demand-side resource  
11 used or proposed to be used or to explain why no demand-side resource was used or is proposed to be  
12 used. Because their requirements are replaced by the Energy Rules, the rulemaking repeals the  
13 Resource Planning and Procurement Rules, the EPS Rule, the REST Rules, the EEE Rules, and the  
14 GEE Rules. It also makes minor modifications to the Net Metering Rules to address grandfathered  
15 customers while the Commission investigates new methods for compensating customers who install a  
16 distributed generation facility and export energy back to the grid.

17       226. The Energy Rules include the following major provisions:

18               (a) Renewable Energy Resources are defined to include, with additional specifications,  
19 biogas and biopower electric generators, geothermal generators, hydropower facilities, landfill gas  
20 generators, solar energy resources, and wind generators. The Commission can determine that  
21 additional technology is a Renewable Energy Resource if it uses natural replenishing materials or  
22 processes and has environmental benefits.

23               (b) An electric utility must file with the Commission for approval, every three years, a  
24 Clean Energy Implementation Plan that describes how the electric utility intends to comply with the  
25 Energy Rules.

26               (c) An LSE must, through its Clean Energy Implementation Plan, by January 1, 2030,  
27 achieve a resource portfolio with demand-side resource capacity equal to at least 35 percent of its 2020  
28 peak demand.

1 (d) Through the DSM programs in its Clean Energy Implementation Plan, an electric  
2 utility must achieve an average of at least 1.3 percent annual EE savings, measured by megawatt-hour  
3 (“MWh”) savings over the three-year planning period, without carrying over energy savings credits  
4 from programs implemented before January 1, 2021.

5 (e) Through its Clean Energy Implementation Plan, an electric utility must achieve, by  
6 December 31, 2035, installation of ESS with an aggregate capacity equal to at least 5 percent of the  
7 utility’s 2020 peak demand, with at least 40 percent derived from customer-owned or customer-leased  
8 distributed storage.

9 (f) Through its Clean Energy Implementation Plan, an electric utility must achieve, by  
10 January 1, 2050, a 100-percent reduction in the electric utility’s baseline carbon emissions level, and  
11 the electric utility must meet interim standards of 50 percent by January 1, 2032, and 75 percent by  
12 January 1, 2040. The electric utility’s baseline carbon emissions level is the average annual metric  
13 tons of carbon emissions from all generating units used to meet the utility’s retail kWh sales during the  
14 three-year period of 2016 through 2018.

15 (g) An electric utility must provide its baseline carbon emissions level, with verification  
16 from an independent third-party, to the Commission for review, and the baseline carbon emissions level  
17 may be subject to stakeholder objection and a Commission approval process.

18 (h) To develop its load forecast and needs assessment, an LSE is required (1) to develop  
19 at least five alternative 15-year load forecasts and needs assessments based on different assumptions,  
20 (2) to form an RPAC that includes representation from specified stakeholder groups, (3) to hold  
21 workshops with the utility’s developed RPAC, (4) to consider the input and recommendations of the  
22 RPAC in good faith and to refine the load forecast and needs assessment accordingly, and (5) to file a  
23 load forecast and needs assessment with the Commission for approval every three years.

24 (i) An LSE’s load forecast and needs assessment must be reviewed by Staff, which will  
25 make a recommendation to the Commission after at least one Commission workshop, and must be  
26 approved by the Commission for use in the LSE’s ASRFI.

27 (j) Each LSE must develop an ASRFI designed to meet the needs and requirements of  
28 its approved load forecast and needs assessment as safely and reliably as possible, while prioritizing

1 meeting its Clean Energy Implementation Plan, minimizing costs for customers, and siting or deploying  
 2 renewable energy resources and clean energy resources in impacted communities. The ASRFI must  
 3 be technology neutral, fuel neutral, location neutral (except for the impacted communities  
 4 prioritization), size neutral, and vendor neutral. The LSE must hold RPAC workshops for input on the  
 5 ASRFI language and must consider in good faith the RPAC's input and recommendations. The LSE  
 6 must then submit its refined ASRFI language to the Commission for approval, which may occur  
 7 through a Staff determination that the ASRFI language is compliant with R14-2-2707(A) or, if an  
 8 RPAC member objects to it and requests review, through Commission approval.<sup>32</sup>

9 (k) An LSE must conduct its ASRFI process using the approved ASRFI language and  
 10 must review and consider each bid before formulating its draft IRP, which must include a preferred  
 11 resource portfolio and at least two alternative resource portfolios describing all energy resources the  
 12 LSE believes should be used to meet its 15-year load forecast and needs assessment. When crafting its  
 13 IRP, an LSE must select its energy resources with consideration of the same priorities required for the  
 14 ASRFI but may also consider an extensive list of other factors that have a reasonable nexus to  
 15 ratemaking, such as improving system reliability and resiliency, decreasing demand during hours when  
 16 the price per kWh for customers is highest, and meeting demand in the least costly way to society.

17 (l) After developing a draft IRP, the LSE must meet with the RPAC in a workshop to  
 18 obtain input on changes to the draft IRP, and then must refine the IRP after good faith consideration of  
 19 that input.

20 (m) By August 1 of every third year, the LSE is required to submit a refined draft IRP  
 21 to the Commission for approval of a Resource Portfolio to be implemented by the LSE. Staff must  
 22 hold at least one workshop to obtain input on the IRP and then must file, for Commission consideration,  
 23 a memorandum and proposed order recommending a Resource Portfolio for use by the LSE. The  
 24 Commission must approve a Resource Portfolio to be implemented by the LSE, and the requirements  
 25 for the first five years of the approved Resource Portfolio are considered to be the LSE's Action Plan.

26 (n) An LSE must implement the approved Action Plan, must use an ASRFP process to  
 27

28 <sup>32</sup> As will be discussed later, R14-2-2707 implies, but does not state, that Commission approval is considered to be granted if the Commission does not choose, within 45 days, to review ASRFI language in response to an RPAC member's request.



1 procure resources (except under specified exceptional circumstances), and must report the results of its  
2 ASRFP process in an annual Procurement Activity Report.

3 (o) The ASRFP process must be overseen by an independent monitor, selected after  
4 consultation with Staff.

5 (p) Exceptions from the ASRFI and ASRFP processes are included for specified  
6 exceptional circumstances.

7 (q) Electric utilities must file annual reports with the Commission describing  
8 compliance with the requirements of their Clean Energy Implementation Plans, providing specified  
9 demand-side and supply-side resource data, and providing the results of its ASFRP process to procure  
10 resources per its Action Plan and describing its procurement plans.

11 (r) Electric utilities must provide opportunities for customers to participate in demand-  
12 side resources, and must evaluate demand-side resources to determine cost-effectiveness. Demand-  
13 side resources must be cost-effective and must either provide EE, manage energy consumption, reduce  
14 peak demand, or alter customer energy consumption behavior.

15 (s) Each Class A gas utility must file an Energy Efficiency Report every third year.  
16 There is no requirement for gas utilities to meet specific standards for reduction in coincident peak or  
17 energy demand, but the gas utilities are required to identify any demand-side resources implemented  
18 or proposed to be implemented and, if none, to explain why.

19 (t) Each electric utility must file, for Commission approval, at least one ESS tariff. The  
20 ESS tariff must establish an incentive program to encourage customers to purchase or lease distributed  
21 storage and must establish values to compensate or credit customers or aggregators for beneficial  
22 operating attributes resulting from distributed storage. The ESS tariff must not require that a  
23 customer's energy storage system be associated with distributed generation.

24 (u) Electric utilities that are cooperatives, including load-serving cooperatives, are  
25 required to use best reasonable efforts to comply with the Energy Rules.

26 (v) A distribution cooperative's Commission-approved Clean Energy Implementation  
27 Plan substitutes for the requirements of the Energy Rules, and a load-serving cooperative's  
28 Commission-approved limited IRP, including its Action Plan, substitutes for the requirements of the

Energy Rules. In preparing its IRP, a load-serving cooperative shall meet with and consider the input of an RPAC comprised of its Board of Directors.

(w) Recovery of the costs to comply with the Energy Rules shall be allowed only if the Commission determines, in a rate case, that they are prudent.

(x) A utility's current Net Metering tariff continues to apply to eligible customers.

### **Rationale for the Rulemaking**

227. The burning of fossil fuels, such as coal, to generate electricity produces CO<sub>2</sub> emissions; CO<sub>2</sub> is a greenhouse gas that contributes to climate change.<sup>33</sup>

228. The burning of fossil fuels to generate electricity also produces emissions of criteria pollutants<sup>34</sup> including nitrogen oxides ("NO<sub>x</sub>") (a precursor to ground-level ozone), sulfur dioxide ("SO<sub>2</sub>") (a precursor to secondary fine particulates ("PM<sub>2.5</sub>")), and primary PM<sub>2.5</sub>, all of which can cause adverse health impacts to humans.<sup>35</sup> The greater Phoenix area's ozone concentration has been steadily increasing since 2016, and it is a nonattainment area for ozone.<sup>36</sup> The Tucson area is at risk of exceeding the NAAQS for ozone.<sup>37</sup>

229. CO<sub>2</sub> emissions for APS and TEP for 2019 were approximately 12.3 million metric tons and 12 million metric tons, respectively.<sup>38</sup>

<sup>33</sup> *Arizona 2020 REST Progress Report* at 21.

<sup>34</sup> Criteria pollutants are those whose levels are regulated by the EPA under the National Ambient Air Quality Standards ("NAAQS") required under the Clean Air Act. The six criteria air pollutants are particulate matter, photochemical oxidants (including ozone), carbon monoxide, sulfur oxides, nitrogen oxides, and lead. (EPA.gov/criteria-air-pollutants.)

<sup>35</sup> *Arizona 2020 REST Progress Report* at 22-23; see ADEQ Comments. See also U.S. Environmental Protection Agency ("EPA") *Integrated Science Assessment for Particulate Matter* (Final Report, December 2019), available at [cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=347534](https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=347534) ("EPA ISA-PM"). Official notice is taken of the EPA ISA-PM. For example, ground-level ozone causes respiratory symptoms such as coughing and shortness of breath; decreases lung function; and inflames airways, increasing the risk for respiratory infection. (ADEQ Comments.) Higher daily ozone concentrations are also associated with increased asthma attacks, worsened chronic obstructive pulmonary disease ("COPD"), early death, damage to the central nervous system, and reproductive and developmental harm. (*Id.*) Short- and long-term PM<sub>2.5</sub> exposures have been determined likely to cause respiratory effects (such as asthma exacerbation, COPD exacerbation, and respiratory-related diseases) and have been determined to cause cardiovascular effects (such as ischemic heart disease and heart failure) and to increase nonaccidental mortality. EPA ISA-PM at ES-9 through ES-17.

<sup>36</sup> ADEQ Comments.

<sup>37</sup> TEP 2020 IRP at 177.

<sup>38</sup> APS 2020 IRP at 43; TEP 2020 IRP at 171.

230. The burning of fossil fuels to generate electricity consumes an enormous amount of water, as water is used as a coolant for thermal power plants fueled by coal or natural gas, whereas renewables such as photovoltaic solar and wind turbines consume little to no water.<sup>39</sup>

231. Arizona has been experiencing drought conditions since at least 2002 and is currently considered to be in an especially severe drought, as 2020 was the second driest calendar year on record for the state.<sup>40</sup>

232. The costs of fossil fuels are variable and sometimes volatile, based on the market;<sup>41</sup> they are generally directly passed through to electric utility customers via adjustor mechanisms.

233. Most renewable energy resources have little to no fuel costs and nearly no other operational costs.<sup>42</sup>

234. Distributed generation, such as through rooftop solar units or small wind turbines, decreases transmission and distribution line losses, reducing energy waste.<sup>43</sup>

235. ESS allow energy generated by intermittent renewable energy resources, such as solar energy resources and wind generators, to be stored for use during periods when the intermittent renewable energy resources are not generating sufficient energy.<sup>44</sup> By absorbing excess renewable energy produced in lower load hours, and discharging the stored energy during hours of peak energy demand, ESS increases the value of renewable energy resources while improving grid reliability and stability.<sup>45</sup> To the extent that an ESS is owned or leased by a customer and coupled with distributed generation, the ESS also allows for the customer to reduce the energy usage for which the customer is billed each month, which generally will reduce customer bills.

<sup>39</sup> *Arizona 2020 REST Progress Report* at 23-26. Thermal power plants fueled by uranium also use water as a coolant. (*Id.* at 23.) APS reported that its fleet-level water intensity was 450 gallons/MWh in 2017 (a reduction from 520 gallons/MWh in 2012). (*Id.* at 23.) See also APS 2020 IRP at 201.

<sup>40</sup> Arizona Department of Water Resources, *Redesigned Drought.Gov: A “One Stop Resource” for All Things Drought* (March 17, 2021), available at [new.azwater.gov/news/articles/2021-17-03-0](http://new.azwater.gov/news/articles/2021-17-03-0).

<sup>41</sup> *Arizona REST 2020 Progress Report* at 18-19.

<sup>42</sup> *Arizona REST 2020 Progress Report* at 18.

<sup>43</sup> [Epa.gov/energy/distributed-generation-electricity-and-its-environmental-impacts](http://Epa.gov/energy/distributed-generation-electricity-and-its-environmental-impacts).

<sup>44</sup> APS 2020 IRP at 74; APS 2019 Preliminary Integrated Resource Plan, dated and filed in the IRP Docket on August 1, 2019 (“APS 2019 Prelim IRP”) at 18.

<sup>45</sup> APS 2020 IRP at 74; APS 2019 Prelim IRP at 18.

236. Demand-side resources reduce the total cost of meeting energy service needs by reducing or shifting the time of energy usage, which reduces overall energy consumption and reduces peak demand.<sup>46</sup>

237. EE is a demand-side resource created by the conservation of energy by customers or through technology improvements (such as replacing an old household appliance or pool pump with a new one or weatherizing an older home) that results in the same level and quality of service using less energy, and is the least expensive energy resource to meet customer needs.<sup>47</sup> Where energy consumption is reduced, the total energy load and peak demand of the utility providing electricity may be reduced, obviating the need for the utility to obtain additional generation resources to meet that demand and resulting in cost savings that can be passed through to customers.<sup>48</sup>

238. Additionally, if a customer conserves energy through an EE program supported by a utility, the customer generally will see direct cost savings on electric bills.<sup>49</sup>

239. The use of both EE standards and IRP processes results in a greater annual energy savings as a percentage of retail sales than IRP processes alone.<sup>50</sup>

240. It has been estimated that the EEE Rules resulted in the following benefits:<sup>51</sup>

- More than \$1.4 billion in net economic benefits to all Arizonans from 2010-2019, as a result of the EE programs of APS, TEP, and UNS Electric;
- Savings of more than 15 billion gallons of water from APS and TEP's efficiency programs combined;
- For APS from 2010 to 2019, avoidance of more than 1,000 MWs through APS's EE programs, which is equivalent to avoiding the construction of 10 combustion turbine units at the Ocotillo Generating Station; and
- From 2010 to 2019, for every \$1.00 of ratepayer money invested in APS and TEP EE programs, a return of approximately \$3.92 in benefits to ratepayers.

<sup>46</sup> See APS 2020 IRP at 112; APS 2019 Prelim IRP at 18.

<sup>47</sup> See *EE Standards vs. IRPs*.

<sup>48</sup> See *Arizona REST 2020 Progress Report* at 19-21.

<sup>49</sup> See APS 2020 IRP at 12.

<sup>50</sup> *Effectiveness & Value of EE Standards*.

<sup>51</sup> Source: SWEEP comments of January 22, 2021, citing APS, TEP, and UNS Electric Annual Demand Side Management reports for 2010-2019.



241. It has been estimated that there are approximately 9,308 EE businesses and more than 41,000 EE jobs in Arizona, with EE jobs comprising 21 percent of construction jobs and 36 percent of energy sector jobs and with veterans comprising approximately 14 percent of those employed in EE jobs.<sup>52</sup>

242. The costs of renewable energy resources have declined greatly since the adoption of the first REST Rules, often making renewable energy resources a less expensive generation option than are fossil-fuel generating units.<sup>53</sup>

243. Renewable energy development in Arizona has provided significant economic benefits. For example, in rural Arizona, from 2001 to 2017, total direct and indirect benefits from renewable energy development activity created \$4.6 billion in direct output and \$4.7 billion in indirect and induced output, produced by 17,971 employees earning a total of approximately \$1.2 billion.<sup>54</sup> These benefits include a direct benefit to Arizona of approximately \$16.7 million in transaction privilege and use tax revenue.<sup>55</sup> For 2018, the total direct and indirect benefits of annual rural renewable energy operations in Arizona were estimated at \$63.3 million in total output produced by 702 employees earning a total of approximately \$33.5 million.<sup>56</sup> These benefits include a direct benefit to Arizona schools of approximately \$882,000 in property tax revenue.<sup>57</sup>

244. It has been estimated that from 2008 to 2018, implementation of the REST yielded more than \$1.5 billion in gross benefits for APS and its customers and more than \$469 million in gross benefits for TEP and its customers.<sup>58</sup> This includes approximately \$787 million (APS) and \$251 million (TEP) in avoided conventional energy costs, approximately \$297 million (APS) and \$82 million (TEP) in cumulative avoided conventional power plant capacity costs, approximately \$234 million (APS) and \$75 million (TEP) in cumulative calculated CO<sub>2</sub> emissions reduction benefits, and

<sup>52</sup> Environmental Entrepreneurs, *Energy Efficiency Jobs in America: Arizona*, available at <https://www.e2.org/wp-content/uploads/2018/09/ARIZONA-Dist.pdf>. The document cites the 2018 U.S. Energy and Employment Report, May 2018, by the National Association of State Energy Officials and Energy Federation, Inc., as its data source.

<sup>53</sup> See, e.g., *Lazard LCOE Analysis* at 2-4. The LCOEs for solar photovoltaic and wind saw the most dramatic reductions in the period from 2009 to 2019. (*Id.* at 7.) During the same time period, gas peaker plants and nuclear plants saw the greatest increases in LCOE. (*Id.*)

<sup>54</sup> *AZ Rural Economic Benefits* at i.

<sup>55</sup> *Id.*

<sup>56</sup> *Id.*

<sup>57</sup> *Id.*

<sup>58</sup> *Arizona REST 2020 Progress Report* at 15.



1 approximately \$185 million (APS) and \$61 million (TEP) in benefits from criteria pollutant emissions  
2 reductions.<sup>59</sup>

3 245. Renewable energy has also been a source of local investment and job creation in  
4 Arizona, with the solar industry alone reported to have resulted in investment of \$11.6 billion in  
5 Arizona, with more than \$735 million invested in 2018 alone.<sup>60</sup> In 2019, SEIA reported that there were  
6 approximately 571 solar companies operating in Arizona, including eight manufacturers.<sup>61</sup> In 2018,  
7 The Solar Foundation reported that there were 7,524 solar industry jobs in Arizona.<sup>62</sup>

8 246. The average residential customer's monthly REST surcharge for the period of 2010  
9 through 2018 was approximately \$3.41 for APS and approximately \$3.78 for TEP, representing a bill  
10 percentage of approximately 2.5 percent and 4.2 percent, respectively.<sup>63</sup>

11 247. It has been estimated that Arizona's electric utilities could save more than \$3 billion by  
12 replacing all remaining coal-burning power plants slated to operate through at least 2035 with new  
13 renewable energy resources.<sup>64</sup>

14 248. The Energy Rules require an electric utility, when determining the resources to include  
15 in its refined IRP, to prioritize minimizing the cost of providing electric energy service to customers  
16 through a combination of supply-side and demand-side resources that will result in the lowest overall,  
17 lifetime costs to meet customers' energy needs safely and reliably.

18 249. The costs of a Clean Energy Standard, which allows for the use of nuclear generation,  
19 are significantly lower than the costs of a Renewable Energy Standard that would not allow for the use  
20 of nuclear generation.<sup>65</sup>

21 250. Having the Commission review and approve a utility's load forecast and needs  
22 assessment before the utility creates its IRP, having the Commission or Staff approve a utility's ASRFI  
23 language before the procurement process begins, and having a utility use an ASRFP process are  
24

25 <sup>59</sup> *Arizona REST 2020 Progress Report* at 18, 20-21, 22, 23.

26 <sup>60</sup> *Id.* at 26.

27 <sup>61</sup> *Id.*

28 <sup>62</sup> *Id.*

<sup>63</sup> *See id.* at 31.

<sup>64</sup> *Arizona Coal Plant Valuation Study* at 4.

<sup>65</sup> *Western Interconnect Clean Energy Study*.

1 consistent with recommended best practices for all-source electric generation procurement.<sup>66</sup>

2       251. Staff's initial proposal for the Energy Rules concluded that modification to the Resource  
3 Planning and Procurement Rules was necessary to ensure that LSEs: (1) fulfill their obligations to serve  
4 customers at just and reasonable rates; (2) use the most cost-effective manner to meet load capacity  
5 needs; (3) minimize impacts on ratepayer bills; (4) evaluate existing resources, including retirement of  
6 fossil fuel generating plants and expiring purchased power agreements; (5) achieve goals to procure  
7 renewable energy resources by a certain time; (6) strengthen reliability, resiliency, and stability of  
8 transmission and distribution systems; (7) implement EE and demand response programs; (8) reduce  
9 greenhouse gas emissions and water consumption; and (9) address community choice aggregation,  
10 tribal lands, and limited-income communities.

11       252. Staff's initial proposal for the Energy Rules also concluded that updating the GEE Rules  
12 was necessary to consider calendar years after 2019, and that it was most appropriate to repeal the GEE  
13 Rules and expand the EEE Rules to consider gas utilities by updating the definition of "affected utility."  
14 Staff also recommended modifying the EEE Rules to consider calendar years past 2019 and integrating  
15 the EEE rules with the Resource Planning and Procurement Rules. In addition, Staff recommended  
16 modifying the REST rules by integrating them with the Resource Planning and Procurement Rules,  
17 establishing a future renewable energy goal, defining distributed generation eligible technologies, and  
18 incorporating the role of forest biomass energy and battery storage. Also, Staff recommended  
19 amending the Net Metering Rules because the current Net Metering language is no longer applicable  
20 to distributed generation customers on an export tariff. Last, Staff proposed repealing the EPS Rule  
21 because the adoption of the REST Rules in Decision No. 69127 effectively superseded the EPS Rule.

22       253. The economic assumptions underlying the original REST Rules, and their purpose of  
23 promoting the adoption of renewable generation resources, have changed dramatically since the REST  
24 Rules were adopted. The cost, technology, and efficiency of solar energy resources have changed  
25 dramatically; the distributed generation industry has expanded greatly; and the costs of residential  
26 rooftop solar have been greatly reduced. These factors led to the Commission's original decision to  
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28 <sup>66</sup> See *Best Practices for All-Source Procurement*.

1 review, modernize, and expand the REST Rules and other associated rules.<sup>67</sup> Revising all of the  
 2 Commission's existing energy-related rules is similarly appropriate because of the changes in  
 3 technology since the rules were adopted. The Commission routinely evaluates its energy-related rules  
 4 for fixed utilities as technology evolves, as energy policy at the state and federal level changes, and as  
 5 changes in the energy marketplace occur.

6 254. The Energy Rules are the culmination of the Commission's efforts to modernize its  
 7 energy-related rules to increase regulated utilities' use of clean and renewable energy technologies,  
 8 ESS, and EE-based measures while maintaining safe and reliable service for electric customers. The  
 9 specific ASRFI and ASRFP energy procurement processes are designed to elicit a least-cost mix of  
 10 resources for each utility to meet its retail energy demands while maintaining reliability, deliverability,  
 11 and safety, and while reducing negative environmental impacts and risks. The Energy Rules recognize  
 12 the evolution of technology, changes in the energy marketplace, and changes in energy policy that have  
 13 been endorsed at the state and federal level to promote energy conservation, to consider alternative  
 14 energy resources, and to improve overall air quality.

15 255. Regulating an electric utility's Resource Portfolio<sup>68</sup> is an essential part of the  
 16 Commission's obligation under Article 15, Section 3 of the Arizona Constitution to "prescribe just and  
 17 reasonable rates and charges to be made and collected . . . by public service corporations within the  
 18 State for service rendered therein" because a utility's Resource Portfolio largely dictates its physical  
 19 assets and operating expenses and thus the revenue requirement its rates and charges are designed to  
 20 generate.

21 256. The Commission made the following Findings of Fact in Decision No. 69127  
 22 (November 14, 2006) and affirms them here:

23 231. Continued reliance on fossil fuel generation resources without  
 24 the addition of renewable generation resources is inadequate and  
 25 insufficient to promote and safeguard the security, convenience, health, and  
 26 safety of [electric utility] customers and the public, and is therefore unjust,  
 27 unreasonable, unsafe, and improper.

28 232. It is just, reasonable, proper, and necessary to require a diverse

<sup>67</sup> See Letter from Commissioner Little docketed September 14, 2016, in the REST Rules Docket.

<sup>68</sup> A utility's resource portfolio is defined in the Energy Rules to be the combination of supply-side and demand-side resources to be used over a forecasted 15-year period to meet electric demand in a safe, reliable, and efficient manner.

1 fuel supply for Arizona's electricity needs in order to reduce reliance on  
2 fossil fuel energy sources in Arizona to promote and safeguard the security,  
3 convenience, health and safety of [electric utility] customers and the public  
4 in Arizona.<sup>69</sup>

5 257. Furthermore, consistent with Decision No. 69127, the Commission finds that it is just,  
6 reasonable, proper, and necessary to require electric utilities to increase the amount of clean energy  
7 resources used in their resource portfolios in order to reduce air pollution emissions and their associated  
8 external costs and to promote and safeguard the security, convenience, health, and safety of their  
9 customers, their employees, and the public in Arizona.

10 258. According to Staff, 30 states, including Arizona, have enacted renewable energy  
11 portfolio standards that typically require some percentage of an electric utility's procured or sold  
12 electricity to come from renewable energy sources. Among those, eight have a renewable energy  
13 portfolio standard of 100 percent by a specific future year. The Energy Rules eliminate Arizona's  
14 REST and EPS and replace them with a carbon-emissions-reduction standard of 100 percent by 2050,  
15 which incentivizes utilities to utilize resources that do not emit carbon while maintaining a flexible  
16 approach as to the technology that can be used to satisfy the mandate.

17 259. The Commission acknowledges the adverse impacts of climate change and the role of  
18 fossil fuel generation in climate change. The Commission also acknowledges and desires to improve  
19 the air pollution and environmental pollution that results from fossil fuel generation. Reducing  
20 emissions of carbon-based pollutants and greenhouse gases is expected to result in increased public  
21 health and safety, and societal and economic benefits.

22 260. Changes to the Commission's rules regarding resource planning and procurement are  
23 warranted because of the development of new technologies, including renewable and clean generation,  
24 distributed generation, and energy storage; increased energy demand; stable costs of natural gas prices;  
25 increased stakeholder involvement; electric vehicle adoption; advanced production and cost modeling  
26 technologies and methodologies; and changes in state and federal environmental and economic  
27 regulations.

28 261. Replacing the EEE and GEE rules with the updated energy efficiency standard for

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<sup>69</sup> Decision No. 69127 at 55.

1 electric utilities is necessary to maintain low-cost electricity for consumers and to reduce fossil fuel use  
2 and environmental emissions. Although an energy efficiency mandate for gas utilities is not included  
3 in the Energy Rules, gas utilities are given the option to provide DSM measures to customers. EE  
4 measures have achieved an established record of reducing overall energy usage and total water use and  
5 waste generation.

6       262. The focus on the early stages of Resource Portfolio development in the Energy Rules,  
7 through approval of the load forecast and needs assessment, approving ASRFI and ASRFP language,  
8 and use of the RPAC, allows the Commission to ensure that an LSE considers the factors necessary for  
9 the cost-effective provision of safe and reliable electric service to its customers while meeting the Clean  
10 Energy Implementation Plan requirements. It is expected that this will provide LSEs more assurance  
11 that their procured resources will be acceptable to the Commission and potentially increase the  
12 likelihood that LSEs will be able to obtain cost recovery for the resources in future ratemaking.

13       263. It is appropriate to adopt more lenient requirements for electric utilities that are  
14 cooperatives in the Energy Rules, in recognition of the cooperatives' non-profit status, smaller size,  
15 and differing operating conditions, particularly their operation by a local board.

16       264. The Commission is continuing to investigate new methods for compensating customers  
17 who install a distributed generation facility and export energy to the grid. Consequently, this  
18 rulemaking makes only minor changes to the Net Metering Rules to apply only to grandfathered  
19 customers.

20       265. The Energy Rules are intended to benefit communities that have been negatively  
21 impacted by the closure of fossil fuel power plants by having utilities give such communities  
22 preferential treatment when they are siting or purchasing renewable and clean energy resources as part  
23 of the resource procurement process.

24       266. The Commission believes that the Energy Rules are necessary and in the public interest  
25 in light of new technology, improved processes, and the evolving energy marketplace. The Energy  
26 Rules provide a balanced position between utility costs and economic and environmental benefits while  
27 ensuring safe, reliable, and affordable energy service to the people of Arizona. The Energy Rules are  
28 the result of extensive stakeholder input and careful evaluation of data and information submitted to



the Commission; are reasonably necessary for effective ratemaking and for the convenience, comfort, safety, and preservation of health of the customers of electric and gas utilities, and the general public; and will result in the adoption of just, reasonable, safe, proper, adequate, and sufficient standards for the generation, procurement, and delivery of electric and gas service.

267. The numerous comments the Commission has received from the public have been overwhelmingly in support of the proposed Energy Rules.

#### **Authority for this Rulemaking**

268. The Commission possesses both constitutional and statutory authority to adopt the Energy Rules, which were cited in the NPRM: Arizona Constitution, Article 15, §§ 3 and 13, and A.R.S. §§ 40-202, 40-203, 40-204, 40-321, 40-322(A), 40-332(B), 40-336, 40-361, and 40-374. The Commission additionally has statutory authority to adopt the Energy Rules under A.R.S. §§ 40-281 and 40-282.

269. Article 15, § 3 of the Arizona Constitution provides, in pertinent part:

The Corporation Commission shall have full power to, and shall, prescribe just and reasonable classifications to be used and just and reasonable rates and charges to be made and collected, by public service corporations within the State for service rendered therein, and make reasonable rules, regulations, and orders, by which such corporations shall be governed in the transaction of business within the State, and may prescribe the forms of contracts and the systems of keeping accounts to be used by such corporations in transacting such business, and make and enforce reasonable rules, regulations, and orders for the convenience, comfort, and safety, and the preservation of the health, of the employees and patrons of such corporations . . . .

This constitutional provision gives the Commission complete and exclusive authority to establish rates, and the ratemaking authority is self-executing, granting the Commission the authority to make rules, regulations, and orders that are reasonably necessary to exercise its ratemaking powers. Judicial review of the Commission's ratemaking decisions is limited to whether its determinations are arbitrary, unlawful, or supported by substantial evidence.<sup>70</sup> This constitutional provision also gives the Commission permissive authority to regulate public service corporations through reasonable rules, regulations, and orders "to preserve and protect public health, safety, convenience, and comfort."<sup>71</sup> The

<sup>70</sup> *Johnson Utilities*, 249 Ariz. 215, 221-22, ¶¶ 21-23, 25 (2020).

<sup>71</sup> *See id.* at 222, ¶ 26.

Commission's permissive authority also is self-executing, but is not exclusive and plenary; instead, the Commission shares its permissive authority with the legislature.<sup>72</sup> As recognized by the Arizona Supreme Court in *Johnson Utilities*, the Commission may impose upon a public service corporation "any regulation necessary to protect public health and safety."<sup>73</sup>

270. A.R.S. § 40-202 provides, in pertinent part:

**A. The commission may supervise and regulate every public service corporation in the state and do all things, whether specifically designated in this title or in addition thereto, necessary and convenient in the exercise of that power and jurisdiction. . . .**

**L.** A public service corporation shall comply with every order, decision, rule or regulation made by the commission in any matter relating to or affecting its business as a public service corporation and shall do everything necessary to secure compliance with and observance of every such order, decision, rule or regulation.<sup>74</sup>

271. A.R.S. § 40-203 states:

**When the commission finds** that the rates, fares, tolls, rentals, charges or classifications, or any of them, demanded or collected by any public service corporation for any service, product or commodity, or in connection therewith, or **that the rules, regulations, practices or contracts, are unjust, discriminatory or preferential, illegal or insufficient, the commission shall determine and prescribe them by order,** as provided in this title.<sup>75</sup>

272. A.R.S. § 40-321 states, in pertinent part:

**A. When the commission finds that the equipment, appliances, facilities or service of any public service corporation, or the methods of manufacture, distribution, transmission, storage or supply employed by it, are unjust, unreasonable, unsafe, improper, inadequate or insufficient, the commission shall determine what is just, reasonable, safe, proper, adequate or sufficient, and shall enforce its determination by order or regulation.**

**B. The commission shall prescribe regulations for the performance of any service or the furnishing of any commodity,** and upon proper demand and tender of rates, the public service corporation shall furnish the

<sup>72</sup> *Id.* at 222, ¶¶ 26-28. The legislature has the authority to override regulations of the Commission, and when there is a conflict between a Commission rule and a statute, the legislature's police power prevails. *Id.* at 223, ¶ 30.

<sup>73</sup> *Id.* at 231.

<sup>74</sup> Emphasis added. The language of A.R.S. § 40-202(A), although broad, has been interpreted by the Arizona Supreme Court as bestowing no additional powers on the Commission aside from those already granted by the Arizona Constitution or specifically granted elsewhere by the legislature, although the Court acknowledged that it also provides the Commission the authority to do those things necessary and convenient in the exercise of the powers so granted. *Southern Pacific Co. v. Arizona Corp. Comm'n*, 98 Ariz. 339, 348 (1965).

<sup>75</sup> Emphasis added.

commodity or render the service within the time and upon the conditions prescribed.<sup>76</sup>

273. A.R.S. § 40-322(A) states, in pertinent part:

**The commission may:**

1. **Ascertain and set just and reasonable** standards, classifications, **regulations,** practices, measurements or service **to be** furnished and **followed by public service corporations** other than a railroad.

2. Ascertain and fix adequate and serviceable standards for the measurement of quantity, quality, pressure, initial voltage or other condition pertaining to the supply of the product, commodity or service furnished by such public service corporation.

3. Prescribe reasonable regulations for the examination and testing of the product, commodity or service and for the measurement thereof.<sup>77</sup>

274. A.R.S. § 40-332(B) provides, in pertinent part:

**Every public service corporation shall allow every electricity supplier and self-generator of electricity access to electric transmission service and electric distribution service** under rates and terms and conditions of service that are just and reasonable as determined and approved by regulatory agencies that have jurisdiction over electric transmission service and electric distribution service. . . .<sup>78</sup>

275. A.R.S. § 40-336 provides:

**The commission may by order, rule or regulation, require every public service corporation to maintain and operate its line, plant, system, equipment, and premises in a manner which will promote and safeguard the health and safety of its employees, passengers, customers and the public,** and may prescribe the installation, use, maintenance and operation of appropriate safety or other devices or appliances, including interlocking and other protective devices at grade crossings or junctions and block or other systems of signaling, establish uniform or other standards of equipment, **and require the performance of any other act which health or safety requires.**<sup>79</sup>

276. A.R.S. § 40-361 provides:

A. Charges demanded or received by a public service corporation for any commodity or service shall be just and reasonable. Every unjust or unreasonable charge demanded or received is prohibited and unlawful.

B. **Every public service corporation shall furnish and maintain such service, equipment and facilities as will promote the safety, health, comfort and convenience of its patrons, employees and the public,** and as will be in all respects adequate, efficient and reasonable.

<sup>76</sup> Emphasis added.

<sup>77</sup> Emphasis added.

<sup>78</sup> Emphasis added.

<sup>79</sup> Emphasis added.

C. All rules and regulations made by a public service corporation affecting or pertaining to its charges or service to the public shall be just and reasonable.<sup>80</sup>

277. A.R.S. § 40-374 provides:

Except as otherwise provided in this chapter, **no public service corporation shall charge, demand, collect or receive a greater, less, or different compensation** for transportation of persons or property, or **for any product or commodity, or for any service rendered in connection therewith, than the rates, fares, tolls, rentals and charges applicable to such transportation or product, commodity or service specified in its schedule on file and in effect at the time**, nor shall any public service corporation refund or remit, directly or indirectly, in any manner or by any device, any part of the rates, fares, tolls, rentals and charges so specified, nor extend to any person any form of contract, agreement, or any rule or regulation, or any facility or privilege, except such as are regularly and uniformly extended to all persons and except upon order of the commission.<sup>81</sup>

278. A.R.S. §§ 40-281 and 40-282 require a public service corporation to obtain a Certificate of Convenience and Necessity ("CC&N") from the Commission before constructing any plant or system, prohibit a public service corporation from exercising any right or privilege under a franchise or permit without first obtaining a CC&N, and authorize the Commission to attach to the exercise of rights under a CC&N such terms and conditions as the Commission deems that the public convenience and necessity require. *See* A.R.S. §§ 40-281(A), (C); 40-282(C).

279. The Commission also has both constitutional and statutory authority specifically with regard to requiring public service corporations to provide information, such as reports, to the Commission. Article 15, § 13 of the Arizona Constitution provides: "All public service corporations . . . shall make such reports to the Corporation Commission, under oath, and provide such information concerning their acts and operations as may be required by law, or by the Corporation Commission." Additionally, A.R.S. § 40-204 states, in pertinent part:

**A. Every public service corporation shall furnish to the commission, in the form and detail the commission prescribes, tabulations, computations, annual reports, monthly or periodical reports of earnings and expenses, and all other information required by it to carry into effect the provisions of this title and shall make specific answers to all questions submitted by the commission.** If a corporation is unable to answer any question, it shall give a good and sufficient reason therefor.

<sup>80</sup> Emphasis added.

<sup>81</sup> Emphasis added. This statutory provision is specifically applicable in regard to the Energy Rules' requirement for an ESS tariff and the modification to the Retail Electric Competition Rules.

1 B. When required by the commission, a public service corporation shall  
 2 deliver to the commission copies of any maps, profiles, contracts,  
 3 franchises, books, papers and records in its possession, or in any way  
 relating to its property or affecting its business, and also a complete  
 inventory of all its property in the form the commission directs.<sup>82</sup>

4 The Commission's authority extends to reports as to both past business activities and future plans.<sup>83</sup>

5 280. The Energy Rules are reasonably necessary for the Commission to exercise its exclusive  
 6 and plenary ratemaking powers under Article 15, § 3 of the Arizona Constitution; are authorized under  
 7 the Commission's statutory authority cited above; and are authorized under the Commission's  
 8 permissive authority under Article 15, § 3 of the Arizona Constitution, which grants the Commission  
 9 authority to regulate public service corporations in areas other than ratemaking, specifically authorizing  
 10 the Commission to "make and enforce reasonable rules, regulations, and orders for the convenience,  
 11 comfort, and safety, and the preservation of the health, of the employees and patrons of [public service]  
 12 corporations." As clarified by the Supreme Court in *Johnson Utilities*, the Commission has permissive  
 13 authority over public health and safety, and to make reasonable orders benefiting the public at-large.<sup>84</sup>  
 14 The legislature has not exercised its police powers to enact any statutes in conflict with the Energy  
 15 Rules.

### 16 **Rulemaking Requirements**

17 281. Arizona has had a general rulemaking moratorium in place since fiscal year 2009-2010,  
 18 first through creation of the Arizona State Legislature and then through gubernatorial orders. The most  
 19 recent gubernatorial order is Executive Order 2021-02 ("EO 2021-02"), effective on February 12, 2021.  
 20 EO 2021-02 generally prohibits a state agency from conducting rulemaking except for specific  
 21 purposes and with prior written approval from the Office of the Governor. However, EO 2021-02  
 22 expressly exempts the Commission from its applicability, although it encourages all exempted state  
 23 officials and agencies to participate voluntarily within the context of their own rulemaking processes.

24 282. A.R.S. § 41-1057 exempts the Commission from having its rules reviewed by the  
 25 Governor's Regulatory Review Counsel ("GRRC"), but requires the Commission to adopt substantially

26 \_\_\_\_\_  
 27 <sup>82</sup> Emphasis added.

28 <sup>83</sup> *Arizona Pub. Serv. Co. v. Arizona Corp. Comm'n*, 155 Ariz. 263 (App. 1987), approved in part, vacated in part, 157 Ariz. 532 (1988).

<sup>84</sup> *Johnson Utilities*, 249 Ariz. at 217, 219, 221, ¶¶ 1, 12, 23.



1 similar rule review procedures, to include preparation of an EIS and a statement of the effect of the rule  
2 on small business.

3 283. A.R.S. § 41-1022 requires an agency to prepare and submit to the Secretary of State, for  
4 publication in the *Arizona Administrative Register*, a NPRM that includes the exact wording of the  
5 rules proposed for adoption. The statute also requires an agency to allow for and accept public  
6 comment on the NPRM as prescribed in A.R.S. § 41-1023.

7 284. A.R.S. § 41-1023 requires an agency to afford persons an opportunity to submit  
8 comments on the proposed rules for at least 30 days after publication of the NPRM and prohibits an  
9 agency from holding an oral proceeding on the NPRM earlier than 30 days after notice of the oral  
10 proceeding is published in the *Arizona Administrative Register*.

11 285. A.R.S. § 41-1024 requires an agency to consider the public comments received on the  
12 rules in a NPRM as well as the EIS and allows an agency to use its own experience, technical  
13 competence, specialized knowledge, and judgment in making a rule.

14 286. A.R.S. § 41-1025 prohibits an agency from submitting a rule to GRRC that is  
15 “substantially different” from the proposed rule in the NPRM and provides that all of the following  
16 must be considered when determining whether a rule is substantially different:

17 1. The extent to which all persons affected by the rule should have  
18 understood that the published proposed rule would affect their interests.

19 2. The extent to which the subject matter of the rule or the issues  
20 determined by that rule are different from the subject matter or issues  
21 involved in the published proposed rule.

22 3. The extent to which the effects of the rule differ from the effects of  
23 the published proposed rule if it had been made instead.<sup>85</sup>

24 Although A.R.S. § 41-1025 does not refer to the Attorney General, and the Commission is not required  
25 to submit its rules to GRRC, because the Commission is required to use substantially similar  
26 rulemaking procedures, the Commission considers it necessary to perform supplemental proposed  
27 rulemaking, as permitted under A.R.S. § 41-1022(E), if the Commission desires to make a modification  
28 to a proposed rule that would result in its being “substantially different” from the proposed rule.

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<sup>85</sup> A.R.S. § 41-1025(B).

287. A.R.S. § 41-1044 requires the Attorney General to review rules that are exempt under A.R.S. § 41-1057 and prohibits submission of a final rulemaking package for such rules to the Office of the Secretary of State unless first approved by the Attorney General.<sup>86</sup> Under A.R.S. § 41-1044, the Attorney General has 60 days to review the rules to determine whether the rules are (1) in appropriate form; (2) clear, concise, and understandable; (3) within the power of the agency to make and within the enacted legislative standard; and (4) made in compliance with the appropriate procedures. If the Attorney General determines that the rules meet the four criteria, the Attorney General endorses the final rulemaking package with approval and submits it to the Secretary of State for publication in the *Arizona Administrative Register*. The Attorney General is prohibited from approving a rule with an immediate effective date unless the Attorney General determines that the rule complies with A.R.S. § 41-1032.

288. Because this rulemaking is not being conducted wholly pursuant to the Commission's plenary and exclusive ratemaking authority under Art. 15, § 3, the Commission is required to obtain Attorney General certification of this rulemaking under A.R.S. § 41-1044.

289. A.R.S. § 41-1030(A) provides that a rule is invalid unless made and approved in substantial compliance with A.R.S. §§ 41-1021 through 41-1029 and A.R.S. Title 41, Chapter 6, Articles 4<sup>87</sup>, 4.1, and 5.<sup>88</sup>

290. A.R.S. § 41-1031 provides that a rule is not final until the Secretary of State affixes the time and date of filing to the rulemaking and EIS filed with the Secretary of State by GRRC or the Attorney General, as applicable, or by an agency pursuant to a statutory exemption.

291. Under A.R.S. § 41-1032, a rulemaking filed with the Secretary of State becomes effective 60 days after filing, unless the agency promulgating the rulemaking includes in the Preamble information demonstrating that the rule needs to be effective immediately on filing with the Secretary of State, for any of the following reasons:

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<sup>86</sup> Commission rules that are promulgated wholly pursuant to the Commission's exclusive and plenary constitutional ratemaking authority are not subject to review and certification by the Attorney General under A.R.S. § 41-1044 before they may become effective. *State ex rel. Corbin v. Arizona Corp. Comm'n*, 174 Ariz. 216 (App. 1992); *US West Communications, Inc. v. Arizona Corp. Comm'n*, 197 Ariz. 16, 24 (App. 1999); *Phelps Dodge Corp. v. Arizona Elec. Power Coop.*, 207 Ariz. 95 (App. 2004).

<sup>87</sup> A.R.S. § 41-1044 is included in A.R.S. Title 41, Chapter 6, Article 4.

<sup>88</sup> As stated previously, the Commission is exempt from A.R.S. Title 41, Chapter 6, Article 5 pursuant to A.R.S. § 41-1057.

- 1 (a) To preserve public peace, health, or safety;
- 2 (b) To avoid a violation of federal law or regulation or state law, if the need for an
- 3 immediate effective date is not caused by the agency's delay or inaction;
- 4 (c) To comply with deadlines in amendments to an agency's governing statute or
- 5 federal programs, if the need for an immediate effective date is not caused by the agency's delay or
- 6 inaction;
- 7 (d) To provide a benefit to the public, if a penalty is not associated with the violation
- 8 of the rule; or
- 9 (e) To adopt a rule less stringent than the rule currently in effect, if the rule does not
- 10 have an impact on the public health, safety, welfare, or environment or affect the public involvement
- 11 and participation process.

## 12 **Public Comment and Responses**

13 292. Exhibit B, attached hereto and incorporated herein, is Staff's summary of the formal

14 comments received regarding the NPRM, along with Staff's responses thereto. Staff did not

15 recommend any changes to the Energy Rules in response to the formal comments.

16 293. Exhibit C, attached hereto and incorporated herein, is the Commission's summary of

17 the formal comments received regarding the NPRM, along with the Commission's responses thereto.

18 The summary of comments and the Commission's responses to those comments, as set forth in Exhibit

19 C, should be included in the Preamble for a Notice of Final Rulemaking in this matter.

## 20 **Recommended Modifications to the Proposed Rules**

21 294. Although we do not believe that any material changes should be made to the Energy

22 Rules, we find that the following minor modifications to the Energy Rules should be made to ensure

23 that they are clear, concise, and understandable; consistent with the stylistic requirements of the

24 Secretary of State; and consistent with the Commission's practice of capitalizing terms that are defined

25 in the Energy Rules:

- 26 (a) In the relabeled R14-2-2307(B), "time of day" should be "time-of-day."
- 27 (b) In R14-2-2701(1), "Commission approved" should be "Commission-approved."
- 28 (c) In R14-2-2701(6), "wherein the Utility" should be "wherein a Utility."

- (d) In R14-2-2701(8), the following should be inserted after “metric tons”: “, and calculated in accordance with R14-2-2704(E).”
- (e) In R14-2-2701(16), a comma should be inserted after “steam.”
- (f) In R14-2-2701(20)(a), the semicolon should be replaced with a comma.
- (g) In R14-2-2701(21), “and determined” should be replaced with “and ultimately determined.”
- (h) In R14-2-2701(33), the semicolons should be replaced with commas.
- (i) In R14-2-2701(35), the semicolons should be replaced with commas.
- (j) In R14-2-2701(38), the definition for “Energy Efficiency Report” should be replaced with the following:
- “Energy Efficiency Report” means information about a Utility’s implementation of Demand-Side Resources, submitted to the Commission every third year as required by R14-2-2704(C)(5) and R14-2-2711 or, if a Gas Utility, as required by R14-2-2712.
- (k) In R14-2-2701(41), a comma should be inserted before “mitigating,” and the semicolons should be replaced with commas.
- (l) In R14-2-2701(48), “census designated areas” should be replaced with “census-designated places,” and “jurisdictions” should be replaced with “jurisdictions or boundaries.”
- (m) In R14-2-2701, the following new definition should be added:
- “Independent” means that a Person is not Affiliated with a Utility.
- (n) In R14-2-2701(57), the semicolons should be replaced with commas.
- (o) In R14-2-2701(59), “that is not a distribution cooperative and” should be deleted as redundant.
- (p) In R14-2-2701, the following new definition should be added:
- “Procurement Activity Report” means the annual submission of information to the Commission required by R14-2-2709(B) and R14-2-2710(D) and, if applicable, R14-2-2709(C).
- (q) In R14-2-2701(63), a comma should be added after “generation.”

- (r) In R14-2-2701(64), “reflecting” should be replaced with “which reflect.”
- (s) R14-2-2701(67) should be deleted.
- (t) In R14-2-2701(74), “that have been approved by the Commission” should be replaced with “that are submitted for Approval by or that have been approved by the Commission” because the term “Tariff” is used in reference to an ESS Tariff that is submitted for approval and thus not already approved.
- (u) In R14-2-2703(A)(1)(a) through (d), the semicolons should be commas.
- (v) In R14-2-2704(B)(1), “By January 1, 2030, a Load-Serving Entity’s resource portfolio shall include” should be replaced with “If the Electric Utility is a Load-Serving Entity, the Electric Utility’s Resource Portfolio shall, by January 1, 2030, include.”
- (w) In R14-2-2704(B)(2), “Utilities” should be replaced with “the Electric Utility.”
- (x) In R14-2-2704(B)(2)(a), “Utility performance” should be replaced with “The Utility’s performance.”
- (y) In R14-2-2704(B)(2)(b), “Utilities” should be replaced with “The Utility.”
- (z) In R14-2-2704(B)(2)(d), “Utilities” should be replaced with “The Utility.”
- (aa) In R14-2-2704(B)(4), a comma should be inserted between “Level” and “with.”
- (bb) In R14-2-2704(C)(2)(c)(v), “RFP” should be replaced with “All-Source RFP.”
- (cc) In R14-2-2704(C)(3)(b), “retail” should be added before “kWh sales.”
- (dd) In R14-2-2704(C)(4), “premise” should be replaced with “premises.”
- (ee) In R14-2-2704(E), “2016 to 2018” should be replaced with “2016 through 2018.”
- (ff) In R14-2-2704(I), “objects to the” should be replaced with “objects to an” and “subsection (G)” should be replaced with “subsection (F).”
- (gg) In R14-2-2704(M), “that the Electric utility shall fund an independent consultant to be selected by Staff to assist” should be replaced with “that the Electric Utility shall fund an Independent consultant, to be selected by Staff, to assist.”
- (hh) In R14-2-2706(B)(4), “at least through” should be replaced with “through at



1 least.”

2 (ii) In R14-2-2707(D), “agreement on refined ASRFI language” should be replaced  
3 with “agreement on ASRFI language.”

4 (jj) In R14-2-2707(E), “agreement on the Load-Serving Entity’s refined ASRFI  
5 language” should be replaced with “agreement on ASRFI language.”

6 (kk) In R14-2-2707(E)(1) and (2), “Memorandum,” “Proposed Order,” and “Open  
7 Meeting” should not be capitalized.

8 (ll) In R14-2-2707(F), “If Staff determines that the ASRFI language is in compliance  
9 with subsection (A), or if Staff and the Load-Serving Entity are able to reach  
10 agreement on the ASRFI language’s compliance” should be replaced with “If  
11 Staff determines that the refined ASRFI language is in compliance with  
12 subsection (A), or if Staff and the Load-Serving Entity are able to reach  
13 agreement on ASRFI language that is in compliance.”

14 (mm) In R14-2-2707, the following should be added as a new subsection (H), to clarify  
15 what is implicit in the proposed rule—that if the Commission chooses not to  
16 review an RPAC member’s request made under subsection (F), the ASRFI  
17 language that Staff has determined to be compliant or has agreed upon with the  
18 LSE will be deemed approved:

19 H. If the Commission chooses not to review ASRFI language  
20 pursuant to a request made under subsection (F), the ASRFI  
21 language shall be deemed to have Commission Approval 45  
days after the request is filed.

22 (nn) In R14-2-2708(A), “using the ASRFI language determined to be in compliance  
23 with this Article” should be replaced with “using the ASRFI language resulting  
24 from the process in R14-2-2707.”

25 (oo) In R14-2-2708(D)(2), “customers” should be replaced with “Customers.”

26 (pp) In R14-2-2708(D)(16), “customer” should be replaced with “Customer.”

27 (qq) In R14-2-2708(D)(17), “Affiliated interests” should be replaced with “Affiliated  
28 Persons.”

(rr) In R14-2-2708(F)(4), “through at least through one” should be replaced with “through at least one.”

(ss) R14-2-2708(G) should be reworded as follows:

G. Within 30 days after the final Commission workshop, Staff shall file a memorandum and proposed order recommending a Resource Portfolio for use by the Load-Serving Entity. If Staff’s memorandum and proposed order does not recommend a Resource Portfolio that prioritizes the factors set forth in subsection (C), Staff shall, in the memorandum and proposed order, explain why and identify the factors set forth in subsection (D) that the recommended Resource Portfolio prioritizes instead.

(tt) In R14-2-2708(H), “Memorandum” should be replaced with “memorandum.”

(uu) In R14-2-2708(J), “independent consultant” should be replaced with “Independent consultant.”

(vv) In R14-2-2709(D)(1), the semicolon should be replaced with a comma.

(ww) R14-2-2709(E) should be reworded as follows:

E. If a Load-Serving Entity determines, during the implementation period for its most recently approved Action Plan, that it will be unable to implement any portion of the Action Plan due to circumstances beyond its control, the Load-Serving Entity shall file with the Commission, in a new docket, notification of the circumstances preventing implementation along with any appropriate request for extension or waiver under R14-2-2716.

(xx) In R14-2-2710(A), “, which shall include” should be replaced with “and includes.”

(yy) In R14-2-2710(A)(5), “retail” should be added before “kWh sales.”

(zz) In R14-2-2710(B), “that shall include” should be replaced with “that includes.”

(aaa) In R14-2-2710(B)(1)(a), “Sales to end users” should be replaced with “Sales for End Use.”

(bbb) In R14-2-2710(B)(3), “for each of the previous calendar year” should be replaced with “for the previous calendar year.”

(ccc) In R14-2-2710(B)(4), “kilowatt-hours” should be replaced with “Kilowatt-

hours.”

(ddd) In R14-2-2710(C), “that shall include” should be replaced with “that includes.”

(eee) In R14-2-2710(C)(1)(h), “megawatt hour” should be replaced with “megawatt-hour.”

(fff) In R14-2-2710(C)(4), “an RFP” should be replaced with “an All-Source RFP.”

(ggg) In R14-2-2711(B), “for each Demand-Side Resource” should be replaced with “for each new Demand-Side Resource.”

(hhh) In R14-2-2712(B)(1) and (2), the semicolons should be replaced with commas.

(iii) In R14-2-2713(A)(2), a comma should be added before “Distributed Storage.”

(jjj) In R14-2-2714, in each place where it appears, “RFP” should be replaced with “All-Source RFP.”

(kkk) In R14-2-2714(C), “on a vendor list” should be replaced with “on the vendor list.”

(lll) In R14-2-2714(H), “an entity” should be replaced with “a Person,” and “Affiliated entity’s” should be replaced with “Affiliated Person’s.”

(mmm) In R14-2-2716(C)(5), “megawatt” should be “megawatts” in both places where it appears.

(nnn) R14-2-2716(D) should be reworded as follows:

D. If the Commission determines that a Load-Serving Entity was not entitled to invoke one of the exceptions of subsection (C) for an acquisition, the Commission shall not allow recovery of the costs incurred by the Load-Serving Entity related to the acquisition.

(ooo) In R14-2-2717(B), “cooperative’s” should be replaced with “Cooperative’s.”

(ppp) R14-2-2717(D) should be reworded as follows:

D. Upon Commission Approval of a Load-Serving Cooperative’s Integrated Resource Plan, including its Action Plan, the provisions of the Integrated Resource Plan shall substitute for the requirements set forth in this Article.

1        295. We find that the modifications described in Findings of Fact No. 294 do not result in  
2 any of the affected Sections being substantially different, under A.R.S. § 41-1025, than they were in  
3 the NPRM because (1) none of the modified Sections would affect the interests of any person whose  
4 interests were not affected by the Sections as included in the NPRM, (2) the subject matter and issues  
5 determined by the modified Sections are not different from the subject matter and issues determined  
6 by the Sections as included in the NPRM, and (3) the effects of the modified Sections do not differ  
7 from the effects of the Sections as included in the NPRM.

8        **Economic Impacts of the Rules**

9        296. The Commission is exempt from the requirements pertaining to GRRC in A.R.S.  
10 Chapter 6, Article 5, which includes the requirement in A.R.S. § 41-1052 for an agency to prepare and  
11 transmit to GRRC an “economic, small business and consumer impact statement that meets the  
12 requirements of A.R.S. § 41-1055” and the requirement in A.R.S. § 41-1055 concerning the contents  
13 of an “economic, small business, and consumer impact statement.” Under A.R.S. § 41-1057(A)(2), the  
14 Commission is required to adopt “substantially similar rule review procedures, including the  
15 preparation of an economic impact statement and a statement of the effect of the rule on small  
16 business.”

17        297. Because “economic impact statement,” the term used in A.R.S. § 41-1057(A)(2), is not  
18 defined, the Commission generally has referred to A.R.S. § 41-1055(B) for guidance on what to include  
19 in its EIS.

20        298. A.R.S. § 41-1055(B) requires an economic, small business, and consumer impact  
21 statement to include the following: (1) an identification of the proposed rulemaking; (2) an  
22 identification of the persons who will be directly affected by, bear the costs of, or directly benefit from  
23 the rulemaking; (3) a cost-benefit analysis including the probable costs and benefits to the  
24 implementing agency and other agencies, the probable costs and benefits to a political subdivision  
25 affected by the implementation and enforcement of the rulemaking, and the probable costs and benefits  
26 to businesses directly affected by the proposed rulemaking; (4) a general description of the probable  
27 impact on private and public employment; (5) a statement of the probable impact on small businesses;  
28 (6) a statement of the probable effect on state revenues; (7) a description of any less intrusive or less

1 costly alternative methods of achieving the purpose of the rulemaking; and (8) a description of any data  
2 on which a rule is based, with a detailed explanation of how the data was obtained and why the data is  
3 acceptable data. Under § 40-1055(C), if adequate data is not reasonably available, the agency must  
4 explain the limitations of the data and the methods used to attempt to obtain the data, and shall  
5 characterize the probable impacts in qualitative terms.

6         299. The Revised EIS, filed by Staff on February 26, 2021, contains information addressing  
7 each of the criteria described in A.R.S. § 41-1055(B). Staff included a list and description of data,  
8 reports, and analyses provided to the Commission and relied on in the development of the Energy Rules  
9 in this docket, in Docket No. E00000V-15-0094 (*In the matter of Resource Planning and Procurement*  
10 *in 2015 and 2016*), and in the IRP Docket. The list is not exhaustive of the information, data, and  
11 analyses used by the Commission in creating the Energy Rules, which has been obtained through the  
12 numerous dockets identified throughout this Decision and of which the Commission has taken official  
13 notice herein.

14         300. The Revised EIS attached as Exhibit D accurately conveys the anticipated economic  
15 impacts of this rulemaking, contains information substantially similar to that required by A.R.S. § 41-  
16 1055(B), and thus complies with A.R.S. § 41-1057(A)(2) and should be adopted as the EIS for this  
17 rulemaking.

#### 18 **Resolution**

19         301. It is necessary for the convenience, comfort, and safety, and the preservation of the  
20 health, of the employees and patrons of electric utilities, and is in the public interest to adopt the Energy  
21 Rules so that Arizona's electric utilities will reduce and ultimately eliminate the carbon emissions and  
22 air pollution caused by generation of electricity using resources that are not clean energy resources.

23         302. It is in the public interest to adopt the Energy Rules so that Arizona's electric utilities  
24 will increase the use of ESS on their systems, including the use of customer-owned and customer-  
25 leased ESS.

26         303. It is in the public interest to adopt the Energy Rules so that Arizona's electric utilities  
27 will increase the use of demand-side resources, and the use of EE, on their systems.



304. It is in the public interest to adopt the Energy Rules so that Arizona's electric utilities will decrease the use of fossil fuel generating units that consume a great deal of water that could be put to other beneficial uses in Arizona.

305. It is in the public interest to adopt the Energy Rules, as published in the NPRM, through a Notice of Final Rulemaking ("NFRM").

306. It is in the public interest to require Staff to file with the Office of the Attorney General, by May 14, 2021, a NFRM package that includes:

(a) A NFRM created by combining (i) the text of the Energy Rules as published in the NPRM (Exhibit A), with the modifications described in Findings of Fact No. 294; and (ii) a final Preamble complying with A.R.S. § 41-1001(16)(d);

(b) The EIS attached as Exhibit D;

(c) Any additional documents required by the Office of the Attorney General for processing under A.R.S. § 41-1044; and

(d) Any additional documents required for publication and codification by the Office of the Secretary of State after approval by the Office of the Attorney General.

307. The Commission finds that it is in the public interest to allow the Energy Rules to become effective 60 days after the date of filing with the Office of the Secretary of State, as provided in A.R.S. § 41-1032.

### **CONCLUSIONS OF LAW**

1. Pursuant to Arizona Constitution, Art. 15, §§ 3 and 13 and A.R.S. §§ 40-202, 40-203, 40-204, 40-281, 40-282, 40-321, 40-322(A), 40-332(B), 40-336, 40-361, and 40-374, the Commission has authority and jurisdiction to revise A.A.C. Title 14, Chapter 2 by adopting new energy-related rules in a new Article 27; by repealing A.A.C. Title 14, Chapter 2, Articles 7, 18, 24, and 25, and A.A.C. R14-2-1618; and by amending A.A.C. R14-2-2302 and R14-2-2307, as set forth in the NPRM attached hereto as Exhibit A and with the modifications described in Findings of Fact No. 294.

2. The Commission is required to submit this rulemaking to the Office of the Attorney General for review and approval under A.R.S. § 41-1044.

3. The NRDO and NPRM for this rulemaking were published in the *Arizona*

1 *Administrative Register* on December 18, 2020, as required by A.R.S. §§ 41-1021 and 41-1022.

2 4. Notice of the oral proceedings regarding the NPRM was provided in the manner  
3 prescribed by law.

4 5. The rules set forth for A.A.C. Title 14, Chapter 2, Article 27 and for the amendments to  
5 A.A.C. R14-2-2302 and R14-2-2307 in the NPRM attached hereto as Exhibit A, with the modifications  
6 described in Findings of Fact No. 294, are clear, concise, and understandable; within the Commission's  
7 power to make; within enacted legislative standards; and made in compliance with appropriate  
8 procedures.

9 6. Adoption of the rules set forth for A.A.C. Title 14, Chapter 2, Article 27, and amended  
10 rules A.A.C. R14-2-2302 and R14-2-2307, in the NPRM attached hereto as Exhibit A, with the  
11 modifications described in Findings of Fact No. 294, is just and reasonable and in the public interest.

12 7. Repealing A.A.C. Title 14, Chapter 2, Articles 7, 18, 24, and 25, and A.A.C. R14-2-  
13 1618, as set forth in the NPRM attached hereto as Exhibit A is just and reasonable and in the public  
14 interest.

15 8. The EIS attached hereto as Exhibit D substantially conforms to the requirements of  
16 A.R.S. §§ 41-1057 and 41-1055.

17 9. The summary of the written and oral comments received concerning the NPRM and the  
18 Commission's responses to those comments set forth in Exhibit C is accurate, will comply with A.R.S.  
19 § 41-1001(16)(d), and should be included in the Preamble for the NFRM for this matter.

20 10. It is in the public interest to file with the Office of the Attorney General, for review and  
21 approval under A.R.S. § 41-1044, a NFRM package that conforms to Findings of Fact No. 306.

## 22 **ORDER**

23 IT IS THEREFORE ORDERED that the Commission hereby adopts the revisions to A.A.C.  
24 Title 14, Chapter 2 reflected in the Notice of Proposed Rulemaking attached hereto as Exhibit A and  
25 with the modifications described in Findings of Fact No. 294.

26 IT IS FURTHER ORDERED that the Commission hereby adopts the Economic, Small  
27 Business, and Consumer Impact Statement attached hereto as Exhibit D.

28 IT IS FURTHER ORDERED that the Commission's Utilities Division/Legal Division shall, by

1 May 14, 2021, prepare and file with the Office of the Attorney General, for review and approval under  
2 A.R.S. § 41-1044, a Notice of Final Rulemaking package that includes:

- 3 1. A Notice of Final Rulemaking created by combining (a) the revisions to A.A.C. Title  
4 14, Chapter 2 reflected in the Notice of Proposed Rulemaking attached hereto as Exhibit  
5 A and with the modifications described in Findings of Fact No. 294; and (b) a Preamble  
6 that conforms to A.R.S. § 41-1001(16)(d) and includes the summary of comments and  
7 Commission responses set forth in Exhibit C;
- 8 2. The Economic, Small Business, and Consumer Impact Statement attached as Exhibit D;
- 9 3. Any additional documents required by the Office of the Attorney General for processing  
10 under A.R.S. § 41-1044; and
- 11 4. Any additional documents required for publication and codification by the Office of the  
12 Secretary of State after approval by the Office of the Attorney General.

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1 IT IS FURTHER ORDERED that the Commission's Utilities Division/Legal Division is  
 2 authorized to make non-substantive changes in the text of A.A.C. Title 14, Chapter 2, Article 27 and  
 3 A.A.C. R14-2-2302 and R14-2-2307 as adopted herein; the Economic, Small Business, and Consumer  
 4 Impact Statement adopted herein; and any of the additional documents required by the Office of the  
 5 Attorney General or the Office of the Secretary of State during the review and approval, publication,  
 6 or codification processes, unless the Commission requires otherwise after notification of those changes.

7 IT IS FURTHER ORDERED that this Decision shall become effective immediately.

8 BY ORDER OF THE ARIZONA CORPORATION COMMISSION.

9  
 10  
 11 CHAIRWOMAN MÁRQUEZ PETERSON

COMMISSIONER KENNEDY

12  
 13 COMMISSIONER OLSON

COMMISSIONER TOVAR

COMMISSIONER O'CONNOR

14  
 15 IN WITNESS WHEREOF, I, MATTHEW J. NEUBERT,  
 16 Executive Director of the Arizona Corporation Commission,  
 17 have hereunto set my hand and caused the official seal of the  
 Commission to be affixed at the Capitol, in the City of Phoenix,  
 this \_\_\_\_\_ day of \_\_\_\_\_ 2021.

18  
 19 MATTHEW J. NEUBERT  
 20 EXECUTIVE DIRECTOR

21 DISSENT \_\_\_\_\_

22  
 23 DISSENT \_\_\_\_\_  
 24 JLM/gb



## NOTICES OF PROPOSED RULEMAKING

This section of the *Arizona Administrative Register* contains Notices of Proposed Rulemakings.

A proposed rulemaking is filed by an agency upon completion and submittal of a Notice of Rulemaking Docket Opening. Often these two documents are filed at the same time and published in the same *Register* issue.

When an agency files a Notice of Proposed Rulemaking under the Administrative Procedure Act (APA), the notice is published in the *Register* within three weeks of filing. See the publication schedule in the back of each issue of the *Register* for more information.

Under the APA, an agency must allow at least 30 days to elapse after the publication of the Notice of Proposed Rulemaking in the *Register* before beginning any proceedings for making, amending, or repealing any rule (A.R.S. §§ 41-1013 and 41-1022).

The Office of the Secretary of State is the filing office and publisher of these rules. Questions about the interpretation of the proposed rules should be addressed to the agency that promulgated the rules. Refer to item #4 below to contact the person charged with the rulemaking and item #10 for the close of record and information related to public hearings and oral comments.

### NOTICE OF PROPOSED RULEMAKING

#### TITLE 14. PUBLIC SERVICE CORPORATIONS; CORPORATIONS AND ASSOCIATIONS; SECURITIES REGULATION

#### CHAPTER 2. CORPORATION COMMISSION - FIXED UTILITIES

[R20-206]

#### PREAMBLE

<u>1. Article, Part, or Section Affected (as applicable)</u>	<u>Rulemaking Action</u>
Article 7	Repeal
R14-2-701	Repeal
R14-2-702	Repeal
R14-2-703	Repeal
R14-2-704	Repeal
R14-2-705	Repeal
R14-2-706	Repeal
R14-2-1618	Repeal
Article 18	Repeal
R14-2-1801	Repeal
R14-2-1802	Repeal
R14-2-1803	Repeal
R14-2-1804	Repeal
R14-2-1805	Repeal
R14-2-1806	Repeal
R14-2-1807	Repeal
R14-2-1808	Repeal
R14-2-1809	Repeal
R14-2-1810	Repeal
R14-2-1811	Repeal
R14-2-1812	Repeal
R14-2-1813	Repeal
R14-2-1814	Repeal
R14-2-1815	Repeal
R14-2-1816	Repeal
Appendix A	Repeal
R14-2-2302	Amend
R14-2-2307	Amend
Article 24	Repeal
R14-2-2401	Repeal
R14-2-2402	Repeal
R14-2-2403	Repeal
R14-2-2404	Repeal
R14-2-2405	Repeal
R14-2-2406	Repeal





R14-2-2407	Repeal
R14-2-2408	Repeal
R14-2-2409	Repeal
R14-2-2410	Repeal
R14-2-2411	Repeal
R14-2-2412	Repeal
R14-2-2413	Repeal
R14-2-2414	Repeal
R14-2-2415	Repeal
R14-2-2416	Repeal
R14-2-2417	Repeal
R14-2-2418	Repeal
R14-2-2419	Repeal
Article 25	Repeal
R14-2-2501	Repeal
R14-2-2502	Repeal
R14-2-2503	Repeal
R14-2-2504	Repeal
R14-2-2505	Repeal
R14-2-2506	Repeal
R14-2-2507	Repeal
R14-2-2508	Repeal
R14-2-2509	Repeal
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R14-2-2514	Repeal
R14-2-2515	Repeal
R14-2-2516	Repeal
R14-2-2517	Repeal
R14-2-2518	Repeal
R14-2-2519	Repeal
R14-2-2520	Repeal
Article 27	New Article
R14-2-2701	New Section
R14-2-2702	New Section
R14-2-2703	New Section
R14-2-2704	New Section
R14-2-2705	New Section
R14-2-2706	New Section
R14-2-2707	New Section
R14-2-2708	New Section
R14-2-2709	New Section
R14-2-2710	New Section
R14-2-2711	New Section
R14-2-2712	New Section
R14-2-2713	New Section
R14-2-2714	New Section
R14-2-2715	New Section
R14-2-2716	New Section
R14-2-2717	New Section
R14-2-2718	New Section

**2. Citations to the agency's statutory rulemaking authority to include the authorizing statute (general) and the implementing statute (specific):**

Constitutional authority and authorizing statutes: Arizona Constitution Article XV, §§ 3, 13; A.R.S. §§ 40-202, 40-203, 40-204, 40-321, 40-322(A), 40-332(B), 40-336, 40-361, and 40-374.

Implementing constitutional provisions and statutes: Arizona Constitution Article XV, §§ 3, 13; A.R.S. §§ 40-202, 40-203, 40-204, 40-321, 40-322(A), 40-332(B), 40-336, 40-361, and 40-374.



**3. Citations to all related notices published in the Register as specified in R1-1-409(A) that pertain to the record of the proposed rule:**

Notice of Rulemaking Docket Opening: 26 A.A.R. 3262, December 18, 2020 (*in this issue*)

**4. The agency's contact person who can answer questions about the rulemaking:**

Name: Maureen A. Scott, Deputy Chief of Litigation and Appeals

Address: Corporation Commission  
Legal Division  
1200 W. Washington St.  
Phoenix, AZ 85007

Telephone: (602) 542-3402

Fax: (602) 542-4780

E-mail: Mscott@azcc.gov

Website: www.azcc.gov

Name: Patrick LaMere, Executive Consultant

Address: Corporation Commission  
Utilities Division  
1200 W. Washington St.  
Phoenix, AZ 85007

Telephone: (602) 542-4382

E-mail: PLaMere@azcc.gov

**5. An agency's justification and reason why a rule should be made, amended, repealed or renumbered, to include an explanation about the rulemaking:**

With this rulemaking, the Commission adds a new Article 27, entitled "Energy Rules" to 14 A.A.C. 2, the Chapter containing the Commission's rules for fixed utilities, with the new Article 27 including 18 new rules. Furthermore, in the same chapter, this rulemaking (1) Repeals the Commission's Resource Planning and Procurement Rules (14 A.A.C. 2, Article 7); (2) Repeals the Environmental Portfolio Standard Rule (A.A.C. R14-2-1618); (3) Repeals the Renewable Energy Standard and Tariff ("REST") Rules (14 A.A.C. 2, Article 18); (4) Amends A.A.C. R14-2-2302 and R14-2-2307 in the Net Metering Rules; (5) Repeals the Electric Energy Efficiency ("EEE") Rules (14 A.A.C. 2, Article 24); and (6) Repeals the Gas Energy Efficiency Rules ("GEE") (14 A.A.C. 2, Article 25). The new Energy Rules establish mandatory standards for Commission-regulated utilities, specifically public service corporations under Arizona Constitution, Article 15, § 2, to follow in generating, procuring, and delivering electric or gas service to the public in Arizona. The new Energy Rules require: (1) each Electric Utility to propose a Clean Energy Implementation Plan that achieves a 100% reduction in its carbon emissions by January 1, 2050, a demand-side resource capacity of 35% by January 1, 2030, an average of at least 1.3% annual energy efficiency savings starting in 2021, and a 5% energy storage capacity requirement; (2) each Class A Gas utility to consider and propose energy efficiency measures and programs; and (3) each Load-Serving Entity ("LSE") to follow a resource planning process, including, for all new resource procurements, an all-source request for information ("ASRFI") process, and an all-source request for proposals ("ASRFP") process. The new Energy Rules require the ASRFP process to be overseen by an Independent Monitor. The new Energy Rules provide exceptions from the ASRFI and ASRFP processes under specified exigent circumstances and exempt distribution cooperatives from the requirements applicable to LSEs, instead adopting a more flexible Clean Energy Implementation Plan requirement for cooperatives. They also provide for robust and diverse stakeholder involvement in LSEs' development of load forecasts and needs assessments to be used in ASRFIs and for Commission approval of LSEs' load forecasts and needs assessments after additional public involvement through at least one workshop conducted by the Commission's Utilities Division. Additionally, the new Energy Rules require an LSE to obtain Commission approval of a Resource Portfolio to be implemented by the LSE, the first five years of which are considered to be the LSE's Action Plan. Further, the new Energy Rules require each Electric Utility to file, for Commission approval, at least one Energy Storage System ("ESS") Tariff designed to incentivize the addition of ESS. The new Energy Rules also impose reporting requirements and provide that the costs to comply with the Energy Rules shall be allowed only if the Commission determines, in a rate case, that they are prudent.

The purpose of the Energy Rules is to promote regulated utilities to increase the utilization of clean and renewable energy technologies, energy storage, and energy efficiency-based measures while maintaining safe and reliable service to meet the electric needs of their customers. The rules incorporate transparent ASRFI and ASRFP energy procurement processes designed to elicit a least-cost mix of resources for the utility to meet its retail energy demands while maintaining reliability, deliverability, and safety, and reducing negative environmental impacts and risk.

On August 22, 2016, Docket No. E-00000Q-16-0289 was opened for the Review, Modernization and Expansion of the Arizona REST Rules and Associated Rules. On August 14, 2018, the Commission directed Staff to initiate a rulemaking docket to evaluate the proposal for Arizona energy modernization. Docket No. RU-00000A-18-0284 was opened on August 17, 2018. Commission Staff was further directed to research and review existing rules in other states regarding energy-related topics such as, but not limited to: resource planning and procurement, energy efficiency, renewable energy standards, net metering, forest bioenergy, distributed generation, baseload security, transmission project assessment, retail electric competition, electric vehicles, blockchain technology or transactive energy, battery storage, and any other energy-related topic.

The Commission has long recognized the need to evaluate its existing energy-related rules for fixed utilities as technology has evolved, changes in energy policy have been endorsed at the state and federal level, and the energy marketplace has changed. At the federal level a number of policies focused on promoting energy conservation, considering alternative energy resources, and improving overall air quality have influenced the Commission's Energy Rules, such as the Public Utility Regulatory Act of 1978 or "PURPA" (part of the National Energy Act), The Energy Policy Act of 1992, and The Energy Policy Act of 2005. In line with



these federal policies, other states' policies, circumstances and existing policies in Arizona, as well as the Commission's review and evaluation of these issues, resulted in the Commission enacting updates and modifications to a number of existing rules.

In Decision No. 63364 (February 8, 2001), modified by Decision No. 63486 (March 29, 2001), the Commission adopted the EPS Rule which imposes requirements for an LSE to obtain a specified percentage of total retail energy sold from new solar resources or renewable electricity technologies. In 2006, the Commission adopted REST Rules, in Decision No. 69127 (November 14, 2006). The REST Rules require affected utilities to satisfy an annual renewable energy requirement up to 15 percent of retail sales by 2024. In Decision No. 74882 (December 31, 2014), the Commission amended the REST Rules to clarify and update how the Commission deals with renewable energy compliance.

As of September 2020, 30 States, including Arizona, have enacted a renewable energy portfolio standard typically requiring some percentage of an electric utility's procured or sold electricity to come from renewable energy sources. Among those, eight have a renewable energy portfolio standard of 100 percent by a specific future year. This rulemaking eliminates Arizona's renewable energy standard and EPS and replaces them with a carbon emissions reduction standard of 100% by 2050. The carbon emissions standard will incentivize utilities to utilize resources that do not emit carbon into the atmosphere while maintaining a flexible approach to satisfying the mandate.

In 1989, the Commission adopted Resource Planning and Procurement Rules requiring LSEs to meet its their forecasted annual peak and energy demand through a balance of supply-side and demand-side resources through an integrated resource plan ("IRP"); with input from stakeholders in a transparent process. In accordance with the purpose of this rulemaking, in Decision No. 57589, (October 29, 1991) Staff issued its first assessment on the LSEs' IRPs and stated, inter alia: "This Commission certainly recognizes the importance of protecting our fragile environment. However, there must be a careful balancing of the costs and benefits including consideration of ratepayer concerns, utility financial stability, and economic growth within the service areas..." The Commission's rules were further amended in Commission Decision No. 71722 (June 3, 2010) to include consideration of a diverse portfolio of purchased power, utility-owned generation, renewables, demand-side management, and distributed generation. Since that time, significant drivers have shaped a need for consideration of change to the Commission's rules concerning resource planning and procurement. Specifically, the development of new technologies such as renewable and clean generation, distributed generation, and energy storage; increased energy demand; stable costs of natural gas prices; increased stakeholder involvement; electric vehicle adoption; advanced production and cost modeling technologies and methodologies; and changes in state and federal environmental and economic regulations have created a need to modernize the Commission's procurement process.

In 2010, the Commission adopted energy efficiency rules for gas and electric utilities, respectively, in Decision No. 71819 (August 10, 2010) and Decision No. 72042 (December 10, 2010). The energy efficiency rules require an affected utility to achieve cumulative annual energy savings, measured in Kilowatt-Hours ("kWh") (or therm or therm-equivalents), equivalent to a percentage of the utility's retail energy sales for a specific calendar year. By December 31, 2020, an electric utility is required to achieve, from cost-effective demand-side management energy efficiency programs, cumulative annual energy savings equivalent to at least 22% of its retail electric energy sales for calendar year 2019. Gas utilities are required to achieve, through demand-side management and renewable energy resource technology programs, cumulative annual energy savings, expressed as therms or therm equivalents, equal to at least 6% of the affected utility's retail gas energy sales for calendar year 2019. This rulemaking replaces both these rules with an updated energy efficiency standard for electric utilities. While this rulemaking does not adopt an energy efficiency mandate for gas utilities, it provides gas utilities an option to provide demand-side management measures to their customers. Energy efficiency has successfully achieved an established record of reducing overall energy usage, as well as reducing total water use and waste generation. Replacing the Commission's rules concerning electric energy efficiency is necessary to maintain low-cost electricity for consumers and reduce fossil fuel use and environmental emissions.

In Decision No. 70567 (October 23, 2008), the Commission adopted rules for net metering which provide consumers the opportunity to be compensated for installing a distributed technology resource and to be compensated for an energy generated in excess of their energy needs. In Decision No. 75859 (January 3, 2017), the Commission ordered Staff to file potential modifications to the current Net Metering Rules to comport with changes in circumstances since their adoption. Accordingly, this rulemaking makes minor changes to modify the rules to only apply to grandfathered customers while the Commission continues to investigate new methods for compensating customers who install a distributed generation facility and export energy back to a utility.

In accordance with the historical practices of the Commission and in light of new technology, improved processes, and the evolving energy marketplace, the Commission believes the redactions, modifications, and additions contained in this rulemaking are necessary and in the public interest. The new Energy Rules provide a balanced position between utility costs and economic and environmental benefits while ensuring safe, reliable, and affordable energy service to the people of Arizona.

**6. A reference to any study relevant to the rule that the agency reviewed and proposes either to rely on or not to rely on in its evaluation of or justification for the rule, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:**

Not applicable

**7. A showing of good cause why the rulemaking is necessary to promote a statewide interest if the rulemaking will diminish a previous grant of authority of a political subdivision of this state:**

Not applicable

**8. The preliminary summary of the economic, small business, and consumer impact:**

The public at large will benefit from the new Energy Rules. A carbon reduction standard of 100 percent will promote the generation of electricity from clean and renewable technologies which emit little to no pollutants into the atmosphere, and at rates determined by the Commission to be just and reasonable. Conventional technology resources such as coal, oil, and natural gas emit carbon dioxide and other greenhouse gases which are known to have negative impacts on human health and safety and the environment. The general population can expect reduced negative health problems associated with limiting the negative impacts to overall air quality. Reducing the emissions of greenhouse gases, which have been known to increase global temperatures, cause rising sea-





levels, and increase the frequency and/or intensity of extreme weather events, can result in increased societal and economic benefits that cannot be quantified at this time. In addition, most renewable and clean energy resources have no fuel costs (e.g., solar, wind and geothermal heat); are available locally in Arizona; and are not subject to supply disruptions, manipulation of market prices, or wild unanticipated fluctuations in price.

Electricity consumers will benefit from the energy efficiency standards. Energy efficiency measures and programs are designed to reduce the overall consumption of electrical energy by end-users, reducing the need to generate additional electricity. Since the overall energy consumption will be reduced, the total energy load and peak demand of the utility providing electricity will be reduced. Additional cost saving will be realized by consumers because they will need to purchase less electricity to meet their energy needs.

For electric utilities, the costs for complying with the rulemaking will vary over time. Electric Utilities can expect increased investment in clean and renewable technologies, energy storage, and demand-side management measures and programs which may increase overall costs for generating electricity. This is dependent on each electric utility's current technologies utilized for meeting its retail load and peak demand, and the useful life of those technologies. With the repeal of a number of current Articles, a utility can expect a benefit in the total cost for complying with the filing requirements contained in this rulemaking as compared to the rules that exist currently. At this time, it is uncertain whether there will be a need for any additional utility personnel in order to comply with the standards contained in this rulemaking. For complying with these rules, it is uncertain at this time whether electric utilities that are LSEs will have additional costs or benefits for complying with the requirements of this rulemaking.

It is expected that persons who will be directly affected by, bear the costs of, or directly benefit from this rulemaking includes: (a) The general public; (b) Consumers of electric service; (C) Consumers of gas service; (D) Electric public service corporations; (E) Class A Gas public service corporations; (F) The Arizona Corporation Commission; (G) Any industry associated with generating, producing, delivering electric energy; (H) Manufacturers and distributors of energy efficiency technologies and other clean energy technologies; and (I) Public entities, such as schools, cities, counties, or state agencies.

**9. The agency's contact person who can answer questions about the economic, small business and consumer impact statement:**

Name: Patrick LaMere  
Address: Corporation Commission  
1200 W. Washington St.  
Phoenix, AZ 85007  
Telephone: (602) 542-4382  
E-mail: PLaMere@azcc.gov  
Website: www.azcc.gov

**10. The time, place, and nature of the proceedings to make, amend, repeal, or renumber the rule, or if no proceeding is scheduled, where, when, and how persons may request an oral proceeding on the proposed rule:**

The Commission has scheduled two telephonic oral proceedings to receive public comments on the Notice of Proposed Rulemaking on:

Dates: January 19 and 20, 2021  
Time: 10:00 a.m.  
Telephone: 1-888-450-5996, passcode 457395#  
Nature: Telephonic Oral Proceedings

Interested persons can submit written comments on the proposed rulemaking to the Commission's Docket Control at 1200 W. Washington St., Phoenix, AZ 85007 or through the Commission's website (azcc.gov). To submit a comment electronically, go to azcc.gov, select the tab "Cases and Open Meetings," and select "Make a Public Comment in a Docket." This leads to a fillable form that can be submitted electronically. An interested person can also "eFile" written comments and "Follow a Docket" to receive notice of all filings made in this rulemaking by going to azcc.gov, selecting the tab "Cases and Open Meetings," and selecting "eFile in a Case." Creation of a free ACC Portal account is required to eFile or Follow a Docket.

Please reference Docket No. RU-00000A-18-0284, on all documents. The Commission requests that written comments be filed by January 22, 2021. Oral comments may be provided during the telephonic oral proceedings to be held on January 19 and 20, 2021.

**11. All agencies shall list other matters prescribed by statute applicable to the specific agency or to any specific rule or class of rules. Additionally, an agency subject to Council review under A.R.S. §§ 41-1052 and 41-1055 shall respond to the following questions:**

Not applicable

**a. Whether the rule requires a permit, whether a general permit is used and if not, the reasons why a general permit is not used:**

Not applicable

**b. Whether a federal law is applicable to the subject of the rule, whether the rule is more stringent than federal law and if so, citation to the statutory authority to exceed the requirements of federal law:**

Not applicable

**c. Whether a person submitted an analysis to the agency that compares the rule's impact of the competitiveness of business in this state to the impact on business in other states:**

Not applicable

**12. A list of any incorporated by reference material as specified in A.R.S. § 41-1028 and its location in the rules:**

None

**13. The full text of the rules follows:****TITLE 14. PUBLIC SERVICE CORPORATIONS; CORPORATIONS AND ASSOCIATIONS;  
SECURITIES REGULATION****CHAPTER 2. CORPORATION COMMISSION - FIXED UTILITIES****ARTICLE 7. RESOURCE PLANNING AND PROCUREMENT REPEALED**

## Section

R14-2-701.	Definitions <u>Repealed</u>
R14-2-702.	Applicability <u>Repealed</u>
R14-2-703.	Load-serving entity reporting requirements <u>Repealed</u>
R14-2-704.	Commission review of load-serving entity resource plans <u>Repealed</u>
R14-2-705.	Procurement <u>Repealed</u>
R14-2-706.	Independent Monitor Selection and Responsibilities <u>Repealed</u>

**ARTICLE 16. RETAIL ELECTRIC COMPETITION**

## Section

R14-2-1618.	Environmental Portfolio Standard <u>Repealed</u>
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**ARTICLE 18. RENEWABLE ENERGY STANDARD AND TARIFF REPEALED**

## Section

R14-2-1801.	Definitions <u>Repealed</u>
R14-2-1802.	Eligible Renewable Energy Resources <u>Repealed</u>
R14-2-1803.	Renewable Energy Credits <u>Repealed</u>
R14-2-1804.	Annual Renewable Energy Requirement <u>Repealed</u>
R14-2-1805.	Distributed Renewable Energy Requirement <u>Repealed</u>
R14-2-1806.	Extra Credit Multipliers <u>Repealed</u>
R14-2-1807.	Manufacturing Partial Credit <u>Repealed</u>
R14-2-1808.	Tariff <u>Repealed</u>
R14-2-1809.	Customer Self-Directed Renewable Energy Option <u>Repealed</u>
R14-2-1810.	Uniform Credit Purchase Program <u>Repealed</u>
R14-2-1811.	Net Metering and Interconnection Standards <u>Repealed</u>
R14-2-1812.	Compliance Reports <u>Repealed</u>
R14-2-1813.	Implementation Plans <u>Repealed</u>
R14-2-1814.	Electric Power Cooperatives <u>Repealed</u>
R14-2-1815.	Enforcement and Penalties <u>Repealed</u>
R14-2-1816.	Waiver from the Provisions of this Article <u>Repealed</u>
Appendix A.	Sample Tariff <u>Repealed</u>

**ARTICLE 23. NET METERING**

## Section

R14-2-2302.	Definitions
R14-2-2307.	Net Metering Tariff

**ARTICLE 24. ELECTRIC ENERGY EFFICIENCY STANDARDS REPEALED**

## Section

R14-2-2401.	Definitions <u>Repealed</u>
R14-2-2402.	Applicability <u>Repealed</u>
R14-2-2403.	Goals and Objectives <u>Repealed</u>
R14-2-2404.	Energy Efficiency Standards <u>Repealed</u>
R14-2-2405.	Implementation Plans <u>Repealed</u>
R14-2-2406.	DSM Tariffs <u>Repealed</u>
R14-2-2407.	Commission Review and Approval of DSM Programs and DSM Measures <u>Repealed</u>
R14-2-2408.	Parity and Equity <u>Repealed</u>
R14-2-2409.	Reporting Requirements <u>Repealed</u>
R14-2-2410.	Cost Recovery <u>Repealed</u>
R14-2-2411.	Performance Incentives <u>Repealed</u>
R14-2-2412.	Cost Effectiveness <u>Repealed</u>
R14-2-2413.	Baseline Estimation <u>Repealed</u>
R14-2-2414.	Fuel Neutrality <u>Repealed</u>
R14-2-2415.	Monitoring, Evaluation, and Research <u>Repealed</u>
R14-2-2416.	Program Administration and Implementation <u>Repealed</u>





R14-2-2417. Levering and Cooperation~~Repealed~~  
 R14-2-2418. Compliance by Electric Distribution Cooperatives~~Repealed~~  
 R14-2-2419. Waiver from the Provisions of this Article~~Repealed~~

## **ARTICLE 25. GAS UTILITY ENERGY EFFICIENCY STANDARDS~~REPEALED~~**

### Section

R14-2-2501. Definitions~~Repealed~~  
 R14-2-2502. Applicability~~Repealed~~  
 R14-2-2503. Goals and Objectives~~Repealed~~  
 R14-2-2504. Energy Efficiency Standards~~Repealed~~  
 R14-2-2505. Implementation Plans~~Repealed~~  
 R14-2-2506. DSM Tariffs~~Repealed~~  
 R14-2-2507. Commission Review and Approval of DSM Programs and RET Programs~~Repealed~~  
 R14-2-2508. Parity and Equity~~Repealed~~  
 R14-2-2509. Reporting Requirements~~Repealed~~  
 R14-2-2510. Cost Recovery~~Repealed~~  
 R14-2-2511. Revenue Decoupling~~Repealed~~  
 R14-2-2512. Cost-Effectiveness~~Repealed~~  
 R14-2-2513. Baseline Estimation~~Repealed~~  
 R14-2-2514. Fuel Neutrality~~Repealed~~  
 R14-2-2515. Monitoring, Evaluation, and Research~~Repealed~~  
 R14-2-2516. Program Administration and Implementation~~Repealed~~  
 R14-2-2517. Levering and Cooperation~~Repealed~~  
 R14-2-2518. Compliance by Gas Distribution Cooperatives~~Repealed~~  
 R14-2-2519. Compliance by Propane Companies~~Repealed~~  
 R14-2-2520. Waiver from the Provisions of this Article~~Repealed~~

## **ARTICLE 27. ENERGY RULES**

### Section

R14-2-2701. Definitions  
 R14-2-2702. Applicability  
 R14-2-2703. Renewable Energy Resources  
 R14-2-2704. Clean Energy Implementation Plan  
 R14-2-2705. Development of Proposed Load Forecast and Needs Assessment  
 R14-2-2706. Load Forecast and Needs Assessment Approval  
 R14-2-2707. All Source Request for Information  
 R14-2-2708. ASRFI Process; Resource Plan Approval  
 R14-2-2709. Implementation of Action Plan  
 R14-2-2710. Electric Utility Annual Reporting Requirements  
 R14-2-2711. Electric Energy Efficiency  
 R14-2-2712. Gas Energy Efficiency  
 R14-2-2713. Energy Storage System Tariff  
 R14-2-2714. Independent Monitor Selection and Responsibilities  
 R14-2-2715. Confidential Information  
 R14-2-2716. Waivers and Exemptions  
 R14-2-2717. Cooperatives  
 R14-2-2718. Cost Recovery and Prudence

## **ARTICLE 7. RESOURCE PLANNING AND PROCUREMENT~~REPEALED~~**

### **R14-2-701. Definitions~~Repealed~~**

In this Article, unless otherwise specified:

1. "Acknowledgment" means a Commission determination, under R14-2-704, that a plan meets the basic requirements of this Article.
2. "Affiliated" means related through ownership of voting securities, through contract, or otherwise in such a manner that one entity directly or indirectly controls another, is directly or indirectly controlled by another, or is under direct or indirect common control with another entity.
3. "Benchmark" means to calibrate against a known set of values or standards.
4. "Book life" means the expected time period over which a power supply source will be available for use by a load-serving entity.
5. "Btu" means British thermal unit.
6. "Capacity" means the amount of electric power, measured in megawatts, that a power source is rated to provide.
7. "Capital costs" means the construction and installation cost of facilities, including land, land rights, structures, and equipment.
8. "Coincident peak" means the maximum of the sum of two or more demands that occur in the same demand interval, which demand interval may be established on an annual, monthly, or hourly basis.
9. "Customer class" means a subset of customers categorized according to similar characteristics, such as amount of energy consumed; amount of demand placed on the energy supply system at the system peak; hourly, daily, or seasonal load pattern; pri-



- mary type of activity engaged in by the customer, including residential, commercial, industrial, agricultural, and governmental; and location.
10. "Decommissioning" means the process of safely and economically removing a generating unit from service.
  11. "Demand management" means beneficial reduction in the total cost of meeting electric energy service needs by reducing or shifting in time electricity usage.
  12. "Derating" means a reduction in a generating unit's capacity.
  13. "Discount rate" means the interest rate used to calculate the present value of a cost or other economic variable.
  14. "Docket Control" means the office of the Commission that receives all official filings for entry into the Commission's public electronic docketing system.
  15. "Emergency" means an unforeseen and unforeseeable condition that:
    - a. Does not arise from the load-serving entity's failure to engage in good utility practices;
    - b. Is temporary in nature; and
    - c. Threatens reliability or poses another significant risk to the system.
  16. "End use" means the final application of electric energy, for activities such as, but not limited to, heating, cooling, running an appliance, or motor, an industrial process, or lighting.
  17. "Energy losses" means the quantity of electric energy generated or purchased that is not available for sale to end users, for resale, or for use by the load-serving entity.
  18. "Escalation" means the change in costs due to inflation, changes in manufacturing processes, changes in availability of labor or materials, or other factors.
  19. "Generating unit" means a specific device or set of devices that converts one form of energy (such as heat or solar energy) into electric energy, such as a turbine and generator or a set of photovoltaic cells.
  20. "Heat rate" means a measure of generating station thermal efficiency expressed in Btus per net kilowatt-hour and computed by dividing the total Btu content of fuel used for electric generation by the kilowatt-hours of electricity generated.
  21. "Independent monitor" means a company or consultant that is not affiliated with a load-serving entity and that is selected to oversee the conduct of a competitive procurement process under R14-2-706.
  22. "Integration" means methods by which energy produced by intermittent resources can be incorporated into the electric grid.
  23. "Intermittent resources" means electric power generation for which the energy production varies in response to naturally occurring processes like wind or solar intensity.
  24. "Interruptible power" means power made available under an agreement that permits curtailment or cessation of delivery by the supplier.
  25. "In-service date" means the date a power supply source becomes available for use by a load-serving entity.
  26. "Load-serving entity" means a public service corporation that provides electricity generation service and operates or owns, in whole or in part, a generating facility or facilities with capacity of at least 50 megawatts combined.
  27. "Long term" means having a duration of three or more years.
  28. "Maintenance" means the repair of generation, transmission, distribution, administrative, and general facilities; replacement of minor items; and installation of materials to preserve the efficiency and working condition of the facilities.
  29. "Mothballing" means the temporary removal of a generating unit from active service and accompanying storage activities.
  30. "Operate" means to manage or otherwise be responsible for the production of electricity by a generating facility, whether that facility is owned by the operator, in whole or in part, or by another entity.
  31. "Participation rate" means the proportion of customers who take part in a specific program.
  32. "Probabilistic analysis" means a systematic evaluation of the effect, on costs, reliability, or other measures of performance, of possible events affecting factors that influence performance, considering the likelihood that the events will occur.
  33. "Production cost" means the variable operating costs and maintenance costs of producing electricity through generation plus the cost of purchases of power sufficient to meet demand.
  34. "Refurbish" means to make major changes, more extensive than maintenance or repair, in the power production, transmission, or distribution characteristics of a component of the power supply system, such as by changing the fuels that can be used in a generating unit or changing the capacity of a generating unit.
  35. "Reliability" means a measure of the ability of a load-serving entity's generation, transmission, or distribution system to provide power without failures to reflect the portion of time that a system is unable to meet demand or the kilowatt-hours of demand that could not be supplied.
  36. "Renewable energy resource" means an energy resource that is replaced rapidly by a natural, ongoing process and that is not nuclear or fossil fuel.
  37. "Reserve requirements" means the capacity that a load-serving entity must maintain in excess of its peak load to provide for scheduled maintenance, forced outages, unforeseen loads, emergencies, system operating requirements, and reserve sharing arrangements.
  38. "Reserve sharing arrangement" means an agreement between two or more load-serving entities to provide backup capacity.
  39. "Resource planning" means integrated supply and demand analyses completed as described in this Article.
  40. "RFP" means request for proposals.
  41. "Self generation" means the production of electricity by an end user.
  42. "Sensitivity analysis" means a systematic assessment of the degree of response of costs, reliability, or other measures of performance to changes in assumptions about factors that influence performance.
  43. "Short term" means having a duration of less than three years.
  44. "Spinning reserve" means the capacity a load-serving entity must maintain connected to the system and ready to deliver power promptly in the event of an unexpected loss of generation source, expressed as a percentage of peak load, as a percentage of the largest generating unit, or as in fixed megawatts.
  45. "Staff" means individuals working for the Commission's Utilities Division, whether as employees or through contract.



46. "Third-party independent energy broker" means an entity, such as Prebon Energy or Tradition Financial Services, that facilitates an energy transaction between separate parties without taking title to the transaction.
47. "Third-party on-line trading system" means a computer-based marketplace for commodity exchanges provided by an entity that is not affiliated with the load-serving entity, such as the Intercontinental Exchange, California Independent System Operator, or New York Mercantile Exchange.
48. "Total cost" means all capital, operating, maintenance, fuel, and decommissioning costs, plus the costs associated with mitigating any adverse environmental effects, incurred, by end-users, load-serving entities, or others, in the provision or conservation of electric energy.

**R14-2-702. Applicability Repealed**

- A.** This Article applies to each load-serving entity, whether the power generated is for sale to end-users or is for resale.
- B.** An electricity public service corporation that becomes a load-serving entity by increasing its generating capacity to at least 50 megawatts combined shall provide written notice to the Commission within 30 days after the increase and shall comply with the filing requirements in this Article within two years after the notice is filed.
- C.** The Commission may, by Order, exempt a load-serving entity from complying with any provision in this Article, or the Article as a whole, upon determining that:
  1. The burden of compliance with the provision, or the Article as a whole, exceeds the potential benefits to customers in the form of cost savings, service reliability, risk reductions, or reduced environmental impacts that would result from the load-serving entity's compliance with the provision or Article; and
  2. The public interest will be served by the exemption.
- D.** A load-serving entity that desires an exemption shall submit to Docket Control an application that includes, at a minimum:
  1. The reasons why the burden of complying with the Article, or the specific provision in the Article for which exemption is requested, exceeds the potential benefits to customers that would result from the load-serving entity's compliance with the provision or Article;
  2. Data supporting the load-serving entity's assertions as to the burden of compliance and the potential benefits to customers that would result from compliance; and
  3. The reasons why the public interest would be served by the requested exemption.
- E.** A load-serving entity shall file with Docket Control, within 120 days after the effective date of these rules, the documents that would have been due on April 1, 2010, under R14-2-703(C), (D), (E), (F), and (H) had the revisions to those subsections been effective at that time.

**R14-2-703. Load-serving entity reporting requirements Repealed**

- A.** A load-serving entity shall, by April 1 of each year, file with Docket Control a compilation of the following items of demand-side data, including for each item for which no record is maintained the load-serving entity's best estimate and a full description of how the estimate was made:
  1. Hourly demand for the previous calendar year, disaggregated by:
    - a. Sales to end-users;
    - b. Sales for resale;
    - c. Energy losses; and
    - d. Other disposition of energy, such as energy furnished without charge and energy used by the load-serving entity;
  2. Coincident peak demand (megawatts) and energy consumption (megawatt-hours) by month for the previous 10 years, disaggregated by customer class;
  3. Number of customers by customer class for each of the previous 10 years; and
  4. Reduction in load (kilowatt and kilowatt-hours) in the previous calendar year due to existing demand management measures, by type of demand management measure.
- B.** A load-serving entity shall, by April 1 of each year, file with Docket Control a compilation of the following items of supply-side data, including for each item for which no record is maintained the load-serving entity's best estimate and a full description of how the estimate was made:
  1. For each generating unit and purchased power contract for the previous calendar year:
    - a. In-service date and book life or contract period;
    - b. Type of generating unit or contract;
    - c. The load-serving entity's share of the generating unit's capacity, or of capacity under the contract, in megawatts;
    - d. Maximum generating unit or contract capacity, by hour, day, or month, if such capacity varies during the year;
    - e. Annual capacity factor (generating units only);
    - f. Average heat rate of generating units and, if available, heat rates at selected output levels;
    - g. Average fuel cost for generating units, in dollars per million Btu for each type of fuel;
    - h. Other variable operating and maintenance costs for generating units, in dollars per megawatt-hour;
    - i. Purchased power energy costs for long-term contracts, in dollars per megawatt-hour;
    - j. Fixed operating and maintenance costs of generating units, in dollars per megawatt;
    - k. Demand charges for purchased power;
    - l. Fuel type for each generating unit;
    - m. Minimum capacity at which the generating unit would be run or power must be purchased;
    - n. Whether, under standard operating procedures, the generating unit must be run if it is available to run;
    - o. Description of each generating unit as base load, intermediate, or peaking;
    - p. Environmental impacts, including air emission quantities (in metric tons or pounds) and rates (in quantities per megawatt-hour) for carbon dioxide, nitrogen oxides, sulfur dioxide, mercury, particulates, and other air emissions subject to current or expected future environmental regulation;





- q. Water consumption quantities and rates; and
- r. Tons of coal ash produced per generating unit;
- 2. For the power supply system for the previous calendar year:
  - a. A description of generating unit commitment procedures;
  - b. Production cost;
  - c. Reserve requirements;
  - d. Spinning reserve;
  - e. Reliability of generating, transmission, and distribution systems;
  - f. Purchase and sale prices, averaged by month, for the aggregate of all purchases and sales related to short-term contracts; and
  - g. Energy losses;
- 3. The level of self-generation in the load-serving entity's service area for the previous calendar year; and
- 4. An explanation of any resource procurement processes used by the load-serving entity during the previous calendar year that did not include use of an RFP, including the exception under which the process was used.
- C. A load-serving entity shall, by April 1 of each even year, file with Docket Control a compilation of the following items of load data and analyses, which may include a reference to the last filing made under this subsection for each item for which there has been no change in forecast since the last filing:
  - 1. Fifteen-year forecast of system coincident peak load (megawatts) and energy consumption (megawatt-hours) by month and year, expressed separately for residential, commercial, industrial, and other customer classes; for interruptible power; for resale; and for energy losses;
  - 2. Disaggregation of the load forecast of subsection (C)(1) into a component in which no additional demand management measures are assumed, and a component assuming the change in load due to additional forecasted demand management measures; and
  - 3. Documentation of all sources of data, analyses, methods, and assumptions used in making the load forecasts, including a description of how the forecasts were benchmarked and justifications for selecting the methods and assumptions used.
- D. A load-serving entity shall, by April 1 of each even year, file with Docket Control the following prospective analyses and plans, which shall compare a wide range of resource options and take into consideration expected duty cycles, cost projections, other analyses required under this Section, environmental impacts, and water consumption and may include a reference to the last filing made under this subsection for each item for which there has been no change since the last filing:
  - 1. A 15-year resource plan, providing for each year:
    - a. Projected data for each of the items listed in subsection (B)(1), for each generating unit and purchased power source, including each generating unit that is expected to be new or refurbished during the period, which shall be designated as new or refurbished, as applicable, for the year of purchase or the period of refurbishment;
    - b. Projected data for each of the items listed in subsection (B)(2), for the power supply system;
    - c. The capital cost, construction time, and construction spending schedule for each generating unit expected to be new or refurbished during the period;
    - d. The escalation levels assumed for each component of cost, such as, but not limited to, operating and maintenance, environmental compliance, system integration, backup capacity, and transmission delivery, for each generating unit and purchased power source;
    - e. If discontinuation, decommissioning, or mothballing of any power source and or permanent derating of any generating facility is expected:
      - i. Identification of each power source or generating unit involved;
      - ii. The costs and spending schedule for each discontinuation, decommissioning, mothballing, or derating; and
      - iii. The reasons for each discontinuation, decommissioning, mothballing, or derating;
    - f. The capital costs and operating and maintenance costs of all new or refurbished transmission and distribution facilities expected during the 15-year period;
    - g. An explanation of the need for and purpose of all expected new or refurbished transmission and distribution facilities, which explanation shall incorporate the load-serving entity's most recent transmission plan filed under A.R.S. § 40-360.02(A) and any relevant provisions of the Commission's most recent Biennial Transmission Assessment decision regarding the adequacy of transmission facilities in Arizona; and
    - h. Cost analyses and cost projections;
  - 2. Documentation of the data, assumptions, and methods or models used to forecast production costs and power production for the 15-year resource plan, including the method by which the forecast was benchmarked;
  - 3. A description of each potential power source that was rejected; the capital costs, operating costs, and maintenance costs of each rejected source; and an explanation of the reasons for rejecting each source;
  - 4. A 15-year forecast of self-generation by customers of the load-serving entity, in terms of annual peak production (megawatts) and annual energy production (megawatt-hours);
  - 5. Disaggregation of the forecast of subsection (D)(4) into two components, one reflecting the self-generation projected if no additional efforts are made to self-generation, and one reflecting the self-generation projected to result from the load-serving entity's institution of additional forecasted self-generation measures;
  - 6. A 15-year forecast of the annual capital costs and operating and maintenance costs of the self-generation identified under subsections (D)(4) and (D)(5);
  - 7. Documentation of the analysis of the self-generation under subsections (D)(4) through (6);
  - 8. A plan that considers using a wide range of resources and promotes fuel and technology diversity within its portfolio;
  - 9. A calculation of the benefits of generation using renewable energy resources;
  - 10. A plan that factors in the delivered cost of all resource options, including costs associated with environmental compliance, system integration, backup capacity, and transmission delivery;



11. Analysis of integration costs for intermittent resources;
  12. A plan to increase the efficiency of the load-serving entity's generation using fossil fuel;
  13. Data to support technology choices for supply-side resources;
  14. A description of the demand management programs or measures included in the 15-year resource plan, including for each demand management program or measure:
    - a. How and when the program or measure will be implemented;
    - b. The projected participation level by customer class for the program or measure;
    - c. The expected change in peak demand and energy consumption resulting from the program or measure;
    - d. The expected reductions in environmental impacts including air emissions, solid waste, and water consumption attributable to the program or measure;
    - e. The expected societal benefits, societal costs, and cost-effectiveness of the program or measure;
    - f. The expected life of the measure; and
    - g. The capital costs, operating costs, and maintenance costs of the measure, and the program costs;
  15. For each demand management measure that was considered but rejected:
    - a. A description of the measure;
    - b. The estimated change in peak demand and energy consumption from the measure;
    - c. The estimated cost-effectiveness of the measure;
    - d. The capital costs, operating costs, and maintenance costs of the measure, and the program costs; and
    - e. The reasons for rejecting the measure;
  16. Analysis of future fuel supplies that are part of the resource plan; and
  17. A plan for reducing environmental impacts related to air emissions, solid waste, and other environmental factors, and a plan for reducing water consumption. The costs for compliance with current and projected future environmental regulations shall be included in the analysis of resources required by R14-2-703(D) and (E). A load-serving entity or any interested parties may also provide, for the Commission's consideration, analyses and supporting data pertaining to environmental impacts associated with the generation or delivery of electricity, which may include monetized estimates of environmental impacts that are not included as costs for compliance. Values or factors for compliance costs, environmental impacts, or monetization of environmental impacts may be developed and reviewed by the Commission in other proceedings or stakeholder workshops.
- F.** A load-serving entity shall, by April 1 of each even year, file with Docket Control a compilation of the following analyses and plan:
1. Analyses to identify and assess errors, risks, and uncertainties in the following, completed using methods such as sensitivity analysis and probabilistic analysis:
    - a. Demand forecasts;
    - b. The costs of demand management measures and power supply;
    - c. The availability of sources of power;
    - d. The costs of compliance with existing and expected environmental regulations;
    - e. Any analysis by the load-serving entity in anticipation of potential new or enhanced environmental regulations;
    - f. Changes in fuel prices, and availability;
    - g. Construction costs, capital costs, and operating costs; and
    - h. Other factors the load-serving entity wishes to consider;
  2. A description and analysis of available means for managing the errors, risks, and uncertainties identified and analyzed in subsection (E)(1), such as obtaining additional information, limiting risk exposure, using incentives, creating additional options, incorporating flexibility, and participating in regional generation and transmission projects; and
  3. A plan to manage the errors, risks, and uncertainties identified and analyzed in subsection (E)(1).
- G.** A load-serving entity shall, by April 1 of each even year, file with Docket Control a 15-year resource plan that:
1. Selects a portfolio of resources based upon comprehensive consideration of a wide range of supply- and demand-side options;
  2. Will result in the load-serving entity's reliably serving the demand for electric energy services;
  3. Will address the adverse environmental impacts of power production;
  4. Will include renewable energy resources so as to meet at least the greater of the Annual Renewable Energy Requirement in R14-2-1804 or the following annual percentages of retail kWh sold by the load-serving entity:

Calendar Year	Percentage of Retail kWh sold during calendar Year
2010	2.5%
2011	3.0%
2012	3.5%
2013	4.0%
2014	4.5%
2015	5.0%
2016	6.0%
2017	7.0%
2018	8.0%
2019	9.0%
2020	10.0%
2021	11.0%
2022	12.0%
2023	13.0%
2024	14.0%
after 2024	15.0%





5. Will include distributed generation energy resources so as to meet at least the greater of the Distributed Renewable Energy Requirement in R14-2-1805 or the following annual percentages as applied to the load-serving entity's Annual Renewable Energy Requirement:
 

2007	5%
2008	10%
2009	15%
2010	20%
2011	25%
After 2011	30%
6. Will address energy efficiency so as to meet any requirements set in rule by the Commission;
7. Will effectively manage the uncertainty and risks associated with costs, environmental impacts, load forecasts, and other factors;
8. Will achieve a reasonable long-term total cost, taking into consideration the objectives set forth in subsections (F)(2)-(7) and the uncertainty of future costs; and
9. Contains all of the following:
  - a. A complete description and documentation of the plan, including supply and demand conditions, availability of transmission, costs, and discount rates utilized;
  - b. A comprehensive, self-explanatory load and resources table summarizing the plan;
  - c. A brief executive summary;
  - d. An index to indicate where the responses to each filing requirement of these rules can be found; and
  - e. Definitions of the terms used in the plan.
- G. A load-serving entity shall, by April 1 of each odd year, file with Docket Control a work plan that includes:
  1. An outline of the contents of the resource plan the load-serving entity is developing to be filed the following year as required under subsection (F);
  2. The load-serving entity's method for assessing potential resources;
  3. The sources of the load-serving entity's current assumptions; and
  4. An outline of the timing and extent of public participation and advisory group meetings the load-serving entity intends to hold before completing and filing the resource plan.
- H. With its resource plan, a load-serving entity shall include an action plan, based on the results of the resource planning process, that:
  1. Includes a summary of actions to be taken on future resource acquisitions;
  2. Includes details on resource types, resources capacity, and resource timing; and
  3. Covers the three-year period following the Commission's acknowledgment of the resource plan.
- I. If a load-serving entity's submission does not contain sufficient information to allow Staff to analyze the submission fully for compliance with this Article, Staff shall request additional information from the load-serving entity, including the data used in the load-serving entity's analyses.
- J. Staff may request that a load-serving entity complete additional analyses to improve specified components of the load-serving entity's submissions.
- K. If a load-serving entity believes that a data-reporting requirement may result in disclosure of confidential business data or confidential electricity infrastructure information, the load-serving entity may submit to Staff a request that the data be submitted to Staff under a confidentiality agreement, which request shall include an explanation justifying the confidential treatment of the data.
- L. Data protected by a confidentiality agreement shall not be submitted to Docket Control and will not be open to public inspection or otherwise made public except upon an order of the Commission entered after written notice to the load-serving entity.

#### **R14-2-704. Commission review of load-serving entity resource plans ~~Repealed~~**

- A. By October 1 of each even year, Staff shall file a report that contains its analysis and conclusions regarding its statewide review and assessments of the load-serving entities' filings made under R14-2-703(C), (D), (E), (F), and (H).
- B. By February 1 of each odd year, the Commission shall issue an order acknowledging a load-serving entity's resource plan or issue an order stating the reasons for not acknowledging the resource plan. The Commission shall order an acknowledgment of a load-serving entity's resource plan, with or without amendment, if the Commission determines that the resource plan, as amended if applicable, complies with the requirements of this Article and that the load-serving entity's resource plan is reasonable and in the public interest, based on the information available to the Commission at the time and considering the following factors:
  1. The total cost of electric energy services;
  2. The degree to which the factors that affect demand, including demand management, have been taken into account;
  3. The degree to which supply alternatives, such as self generation, have been taken into account;
  4. Uncertainty in demand and supply analyses, forecasts, and plans, and whether plans are sufficiently flexible to enable the load-serving entity to respond to unforeseen changes in supply and demand factors;
  5. The reliability of power supplies, including fuel diversity and non-cost considerations;
  6. The reliability of the transmission grid;
  7. The degree to which the load-serving entity considered all relevant resources, risks, and uncertainties;
  8. The degree to which the load-serving entity's plan for future resources is in the best interest of its customers;
  9. The best combination of expected costs and associated risks for the load-serving entity and its customers; and
  10. The degree to which the load-serving entity's resource plan allows for coordinated efforts with other load-serving entities.
- C. The Commission may hold a hearing or workshop regarding a load-serving entity's resource plan. If the Commission holds such a hearing or workshop, the Commission may extend the February 1 deadline for the Commission to issue an order regarding acknowledgment under subsection (B).
- D. While no particular future ratemaking treatment is implied by or shall be inferred from the Commission's acknowledgement, the Commission shall consider a load-serving entity's filings made under R14-2-703 when the Commission evaluates the performance of the load-serving entity in subsequent rate cases and other proceedings.



- ~~E.~~ A load-serving entity may seek Commission approval of specific resource planning actions.
- ~~F.~~ A load-serving entity may file an amendment to an acknowledged resource plan if changes in conditions or assumptions necessitate a material change in the load-serving entity's plan before the next resource plan is due to be filed.

#### **R14-2-705. Procurement Repealed**

- ~~A.~~ Except as provided in subsection (B), a load-serving entity may use the following procurement methods for the wholesale acquisition of energy, capacity, and physical power hedge transactions:
  1. Purchase through a third-party on-line trading system;
  2. Purchase from a third-party independent energy broker;
  3. Purchase from a non-affiliated entity through auction or an RFP process;
  4. Bilateral contract with a non-affiliated entity;
  5. Bilateral contract with an affiliated entity, provided that non-affiliated entities were provided notice and an opportunity to compete against the affiliated entity's proposal before the transaction was executed; and
  6. Any other competitive procurement process approved by the Commission.
- ~~B.~~ A load-serving entity shall use an RFP process as its primary acquisition process for the wholesale acquisition of energy and capacity, unless one of the following exceptions applies:
  1. The load-serving entity is experiencing an emergency;
  2. The load-serving entity needs to make a short-term acquisition to maintain system reliability;
  3. The load-serving entity needs to acquire other components of energy procurement, such as fuel, fuel transportation, and transmission projects;
  4. The load-serving entity's planning horizon is two years or less;
  5. The transaction presents the load-serving entity a genuine, unanticipated opportunity to acquire a power supply resource at a clear and significant discount, compared to the cost of acquiring new generating facilities, and will provide unique value to the load-serving entity's customers;
  6. The transaction is necessary for the load-serving entity to satisfy an obligation under the Renewable Energy Standard rules; or
  7. The transaction is necessary for the load-serving entity's demand-side management or demand response programs.
- ~~C.~~ A load-serving entity shall engage an independent monitor to oversee all RFP processes for procurement of new resources.

#### **R14-2-706. Independent Monitor Selection and Responsibilities Repealed**

- ~~A.~~ When a load-serving entity contemplates engaging in an RFP process, the load-serving entity shall consult with Staff regarding the identity of companies or consultants that could serve as independent monitor for the RFP process.
- ~~B.~~ After consulting with Staff, a load-serving entity shall create a vendor list of three to five candidates to serve as independent monitor and shall file the vendor list with Docket Control to allow interested persons time to review and file objections to the vendor list.
- ~~C.~~ An interested person shall file with Docket Control, within 30 days after a vendor list is filed with Docket Control, any objection that the interested person may have to a candidate's inclusion on a vendor list.
- ~~D.~~ Within 60 days after a vendor list is filed with Docket Control, Staff shall issue a notice identifying each candidate on the vendor list that Staff considers to be qualified to serve as independent monitor for the contemplated RFP process. In making its determination, Staff shall consider the experience of the candidates, the professional reputation of the candidates, and any objections filed by interested persons.
- ~~E.~~ A load-serving entity that has completed the actions required by subsections (A) and (B) to comply with a particular Commission Decision is deemed to have complied with subsections (A) and (B) and is not required to repeat those actions.
- ~~F.~~ A load-serving entity may retain as independent monitor for the contemplated RFP process and for its future RFP processes any of the candidates identified in Staff's notice.
- ~~G.~~ A load-serving entity shall file with Docket Control a written notice of its retention of an independent monitor.
- ~~H.~~ A load-serving entity is responsible for paying the independent monitor for its services and may charge a reasonable bidder's fee to each bidder in the RFP process to help offset the cost of the independent monitor's services. A load-serving entity may request recovery of the cost of the independent monitor's services, to the extent that the cost is not offset by bidder's fees, in a subsequent rate case. The Commission shall use its discretion in determining whether to allow the cost to be recovered through customer rates.
- ~~I.~~ One week prior to the deadline for submitting bids, a load-serving entity shall provide the independent monitor a copy of any bid proposal prepared by the load-serving entity or entity affiliated with the load-serving entity and of any benchmark or reference cost the load-serving entity has developed for use in evaluating bids. The independent monitor shall take steps to secure the load-serving entity's bid proposal and any benchmark or reference cost so that they are inaccessible to any bidder, the load-serving entity, and any entity affiliated with the load-serving entity.
- ~~J.~~ Upon Staff's request, the independent monitor shall provide status reports to Staff throughout the RFP process.

### **ARTICLE 16. RETAIL ELECTRIC COMPETITION**

#### **R14-2-1618. Environmental Portfolio Standard Repealed**

- ~~A.~~ Upon the effective implementation of a Commission-approved Environmental Portfolio Standard Surcharge tariff, any Load-Serving Entity selling electricity or aggregating customers for the purpose of selling electricity under the provisions of this Article must derive at least .2% of the total retail energy sold from new solar resources or environmentally friendly renewable electricity technologies, whether that energy is purchased or generated by the seller. Solar resources include photovoltaic resources and solar thermal resources that generate electricity. New solar resources and environmentally friendly renewable electricity technologies are those installed on or after January 1, 1997.
  1. Electric Service Providers, that are not UDCs, are exempt from portfolio requirements until 2004, but could voluntarily elect to participate. ESPs choosing to participate would receive a pro rata share of funds collected from the Environmental Portfolio Surcharge delineated in R14-2-1618.A.2 for portfolio purposes to acquire eligible portfolio systems or electricity generated from such systems.



2. Utility Distribution Companies would recover part of the costs of the portfolio standard through current System Benefits Charges, if they exist, including a re-allocation of demand side management funding to portfolio uses. Additional portfolio standard costs will be recovered by a customer Environmental Portfolio Surcharge on the customers' monthly bill. The Environmental Portfolio Surcharge shall be assessed monthly to every metered and/or non-metered retail electric service. This monthly assessment will be the lesser of \$0.000875 per kWh or:
    - a. Residential Customers: \$.35 per service;
    - b. Non-Residential Customers: \$13 per service;
    - c. Non-Residential Customers whose metered demand is 3,000 kW or more for three consecutive months: \$39.00 per service. In the case of unmetered services, the Load-Serving Entity shall, for purposes of billing the Environmental Portfolio Standard Surcharge and subject to the caps set forth above, use the lesser of (i) the load profile or otherwise estimated kWh required to provide the service in question; or (ii) the service's contract kWh.
  3. Customer bills shall reflect a line item entitled "Environmental Portfolio Surcharge, mandated by the Corporation Commission."
  4. Utility Distribution Companies or ESPs that do not currently have a renewables program may request a waiver or modification of this Section due to extreme circumstances that may exist.
- B.** The portfolio percentage shall increase after December 31, 2000.
1. Starting January 1, 2001, the portfolio percentage shall increase annually and shall be set according to the following schedule:
 

YEAR	PORTFOLIO PERCENTAGE
2001	.2%
2002	.4%
2003	.6%
2004	.8%
2005	1.0%
2006	1.05%
2007-2012	1.1%
  2. The Commission would continue the annual increase in the portfolio percentage after December 31, 2004, only if the cost of environmental portfolio electricity has declined to a Commission-approved cost/benefit point. The Director, Utilities Division shall establish, not later than January 1, 2003, an Environmental Portfolio Cost Evaluation Working Group to make recommendations to the Commission of an acceptable portfolio electricity cost/benefit point or portfolio kWh cost impact maximum that the Commission could use as a criteria for the decision to continue the increase in the portfolio percentage. The recommendations of the Working Group shall be presented to the Commission not later than June 30, 2003. In no event, however, shall the Commission increase the surcharge caps as delineated in R14-2-1618(A)(2).
  3. The requirements for the phase-in of various technologies shall be:
    - a. In 2001, the Portfolio kWh makeup shall be at least 50 percent solar electric, and no more than 50 percent other environmentally-friendly renewable electricity technologies or solar hot water or R&D on solar electric resources, but with no more than 10 percent on R&D.
    - b. In 2002 and 2003, the Portfolio kWh makeup shall be at least 50 percent solar electric, and no more than 50 percent other environmentally-friendly renewable electricity technologies or solar hot water or R&D on solar electric resources, but with no more than 5 percent on R&D.
    - c. In 2004, through 2012, the portfolio kWh makeup shall be at least 60 percent solar electric with no more than 40 percent solar hot water or other environmentally-friendly renewable electricity technologies.
- C.** Load-Serving Entities shall be eligible for a number of extra credit multipliers that may be used to meet the portfolio standard requirements. Extra credits may be used to meet portfolio requirements and extra credits from solar electric technologies will also count toward the solar electric fraction requirements in R14-2-1618(B)(3). With the exception of the Early Installation Extra Credit Multiplier, which has a five-year life from operational start-up, all other extra credit multipliers are valid for the life of the generating equipment.
1. Early Installation Extra Credit Multiplier: For new solar electric systems installed and operating prior to December 31, 2003, Load-Serving Entities would qualify for multiple extra credits for kWh produced for five years following operational start-up of the solar electric system. The five-year extra credit would vary depending upon the year in which the system started up, as follows:
 

YEAR	EXTRA CREDIT MULTIPLIER
1997	.5
1998	.5
1999	.5
2000	.4
2001	.3
2002	.2
2003	.1

 Eligibility to qualify for the Early Installation Extra Credit Multiplier would end in 2003. However, any eligible system that was operational in 2003 or before would still be allowed the applicable extra credit for the full five years after operational start-up.
  2. Solar Economic Development Extra Credit Multipliers: There are two equal parts to this multiplier, an in-state installation credit and an in-state content multiplier.
    - a. In-State Power Plant Installation Extra Credit Multiplier: Solar electric power plants installed in Arizona shall receive a .5 extra credit multiplier.
    - b. In-State Manufacturing and Installation Content Extra Credit Multiplier: Solar electric power plants shall receive up to a .5 extra credit multiplier related to the manufacturing and installation content that comes from Arizona. The percentage of Arizona content of the total installed plant cost shall be multiplied by .5 to determine the appropriate extra credit multiplier.





So, for instance, if a solar installation included 80% Arizona content, the resulting extra credit multiplier would be .4 (which is .8 X .5).

3. Distributed Solar Electric Generator and Solar Incentive Program Extra Credit Multiplier: Any distributed solar electric generator that meets more than one of the eligibility conditions will be limited to only one .5 extra credit multiplier from this subsection. Appropriate meters will be attached to each solar electric generator and read at least once annually to verify solar performance:
  - a. Solar electric generators installed at or on the customer premises in Arizona. Eligible customer premises locations will include both grid-connected and remote, non-grid-connected locations. In order for Load-Serving Entities to claim an extra credit multiplier, the Load-Serving Entity must have contributed at least 10% of the total installed cost or have financed at least 80% of the total installed cost.
  - b. Solar electric generators located in Arizona that are included in any Load-Serving Entity's Green Pricing program.
  - c. Solar electric generators located in Arizona that are included in any Load-Serving Entity's Net Metering or Net Billing program.
  - d. Solar electric generators located in Arizona that are included in any Load-Serving Entity's solar leasing program.
  - e. All Green Pricing, Net Metering, Net Billing, and Solar Leasing programs must have been reviewed and approved by the Director, Utilities Division in order for the Load-Serving Entity to accrue extra credit multipliers from this subsection.
4. All multipliers are additive, allowing a maximum combined extra credit multiplier of 2.0 in years 1997-2003, for equipment installed and manufactured in Arizona and either installed at customer premises or participating in approved solar incentive programs. So, if a Load-Serving Entity qualifies for a 2.0 extra credit multiplier and it produces 1 solar kWh, the Load-Serving Entity would get credit for 3 solar kWh (1 produced plus 2 extra credit).
- D. Load-Serving Entities selling electricity under the provisions of this Article shall provide reports on sales and portfolio power as required in this Article, clearly demonstrating the output of portfolio resources, the installation date of portfolio resources, and the transmission of energy from those portfolio resources to Arizona consumers. The Commission may conduct necessary monitoring to ensure the accuracy of these data. Reports shall be made according to the Reporting Schedule in R14-2-1613(B).
- E. Photovoltaic or solar thermal electric resources that are located on the consumer's premises shall count toward the Environmental Portfolio Standard applicable to the current Load-Serving Entity serving that consumer unless a different Load-Serving Entity is entitled to receive credit for such resources under the provisions of R14-2-1618(C)(3)(a).
- F. Any solar electric generators installed by an Affected Utility to meet the environmental portfolio standard shall be counted toward meeting renewable resource goals for Affected Utilities established in Decision No. 58643.
- G. Any Load-Serving Entity that produces or purchases any eligible kWh in excess of its annual portfolio requirements may save or bank those excess kWh for use or sale in future years. Any eligible kWh produced subject to this rule may be sold or traded to any Load-Serving Entity that is subject to this rule. Appropriate documentation, subject to Commission review, shall be given to the purchasing entity and shall be referenced in the reports of the Load-Serving Entity that is using the purchased kWh to meet its portfolio requirements.
- H. Environmental Portfolio Standard requirements shall be calculated on an annual basis, based upon electricity sold during the calendar year.
- I. A Load-Serving Entity shall be entitled to receive a partial credit against the portfolio requirement if the Load-Serving Entity or its affiliate owns or makes a significant investment in any solar electric manufacturing plant that is located in Arizona. The credit will be equal to the amount of the nameplate capacity of the solar electric generators produced in Arizona and sold in a calendar year times 2,190 hours (approximating a 25% capacity factor):
  1. The credit against the portfolio requirement shall be limited to the following percentages of the total portfolio requirement:
    - 2001: Maximum of 50% of the portfolio requirement
    - 2002: Maximum of 25% of the portfolio requirement
    - 2003 and on: Maximum of 20% of the portfolio requirement
  2. No extra credit multipliers will be allowed for this credit. In order to avoid double-counting of the same equipment, solar electric generators that are used by other Load-Serving Entities to meet their Arizona portfolio requirements will not be allowable for credits under this Section for the manufacturer/Electric Service Provider to meet its portfolio requirements.
- J. The Director, Utilities Division shall develop appropriate safety, durability, reliability, and performance standards necessary for solar generating equipment and environmentally friendly renewable electricity technologies and to qualify for the portfolio standard. Standards requirements will apply only to facilities constructed or acquired after the standards are publicly issued.
- K. A Load-Serving Entity shall be entitled to meet up to 20% of the portfolio requirement with solar water heating systems or solar air conditioning systems purchased by the Load-Serving Entity for use by its customers, or purchased by its customers and paid for by the Load-Serving Entity through bill credits or other similar mechanisms. The solar water heaters must replace or supplement the use of electric water heaters for residential, commercial, or industrial water heating purposes. For the purposes of this rule, solar water heaters will be credited with 1 kWh of electricity produced for each 3,415 British Thermal Units of heat produced by the solar water heater and solar air conditioners shall be credited with kWhs equivalent to those needed to produce a comparable cooling load reduction. Solar water heating systems and solar air conditioning systems shall be eligible for Early Installation Extra Credit Multipliers as defined in R14-2-1618(C)(1) and Solar Economic Development Extra Credit Multipliers as defined in R14-2-1618(C)(2)(b).
- L. A Load-Serving Entity shall be entitled to meet the portfolio requirement with electricity produced in Arizona by environmentally friendly renewable electricity technologies that are defined as in-state landfill gas generators, wind generators, and biomass generators, consistent with the phase-in schedule in R14-2-1618(B)(3). Systems using such technologies shall be eligible for Early Installation Extra Credit Multipliers as defined in R14-2-1618(C)(1) and Solar Economic Development Extra Credit Multipliers as defined in R14-2-1618(C)(2)(b).

**ARTICLE 18. RENEWABLE ENERGY STANDARD AND TARIFF REPEALED****R14-2-1801. Definitions Repealed**

- A.** "Affected Utility" means a public service corporation serving retail electric load in Arizona, but excluding any Utility Distribution Company with more than half of its customers located outside of Arizona.
- B.** "Annual Renewable Energy Requirement" means the portion of an Affected Utility's annual retail electricity sales that must come from Eligible Renewable Energy Resources.
- C.** "Conventional Energy Resource" means an energy resource that is non-renewable in nature, such as natural gas, coal, oil, and uranium, or electricity that is produced with energy resources that are not Renewable Energy Resources.
- D.** "Customer Self-Directed Renewable Energy Option" means a Commission-approved program under which an Eligible Customer may self-direct the use of its allocation of funds collected pursuant to an Affected Utility's Tariff.
- E.** "Distributed Generation" means electric generation sited at a customer premises, providing electric energy to the customer load on that site or providing wholesale capacity and energy to the local Utility Distribution Company for use by multiple customers in contiguous distribution substation service areas. The generator size and transmission needs shall be such that the plant or associated transmission lines do not require a Certificate of Environmental Compatibility from the Corporation Commission.
- F.** "Distributed Renewable Energy Requirement" means a portion of the Annual Renewable Energy Requirement that must be met with Renewable Energy Credits derived from resources that qualify as Distributed Renewable Energy Resources pursuant to R14-2-1802(B).
- G.** "Distributed Solar Electric Generator" means electric generation sited at a customer premises, providing electric energy from solar electric resources to the customer load on that site or providing wholesale capacity and energy to the local Utility Distribution Company for use by multiple customers in contiguous distribution substation service areas. The generator size and transmission needs shall be such that the plant or associated transmission lines do not require a Certificate of Environmental Compatibility from the Corporation Commission.
- H.** "Eligible Customer" means an entity that pays Tariff funds of at least \$25,000 annually for any number of related accounts or services within an Affected Utility's service area.
- I.** "Extra Credit Multiplier" means a way to increase the Renewable Energy Credits attributable to specific Eligible Renewable Energy Resources in order to encourage specific renewable applications.
- J.** "Green Pricing" means a rate option in which a customer elects to pay a tariffed rate premium for electricity derived from Eligible Renewable Energy Resources.
- K.** "Market Cost of Comparable Conventional Generation" means the Affected Utility's energy and capacity cost of producing or procuring the incremental electricity that would be avoided by the resources used to meet the Annual Renewable Energy Requirement, taking into account hourly, seasonal, and long-term supply and demand circumstances. Avoided costs include any avoided transmission and distribution costs and any avoided environmental compliance costs.
- L.** "Net Billing" means a system of billing a customer who installs an Eligible Renewable Energy Resource generator on the customer's premises for retail electricity purchased at retail rates while crediting the customer's bill for any customer-generated electricity sold to the Affected Utility at avoided cost.
- M.** "Net Metering" means a system of metering electricity by which the Affected Utility credits the customer at the full retail rate for each kilowatt-hour of electricity produced by an Eligible Renewable Energy Resource system installed on the customer-generator's side of the electric meter, up to the total amount of electricity used by that customer during an annualized period, and which compensates the customer-generator at the end of the annualized period for any excess credits at a rate equal to the Affected Utility's avoided cost of wholesale power. The Affected Utility does not charge the customer-generator any additional fees or charges or impose any equipment or other requirements unless the same is imposed on customers in the same rate class that the customer-generator would qualify for if the customer-generator did not have generation equipment.
- N.** "Renewable Energy Credit" means the unit created to track kWh derived from an Eligible Renewable Energy Resource or kWh equivalent of Conventional Energy Resources displaced by Distributed Renewable Energy Resources.
- O.** "Renewable Energy Resource" means an energy resource that is replaced rapidly by a natural, ongoing process and that is not nuclear or fossil fuel.
- P.** "Tariff" means a Commission-approved rate designed to recover an Affected Utility's reasonable and prudent costs of complying with these rules.
- Q.** "Utility Distribution Company" means a public service corporation that operates, constructs, or maintains a distribution system for the delivery of power to retail customers.
- R.** "Wholesale Distributed Generation Component" means non-utility owners of Eligible Renewable Energy Resources that are located within the distribution system and that do not require a transmission line over 69 kv to deliver power at wholesale to an Affected Utility to meet its Annual Renewable Energy Requirements.

**R14-2-1802. Eligible Renewable Energy Resources Repealed**

- A.** "Eligible Renewable Energy Resources" are applications of the following defined technologies that displace Conventional Energy Resources that would otherwise be used to provide electricity to an Affected Utility's Arizona customers:
  1. "Biogas Electricity Generator" is a generator that produces electricity from gases that are derived from plant-derived organic matter, agricultural food and feed matter, wood wastes, aquatic plants, animal wastes, vegetative wastes, or wastewater treatment facilities using anaerobic digestion or from municipal solid waste through a digester process, an oxidation process, or other gasification process.
  2. "Biomass Electricity Generator" is an electricity generator that uses any raw or processed plant-derived organic matter available on a renewable basis, including: dedicated energy crops and trees; agricultural food and feed crops; agricultural crop wastes and residues; wood wastes and residues, including landscape waste, right-of-way tree trimmings, or small diameter forest thinnings that are 12" in diameter or less; dead and downed forest products; aquatic plants; animal wastes; other vegetative waste materials; non-hazardous plant matter waste material that is segregated from other waste; forest-related resources, such as harvesting





and mill residue, pre-commercial thinnings, slash, and brush; miscellaneous waste, such as waste pellets, crates, and dunnage; and recycled paper fibers that are no longer suitable for recycled paper production, but not including painted, treated, or pressurized wood, wood contaminated with plastics or metals, tires, or recyclable post-consumer waste paper.

3. "Distributed Renewable Energy Resources" as defined in subsection (B):
4. "Eligible Hydropower Facilities" are hydropower generators that were in existence prior to 1997 and that satisfy one of the following two criteria:
  - a. New Increased Capacity of Existing Hydropower Facilities: A hydropower facility that increases capacity due to improved technological or operational efficiencies or operational improvements resulting from improved or modified turbine design, improved or modified wicket gate assembly design, improved hydrological flow conditions, improved generator windings, improved electrical excitation systems, increases in transformation capacity, and improved system control and operating limit modifications. The electricity kWh that are eligible to meet the Annual Renewable Energy Requirements shall be limited to the new, incremental kWh output resulting from the capacity increase that is delivered to Arizona customers to meet the Annual Renewable Energy Requirement.
  - b. Generation from pre-1997 hydropower facilities that is used to firm or regulate the output of other eligible, intermittent renewable resources. The electricity kWh that are eligible to meet the Annual Renewable Energy Requirements shall be limited to the kWh actually generated to firm or regulate the output of eligible intermittent Renewable Energy Resources and that are delivered to Arizona customers to meet the Annual Renewable Energy Requirements.
5. "Fuel Cells that Use Only Renewable Fuels" are fuel cell electricity generators that operate on renewable fuels, such as hydrogen created from water by Eligible Renewable Energy Resources. Hydrogen created from non-Renewable Energy Resources, such as natural gas or petroleum products, is not a renewable fuel.
6. "Geothermal Generator" is an electricity generator that uses heat from within the earth's surface to produce electricity.
7. "Hybrid Wind and Solar Electric Generator" is a system in which a Wind Generator and a solar electric generator are combined to provide electricity.
8. "Landfill Gas Generator" is an electricity generator that uses methane gas obtained from landfills to produce electricity.
9. "New Hydropower Generator of 10 MW or Less" is a generator, installed after January 1, 2006, that produces 10 MW or less and is either:
  - a. A low-head, micro hydro run-of-the-river system that does not require any new damming of the flow of the stream; or
  - b. An existing dam that adds power generation equipment without requiring a new dam, diversion structures, or a change in water flow that will adversely impact fish, wildlife, or water quality; or
  - c. Generation using canals or other irrigation systems.
10. "Solar Electricity Resources" use sunlight to produce electricity by either photovoltaic devices or solar thermal electric resources.
11. "Wind Generator" is a mechanical device that is driven by wind to produce electricity.
- B.** "Distributed Renewable Energy Resources" are applications of the following defined technologies that are located at a customer's premises and that displace Conventional Energy Resources that would otherwise be used to provide electricity to Arizona customers:
  1. "Biogas Electricity Generator," "Biomass Electricity Generator," "Geothermal Generator," "Fuel Cells that Use Only Renewable Fuels," "New Hydropower Generator of 10 MW or Less," or "Solar Electricity Resources," as each of those terms is defined in subsections (A)(1), (A)(2), (A)(5), (A)(6), (A)(9), and (A)(10).
  2. "Biomass Thermal Systems" and "Biogas Thermal Systems" are systems which use fuels as defined in subsections (A)(1) and (A)(2) to produce thermal energy and that comply with Environmental Protection Agency Certification Programs or are permitted by state, county, or local air quality authorities. For purposes of this definition "Biomass Thermal Systems" and "Biogas Thermal Systems" do not include biomass and wood stoves, furnaces, and fireplaces.
  3. "Commercial Solar Pool Heaters" are devices that use solar energy to heat commercial or municipal swimming pools.
  4. "Geothermal Space Heating and Process Heating Systems" are systems that use heat from within the earth's surface for space heating or for process heating.
  5. "Renewable Combined Heat and Power System" is a Distributed Generation system, fueled by an Eligible Renewable Energy Resource, that produces both electricity and useful renewable process heat. Both the electricity and renewable process heat may be used to meet the Distributed Renewable Energy Requirement.
  6. "Solar Daylighting" is the non-residential application of a device specifically designed to capture and redirect the visible portion of the solar beam, while controlling the infrared portion, for use in illuminating interior building spaces in lieu of artificial lighting.
  7. "Solar Heating, Ventilation, and Air Conditioning" ("HVAC") is the combination of Solar Space Cooling and Solar Space Heating as part of one system.
  8. "Solar Industrial Process Heating and Cooling" is the use of solar thermal energy for industrial or commercial manufacturing or processing applications.
  9. "Solar Space Cooling" is a technology that uses solar thermal energy absent the generation of electricity to drive a refrigeration machine that provides for space cooling in a building.
  10. "Solar Space Heating" is a method whereby a mechanical system is used to collect solar energy to provide space heating for buildings.
  11. "Solar Water Heater" is a device that uses solar energy rather than electricity or fossil fuel to heat water for residential, commercial, or industrial purposes.
  12. "Wind Generator of 1 MW or Less" is a mechanical device, with an output of 1 MW or less, that is driven by wind to produce electricity.
- C.** Except as provided in subsection (A)(4), Eligible Renewable Energy Resources shall not include facilities installed before January 1, 1997.



- D.** The Commission may adopt pilot programs in which additional technologies are established as Eligible Renewable Energy Resources. Any such additional technologies shall be Renewable Energy Resources that produce electricity, replace electricity generated by Conventional Energy Resources, or replace the use of fossil fuels with Renewable Energy Resources. Energy conservation products, energy management products, energy efficiency products, or products that use non-renewable fuels shall not be eligible for these pilot programs.

**R14-2-1803. Renewable Energy Credits Repealed**

- A.** One Renewable Energy Credit shall be created for each kWh derived from an Eligible Renewable Energy Resource.
- B.** For Distributed Renewable Energy Resources, one Renewable Energy Credit shall be created for each 3,415 British Thermal Units of heat produced by a Solar Water Heating System, a Solar Industrial Process Heating and Cooling System, Solar Space Cooling System, Biomass Thermal System, Biogas Thermal System, or a Solar Space Heating System.
- C.** An Affected Utility may transfer Renewable Energy Credits to another party and may acquire Renewable Energy Credits from another party. A Renewable Energy Credit is owned by the owner of the Eligible Renewable Energy Resource from which it was derived unless specifically transferred.
- D.** All transfers of Renewable Energy Credits shall be appropriately documented to demonstrate that the energy associated with the Renewable Energy Credits meets the provisions of R14-2-1802.
- E.** Any contract by an Affected Utility for purchase or sale of energy or Renewable Energy Credits to meet the requirements of this Rule shall explicitly describe the transfer of rights concerning both energy and Renewable Energy Credits.
- F.** Except in the case of Distributed Renewable Energy Resources, Affected Utilities must demonstrate the delivery of energy from Eligible Renewable Energy Resources to their retail consumers such as by providing proof that the necessary transmission rights were reserved and utilized to deliver energy from Eligible Renewable Energy Resources to the Affected Utility's system, if transmission is required, or that the appropriate control area operators scheduled the energy from Eligible Renewable Energy Resources for delivery to the Affected Utility's system.

**R14-2-1804. Annual Renewable Energy Requirement Repealed**

- A.** In order to ensure reliable electric service at reasonable rates, each Affected Utility shall be required to satisfy an Annual Renewable Energy Requirement by obtaining Renewable Energy Credits from Eligible Renewable Energy Resources.
- B.** An Affected Utility's Annual Renewable Energy Requirement shall be calculated each calendar year by applying the following applicable annual percentage to the retail kWh sold by the Affected Utility during that calendar year:

2006	1.25%
2007	1.50%
2008	1.75%
2009	2.00%
2010	2.50%
2011	3.00%
2012	3.50%
2013	4.00%
2014	4.50%
2015	5.00%
2016	6.00%
2017	7.00%
2018	8.00%
2019	9.00%
2020	10.00%
2021	11.00%
2022	12.00%
2023	13.00%
2024	14.00%
After 2024	15.00%

The annual increase in the annual percentage for each Affected Utility will be pro-rated for the first year based on when the Affected Utility's funding mechanism is approved.

- C.** An Affected Utility may use Renewable Energy Credits acquired in any year to meet its Annual Renewable Energy Requirement.
- D.** Once a Renewable Energy Credit is used by any Affected Utility to satisfy these requirements, the credit is retired and cannot be subsequently used to satisfy these rules or any other regulatory requirement.
- E.** If an Affected Utility trades or sells environmental pollution reduction credits or any other environmental attributes associated with kWh produced by an Eligible Renewable Energy Resource, the Affected Utility may not apply Renewable Energy Credits derived from that same kWh to satisfy the requirements of these rules.
- F.** No more than 20 percent of an Affected Utility's Annual Renewable Energy Requirement may be met with Renewable Energy Credits derived pursuant to R14-2-1807.
- G.** An Affected Utility may ask the Commission to preapprove agreements to purchase energy or Renewable Energy Credits from Eligible Renewable Energy Resources.

**R14-2-1805. Distributed Renewable Energy Requirement Repealed**

- A.** In order to improve system reliability, each Affected Utility shall be required to satisfy a Distributed Renewable Energy Requirement by obtaining Renewable Energy Credits from Distributed Renewable Energy Resources.
- B.** An Affected Utility's Distributed Renewable Energy Requirement shall be calculated each calendar year by applying the following applicable annual percentage to the Affected Utility's Annual Renewable Energy Requirement:
- |      |    |
|------|----|
| 2007 | 5% |
|------|----|



2008	10%
2009	15%
2010	20%
2011	25%
After 2011	30%

The annual increase in the annual percentage for each Affected Utility will be pro-rated for the first year based on when the Affected Utility's funding mechanism is approved.

- C. An Affected Utility may use Renewable Energy Credits acquired in any year to meet its Distributed Renewable Energy Requirement. Once a Renewable Energy Credit is used by any Affected Utility to satisfy these requirements, the credit is retired.
- D. An Affected Utility shall meet one-half of its annual Distributed Renewable Energy Requirement from residential applications and the remaining one-half from non-residential, non-utility applications.
- E. An Affected Utility may satisfy no more than 10 percent of its annual Distributed Renewable Energy Requirement from Renewable Energy Credits derived from distributed Renewable Energy Resources that are non-utility owned generators that sell electricity at wholesale to Affected Utilities. This Wholesale Distributed Generation Component shall qualify for the non-residential portion of the Distributed Renewable Energy Requirement.
- F. Any Renewable Energy Credit created by production of renewable energy which the Affected Utility does not own shall be retained by the entity creating the Renewable Energy Credit. Such Renewable Energy Credit may not be considered used or extinguished by any Affected Utility without approval and proper documentation from the entity creating the Renewable Energy Credit, regardless of whether or not the Commission acknowledged the kWhs associated with non-utility owned Renewable Energy Credits.
- G. The reporting of kWhs associated with Renewable Energy Credits not owned by the utility will be acknowledged.

#### **R14-2-1806. Extra Credit Multipliers ~~Repealed~~**

- A. Renewable Energy Credits derived from Eligible Renewable Energy Resources installed after December 31, 2005, shall not be eligible for Extra Credit Multipliers.
- B. The extra Renewable Energy Credits resulting from any applicable multiplier shall be added to the Renewable Energy Credits produced by the Eligible Renewable Energy Resource to determine the total Renewable Energy Credits that may be used to meet an Affected Utility's Annual Renewable Energy Requirement.
- C. "Early Installation Extra Credit Multiplier." Affected Utilities acquiring Renewable Energy Credits from a Solar Electricity Resource, a Solar Water Heater, a Solar Space Cooling system, a Landfill Gas Generator, a Wind Generator, or a Biomass Electricity Generator that was installed and began operations between January 1, 2001, and December 31, 2003, shall be eligible for an Early Installation Extra Credit Multiplier. Renewable Energy Credits derived from such facilities and acquired by Affected Utilities shall be eligible for five years following the facility's operational start-up. The multiplier shall vary according to the year in which the system began operating:
 

2001	.3
2002	.2
2003	.1
- D. "In-State Power Plant Installation Extra Credit Multiplier." Affected Utilities acquiring Renewable Energy Credits from a Solar Electricity Resource that was installed in Arizona on or before December 31, 2005, shall be eligible for an In-State Power Plant Installation Extra Credit Multiplier. The Renewable Energy Credits derived from such a facility and acquired by an Affected Utility shall be multiplied by .5 annually for the life of the facility. The extra Renewable Energy Credits resulting from the multiplier shall be added to the Renewable Energy Credits produced by the Eligible Renewable Energy Resource to determine the total Renewable Energy Credits that may be used to meet an Affected Utility's Annual Renewable Energy Requirement.
- E. "In-State Manufacturing and Installation Content Extra Credit Multiplier." Affected Utilities acquiring Renewable Energy Credits from a Solar Electricity Resource, a Solar Water Heater, a Solar Space Cooling system, a Landfill Gas Generator, a Wind Generator, or a Biomass Electricity Generator that was installed in Arizona on or before December 31, 2005, and that contains components manufactured in Arizona shall be eligible for an In-State Manufacturing and Installation Content Extra Credit Multiplier. The Renewable Energy Credits derived from such a facility and acquired by an Affected Utility shall be multiplied annually for the life of the facility by a factor determined by multiplying .5 times the percent of Arizona content of the total installed plant.
- F. "Distributed Solar Electric Generator and Solar Incentive Program Extra Credit Multiplier." Affected Utilities acquiring Renewable Energy Credits from a Distributed Solar Electric Generator that was installed in Arizona on or before December 31, 2005, shall be eligible for a Distributed Solar Electric Generator and Solar Incentive Program Extra Credit Multiplier if the facility meets at least two of the following criteria:
  1. The facility is installed on customer premises;
  2. The facility is included in any Affected Utility's approved Green Pricing program;
  3. The facility is included in any Affected Utility's approved Net Metering or Net Billing program;
  4. The facility is included in any Affected Utility's approved solar leasing program; or
  5. The facility is owned by and located on an Affected Utility's property or customer property. The Renewable Energy Credits derived from such a facility and acquired by an Affected Utility shall be multiplied by .5 annually for the life of the facility. Meters will be attached to each solar electric generator and read at least once annually to verify solar performance.
- G. All multipliers are additive, except that the maximum combined Extra Credit Multiplier shall not exceed 2.0.

#### **R14-2-1807. Manufacturing Partial Credit ~~Repealed~~**

- A. An Affected Utility may acquire Renewable Energy Credits to apply to the non-distributed portion of its Annual Renewable Energy Requirement if it or its affiliate owns or makes a significant investment in any solar electric manufacturing plant located in Arizona or if it or its affiliate provides incentives to a manufacturer of solar electric products to locate a manufacturing facility in Arizona.
- B. The Renewable Energy Credits shall be equal to the nameplate capacity of the solar electric generators produced and sold in a calendar year times 2,190 hours, which approximates a 25 percent capacity factor.





- C.** Extra credit multipliers shall not apply to Renewable Energy Credits created by this Section.

**R14-2-1808. Tariff Repealed**

- A.** Within 60 days of the effective date of these rules, each Affected Utility shall file with the Commission a Tariff in substantially the same form as the Sample Tariff set forth in these rules that proposes methods for recovering the reasonable and prudent costs of complying with these rules. The specific amounts in the Sample Tariff are for illustrative purposes only and Affected Utilities may submit, with proper support, Tariff filings with alternative surcharge amounts.
- B.** The Affected Utility's Tariff filing shall provide the following information:
1. Financial information and supporting data sufficient to allow the Commission to determine the Affected Utility's fair value for purposes of evaluating the Affected Utility's proposed Tariff. Information submitted in the format of the Annual Report required under R14-2-212(G)(4) will be the minimum information necessary for filing a Tariff application but Commission Staff may request additional information depending upon the type of Tariff filing that is submitted.
  2. A discussion of the suitability of the Sample Tariff set forth in Appendix A for recovering the Affected Utility's reasonable and prudent costs of complying with these rules;
  3. Data to support the level of costs that the Affected Utility contends will be incurred in order to comply with these rules;
  4. Data to demonstrate that the Affected Utility's proposed Tariff is designed to recover only the costs in excess of the Market Cost of Comparable Conventional Generation; and
  5. Any other information that the Commission believes will be relevant to the Commission's consideration of the Tariff filing.
- C.** The Commission will approve, modify, or deny a Tariff proposed pursuant to subsection (A) within 180 days after the Tariff has been filed. The Commission may suspend this deadline or adopt an alternative procedural schedule for good cause. The Affected Utility's Annual Renewable Energy Requirement, as set forth in R14-2-1804(B), Distributed Renewable Energy Requirement, as set forth in R14-2-1805(B), will be effective upon Commission approval of the Tariff filed pursuant to this Section.
- D.** If an Affected Utility has an adjustor mechanism for the recovery of costs related to Annual Renewable Energy Requirements, the Affected Utility may file a request to reset its adjustor mechanism in lieu of a Tariff pursuant to subsection (A). The Affected Utility's filing shall provide all the information required by subsection (B), except that it may omit information specifically related to the fair value determination. The Affected Utility's Annual Renewable Energy Requirement, as set forth in R14-2-1804(B), and Distributed Renewable Energy Requirement, as set forth in R14-2-1805(B) will be effective upon Commission approval of the adjustor mechanism rate filed pursuant to this Section.
- E.** An Affected Utility may file a rate case pursuant to R14-2-103 in lieu of a Tariff pursuant to subsection (A). The Affected Utility's filing shall provide all information required by subsection (B).

**R14-2-1809. Customer Self-Directed Renewable Energy Option Repealed**

- A.** By January 1, 2007, each Affected Utility shall file with Docket Control a Tariff by which an Eligible Customer may apply to an Affected Utility to receive funds to install distributed Renewable Energy Resources. The funds annually received by an Eligible Customer pursuant to this Tariff may not exceed the amount annually paid by the Eligible Customer pursuant to the Affected Utility's Tariff.
- B.** An Eligible Customer seeking to participate in this program shall submit to the Affected Utility a written application that describes the Renewable Energy Resources that it proposes to install and the projected cost of the project. An Eligible Customer shall provide at least half of the funding necessary to complete the project described in its application.
- C.** All Renewable Energy Credits derived from the project, including generation and Extra Credit Multipliers, shall be applied to satisfy the Affected Utility's Annual Renewable Energy Requirement.

**R14-2-1810. Uniform Credit Purchase Program Repealed**

- A.** The Director of the Utilities Division shall establish a Uniform Credit Purchase Program working group, which will study issues related to implementing Distributed Renewable Energy Resources. The working group shall address the consumer participation process, budgets, incentive levels, eligible technologies, system requirements, installation requirements, and any other issues that are relevant to encouraging the implementation of Distributed Renewable Energy Resources. No later than March 1, 2007, the Director of the Utilities Division shall file a staff report with recommendations for Uniform Credit Purchase Programs.
- B.** No later than July 1, 2007, each Affected Utility shall file a Uniform Credit Purchase Program for Commission review and approval.

**R14-2-1811. Net Metering and Interconnection Standards Repealed**

The Commission Staff shall host a series of workshops addressing the issues of rate design including Net Metering and interconnection standards. Upon completion of this task, and the adoption of rules or standards, if appropriate, each Affected Utility shall file conforming Net Metering tariffs and interconnection standards in Docket Control.

**R14-2-1812. Compliance Reports Repealed**

- A.** Beginning April 1, 2007, and every April 1st thereafter, each Affected Utility shall file with Docket Control a report that describes its compliance with the requirements of these rules for the previous calendar year. The Affected Utility shall also transmit to the Director of the Utilities Division an electronic copy of this report that is suitable for posting on the Commission's website.
- B.** The compliance report shall include the following information:
1. The actual kWh of energy or equivalent obtained from Eligible Renewable Energy Resources;
  2. The kWh of energy or equivalent obtained from Eligible Renewable Energy Resources normalized to reflect a full year's production;
  3. The kW of generation capacity, disaggregated by technology type;
  4. Cost information regarding cents per actual kWh of energy obtained from Eligible Renewable Energy Resources and cents per kW of generation capacity, disaggregated by technology type;



5. A breakdown of the Renewable Energy Credits used to satisfy both the Annual Renewable Energy Requirement and the Distributed Renewable Energy Requirement and appropriate documentation of the Affected Utility's receipt of those Renewable Energy Credits; and
  6. A description of the Affected Utility's procedures for choosing Eligible Renewable Energy Resources and a certification from an independent auditor that those procedures are fair and unbiased and have been appropriately applied.
- C. The Commission may hold a hearing to determine whether an Affected Utility's compliance report satisfies the requirements of these rules.

#### **R14-2-1813. Implementation Plans Repealed**

- A. Beginning July 1, 2007, and every July 1st thereafter, each Affected Utility shall file with Docket Control for Commission review and approval a plan that describes how it intends to comply with these rules for the next calendar year. The Affected Utility shall also transmit an electronic copy of this plan that is suitable for posting on the Commission's website to the Director of the Utilities Division.
- B. The implementation plan shall include the following information:
1. A description of the Eligible Renewable Energy Resources, identified by technology, proposed to be added by year for the next five years and a description of the kW and kWh to be obtained from each of those resources;
  2. The estimated cost of each Eligible Renewable Energy Resource proposed to be added, including cost per kWh and total cost per year;
  3. A description of the method by which each Eligible Renewable Energy Resource is to be obtained, such as self-build, customer installation, or request for proposals;
  4. A proposal that evaluates whether the Affected Utility's existing rates allow for the ongoing recovery of the reasonable and prudent costs of complying with these rules, including a Tariff application that meets the requirements of R14-2-1808 and addresses the Sample Tariff set forth in Appendix A if necessary; and
  5. A line item budget that allocates specific funding for Distributed Renewable Energy Resources, for the Customer Self-Directed Renewable Energy Option, for power purchase agreements, for utility-owned systems, and for each Eligible Renewable Energy Resource described in the Affected Utility's implementation plan.
- C. The Commission may hold a hearing to determine whether an Affected Utility's implementation plan satisfies the requirements of these rules.

#### **R14-2-1814. Electric Power Cooperatives Repealed**

- A. Within 60 days of the effective date of these rules, every electric cooperative that is an Affected Utility shall file with Docket Control an appropriate plan for acquiring Renewable Energy Credits from Eligible Renewable Energy Resources for the next calendar year and a Tariff that proposes methods for recovering the reasonable and prudent costs of complying with its proposed plan and addresses the Sample Tariff set forth in Appendix A. The cooperative shall also transmit electronic copies of these filings that are suitable for posting on the Commission's website to the Director of the Utilities Division. Upon Commission approval of this plan, its provisions shall substitute for the requirements of R14-2-1804 and R14-2-1805 for the electric power cooperative proposing the plan.
- B. Beginning July 1, 2007, and every July 1st thereafter, every electric cooperative that is an Affected Utility shall file with Docket Control an appropriate plan for acquiring Renewable Energy Credits from Eligible Renewable Energy Resources for the next calendar year. The cooperative shall also transmit an electronic copy of this plan that is suitable for posting on the Commission's website to the Director of the Utilities Division.

#### **R14-2-1815. Enforcement and Penalties Repealed**

- A. If an Affected Utility fails to meet the annual requirements set forth in R14-2-1804 and R14-2-1805, it shall include with its annual compliance report a notice of noncompliance.
- B. The notice of noncompliance shall provide the following information:
1. A computation of the difference between the Renewable Energy Credits required by R14-2-1804 and R14-2-1805 and the amount actually obtained;
  2. A plan describing how the Affected Utility intends to meet the shortfall from the previous calendar year in the current calendar year; and
  3. An estimate of the costs of meeting the shortfall.
- C. If the Commission finds after affording an Affected Utility notice and an opportunity to be heard that the Affected Utility has failed to comply with its implementation plan approved by the Commission as set forth in R14-2-1813, the Commission may find that the Affected Utility shall not recover the costs of meeting the shortfall described in R14-2-1815(B) in rates.
- D. Nothing herein is intended to limit the actions the Commission may take or the penalties the Commission may impose pursuant to Arizona Revised Statutes, Chapter 2, Article 9. An Affected Utility is entitled to notice and an opportunity to be heard prior to Commission action or imposition of penalties.

#### **R14-2-1816. Waiver from the Provisions of this Article Repealed**

The Commission may waive compliance with any provision of this Article for good cause. Any Affected Utility may petition the Commission to waive its compliance with any provision of this Article for good cause. A petition filed pursuant to these rules shall have priority over other matters filed at the Commission.

#### **Appendix A. Sample Tariff Repealed**

Unless otherwise ordered by the Commission, the renewable energy standard surcharge shall be assessed monthly to every retail electric service. This monthly assessment will be the lesser of \$0.004988 per kWh or:

1. For residential customers, \$1.05 per service;
2. For non-residential customers, \$39.00 per service;
3. For non-residential customers whose metered demand is 3,000 kW or more for three consecutive months, \$117.00 per service;





4. For non-metered services, the lesser of the load profile or otherwise estimated kWh required to provide the service in question, or the service's contract kWh shall be used in the calculation of the surcharge.

### ARTICLE 23. NET METERING

#### R14-2-2302. Definitions

For purposes of this Article, the following definitions apply unless the context requires otherwise:

1. No change
2. No change
  - a. No change
  - b. No change
  - c. No change
  - d. No change
    - i. No change
    - ii. No change
    - iii. No change
  - e. No change
  - f. No change
  - g. No change
  - h. No change
  - i. No change
  - j. No change
    - i. No change
    - ii. No change
    - iii. No change
    - iv. No change
  - k. No change
    - i. No change
    - ii. No change
    - iii. No change
  - l. No change
    - i. No change
    - ii. No change
    - iii. No change
    - iv. No change
3. No change
  - a. No change
  - b. No change
  - c. No change
  - d. No change
  - e. No change
  - f. No change
  - g. No change
  - h. No change
    - i. No change
    - ii. No change
    - iii. No change
4. No change
5. No change
6. No change
7. No change
8. No change
9. No change
10. No change
11. No change
12. "Net Metering Customer" means any Arizona Customer who:
  - a. ~~chooses~~ Chooses to take electric service in the manner described in the definition of Net Metering in subsection (11), and
  - b. Is a Customer of an Electric Utility under the that has a Net Metering tariff for which the Customer is eligible, as described in R14-2-2307.
13. No change
  - a. No change
  - b. No change
  - c. No change
  - d. No change
  - e. No change
14. No change
  - a. No change



- b. No change
- c. No change
- d. No change
- e. No change
- f. No change
- 15. No change
- 16. No change

**R14-2-2307. Net Metering Tariff**

- A.** Each Electric Utility shall file, for approval by the Commission, a Net Metering tariff within 120 days from the effective date of these rules, including financial information and supporting data sufficient to allow the Commission to determine the Electric Utility's fair value for the purposes of evaluating any specific proposed charges. The Commission shall issue a decision on these filings within 120 days.
- BA.** If an Electric Utility has a Net Metering tariff, the Net Metering tariff shall specify standard rates for annual purchases of remaining credits from Net Metering Facilities and may specify total utility capacity limits. If total utility capacity limits are included in the tariff, such limits must be fully justified.
- CB.** Electric utilities may include seasonally and time of day differentiated Avoided Cost rates for purchases from Net Metering Customers, to the extent that Avoided Costs vary by season and time of day.

**ARTICLE 24. ELECTRIC ENERGY EFFICIENCY STANDARDS REPEALED****R14-2-2401. Definitions Repealed**

In this Article, unless otherwise specified:

1. "Adjustment mechanism" means a Commission-approved provision in an affected utility's rate schedule allowing the affected utility to increase and decrease a certain rate or rates, in an established manner, when increases and decreases in specific costs are incurred by the affected utility.
2. "Affected utility" means a public service corporation that provides electric service to retail customers in Arizona.
3. "Baseline" means the level of electricity demand, electricity consumption, and associated expenses estimated to occur in the absence of a specific DSM program, determined as provided in R14-2-2413.
4. "CHP" means combined heat and power, which is using a primary energy source to simultaneously produce electrical energy and useful process heat.
5. "Commission" means the Arizona Corporation Commission.
6. "Cost-effective" means that total incremental benefits from a DSM measure or DSM program exceed total incremental costs over the life of the DSM measure, as determined under R14-2-2412.
7. "Customer" means the person or entity in whose name service is rendered to a single contiguous field, location, or facility, regardless of the number of meters at the field, location, or facility.
8. "Delivery system" means the infrastructure through which an affected utility transmits and then distributes electrical energy to its customers.
9. "Demand savings" means the load reduction, measured in kW, occurring during a relevant peak period or periods as a direct result of energy efficiency and demand response programs.
10. "Demand response" means modification of customers' electricity consumption patterns, affecting the timing or quantity of customer demand and usage, achieved through intentional actions taken by an affected utility or customer because of changes in prices, market conditions, or threats to system reliability.
11. "Distributed generation" means the production of electricity on the customer's side of the meter, for use by the customer, through a process such as CHP.
12. "DSM" means demand-side management, the implementation and maintenance of one or more DSM programs.
13. "DSM measure" means any material, device, technology, educational program, pricing option, practice, or facility alteration designed to result in reduced peak demand, increased energy efficiency, or shifting of electricity consumption to off-peak periods and includes CHP used to displace space heating, water heating, or another load.
14. "DSM program" means one or more DSM measures provided as part of a single offering to customers.
15. "DSM tariff" means a Commission-approved schedule of rates designed to recover an affected utility's reasonable and prudent costs of complying with this Article.
16. "Electric utility" means a public service corporation providing electric service to the public.
17. "Energy efficiency" means the production or delivery of an equivalent level and quality of end-use electric service using less energy, or the conservation of energy by end-use customers.
18. "Energy efficiency standard" means the reduction in retail energy sales, in percentage of kWh, required to be achieved through an affected utility's approved DSM programs as prescribed in R14-2-2404.
19. "Energy savings" means the reduction in a customer's energy consumption directly resulting from a DSM program, expressed in kWh.
20. "Energy service company" means a company that provides a broad range of services related to energy efficiency, including energy audits, the design and implementation of energy efficiency projects, and the installation and maintenance of energy efficiency measures.
21. "Environmental benefits" means avoidance of costs for compliance, or reduction in environmental impacts, for things such as, but not limited to:
  - a. Water use and water contamination;
  - b. Monitoring storage and disposal of solid waste such as coal ash (bottom and fly);
  - c. Health effects from burning fossil fuels; and
  - d. Emissions from transportation and production of fuels and electricity.



22. "Fuel-neutral" means without promoting or otherwise expressing bias regarding a customer's choice of one fuel over another.
23. "Incremental benefits" means amounts saved through avoiding costs for fuel, purchased power, new capacity, transmission, distribution, and other cost items necessary to provide electric utility service, along with other improvements in societal welfare, such as through avoided environmental impacts, including, but not limited to, water consumption savings, air emission reduction, reduction in coal ash, and reduction of nuclear waste.
24. "Incremental costs" means the additional expenses of DSM measures, relative to baseline.
25. "Independent program administrator" means an impartial third party employed to provide objective oversight of energy efficiency programs.
26. "kW" means kilowatt.
27. "kWh" means kilowatt-hour.
28. "Leveraging" means combining resources to more effectively achieve an energy efficiency goal, or to achieve greater energy efficiency savings, than would be achieved without combining resources.
29. "Load management" means actions taken or sponsored by an affected utility to reduce peak demands or improve system operating efficiency, such as direct control of customer demands through affected-utility-initiated interruption or cycling, thermal storage, or educational campaigns to encourage customers to shift loads.
30. "Low-income customer" means a customer with a below average level of household income, as defined in an affected utility's Commission-approved DSM program description.
31. "Market transformation" means strategic efforts to induce lasting structural or behavioral changes in the market that result in increased energy efficiency.
32. "Net benefits" means the incremental benefits resulting from DSM minus the incremental costs of DSM.
33. "Non-market benefits" means improvements in societal welfare that are not bought or sold.
34. "Program costs" means the expenses incurred by an affected utility as a result of developing, marketing, implementing, administering, and evaluating Commission-approved DSM programs.
35. "Self-direction" means an option made available to qualifying customers of sufficient size, in which the amount of money paid by each qualifying customer toward DSM costs is tracked for the customer and made available for use by the customer for approved DSM investments upon application by the customer.
36. "Societal Test" means a cost-effectiveness test of the net benefits of DSM programs that starts with the Total Resource Cost Test, but includes non-market benefits and costs to society.
37. "Staff" means individuals working for the Commission's Utilities Division, whether as employees or through contract.
38. "Thermal envelope" means the collection of building surfaces, such as walls, windows, doors, floors, ceilings, and roofs, that separate interior conditioned (heated or cooled) spaces from the exterior environment.
39. "Total Resource Cost Test" means a cost-effectiveness test that measures the net benefits of a DSM program as a resource option, including incremental measure costs, incremental affected utility costs, and carrying costs as a component of avoided capacity cost, but excluding incentives paid by affected utilities and non-market benefits to society.

#### **R14-2-2402. Applicability Repealed**

This Article applies to each affected utility classified as Class A according to R14-2-103(A)(3)(q), unless the affected utility is an electric distribution cooperative that has fewer than 25% of its customers in Arizona.

#### **R14-2-2403. Goals and Objectives Repealed**

- A:** An affected utility shall design each DSM program:
1. To be cost-effective, and
  2. To accomplish at least one of the following:
    - a. Energy efficiency;
    - b. Load management, or
    - c. Demand response.
- B:** An affected utility shall consider the following when planning and implementing a DSM program:
1. Whether the DSM program will achieve cost-effective energy savings and peak demand reductions;
  2. Whether the DSM program will advance market transformation and achieve sustainable savings, reducing the need for future market interventions; and
  3. Whether the affected utility can ensure a level of funding adequate to sustain the DSM program and allow the DSM program to achieve its targeted goal.
- C:** An affected utility shall:
1. Offer DSM programs that will provide an opportunity for all affected utility customer segments to participate, and
  2. Allocate a portion of DSM resources specifically to low-income customers.

#### **R14-2-2404. Energy Efficiency Standards Repealed**

- A:** Except as provided in R14-2-2418, in order to ensure reliable electric service at reasonable ratepayer rates and costs, by December 31, 2020, an affected utility shall, through cost-effective DSM energy efficiency programs, achieve cumulative annual energy savings, measured in kWh, equivalent to at least 22% of the affected utility's retail electric energy sales for calendar year 2019.
- B:** An affected utility shall, by the end of each calendar year, meet at least the cumulative annual energy efficiency standard listed in Table 1 for that calendar year. An illustrative example of how the required energy savings would be calculated is shown in Table 2. An illustrative example of how the standard could be met in 2020 is shown in Table 4.

**Table 1. Energy Efficiency Standard Repealed**

CALENDAR YEAR	ENERGY EFFICIENCY STANDARD (Cumulative Annual Energy Savings by the End of Each Calendar Year as a Percentage of the Retail Energy Sales in the Prior Calendar Year)
2011	1.25%
2012	3.00%
2013	5.00%
2014	7.25%
2015	9.50%
2016	12.00%
2017	14.50%
2018	17.00%
2019	19.50%
2020	22.00%

**Table 2. Illustrative Example of Calculating Required Energy Savings Repealed**

CALENDAR YEAR	A RETAIL SALES (kWh)	B ENERGY- EFFICIENCY STANDARD	C REQUIRED CUMULATIVE ENERGY- SAVINGS (B of current year $\times$ A of prior year)
2010	100,000,000		0
2011	100,750,000	1.25%	1,250,000
2012	101,017,500	3.00%	3,022,500
2013	101,069,925	5.00%	5,050,875
2014	100,915,646	7.25%	7,327,570
2015	100,821,094	9.50%	9,586,986
2016	100,517,711	12.00%	12,098,531
2017	100,293,499	14.50%	14,575,068
2018	100,116,043	17.00%	17,049,895
2019	99,986,628	19.50%	19,522,628
2020	99,902,384	22.00%	21,997,058

- C.** An affected utility's measured reductions in peak demand resulting from cost-effective demand response and load management programs may comprise up to two percentage points of the 22% energy efficiency standard, with peak demand reduction capability from demand response converted to an annual energy savings equivalent based on an assumed 50% annual load factor. The credit for demand response and load management peak demand reductions shall not exceed 10% of the energy efficiency standard set forth in subsection (B) for any year. The measured reductions in peak demand occurring during a calendar year after the effective date of this Article may be counted for that calendar year even if the demand response or load management program resulting in the reductions was implemented prior to the effective date of this Article.
- D.** An affected utility's energy savings resulting from DSM energy efficiency programs implemented before the effective date of this Article, but after 2004, may be credited toward meeting the energy efficiency standard set forth in subsection (B). The total energy savings credit for these pre-rules energy efficiency programs shall not exceed 4% of the affected utility's retail energy sales in calendar year 2005. A portion of the total energy savings credit for these pre-rules energy efficiency programs may be applied each year, from 2016 through 2020, as listed in Table 3, Column A.

**Table 3. Credit for Pre-Rules Energy Savings Repealed**

CALENDAR YEAR	A CREDIT FOR THE PRE-RULES ENERGY SAVINGS APPLIED IN EACH YEAR (Percentage of the Total Eligible Pre-Rules Cumulative Annual Energy Savings That Shall Be Applied in the Year)	B CUMULATIVE APPLICATION OF THE CREDIT FOR THE PRE-RULES ENERGY SAVINGS IN 2016- 2020 (Percentage of the Total Eligible Pre-Rules Cumulative Annual Energy Savings That Are Credited by the End of Each Year)
2016	7.5%	7.5%
2017	15.0%	22.5%



2018	20.0%	42.5%
2019	25.0%	67.5%
2020	32.5%	100.0%

- E.** An affected utility may count toward meeting the standard up to one third of the energy savings, resulting from energy efficiency building codes, that are quantified and reported through a measurement and evaluation study undertaken by the affected utility.
- F.** An affected utility may count the energy savings from combined heat and power (CHP) installations that do not qualify under the Renewable Energy Standard toward meeting the energy efficiency standard.
- G.** An affected utility may count a customer's energy savings resulting from self-direction toward meeting the standard.
- H.** An affected utility's energy savings resulting from efficiency improvements to its delivery system may not be counted toward meeting the standard.
- I.** An affected utility's energy savings used to meet the energy efficiency standard will be assumed to continue through the year 2020 or, if expiring before the year 2020, to be replaced with a DSM energy efficiency program having at least the same level of efficiency.

**Table 4. Illustrative Example of How the Energy Standard Could Be Met in 2020~~Repealed~~**

	2020 Energy Efficiency Standard	2019 Retail Sales (kWh)	Required Cumulative Annual Energy Savings (kWh)
Total	22.00%	99,986,628	21,997,058
Breakdown of Savings and Credits Used To Meet 2020 Standard:			
			Cumulative Annual Energy Savings or Credit (kWh)
Demand Response Credit R14-2-2404(C)	Up to 2.00%		1,999,733
Pre-rules Savings Credit R14-2-2404(D)			1,100,000*
Building Code R14-2-2404(E)			1,000,000
CHP R14-2-2404(F)			500,000
Self-direction R14-2-2404(G)			100,000
Energy Efficiency R14-2-2404(A)			17,297,325
Total			21,997,058

\*The total pre-rules savings credit is capped at 4% of 2005 retail energy sales, and the total credit is allocated over five years from 2016 to 2020. The credit shown above represents an estimate of the portion of the total credit that can be taken in 2020, or 32.5% of the total credit allowed.

**R14-2-2405. Implementation Plans~~Repealed~~**

- A.** Except as provided in R14-2-2418, on June 1 of each odd year, or annually at the election of each affected utility, each affected utility shall file with Docket Control, for Commission review and approval, an implementation plan describing how the affected utility intends to meet the energy efficiency standard for the next one or two calendar years, as applicable, except that the initial implementation plan shall be filed within 30 days of the effective date of this Article.
- B.** The implementation plan shall include the following information:
  1. Except for the initial implementation plan, a description of the affected utility's compliance with the requirements of this Article for the previous calendar year;
  2. Except for the initial implementation plan, which shall describe only the next calendar year, a description of how the affected utility intends to comply with this Article for the next two calendar years, including an explanation of any modification to the rates of an existing DSM adjustment mechanism or tariff that the affected utility believes is necessary;
  3. Except for the initial implementation plan, which shall describe only the next calendar year, a description of each DSM program to be newly implemented or continued in the next two calendar years and an estimate of the annual kWh and kW savings projected to be obtained through each DSM program;
  4. The estimated total cost and cost per kWh reduction of each DSM measure and DSM program described in subsection (B)(3);
  5. A DSM tariff filing complying with R14-2-2406(A) or a request to modify and reset an adjustment mechanism complying with R14-2-2406(C), as applicable; and
  6. For each new DSM program or DSM measure that the affected utility desires to implement, a program proposal complying with R14-2-2407.
- C.** An affected utility shall notify its customers of its annual implementation plan filing through a notice in its next regularly scheduled customer bills.
- D.** The Commission may hold a hearing to determine whether an affected utility's implementation plan satisfies the requirements of this Article.





- E.** An affected utility's Commission-approved implementation plan, and the DSM programs authorized thereunder, shall continue in effect until the Commission takes action on a new implementation plan for the affected utility.

#### **R14-2-2406. DSM Tariffs Repealed**

- A.** An affected utility's DSM tariff filing shall include the following:
1. A detailed description of each method proposed by the affected utility to recover the reasonable and prudent costs associated with implementing the affected utility's intended DSM programs;
  2. Financial information and supporting data sufficient to allow the Commission to determine the affected utility's fair value, including, at a minimum, the information required to be submitted in a utility annual report filed under R14-2-212(G)(4);
  3. Data supporting the level of costs that the affected utility believes will be incurred in order to comply with this Article; and
  4. Any other information that the Commission believes is relevant to the Commission's consideration of the tariff filing.
- B.** The Commission shall approve, modify, or deny a tariff filed pursuant to subsection (A) within 180 days after the tariff has been filed. The Commission may suspend this deadline or adopt an alternative procedural schedule for good cause.
- C.** If an affected utility has an existing adjustment mechanism to recover the reasonable and prudent costs associated with implementing DSM programs, the affected utility may, in lieu of making a tariff filing under subsection (A), file a request to modify and reset its adjustment mechanism by submitting the information required under subsections (A)(1) and (3).

#### **R14-2-2407. Commission Review and Approval of DSM Programs and DSM Measures Repealed**

- A.** An affected utility shall obtain Commission approval before implementing a new DSM program or DSM measure.
- B.** An affected utility may apply for Commission approval of a DSM program or DSM measure by submitting a program proposal either as part of its implementation plan submitted under R14-2-2405 or through a separate application.
- C.** A program proposal shall include the following:
1. A description of the DSM program or DSM measure that the affected utility desires to implement;
  2. The affected utility's objectives and rationale for the DSM program or DSM measure;
  3. A description of the market segment at which the DSM program or DSM measure is aimed;
  4. An estimated level of customer participation in the DSM program or DSM measure;
  5. An estimate of the baseline;
  6. The estimated societal benefits and savings from the DSM program or DSM measure;
  7. The estimated societal costs of the DSM program or DSM measure;
  8. The estimated environmental benefits to be derived from the DSM program or DSM measure;
  9. The estimated benefit-cost ratio of the DSM program or DSM measure;
  10. The affected utility's marketing and delivery strategy;
  11. The affected utility's estimated annual costs and budget for the DSM program or DSM measure;
  12. The implementation schedule for the DSM program or DSM measure;
  13. A description of the affected utility's plan for monitoring and evaluating the DSM program or DSM measure; and
  14. Any other information that the Commission believes is relevant to the Commission's consideration of the tariff filing.
- D.** In determining whether to approve a program proposal, the Commission shall consider:
1. The extent to which the Commission believes the DSM program or DSM measure will meet the goals set forth in R14-2-2403(A), and
  2. All of the considerations set forth in R14-2-2403(B).
- E.** Staff may request modifications of on-going DSM programs to ensure consistency with this Article. The Commission shall allow affected utilities adequate time to notify customers of DSM program modifications.

#### **R14-2-2408. Parity and Equity Repealed**

- A.** An affected utility shall develop and propose DSM programs for residential, non-residential, and low-income customers.
- B.** An affected utility shall allocate DSM funds collected from residential customers and from non-residential customers proportionately to those customer classes to the extent practicable.
- C.** The affected utility costs of DSM programs for low-income customers shall be borne by all customer classes, except where a customer or customer class is specifically exempted by Commission order.
- D.** DSM funds collected by an affected utility shall be used, to the extent practicable, to benefit that affected utility's customers.
- E.** All customer classes of an affected utility shall bear the costs of DSM programs by payment through a non-bypassable mechanism, unless a customer or customer class is specifically exempted by Commission order.

#### **R14-2-2409. Reporting Requirements Repealed**

- A.** By March 1 of each year, an affected utility shall submit to the Commission, in a Commission-established docket for that year, a DSM progress report providing information for each of the affected utility's Commission-approved DSM programs and including at least the following:
1. An analysis of the affected utility's progress toward meeting the annual energy efficiency standard;
  2. A list of the affected utility's current Commission-approved DSM programs and DSM measures, organized by customer segment;
  3. A description of the findings from any research projects completed during the previous year; and
  4. The following information for each Commission-approved DSM program or DSM measure:
    - a. A brief description;
    - b. Goals, objectives, and savings targets;
    - c. The level of customer participation during the previous year;
    - d. The costs incurred during the previous year, disaggregated by type of cost, such as administrative costs, rebates, and monitoring costs;
    - e. A description and the results of evaluation and monitoring activities during the previous year;



- f. Savings realized in kW, kWh, therms, and BTUs, as appropriate;
  - g. The environmental benefits realized, including reduced emissions and water savings;
  - h. Incremental benefits and net benefits, in dollars;
  - i. Performance-incentive calculations for the previous year;
  - j. Problems encountered during the previous year and proposed solutions;
  - k. A description of any modifications proposed for the following year; and
  - l. Whether the affected utility proposes to terminate the DSM program or DSM measure and the proposed date of termination.
- B.** By September 1 of each year, an affected utility shall file a status report including a tabular summary showing the following for each current Commission-approved DSM program and DSM measure of the affected utility:
- 1. Semi-annual expenditures compared to annual budget; and
  - 2. Participation rates.
- C.** An affected utility shall file each report required by this Section with Docket Control, where it will be available to the public, and shall make each such report available to the public upon request.
- D.** An affected utility may request within its implementation plan that these reporting requirements supersede specific existing DSM reporting requirements.

**R14-2-2410. ~~Cost Recovery~~Repealed**

- A.** An affected utility may recover the costs that it incurs in planning, designing, implementing, and evaluating a DSM program or DSM measure if the DSM program or DSM measure is all of the following:
- 1. Approved by the Commission before it is implemented;
  - 2. Implemented in accordance with a Commission-approved program proposal or implementation plan; and
  - 3. Monitored and evaluated for cost-effectiveness pursuant to R14-2-2415.
- B.** An affected utility shall monitor and evaluate each DSM program and DSM measure, as provided in R14-2-2415, to determine whether the DSM program or DSM measure is cost-effective and otherwise meets expectations.
- C.** If an affected utility determines that a DSM program or DSM measure is not cost-effective or otherwise does not meet expectations, the affected utility shall include in its annual DSM progress report filed under R14-2-2409 a proposal to modify or terminate the DSM program or DSM measure.
- D.** An affected utility shall recover its DSM costs concurrently, on an annual basis, with the spending for a DSM program or DSM measure, unless the Commission orders otherwise.
- E.** An affected utility may recover costs from DSM funds for any of the following items, if the expenditures will enhance DSM:
- 1. Incremental labor attributable to DSM development;
  - 2. A market study;
  - 3. A research and development project such as applied technology assessment;
  - 4. Consortium membership; or
  - 5. Another item that is difficult to allocate to an individual DSM program.
- F.** The Commission may impose a limit on the amount of DSM funds that may be used for the items in subsection (E).
- G.** If goods and services used by an affected utility for DSM have value for other affected utility functions, programs, or services, the affected utility shall divide the costs for the goods and services and allocate funding proportionately.
- H.** An affected utility shall allocate DSM costs in accordance with generally accepted accounting principles.
- I.** The Commission shall review and address financial disincentives, recovery of fixed costs, and recovery of net lost income/revenue, due to Commission-approved DSM programs, if an affected utility requests such review in its rate case and provides documentation/records supporting its request in its rate application.
- J.** An affected utility, at its own initiative, may submit to the Commission twice annual reports on the financial impacts of its Commission-approved DSM programs, including any unrecovered fixed costs and net lost income/revenue resulting from its Commission-approved DSM programs.

**R14-2-2411. ~~Performance Incentives~~Repealed**

In the implementation plans required by R14-2-2405, an affected utility may propose for Commission review a performance incentive to assist in achieving the energy efficiency standard set forth in R14-2-2404. The Commission may also consider performance incentives in a general rate case.

**R14-2-2412. ~~Cost effectiveness~~Repealed**

- A.** An affected utility shall ensure that the incremental benefits to society of the affected utility's overall DSM portfolio exceed the incremental costs to society of the DSM portfolio.
- B.** The Societal Test shall be used to determine cost-effectiveness.
- C.** The analysis of a DSM program's or DSM measure's cost-effectiveness may include:
- 1. Costs and benefits associated with reliability, improved system operations, environmental impacts, and customer service;
  - 2. Savings of both natural gas and electricity; and
  - 3. Any uncertainty about future streams of costs or benefits.
- D.** An affected utility shall make a good faith effort to quantify water consumption savings and air emission reductions, while other environmental costs or the value of environmental improvements shall be estimated in physical terms when practical but may be expressed qualitatively. An affected utility, Staff, or any party may propose monetized benefits and costs if supported by appropriate documentation or analyses.
- E.** Market transformation programs shall be analyzed for cost-effectiveness by measuring market effects compared to program costs.
- F.** Educational programs shall be analyzed for cost-effectiveness based on estimated energy and peak demand savings resulting from increased awareness about energy use and opportunities for saving energy.



- G. Research and development and pilot programs are not required to demonstrate cost-effectiveness.
- H. An affected utility's low-income customer program portfolio shall be cost-effective, but costs attributable to necessary health and safety measures shall not be used in the calculation.

**R14-2-2413. Baseline Estimation Repealed**

- A. To determine the baseline, an affected utility shall estimate the level of electric demand and consumption and the associated costs that would have occurred in the absence of a DSM program or DSM measure.
- B. For demand response programs, an affected utility shall use customer load profile information to verify baseline consumption patterns and the peak demand savings resulting from demand response actions.
- C. For installations or applications that have multiple fuel choices, an affected utility shall determine the baseline using the same fuel source actually used for the installation or application.

**R14-2-2414. Fuel Neutrality Repealed**

- A. Ratepayer-funded DSM shall be developed and implemented in a fuel-neutral manner.
- B. An affected utility shall use DSM funds collected from electric customers for electric DSM programs, unless otherwise ordered by the Commission.
- C. An affected utility may use DSM funds collected from electric customers for thermal envelope improvements.

**R14-2-2415. Monitoring, Evaluation, and Research Repealed**

- A. An affected utility shall monitor and evaluate each DSM program and DSM measure to:
  1. Ensure compliance with the cost-effectiveness requirements of R14-2-2412;
  2. Determine participation rates, energy savings, and demand reductions;
  3. Assess the implementation process for the DSM program or DSM measure;
  4. Obtain information on whether to continue, modify, or terminate a DSM program or DSM measure; and
  5. Determine the persistence and reliability of the affected utility's DSM.
- B. An affected utility may conduct evaluation and research, such as market studies, market research, and other technical research, for DSM program planning, product development, and DSM program improvement.

**R14-2-2416. Program Administration and Implementation Repealed**

- A. An affected utility may use an energy service company or other external resource to implement a DSM program or DSM measure.
- B. The Commission may, at its discretion, establish independent program administrators who would be subject to the relevant requirements of this Article.

**R14-2-2417. Leveraging and Cooperation Repealed**

- A. An affected utility shall, to the extent practicable, participate in cost sharing, leveraging, or other lawful arrangements with customers, vendors, manufacturers, government agencies, other electric utilities, or other entities if doing so will increase the effectiveness or cost-effectiveness of a DSM program or DSM measure.
- B. An affected utility shall participate in a DSM program or DSM measure with a natural gas utility when doing so is practicable and if doing so will increase the effectiveness or cost-effectiveness of a DSM program or DSM measure.

**R14-2-2418. Compliance by Electric Distribution Cooperatives Repealed**

- A. An electric distribution cooperative that is an affected utility shall comply with the requirements of this Section instead of meeting the requirements of R14-2-2404(A) and (B) and R14-2-2405(A).
- B. An electric distribution cooperative shall, on June 1 of each odd year, or annually at its election:
  1. File with Docket Control, for Commission review and approval, an implementation plan for each DSM program to be implemented or maintained during the next one or two calendar years, as applicable; and
  2. Submit to the Director of the Commission's Utilities Division an electronic copy of its implementation plan in a format suitable for posting on the Commission's web site.
- C. An implementation plan submitted under subsection (B) shall set forth an energy efficiency goal for each year of at least 75% of the savings requirement specified in R14-2-2404 and shall include the information required under R14-2-2405(B).

**R14-2-2419. Waiver from the Provisions of this Article Repealed**

- A. The Commission may waive compliance with any provision of this Article for good cause.
- B. An affected utility may petition the Commission to waive its compliance with any provision of this Article for good cause.
- C. A petition filed pursuant to this Section shall have priority over other matters filed under this Article.

**ARTICLE 25. GAS UTILITY ENERGY EFFICIENCY STANDARDS REPEALED**

**R14-2-2501. Definitions Repealed**

In this Article, unless otherwise specified:

1. "Adjustment mechanism" means a Commission-approved provision in an affected utility's rate schedule allowing the affected utility to increase and decrease a certain rate or rates, in an established manner, when increases and decreases in specific costs are incurred by the affected utility.
2. "Affected utility" means a public service corporation that provides gas utility service to retail customers in Arizona.
3. "Baseline" means the level of gas demand, gas consumption, and associated expenses estimated to occur in the absence of a specific DSM program, determined as provided in R14-2-2513.
4. "CHP" means combined heat and power, which is using a primary energy source to simultaneously produce electrical energy and useful process heat.
5. "Commission" means the Arizona Corporation Commission.





6. "Cost-effective" means that total incremental benefits from a DSM measure or DSM program exceed total incremental costs over the life of the DSM measure, as determined under R14-2-2512.
7. "Customer" means the person or entity in whose name service is rendered to a single contiguous field, location, or facility, regardless of the number of meters at the field, location, or facility.
8. "Delivery system" means the infrastructure through which an affected utility transmits and then distributes gas energy to its customers.
9. "DSM" means demand-side management, the implementation and maintenance of one or more DSM programs.
10. "DSM measure" means any material, device, technology, educational program, practice, or facility alteration designed to result in increased energy efficiency and includes CHP used to displace space heating, water heating, or another load.
11. "DSM program" means one or more DSM measures provided as part of a single offering to customers.
12. "DSM tariff" means a Commission-approved schedule of rates designed to recover an affected utility's reasonable and prudent costs of complying with this Article.
13. "Energy efficiency" means the production or delivery of an equivalent level and quality of end-use gas service using less energy, or the conservation of energy by end-use customers.
14. "Energy efficiency standard" means the reduction in retail energy sales, in percentage of therms or therm equivalents, required to be achieved through an affected utility's approved DSM and RET programs as prescribed in R14-2-2504.
15. "Energy savings" means the reduction in a customer's energy consumption, expressed in therms or therm equivalents.
16. "Energy service company" means a company that provides a broad range of services related to energy efficiency, including energy audits, the design and implementation of energy efficiency projects, and the installation and maintenance of energy efficiency measures.
17. "Environmental benefits" means avoidance of costs for compliance, or reduction in environmental impacts, for things such as, but not limited to:
  - a. Water use and water contamination;
  - b. Monitoring storage and disposal of solid waste, such as coal ash (bottom and fly);
  - c. Health effects from burning fossil fuels; and
  - d. Emissions from transportation and production of fuels.
18. "Fuel-neutral" means without promoting or otherwise expressing bias regarding a customer's choice of one fuel over another.
19. "Gas" means either natural gas or propane.
20. "Gas utility" means a public service corporation providing natural gas service or propane service to the public.
21. "Incremental benefits" means amounts saved through avoiding costs for gas purchases, delivery system, and other cost items necessary to provide gas utility service, along with other improvements in societal welfare, such as through avoided environmental impacts, including, but not limited to, water consumption savings, water contamination reduction, air emission reduction, reduction in coal ash, and reduction of nuclear waste.
22. "Incremental costs" means the additional expenses of DSM measures, relative to baseline.
23. "Independent program administrator" means an impartial third party employed to provide objective oversight of DSM and RET programs.
24. "kWh" means kilowatt-hour.
25. "Leveraging" means combining resources to more effectively achieve an energy efficiency goal, or to achieve greater energy efficiency savings, than would be achieved without combining resources.
26. "Low-income customer" means a customer with a below average level of household income, as defined in an affected utility's Commission-approved DSM program description.
27. "Market transformation" means strategic efforts to induce lasting structural or behavioral changes in the market that result in increased energy efficiency.
28. "Net benefits" means the incremental benefits resulting from DSM minus the incremental costs of DSM.
29. "Non-market benefits" means improvements in societal welfare that are not bought or sold.
30. "Program costs" means the expenses incurred by an affected utility as a result of developing, marketing, implementing, administering, and evaluating Commission-approved DSM programs.
31. "RET" means a renewable energy resource technology application utilizing an energy resource that is replaced rapidly by a natural, ongoing process and that displaces conventional energy resources otherwise used to provide energy to an affected utility's Arizona customers.
32. "RET program" means one or more RETs provided as part of a single offering to customers.
33. "Revenue decoupling" means a mechanism that reduces or eliminates the connection between sales volume and the recovery of an affected utility's Commission-approved cost of service.
34. "Self-direction" means an option made available to qualifying customers of sufficient size, in which the amount of money paid by each qualifying customer toward DSM costs is tracked for the customer and made available for use by the customer for approved DSM investments upon application by the customer.
35. "Societal Test" means a cost-effectiveness test of the net benefits of DSM programs that starts with the Total Resource Cost Test, but includes non-market benefits and costs to society.
36. "Staff" means individuals working for the Commission's Utilities Division, whether as employees or through contract.
37. "Therm" means a unit of heat energy equal to 100,000 British Thermal Units.
38. "Thermal envelope" means the collection of building surfaces, such as walls, windows, doors, floors, ceilings, and roofs, that separate interior conditioned (heated or cooled) spaces from the exterior environment.
39. "Therm equivalent" means a unit of energy, such as kWh, converted and stated in terms of therms.



40. "Total Resource Cost Test" means a cost-effectiveness test that measures the net benefits of a DSM program as a resource option, including incremental measure costs, incremental affected utility costs, and carrying costs as a component of avoided capacity cost, but excluding incentives paid by affected utilities and non-market benefits to society.

#### **R14-2-2502. Applicability Repealed**

This Article applies to each affected utility classified as Class A according to R14-2-103(A)(3)(q).

#### **R14-2-2503. Goals and Objectives Repealed**

- A.** An affected utility shall design each DSM program to be cost-effective.
- B.** An affected utility shall consider the following when planning and implementing a DSM or RET program:
1. Whether the DSM or RET program will advance market transformation and achieve sustainable savings, reducing the need for future market interventions;
  2. Whether the affected utility can ensure a level of funding adequate to sustain the DSM or RET program and allow the program to achieve its targeted goals; and
  3. If a DSM program, whether the DSM program will achieve cost-effective energy savings.
- C.** An affected utility shall:
1. Offer DSM programs that will provide an opportunity for all affected utility customer segments to participate, and
  2. Allocate a portion of DSM resources specifically to low-income customers.

#### **R14-2-2504. Energy Efficiency Standards Repealed**

- A.** Except as provided in R14-2-2518 and R14-2-2519, in order to ensure reliable gas service at reasonable ratepayer rates and costs, by December 31, 2020, an affected utility shall, through DSM and RET programs, achieve cumulative annual energy savings, expressed as therms or therm equivalents, equal to at least 6% of the affected utility's retail gas energy sales for calendar year 2019.
- B.** An affected utility shall, by the end of each calendar year, meet at least the cumulative annual energy efficiency standard listed in Table 1 for that calendar year. An illustrative example of how the required energy savings would be calculated is shown in Table 2. An illustrative example of how the standard can be met in 2020 is shown in Table 4.

**Table 1. Energy Efficiency Standard Repealed**

CALENDAR YEAR	ENERGY EFFICIENCY STANDARD (Cumulative Annual Energy Savings by the End of Each Calendar Year as a Percentage of the Retail Energy Sales in the Prior Calendar Year)
2011	0.50%
2012	1.20%
2013	1.80%
2014	2.40%
2015	3.00%
2016	3.60%
2017	4.20%
2018	4.80%
2019	5.40%
2020	6.00%

**Table 2. Illustrative Example of Calculating Required Energy Savings Repealed**

CALENDAR YEAR	A RETAIL SALES (therms)	B ENERGY EFFICIENCY STANDARD	C REQUIRED CUMULATIVE ENERGY SAVINGS (therms or therm equivalents) (B of current year × A of prior year)
2010	100,000,000		0
2011	97,500,000	0.50%	500,000
2012	94,870,000	1.20%	1,170,000
2013	92,411,540	1.80%	1,707,660
2014	90,018,939	2.40%	2,217,877
2015	87,691,512	3.00%	2,700,568
2016	85,427,344	3.60%	3,156,894
2017	83,224,605	4.20%	3,587,948
2018	81,081,521	4.80%	3,994,781
2019	78,996,374	5.40%	4,378,402
2020	76,967,498	6.00%	4,739,782

- C.** An affected utility may count energy savings resulting from DSM and RET programs to meet the energy efficiency standard. At least 75% of the energy efficiency standard for each year listed in Table 1 shall be achieved through DSM energy efficiency programs.
- D.** An affected utility's energy savings resulting from DSM energy efficiency programs implemented before the effective date of this Article, but after 2004, may be credited toward meeting the energy efficiency standard set forth in subsection (B). The total energy savings credit for these pre-rules DSM programs shall not exceed 1% of the affected utility's retail energy sales in calendar year 2005.





A portion of the total energy savings credit for these pre-rules programs may be applied each year, from 2016 through 2020, as listed in Table 3, Column A.

**Table 3. Credit for Pre-rules Energy Savings Repealed**

CALENDAR YEAR	A CREDIT FOR THE PRE-RULES ENERGY SAVINGS APPLIED IN EACH YEAR (Percentage of the Total Eligible Pre-rules Cumulative Annual Energy Savings That Shall Be Applied in the Year)	B CUMULATIVE APPLICATION OF THE CREDIT FOR THE PRE-RULES ENERGY SAVINGS IN 2016-2020 (Percentage of the Total Eligible Pre-rules Cumulative Annual Energy Savings That Are Credited by the End of Each Year)
2016	7.5%	7.5%
2017	15.0%	22.5%
2018	20.0%	42.5%
2019	25.0%	67.5%
2020	32.5%	100.0%

- E.** An affected utility may count toward meeting the energy efficiency standard up to one-third of the energy savings resulting from energy efficiency building codes and up to one-third of the energy savings resulting from energy efficiency appliance standards, if the energy savings are quantified and reported through a measurement and evaluation study undertaken by the affected utility, and the affected utility demonstrates and documents its efforts in support of the adoption or implementation of the energy efficiency building codes and appliance standards.
- F.** An affected utility may count a customer's energy savings resulting from self-direction toward meeting the energy efficiency standard.
- G.** An affected utility may count toward meeting the energy efficiency standard all energy savings resulting from the affected utility's sponsorship of RET projects that displace gas. An affected utility may also count toward meeting the energy efficiency standard all energy savings resulting from other RET projects that are not sponsored by the affected utility, if the affected utility can demonstrate that its efforts facilitated the placement and completion of the RET project.
- H.** An affected utility's energy savings resulting from efficiency improvements to its delivery system may not be counted toward meeting the energy efficiency standard.
- I.** An affected utility's energy savings used to meet the energy efficiency standard will be assumed to continue through the year 2020 or, if expiring before the year 2020, to be replaced with a DSM measure or RET having at least the same level of efficiency.

**Table 4. Illustrative Example of How the Energy Standard Could be Met in 2020 Repealed**

	2020 Energy Efficiency Standard	2019 Retail Sales (therms)	Required Cumulative Annual Energy Savings (therms or therm equivalents)
Total	6.00%	78,996,374	4,739,782
Breakdown of Savings and Credits Used To Meet 2020 Standard:			
			Cumulative Annual Energy Savings Or Credit (therms)
Pre-rules Savings Credit R14-2-2504(D)			359,545*
Building Codes and Appliance Standards R14-2-2504(E)			425,000
Self-direction R14-2-2504(F)			27,000
RET R14-2-2504(G)			25,000
CHP R14-2-2501(H) and R14-2-2504(C)			135,000
Energy Efficiency R14-2-2504(C)	At least 75%		3,768,237
Total			4,739,782

\*The total pre-rules savings credit shall be capped at 1% of 2005 retail energy sales, and the total credit is allocated over five years from 2016 to 2020. The credit shown above represents an estimate of the portion of the total credit that can be taken in 2020, or 32.5% of the total credit allowed.

**R14-2-2505. Implementation Plans Repealed**

- A.** Except as provided in R14-2-2518 and R14-2-2519, on June 1 of each odd year, or annually at the election of each affected utility, each affected utility shall file with Docket Control, for Commission review and approval, an implementation plan describing how the affected utility intends to meet the energy efficiency standard for the next one or two calendar years, as applicable, except that the initial implementation plan shall be filed within 30 days of the effective date of this Article.
- B.** The implementation plan shall include the following information:
- Except for the initial implementation plan, a description of the affected utility's compliance with the requirements of this Article for the previous calendar year;



2. Except for the initial implementation plan, which shall describe only the next calendar year, a description of how the affected utility intends to comply with this Article for the next two calendar years, including an explanation of any modification to the rates of an existing DSM adjustment mechanism or tariff that the affected utility believes is necessary;
  3. Except for the initial implementation plan, which shall describe only the next calendar year, a description of each DSM and RET program to be newly implemented or continued in the next two calendar years and an estimate of the annual therm or therm equivalent savings projected to be obtained through each DSM and RET program;
  4. The estimated total cost and cost per therm reduction of each DSM measure and program and each RET and RET program described in subsection (B)(3);
  5. A DSM tariff filing complying with R14-2-2506(A) or a request to modify and reset an adjustment mechanism complying with R14-2-2506(C), as applicable; and
  6. For each new DSM measure and program and each RET and RET program that the affected utility desires to implement, a program proposal complying with R14-2-2507.
- C.** An affected utility shall notify its customers of its implementation plan filing through a notice in its next regularly scheduled customer bills following the filing of the implementation plan.
- D.** The Commission may hold a hearing to determine whether an affected utility's implementation plan satisfies the requirements of this Article.
- E.** An affected utility's Commission-approved implementation plan, and the DSM and RET programs authorized thereunder, shall continue in effect until the Commission takes action on a new implementation plan for the affected utility.

#### **R14-2-2506. DSM Tariffs Repealed**

- A.** An affected utility's DSM tariff filing shall include the following:
1. A detailed description of each method proposed by the affected utility to recover the reasonable and prudent costs associated with implementing the affected utility's intended DSM and RET programs;
  2. Financial information and supporting data sufficient to allow the Commission to determine the affected utility's fair value, including, at a minimum, the information required to be submitted in a utility annual report filed under R14-2-312(G)(4);
  3. Data supporting the level of costs that the affected utility believes will be incurred in order to comply with this Article; and
  4. Any other information that the Commission believes is relevant to the Commission's consideration of the tariff filing.
- B.** The Commission shall approve, modify, or deny a tariff filed pursuant to subsection (A) within 180 days after the tariff has been filed. The Commission may suspend this deadline or adopt an alternative procedural schedule for good cause.
- C.** If an affected utility has an existing adjustment mechanism to recover the reasonable and prudent costs associated with implementing DSM and RET programs, the affected utility may, in lieu of making a tariff filing under subsection (A), file a request to modify and reset its adjustment mechanism by submitting the information required under subsections (A)(1) and (3).

#### **R14-2-2507. Commission Review and Approval of DSM and RET Programs Repealed**

- A.** An affected utility shall obtain Commission approval before implementing a new DSM program or measure or a new RET program or RET.
- B.** An affected utility may apply for Commission approval of a DSM program or measure or an RET program or RET by submitting a program proposal either as part of its implementation plan submitted under R14-2-2505 or through a separate application.
- C.** A program proposal shall include the following:
1. A description of the DSM program or measure or RET program or RET that the affected utility desires to implement;
  2. The affected utility's objectives and rationale for the DSM program or measure or RET program or RET;
  3. A description of the market segment at which the DSM program or measure or RET program or RET is aimed;
  4. An estimated level of customer participation in the DSM program or measure or RET program or RET;
  5. An estimate of the baseline;
  6. For a DSM program or measure:
    - a. The estimated societal benefits and savings from the DSM program or measure;
    - b. The estimated societal costs of the DSM program or measure; and
    - c. The estimated benefit-cost ratio of the DSM program or measure;
  7. The estimated environmental benefits to be derived from the DSM program or measure or RET program or RET;
  8. The affected utility's marketing and delivery strategy;
  9. The affected utility's estimated annual costs and budget for the DSM program or measure or RET program or RET;
  10. The implementation schedule for the DSM program or measure or RET program or RET;
  11. A description of the affected utility's plan for monitoring and evaluating the DSM program or measure or RET program or RET; and
  12. Any other information that the Commission believes is relevant to the Commission's consideration of the filing.
- D.** In determining whether to approve a program proposal, the Commission shall consider:
1. The extent to which the Commission believes the DSM program or measure will meet the goal set forth in R14-2-2503(A), and
  2. All of the considerations set forth in R14-2-2503(B).
- E.** Staff may request modifications of on-going DSM and RET programs to ensure consistency with this Article. The Commission shall allow affected utilities adequate time to notify customers of DSM and RET program modifications.

#### **R14-2-2508. Parity and Equity Repealed**

- A.** An affected utility shall develop and propose DSM programs for residential, non-residential, and low-income customers.
- B.** An affected utility shall allocate DSM funds collected from residential customers and from non-residential customers proportionately to those customer classes to the extent practicable.
- C.** The affected utility costs of DSM and RET programs for low-income customers shall be borne by all customer classes, except where a customer or customer class is specifically exempted by Commission order.



- D. DSM funds collected by an affected utility shall be used, to the extent practicable, to benefit that affected utility's customers.
- E. All customer classes of an affected utility shall bear the costs of DSM and RET programs by payment through a non-bypassable mechanism, unless a customer or customer class is specifically exempted by Commission order.

**R14-2-2509. Reporting Requirements Repealed**

- A. By April 1 of each year, an affected utility shall submit to the Commission, in a Commission-established docket for that year, a DSM progress report providing information for each of the affected utility's Commission-approved DSM and RET programs including at least the following:
  1. An analysis of the affected utility's progress toward meeting the annual energy efficiency standard;
  2. A list of the affected utility's current Commission-approved DSM and RET programs, organized by customer segment;
  3. A description of the findings from any research projects completed during the previous year; and
  4. The following information for each Commission-approved DSM program and measure and RET program and RET:
    - a. A brief description;
    - b. Goals, objectives, and savings targets;
    - c. The level of customer participation during the previous year;
    - d. The costs incurred during the previous year, disaggregated by type of cost, such as administrative costs, rebates, and monitoring costs;
    - e. A description and the results of evaluation and monitoring activities during the previous year;
    - f. Savings realized in kW, kWh, therms, and therm equivalents, as appropriate;
    - g. The environmental benefits realized;
    - h. Incremental benefits and net benefits, in dollars;
    - i. Performance-incentive calculations for the previous year;
    - j. Problems encountered during the previous year and proposed solutions;
    - k. A description of any modifications proposed for the following year; and
    - l. Whether the affected utility proposes to terminate the DSM program or measure or RET program or RET and the proposed date of termination.
- B. By October 1 of each year, an affected utility shall file a status report including a tabular summary showing the following for each current Commission-approved DSM program and measure and RET program and RET of the affected utility:
  1. Semi-annual expenditures compared to annual budget, and
  2. Participation rates.
- C. An affected utility shall file each report required by this Section with Docket Control, where it will be available to the public, and shall make each such report available to the public upon request.
- D. An affected utility may request within its implementation plan that these reporting requirements supersede specific existing DSM reporting requirements.

**R14-2-2510. Cost Recovery Repealed**

- A. An affected utility may recover the costs that it incurs in planning, designing, implementing, and evaluating a DSM program or measure or RET program or RET if the DSM program or measure or RET program or RET is all of the following:
  1. Approved by the Commission before it is implemented;
  2. Implemented in accordance with a Commission-approved program proposal or implementation plan; and
  3. Monitored and evaluated, pursuant to R14-2-2515.
- B. An affected utility shall monitor and evaluate each DSM program or measure and each RET program or RET, as provided in R14-2-2515.
- C. If an affected utility determines that a DSM program or measure is not cost-effective or that a DSM program or measure or RET program or RET does not meet expectations, the affected utility shall include in its annual DSM progress report filed under R14-2-2509 a proposal to modify or terminate the DSM program or measure or RET program or RET.
- D. An affected utility shall recover its DSM and RET costs concurrently, on an annual basis, with the spending for DSM and RET programs, unless the Commission orders otherwise.
- E. An affected utility may recover costs from DSM funds for any of the following items, if the expenditures will enhance DSM or RET programs:
  1. Incremental labor attributable to DSM and RET development;
  2. A market study;
  3. A research and development project such as applied technology assessment;
  4. Consortium membership; or
  5. Other items that are difficult to allocate to an individual DSM or RET program.
- F. The Commission may impose a limit on the amount of DSM funds that may be used for the items in subsection (E).
- G. If goods and services used by an affected utility for DSM or RET have value for other affected utility functions, programs, or services, the affected utility shall divide the costs for the goods and services and allocate funding proportionately.
- H. An affected utility shall allocate DSM and RET costs in accordance with generally accepted accounting principles.
- I. An affected utility, at its own initiative, may submit to the Commission twice annual reports on the financial impacts of its Commission-approved DSM and RET programs, including any unrecovered fixed costs and net lost income/revenue resulting from its Commission-approved DSM and RET programs.

**R14-2-2511. Revenue Decoupling Repealed**

The Commission shall review and address financial or other disincentives, recovery of fixed costs, and recovery of net lost income/revenue, including, but not limited to, implementation of a revenue decoupling mechanism, due to Commission-approved DSM and RET pro-





grams, if an affected utility requests such review in its rate case and provides adequate documentation/records supporting its request in its rate application.

#### **R14-2-2512. Cost-effectiveness Repealed**

- A:** An affected utility shall ensure that the incremental benefits to society of the affected utility's overall group of DSM programs exceed the incremental costs to society of the overall group of DSM programs.
- B:** The Societal Test shall be used to determine cost-effectiveness.
- C:** The analysis of a DSM program's or DSM measure's cost-effectiveness may include:
  1. Costs and benefits associated with reliability, improved system operations, environmental impacts, and customer service;
  2. Savings of both gas and electricity; and
  3. Any uncertainty about future streams of costs or benefits.
- D:** An affected utility shall make a good faith effort to quantify water consumption savings and air emission reductions resulting from implementation of DSM programs, while other environmental costs or the value of environmental improvements shall be estimated in physical terms when practical but may be expressed qualitatively. An affected utility, Staff, or any party may propose monetized benefits and costs if supported by appropriate documentation or analyses.
- E:** Market transformation programs shall be analyzed for cost-effectiveness by measuring market effects compared to program costs.
- F:** Educational programs shall be analyzed for cost-effectiveness based on estimated energy and peak demand savings resulting from increased awareness about energy use and opportunities for saving energy.
- G:** Research and development and pilot programs are not required to demonstrate cost-effectiveness.
- H:** An affected utility's low-income customer program portfolio shall be cost-effective, but costs attributable to necessary health and safety measures shall not be used in the calculation.

#### **R14-2-2513. Baseline Estimation Repealed**

- A:** To determine the baseline, an affected utility shall estimate the level of gas demand and consumption and the associated costs that would have occurred in the absence of a DSM program.
- B:** For installations or applications that have multiple fuel choices, an affected utility shall determine the baseline using the same fuel source that would have actually been used for the installation or application in the absence of a DSM program.

#### **R14-2-2514. Fuel Neutrality Repealed**

- A:** Ratepayer-funded DSM shall be developed and implemented in a fuel-neutral manner.
- B:** An affected utility shall use DSM funds collected from gas customers for gas DSM programs, unless otherwise ordered by the Commission.
- C:** An affected utility may use DSM funds collected from gas customers for thermal envelope improvements.

#### **R14-2-2515. Monitoring, Evaluation, and Research Repealed**

- A:** An affected utility shall monitor and evaluate each DSM program and measure and each RET program and RET to:
  1. Ensure compliance with the cost-effectiveness requirements for DSM programs in R14-2-2512;
  2. Determine participation rates, energy savings, and demand reductions;
  3. Assess the implementation process for the DSM program or measure or RET program or RET;
  4. Obtain information on whether to continue, modify, or terminate a DSM program or measure or RET program or RET; and
  5. Determine the persistence and reliability of the affected utility's DSM programs and measures and RET programs and RETs.
- B:** An affected utility may conduct evaluation and research, such as market studies, market research, and other technical research, for DSM and RET program planning, product development, and DSM and RET program improvement.

#### **R14-2-2516. Program Administration and Implementation Repealed**

- A:** An affected utility may use an energy service company or other external resource to implement a DSM program or measure or RET program or RET.
- B:** The Commission may, at its discretion, establish independent program administrators who would be subject to the relevant requirements of this Article.

#### **R14-2-2517. Leveraging and Cooperation Repealed**

- A:** An affected utility shall, to the extent practicable, participate in cost sharing, leveraging, or other lawful arrangements with customers, vendors, manufacturers, government agencies, other gas utilities, or other entities if doing so will increase the effectiveness of a DSM program or measure or RET program or RET.
- B:** An affected utility shall participate in a DSM program or measure or RET program or RET with an electric utility when doing so is practicable and if doing so will increase the effectiveness of the DSM program or measure or RET program or RET.

#### **R14-2-2518. Compliance by Gas Distribution Cooperatives Repealed**

- A:** A gas distribution cooperative that is an affected utility shall comply with the requirements of this Section instead of meeting the requirements of R14-2-2504(A) and (B) and R14-2-2505(A).
- B:** A gas distribution cooperative shall, on June 1 of each odd year, or annually at its election:
  1. File with Docket Control, for Commission review and approval, an implementation plan providing information for each DSM and RET program to be implemented or maintained during the next one or two calendar years, as applicable; and
  2. Submit to the Director of the Commission's Utilities Division an electronic copy of its implementation plan in a format suitable for posting on the Commission's web site.
- C:** A gas distribution cooperative's initial implementation plan shall be filed with Docket Control within 30 days of the effective date of this Article.



- D:** An implementation plan submitted under subsection (B) or (C) shall set forth an energy efficiency goal for each year of at least 75% of the savings requirement specified in R14-2-2504 and shall include the information required under R14-2-2505(B).

**R14-2-2519. Compliance by Propane Companies Repealed**

- A:** A propane company that is an affected utility shall comply with the requirements of this Section instead of meeting the requirements of R14-2-2504(A) and (B) and R14-2-2505(A).
- B:** A propane company shall, on June 1 of each odd year, or annually at its election:
1. File with Docket Control, for Commission review and approval, an implementation plan providing information for each DSM and RET program to be implemented or maintained during the next one or two calendar years, as applicable; and
  2. Submit to the Director of the Commission's Utilities Division an electronic copy of its implementation plan in a format suitable for posting on the Commission's web site.
- C:** A propane company's initial implementation plan shall be filed with Docket Control within 30 days of the effective date of this Article.
- D:** An implementation plan submitted under subsection (B) or (C) shall set forth an energy efficiency goal for each year of at least 50% of the savings requirement specified in R14-2-2504 and shall include the information required under R14-2-2505(B).

**R14-2-2520. Waiver from the Provisions of this Article Repealed**

- A:** The Commission may waive compliance with any provision of this Article for good cause.
- B:** An affected utility may petition the Commission to waive its compliance with any provision of this Article for good cause.

**ARTICLE 27. ENERGY RULES**

**R14-2-2701. Definitions**

In this Article, unless otherwise specified:

1. "Action Plan" means the first five years of a Load-Serving Entity's Commission approved Resource Portfolio.
2. "Affiliated" means related through ownership of voting securities, through contract, or otherwise in such a manner that one entity directly or indirectly controls another, is directly or indirectly controlled by another, or is under direct or indirect common control with another entity.
3. "Aggregation" means the operation of two or more Distributed Storage systems under a Tariff established pursuant to R14-2-2713.
4. "Aggregator" means any person other than an Electric Utility that coordinates the operation of two or more Distributed Storage systems under a Tariff pursuant to R14-2-2713.
5. "All-Source Request for Information" or "ASRFI" means a process wherein a Utility solicits information from market participants to address the Utility's resource and Reliability needs.
6. "All-Source Request for Proposals" or "All-Source RFP" means a process wherein the Utility solicits open all-source bids from market participants to address the Utility's resource and Reliability needs.
7. "Approval" means Commission authorization to take an action or implement a plan, but is not a determination that the action to be taken or the implementation of a plan is prudent for the purposes of ratemaking or cost recovery.
8. "Baseline Carbon Emissions Level" means a Utility's annual gross Carbon Emissions directly associated with energy produced from all Generating Units used to serve its kWh sales, expressed in metric tons.
9. "Benchmark" means to calibrate against a known set of values or standards.
10. "Btu" means British thermal unit.
11. "Capacity" means the nameplate rating of a Generating Unit.
12. "Capacity Factor" means the ratio of power produced by a Generating Unit in a given period of time compared to the maximum amount it could generate in the same period of time without interruption.
13. "Carbon Emissions" means carbon emissions resulting from the combustion of fossil fuels, such as coal, petroleum, natural gas, oil, shale, and bitumen, in a Generating Unit, expressed in metric tons.
14. "Clean Energy" means energy produced by a Clean Energy Resource.
15. "Clean Energy Implementation Plan" means an Electric Utility's plan, filed with the Commission, for meeting the goals and standards of this Article.
16. "Clean Energy Resource" means a technology that operates with zero net emissions beyond that of steam including:
  - a. A Renewable Energy Resource;
  - b. A Demand-Side Resource; or
  - c. A Nuclear Power Generator that produces energy using nuclear fusion or fission and any reactor type approved by the United States Nuclear Regulatory Commission.
17. "Coincident Peak" means the maximum aggregate sum of system demand within a specific time period.
18. "Commission" means the Arizona Corporation Commission.
19. "Conventional Energy Resource" means a Generating Unit that is not a Clean Energy Resource.
20. "Cooperative" means a Utility that is:
  - a. Not operated for profit; and
  - b. Owned and controlled by its members.
21. "Cost-Effective" means "prudently invested," as defined by R14-2-103(A)(3)(I) and determined in a rate case under A.A.C. R14-2-103.
22. "Customer" means the individual or entity in whose name service is rendered to a single contiguous field, location, or facility.
23. "Customer Class" means a subset of Customers categorized according to similar characteristics, such as:
  - a. Amount of energy consumed;
  - b. Amount of demand placed on the energy supply system at the system peak;
  - c. Hourly, daily, or monthly load pattern;





- d. Primary type of activity engaged in by the Customer, such as residential, commercial, industrial, agricultural, or governmental; or
- e. A specific geographical location.
- 24. "Decommission" means to safely and economically remove a Generating Unit from service.
- 25. "Demand Response" means modification of Customers' energy consumption patterns, affecting the timing or quantity of Customer demand and usage, achieved through intentional actions taken by a Utility or the Customer.
- 26. "Demand-Side Management" or "DSM" means the beneficial reduction in the Total Cost of meeting energy service needs by reducing or shifting the time of energy usage.
- 27. "Demand-Side Resource" means any DSM Measure, DSM Program, Demand Response-based mechanism, Energy Efficiency-based mechanism, or Load Management-based mechanism.
- 28. "Dispatchable Resource" means an electric power system resource for which power output supplied to the electric grid can be turned on and off or otherwise adjusted on demand.
- 29. "Distributed Generation" means any type of electrical Generating Unit, including all inverter(s) and protective, safety, and associated equipment necessary to produce electric power, that is located on the Distribution System or any subsystem of the Distribution System, or behind the Customer meter.
- 30. "Distributed Storage" means an Energy Storage System that is located on the Distribution System or any subsystem of the Distribution System, or behind the Customer meter.
- 31. "Distribution System" means the infrastructure constructed, maintained, and operated by a Utility to deliver service at the distribution level (69 kV or less) to its Customers.
- 32. "DSM Measure" means any material, device, technology, educational program, pricing option, practice, or facility alteration designed to result in reduced peak demand, increased Energy Efficiency, or shifting of energy consumption to off-peak periods.
- 33. "DSM Program" means a Utility program provided as part of a single offering to its Customers and designed to implement:
  - a. One or more DSM Measures;
  - b. Demand Response; or
  - c. Energy Efficiency.
- 34. "Electric Utility" means a public service corporation under Arizona Constitution, Article 15, § 2, providing electric service to the public in Arizona.
- 35. "Emergency" means an unforeseen and unforeseeable condition that:
  - a. Does not arise from a Utility's failure to engage in Good Utility Practice;
  - b. Is temporary in nature; and
  - c. Threatens Reliability or poses another significant risk to the system.
- 36. "End Use" means the final application of energy, for activities such as, but not limited to, heating, cooling, running an appliance or motor, an industrial process, or lighting.
- 37. "Energy Efficiency" means the production or delivery of an equivalent level and quality of End Use electric or Gas service using less energy, or the conservation of energy by a Customer.
- 38. "Energy Efficiency Report" means a Utility's plan to implement Demand-Side Resources.
- 39. "Energy Losses" means the quantity of energy generated or purchased that is not available for sale for End Use, for resale, or for use by a Utility.
- 40. "Energy Storage System" means equipment capable of storing generated energy and providing a means to discharge that energy at a later time.
- 41. "Environmental Benefits" means any avoided costs for compliance with regulatory requirements for, and any reduced adverse impacts to the environment from mitigating or eliminating acts such as:
  - a. Water use and water contamination;
  - b. Storage and disposal of solid waste;
  - c. Burning fossil fuels; and
  - d. Producing fuels and energy.
- 42. "Federal Poverty Level" means the U.S. federal poverty guideline for the pertinent household size published annually in the Federal Register by the U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, and available at <https://aspe.hhs.gov/poverty-guidelines>.
- 43. "Gas" means either natural gas or propane.
- 44. "Gas Utility" means a public service corporation under Arizona Constitution, Article 15, § 2, providing Gas services to the public in Arizona and classified as Class A according to R14-2-103(A)(3)(q).
- 45. "Generating Unit" means a specific device or set of devices that converts one form of energy, such as mechanical, thermal, or chemical energy, into electricity, excluding energy conversion related to an Energy Storage System.
- 46. "Good Utility Practice" means any of the practices, methods, and acts engaged in or approved by a significant portion of the energy industry during the relevant time period, or any of the practices, methods, and acts that, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with Reliability, safety, efficiency, and expedition. Good Utility Practice is not intended to be limited to the optimal practice, method, or act to the exclusion of all others, but rather to include practices, methods, or acts generally accepted in the region at the relevant time.
- 47. "Heat Rate" means a measure of Generating Unit thermal efficiency expressed in Btu per net kWh and computed by dividing the total Btu content of fuel used for electric generation by the total kWh of energy generated.
- 48. "Impacted Communities" means cities, towns, counties, communities, tribes, census designated areas, and non-incorporated geographic areas that will be negatively affected, financially or socially, by the closure of Conventional Energy Resources or mining facilities, located in or near their jurisdictions, that have been a source of economic income and employment.



49. "Incremental Benefits" means amounts saved by a Utility through avoiding costs for fuel, purchased power, new Capacity, transmission, distribution, and other cost items necessary to provide electric service or Gas service, as applicable, along with Environmental Benefits.
50. "Independent Monitor" means a Person that is not Affiliated with a Utility and that is selected to oversee the conduct of a competitive procurement process.
51. "Integrated Resource Plan" or "IRP" means a Load-Serving Entity's plan to meet forecasted annual peak and energy demand through a combination of Supply-Side and Demand-Side Resources in accordance with this Article and applicable laws and regulations that constrain resource selection.
52. "Interruptible Service" means power made available under an agreement that permits curtailment or cessation of delivery by the supplier.
53. "In-Service Date" means the date a resource becomes available for use by a Utility.
54. "Kilowatt-hour" or "kWh" means the electric energy equivalent to the amount of electric energy delivered in one hour when delivery is at a constant rate of one kilowatt.
55. "Limited-Income Customer" means:
  - a. A residential Customer with annual household income at or below 250 percent of the Federal Poverty Level; or
  - b. A residential Customer with annual household income at or below a percentage of the Federal Poverty Level higher than 250 percent, as established by an Electric Utility in a Commission-approved Tariff.
56. "Load Forecast" means an estimate or projection of a Utility's electric loads and the factors that affect those loads, designed to determine, as accurately as possible, the Utility's future demand for energy and Capacity.
57. "Load Management" means actions taken or sponsored by a Utility to reduce peak demands or improve system operating efficiency, such as:
  - a. Utilizing an Energy Storage System;
  - b. Educational campaigns to encourage Customers to shift loads; or
  - c. Direct control by the Utility of Customer demands through Interruptible Service.
58. "Load-Serving Cooperative" means a Load-Serving Entity that is a Cooperative.
59. "Load-Serving Entity" means an Electric Utility that is not a distribution cooperative and that provides energy generation service and operates or owns, in whole or in part, a Generating Unit or Generating Units with aggregate Capacity of at least 50 megawatts.
60. "Maintenance" means the repair of generation, transmission, distribution, administrative, and general facilities; replacement of minor items; and installation of materials to preserve the efficiency and working condition of facilities.
61. "Operate" means to manage or otherwise be responsible for the production of energy by a Generating Unit, whether that Generating Unit is owned by the operator, in whole or in part, or by another Person.
62. "Person" means an individual, partnership, corporation, limited liability company, governmental agency, or other organization operating as a single entity.
63. "Production Cost" means the variable operating costs and Maintenance costs of producing energy through generation plus the cost of purchases of power sufficient to meet a Utility's demand.
64. "Reliability" means a measure of the ability of a Load-Serving Entity's generation, transmission, or Distribution System to provide power without failures, reflecting the portion of time that a system is unable to meet demand or the kilowatt-hours of demand that could not be supplied.
65. "Renewable Energy" means energy produced by a Renewable Energy Resource.
66. "Renewable Energy Resource" means a source of energy conforming to R14-2-2703.
67. "Request for Proposals" or "RFP" means to solicit proposals through a bidding process.
68. "Reserve Requirements" means the Capacity that a Load-Serving Entity must maintain in excess of its peak load to provide for scheduled Maintenance, forced outages, unforeseen loads, Emergencies, system operating requirements, and any agreement to provide backup Capacity to another Load-Serving Entity.
69. "Resource Planning Advisory Council" or "RPAC" means the group of interested Persons formed by a Load-Serving Entity as required by R14-2-2705(A)(2), unless the Load-Serving Entity is a Load-Serving Cooperative, in which case "Resource Planning Advisory Council" or "RPAC" means the Load-Serving Cooperative's Board of Directors.
70. "Resource Portfolio" means the combination of selected Supply-Side Resources and Demand-Side Resources to be used over a forecasted 15-year period to meet electric demand in a safe, reliable, and efficient manner, taking into consideration the factors set forth in R14-2-2708(C) and (D).
71. "Spinning Reserve" means the Capacity a Load-Serving Entity must maintain connected to the system and ready to deliver power promptly in the event of an unexpected loss of generation source, expressed as a percentage of peak load, a percentage of the production Capacity of the largest Generating Unit, or in fixed megawatts.
72. "Staff" means individuals working for the Commission, whether as employees or through contract.
73. "Supply-Side Resource" means a resource that provides a supply of energy, Capacity, or grid services to a Utility.
74. "Tariff" means a document setting forth requirements related to an Electric Utility's service, such as rates and charges, other terms and conditions of service, available program offerings, or any combination of these that have been approved by the Commission.
75. "Total Cost" means all capital, operating, Maintenance, fuel, and Decommissioning costs, plus the costs associated with mitigating any adverse environmental effects in the provision or conservation of electric energy.
76. "Utility" means an Electric Utility or Gas Utility.

**R14-2-2702. Applicability**

This Article applies to each Utility that has more than half of its Customers located in Arizona.

**R14-2-2703. Renewable Energy Resources**

**A. The following are Renewable Energy Resources:**

1. A Biogas Electric Generator, which produces energy using as fuel Gas derived from any of the following and produces zero net life-cycle Carbon Emissions:
  - a. Plant-derived organic matter;
  - b. Animal waste;
  - c. A wastewater treatment facility using anaerobic digestion;
  - d. An oxidation process; and
  - e. Another gasification process that produces energy;
2. A Biopower Electric Generator, which uses as fuel any of the following raw or processed plant-derived organic matter available on a renewable basis and that has zero net life-cycle Carbon Emissions:
  - a. Agricultural food and feed crops;
  - b. Agricultural crop wastes and residues;
  - c. Wood wastes and residues, including landscape waste, right-of-way tree trimmings, or small diameter forest thinnings that are 12" in diameter or less;
  - d. Dead and downed forest products;
  - e. Aquatic plants;
  - f. Animal wastes;
  - g. Vegetative waste materials;
  - h. Non-hazardous plant matter waste material that is segregated from other waste;
  - i. Forest-related resources, such as harvesting and mill residue, pre-commercial thinnings, slash, and brush;
  - j. Miscellaneous waste, such as waste pellets, crates, and dunnage; and
  - k. Recycled paper fibers that are no longer suitable for recycled paper production;
3. A Geothermal Generator, which uses heat from within the earth's surface to produce energy;
4. A Hydropower Facility, which generates energy using:
  - a. A low-head, micro hydro run-of-the-river system that does not require any new damming of the flow of the stream;
  - b. An existing dam without requiring a new dam, diversion structures, or a change in water flow that will adversely impact fish, wildlife, or water quality;
  - c. A new dam without adversely impacting fish, wildlife, or water quality; or
  - d. Canals or other irrigation systems;
5. A Landfill Gas Generator, which produces energy using pipeline-quality methane gas obtained from landfills;
6. Solar Energy Resources, which use sunlight or solar heat to produce energy with either photovoltaic devices or solar thermal electric devices; and
7. A Wind Generator, which produces energy using a mechanical device that is driven by wind.

**B. Upon application, or upon its own initiative, the Commission may determine, by order, that an additional technology is a Renewable Energy Resource if the technology uses naturally replenishing materials or processes to produce energy and has Environmental Benefits.****R14-2-2704. Clean Energy Implementation Plan****A. An Electric Utility shall, by April 1 every third year, beginning April 1, 2023, file with the Commission, for Approval, a Clean Energy Implementation Plan describing how the Electric Utility intends to comply with this Article.****B. Through its Clean Energy Implementation Plan, an Electric Utility shall achieve the following:**

1. By January 1, 2030, a Load-Serving Entity's resource portfolio shall include a Demand-Side Resource Capacity equal to at least 35% of the Load-Serving Entity's 2020 peak demand;
2. For each three-year planning period, Utilities shall propose DSM programs that include traditional Energy Efficiency, Demand Response, and other programs that focus on reducing overall energy usage, peak demand management, and load shifting, in accordance with the following:
  - a. Utility performance shall be based on both megawatt-hour energy savings and megawatt Capacity reductions;
  - b. Utilities must average at least 1.3% annual Energy Efficiency measured by megawatt-hour savings over the three-year planning period, without carrying over energy savings credits from programs implemented before January 1, 2021;
  - c. The portfolio of DSM measures must include rate-enabled, load-shifting technologies, including Demand Response, that provide Customer bill savings and clean energy benefits; and
  - d. Utilities shall propose programs and expected peak load reductions in their filings for review and Approval by the Commission;
3. By December 31, 2035, the installation of Energy Storage Systems with an aggregate Capacity equal to at least 5% of the Electric Utility's 2020 peak demand, of which at least 40% shall be derived from Customer-owned or Customer-leased Distributed Storage; and
4. A 100% reduction in Carbon Emissions below its Baseline Carbon Emissions Level with the following corresponding interim standards:

<b>Year</b>	<b>Reduction from Baseline Carbon Emissions Level</b>
<u>January 1, 2032</u>	<u>At least 50%</u>
<u>January 1, 2040</u>	<u>At least 75%</u>
<u>January 1, 2050</u>	<u>100%</u>

**C. An Electric Utility shall include in its Clean Energy Implementation Plan, at minimum, the following information:**

1. An Executive Summary of its Clean Energy Implementation Plan;





2. A summary of actions to be taken for the next three calendar years to meet the requirements of subsection (B), including:
  - a. Projected monthly Coincident Peak demand and energy consumption, disaggregated by Customer Class;
  - b. A schedule of each Renewable Energy Resource and Clean Energy Resource to be added;
  - c. For each Renewable Energy Resource and Clean Energy Resource:
    - i. The technology type;
    - ii. A description of the kW and kWh to be obtained;
    - iii. Whether the resource is used to meet subsection B(3);
    - iv. The estimated Total Cost per kWh and per year; and
    - v. A description of the method by which each resource is to be obtained, such as self-build, Customer installation, or RFP; and
  - d. A schedule for the retirement of each Generating Unit that produces Carbon Emissions;
3. For the previous three calendar years:
  - a. Monthly Coincident Peak demand and energy consumption, disaggregated by Customer Class;
  - b. The monthly kWh sales from Clean Energy Resources, disaggregated by Clean Energy Resource and Customer Class;
  - c. Total kWh obtained from Clean Energy Resources and Renewable Energy Resources, disaggregated by technology type;
  - d. Total kWh obtained to meet subsection (B)(3);
  - e. Total kW of generation Capacity, disaggregated by technology type;
  - f. Total Costs per kWh to serve retail load and cents per kW of generating Capacity, disaggregated by technology type;
  - g. A description of the Electric Utility's competitive procedures for choosing Clean Energy Resources, including justification concerning how those competitive procedures are fair and unbiased and how they have been appropriately applied;
  - h. Total Carbon Emissions, disaggregated; and
  - i. Total Carbon Emission reductions from Baseline Carbon Emissions Level;
4. A summary of each program developed by the Electric Utility to encourage Customer adoption of an Energy Storage System that is paired with Distributed Generation installed on the Customer's premise; and
5. An Energy Efficiency Report, in accordance with R14-2-2711, with a description of each Demand-Side Resource used toward the Electric Utility's Clean Energy Implementation Plan or, if no Demand-Side Resource was used, an explanation why no Demand-Side Resource was used.
- D.** In its Clean Energy Implementation Plan, an Electric Utility shall demonstrate its ability to deliver energy from Clean Energy Resources and Renewable Energy Resources to its Customers by providing documentation of:
  1. The transmission rights to deliver energy from Clean Energy Resources or Renewable Energy Resources to the Electric Utility's system, if applicable;
  2. A control area operator scheduling the energy from Clean Energy Resources or Renewable Energy Resources for delivery to the Electric Utility's system, if applicable; or
  3. For an Energy Storage System used to meet subsection (B)(3), the source of the energy that is being used to charge the Energy Storage System.
- E.** An Electric Utility's Baseline Carbon Emissions Level shall be the average annual metric tons of Carbon Emissions from all Generating Units used to meet the Electric Utility's retail kWh sales, during the consecutive three-calendar-year period of 2016 to 2018.
- F.** Within 210 days after the effective date of this Article, an Electric Utility shall provide to the Commission for review its proposed Baseline Carbon Emissions Level and verification from an independent third-party that the Carbon Emissions identified in its Baseline Carbon Emissions Level are accurate, along with any supplemental information and work papers used to make that determination.
- G.** An interested Person shall file with the Commission, within 60 days after an Electric Utility provides to the Commission its Baseline Carbon Emissions Level under subsection (F), any objection to the proposed Baseline Carbon Emissions Level.
- H.** After receiving an objection, or on its own initiative, the Commission may engage in a process to determine and approve the Baseline Carbon Emissions Level for an Electric Utility.
- I.** If no interested Person objects to the Electric Utility's Baseline Carbon Emissions Level, and the Commission does not establish a process to determine and approve the Baseline Carbon Emissions Level for the Electric Utility under subsection (H), the Electric Utility's Baseline Carbon Emissions Level shall become effective 120 days after it is filed with the Commission as required by subsection (G).
- J.** An Electric Utility shall consult with Staff regarding the identity of organizations or consultants that could serve as an independent third-party to verify that an Electric Utility's identified Carbon Emissions are accurate.
- K.** Staff shall issue a notice identifying each organization or consultant that could serve as an independent third-party to verify an Electric Utility's identified Carbon Emissions.
- L.** Within 10 days after retaining an independent third-party to verify its identified Carbon Emissions, an Electric Utility shall file with the Commission a written notice of such retention.
- M.** If an Electric Utility's Clean Energy Implementation Plan does not contain sufficient information to allow Staff to analyze the submission fully for compliance with this Article, Staff shall request additional information from the Electric Utility, which may include the data used in the Electric Utility's analyses, and shall request an order from the Commission that the Electric Utility shall fund an independent consultant to be selected by Staff to assist in Staff's analysis of the Clean Energy Implementation Plan.
- N.** Staff shall, within 120 days after the Clean Energy Implementation Plan is filed, file a memorandum and proposed order for the Commission's consideration.
- O.** Within 60 days after the memorandum and proposed order is filed by Staff, the Commission shall consider the proposed order at an open meeting.

**R14-2-2705. Development of Proposed Load Forecast and Needs Assessment**

- A.** To develop a Load Forecast and Needs Assessment, a Load-Serving Entity shall:
  1. Prepare at least five alternative 15-year Load Forecasts and Needs Assessments, which shall include:



- a. A Load Forecast and Needs Assessment showing the load growth expected by the Load-Serving Entity based on available data.
- b. A Load Forecast and Needs Assessment showing the load growth expected by the RPAC based on available data.
- c. A Load Forecast and Needs Assessment showing no load growth.
- d. A Load Forecast and Needs Assessment showing lower than expected load growth, and
- e. A Load Forecast and Needs Assessment showing higher than expected load growth;
- 2. To facilitate stakeholder participation throughout the resource planning process, form an RPAC, in compliance with subsection (B);
- 3. Supply the RPAC all data and information used by the Load-Serving Entity in the development of its Load Forecast and Needs Assessment, which shall include, but not be limited to, modeling assumptions, outputs, and methodologies used;
- 4. Respond to data requests from RPAC members pursuant to the requirements of A.A.C. R14-3-101 and specific Commission orders regarding discovery;
- 5. Meet with the RPAC in a workshop environment to obtain input on the validity of each alternative Load Forecast and Needs Assessment and recommendations for the Load Forecast and Needs Assessment to be proposed to the Commission; and
- 6. After good faith consideration of the input and recommendations received from the RPAC, refine the Load Forecast and Needs Assessment.
- B.** In forming an RPAC, a Load-Serving Entity shall ensure that the RPAC includes a diverse range of interested Persons, including but not limited to:
  - 1. Representatives from public interest groups,
  - 2. A consumer advocate or advocacy group,
  - 3. An advocate or advocacy group representing Limited-Income Customers,
  - 4. A member of the public at large,
  - 5. A representative of each Customer Class served by the Load-Serving Entity,
  - 6. An environmental advocate, and
  - 7. A representative from each of the following industries:
    - a. Renewable Energy,
    - b. Energy Efficiency or DSM,
    - c. Energy storage, and
    - d. Electric vehicles.

#### **R14-2-2706. Load Forecast and Needs Assessment Approval**

- A.** A Load-Serving Entity shall, by August 1 of every third year, beginning with August 1, 2021, file with the Commission, in a new docket, a request for Approval of Load Forecast and Needs Assessment, which shall include the refined Load Forecast and Needs Assessment created under R14-2-2705 and all of the data and information used to develop the refined Load Forecast and Needs Assessment, including but not limited to the modeling assumptions, outputs, and methodologies used.
- B.** Staff shall, within 90 days after the request for Approval is filed:
  - 1. Analyze the Load Forecast and Needs Assessment,
  - 2. Schedule at least one Commission workshop at which input regarding the Load Forecast and Needs Assessment can be provided by interested Persons,
  - 3. Provide the public notice of each Commission workshop at least through a filing in the docket and posting on the Commission's website, and
  - 4. Accept input regarding the Load Forecast and Needs Assessment at least through one Commission workshop and written comments.
- C.** Within 30 days after the final Commission workshop, Staff shall file a memorandum and proposed order recommending a Load Forecast and Needs Assessment to be used for the Load-Serving Entity.
- D.** Within 30 days after the memorandum and proposed order is filed, the Commission shall consider the proposed order at an open meeting.
- E.** The Commission shall issue a decision approving a Load Forecast and Needs Assessment to be used in the Load-Serving Entity's ASRFL. In this decision, the Commission may state the minimum amount of load that shall be served through Cost-Effective Energy Efficiency and may state the minimum amount of load that shall be served through Clean Energy, Renewable Energy, Distributed Generation, Distributed Storage, and Cost-Effective Demand-Side Resources.

#### **R14-2-2707. All Source Request for Information**

- A.** After its Load Forecast and Needs Assessment are approved by the Commission, a Load-Serving Entity shall develop an ASRFL, which shall be:
  - 1. Designed to obtain bids from numerous and diverse vendors of Supply-Side Resources and Demand-Side Resources that may be able to meet all or any part of the Load-Serving Entity's Load Forecast and Needs Assessment approved under R14-2-2706;
  - 2. Designed to enable Demand-Side Resources and Supply-Side Resources to compete on equal footing and not limited to Dispatchable Resources;
  - 3. Designed to meet the needs and system requirements developed in the approved Load Forecast and Needs Assessment as safely and reliably as possible, while prioritizing the factors set forth under R14-2-2708(C);
  - 4. Technology neutral;
  - 5. Fuel neutral;
  - 6. Location neutral, except for compliance with R14-2-2708(C);
  - 7. Size neutral;
  - 8. Vendor neutral; and
  - 9. Designed to provide notice to bidders that RPAC members will be able to review the bids resulting from the ASRFL.





- B.** After developing draft language for its ASRFI, a Load-Serving Entity shall:
1. Provide copies of the draft ASRFI language to the RPAC members;
  2. Meet with the RPAC in a workshop environment to obtain input on the draft ASRFI language and recommendations for any changes; and
  3. After good faith consideration of the input and recommendations received from the RPAC, refine the ASRFI language.
- C.** A Load-Serving Entity shall file the refined ASRFI language, created under subsection (B)(3), with the Commission.
- D.** Within 30 days after a Load-Serving Entity files its refined ASRFI language, Staff shall file a notice that the refined ASRFI language is either in compliance with subsection (A) or is deficient. If the refined ASRFI language does not comply with subsection (A), Staff and the Load-Serving Entity shall attempt in good faith to reach agreement on refined ASRFI language that complies with subsection (A).
- E.** If Staff and the Load-Serving Entity are unable to reach agreement on the Load-Serving Entity's refined ASRFI language, the following shall occur:
1. Staff shall, within 60 days after receiving the Load-Serving Entity's refined ASRFI language, file a Memorandum and Proposed Order recommending ASRFI language that complies with subsection (A) to be used by the Load-Serving Entity;
  2. Within 30 days after the Memorandum and Proposed Order is filed, the Commission shall consider the Proposed Order at an Open Meeting; and
  3. The Commission shall issue a decision approving ASRFI language that complies with subsection (A) to be used by the Load-Serving Entity.
- F.** If Staff determines that the ASRFI language is in compliance with subsection (A), or if Staff and the Load-Serving Entity are able to reach agreement on the ASRFI language's compliance with subsection (A), but an RPAC member disagrees with the ASRFI language, the RPAC member may, within five days after Staff files its notice of compliance, file a request for review of the ASRFI language by the Commission. In a request for review of the ASRFI language, the RPAC member shall propose alternative ASRFI language that complies with subsection (A).
- G.** If the Commission chooses to review ASRFI language pursuant to a request made under subsection (F), the Commission, within 45 days of the RPAC member's filed request for review, shall:
1. Consider the Load-Serving Entity's ASRFI language and the proposed alternative ASRFI language at an open meeting; and
  2. Issue a decision approving ASRFI language that complies with subsection (A) to be used by the Load-Serving Entity.

**R14-2-2708. ASRFI Process; Integrated Resource Plan Approval**

- A.** A Load-Serving Entity shall conduct its ASRFI process using the ASRFI language determined to be in compliance with this Article, or as otherwise ordered by the Commission.
- B.** After the ASRFI bid submission deadline has passed, a Load-Serving Entity shall:
1. Review and consider each bid submitted to satisfy all or any part of the Load-Serving Entity's approved Load Forecast and Needs Assessment, taking into account the provisions of subsection (C);
  2. Formulate a draft Integrated Resource Plan that includes a preferred Resource Portfolio and at least two alternative Resource Portfolios, describing all of the energy resources the Load-Serving Entity believes should be used to meet its 15-year Load Forecast and Needs Assessment, and provides any supplemental data and analyses used in justifying its choices; and
  3. After developing a draft Integrated Resource Plan:
    - a. Provide copies of the draft Integrated Resource Plan to the RPAC members;
    - b. Meet with the RPAC in a workshop environment to obtain input on the draft Integrated Resource Plan and recommendations for any changes; and
    - c. After good faith consideration of the input and recommendations received from the RPAC, refine the Integrated Resource Plan.
- C.** When determining the resources to include in its refined Integrated Resource Plan, a Load-Serving Entity shall prioritize the following:
1. Meeting the requirements of the Clean Energy Implementation Plan created under R14-2-2704;
  2. Minimizing the cost of providing electric energy service to Customers through a combination of Supply-Side Resources and Demand-Side Resources that will result in the lowest overall, lifetime costs to meet Customers' energy needs safely and reliably; and
  3. Giving preferential treatment to Renewable and Clean Energy Resources sited or deployed in Impacted Communities.
- D.** In addition to the factors created in subsection (C), when determining the resources to include in its refined Integrated Resource Plan to provide the lowest overall, lifetime costs to meet its Load Forecast and Needs Assessment safely and reliably, meet the Clean Energy Implementation Plan set forth under R14-2-2704, and minimize the cost of providing electric energy service to Customers, a Load-Serving Entity may also consider factors that have a reasonable nexus to ratemaking, such as, but not limited to, the following:
1. Improving system Reliability and resiliency;
  2. Providing adequate service to customers;
  3. Diversifying fuel supplies and technologies;
  4. Stabilizing the electric power supply;
  5. Decreasing peak demand;
  6. Decreasing demand during hours when the price per kWh for Customers is highest;
  7. Providing opportunities for additional savings;
  8. Improving the economic utilization of new and existing resources;
  9. Reducing the need to build new transmission to support the new resources;
  10. Reducing the risk of losing transmission to natural disaster or other unanticipated events;
  11. Improving the efficiency of the transmission grid;
  12. Reducing the costs associated with complying with local, state, and federal regulations;
  13. Improving grid security and the personal health and safety of patrons and employees;



14. Meeting the demand for electricity in the least costly way to society;
  15. Providing Environmental Benefits or reducing environmental impacts, such as, but not limited to, benefits and impacts regarding air and water pollution, emissions, ground water and surface water pollution and consumption, recyclability of resources and of resources' respective parts and components, and the carbon footprint and environmental impacts and benefits of each resource's full lifecycle and supply chain and of the full lifecycles and supply chains of each of the resource's respective parts and components;
  16. Providing economic benefits or reducing negative economic impacts, such as, but not limited to, benefits and impacts related to economic development, job creation or retention, customer growth or retention, location or jurisdiction of manufacture, location or jurisdiction of the source of the resource's respective parts and components, and the development of new technologies, innovations, or pilot programs;
  17. Minimizing the occurrence or appearance of anti-competitive behavior and self-dealing between Electric Utilities and Affiliated interests;
  18. Benefitting Impacted Communities; and
  19. Serving the Public Interest.
- E.** A Load-Serving Entity shall, by August 1 of every third year, beginning with August 1, 2023, file with the Commission, in the docket created for the Load Forecast and Needs Assessment, the refined Integrated Resource Plan language created under subsection (B)(3). The Load-Serving Entity shall include in its filing any additional data or analyses that it believes Staff or the Commission will find useful in considering the Integrated Resource Plan and shall provide to Staff and the Commission any additional information requested after the initial filing.
- F.** Staff shall, within 90 days after the Integrated Resource Plan is filed:
1. Analyze the Integrated Resource Plan, prioritizing the factors set forth in subsection (C);
  2. Schedule at least one Commission workshop at which input regarding the Integrated Resource Plan can be provided by interested Persons;
  3. Provide the public notice of each Commission workshop at least through a filing in the docket and posting on the Commission's website; and
  4. Accept input regarding the Integrated Resource Plan through at least through one Commission workshop and written comments.
- G.** Within 30 days after the final Commission workshop, Staff shall file a memorandum and proposed order recommending a Resource Portfolio for use by the Load-Serving Entity, which shall either:
1. Recommend a Resource Portfolio that prioritizes the factors set forth in subsection (C); or
  2. If the memorandum and proposed order does not recommend a Resource Portfolio that prioritizes the factors set forth in subsection (C), then:
    - a. Explain why the Memorandum and proposed order recommends a Resource Portfolio that does not prioritize the factors set forth in subsection (C), and
    - b. Identify the factors set forth in subsection (D) that the recommended Resource Portfolio prioritizes instead.
- H.** Within 30 days after the Memorandum and proposed order is filed, the Commission shall consider the proposed order at an open meeting.
- I.** The Commission shall issue a decision approving a Resource Portfolio to be implemented by the Load-Serving Entity.
- J.** Staff may hire one or more consultants, as necessary, to meet the obligation and timelines of R14-2-2704 through R14-2-2708. The Commission may order the Load-Serving Entity to fund an independent consultant to be selected by Staff to assist in Staff's analysis.

#### **R14-2-2709. Implementation of Action Plan**

- A.** A Load-Serving Entity shall implement the Action Plan approved for it by the Commission and, except as permitted by this Article, utilize an All-Source RFP process to procure resources per the Commission approved Action Plan.
- B.** A Load-Serving Entity shall report the results of its All-Source RFP process in an annual Procurement Activity Report.
- C.** A Load-Serving Entity shall include any request to update its Action Plan in its annual Procurement Activity Report.
- D.** Within 60 days after receiving a Load-Serving Entity's request to update its Action Plan, the Commission shall issue:
1. An order of Approval of the Load-Serving Entity's request to update its Action Plan; or
  2. An order denying the Load-Serving Entity's request to update its Action Plan.
- E.** A Load-Serving Entity that determines, during the implementation period for its most recently approved Action Plan, that the Load-Serving Entity will be unable to implement any portion of the Action Plan due to circumstances beyond the Load-Serving Entity's control, shall file with the Commission, in a new docket, notification of the circumstances preventing implementation along with any appropriate request for extension or waiver under R14-2-2716.

#### **R14-2-2710. Electric Utility Annual Reporting Requirements**

- A.** An Electric Utility shall, by January 31 of each year, beginning on January 31, 2022, file with the Commission a report that describes its compliance with subsection R14-2-2704(B) in the previous calendar year, which shall include the following information:
1. The actual kWh of energy produced within its service territory or obtained from Clean Energy Resources and Renewable Energy Resources;
  2. The kW of generation Capacity, disaggregated by technology type;
  3. Cost information regarding cents per actual kWh of energy obtained from Clean Energy Resources and Renewable Energy Resources and cents per kW of generation Capacity, disaggregated by technology type;
  4. The total Capacity of Demand-Side Resources with comparison to the Load-Serving Entity's 2020 peak demand;
  5. The total Carbon Emissions disaggregated by all Generating Units used to serve its kWh sales, expressed in metric tons;
  6. The aggregate Capacity of installed Energy Storage Systems; and
  7. The aggregate Capacity of Customer-owned or Customer-leased Distributed Storage.



- B.** A Load-Serving Entity shall, by January 31 of each year, beginning on January 31, 2022, file with the Commission a report that shall include the following items of Demand-Side Resource data, including for each item for which no record is maintained the Load-Serving Entity's best estimate and a full description of how the estimate was made:
1. Average hourly demand for the previous calendar year, disaggregated by:
    - a. Sales to end users;
    - b. Sales for resale;
    - c. Energy Losses; and
    - d. Other disposition of energy, such as energy furnished without charge and energy used by the Load-Serving Entity;
  2. Coincident Peak demand and energy consumption by month for the previous calendar year, disaggregated by Customer Class;
  3. Average number of annual Customers by Customer Class for each of the previous calendar year; and
  4. Reduction in load (kilowatt and kilowatt-hours) in the previous calendar year due to existing DSM Measures, by type of DSM Measure.
- C.** A Load-Serving Entity shall, by January 31 of each year, beginning January 31, 2022, file with the Commission a report that shall include the following items of Supply-Side Resource data, including for each item for which no record is maintained the Load-Serving Entity's best estimate and a full description of how the estimate was made:
1. For each Generating Unit and purchased power contract for the previous calendar year:
    - a. In-Service Date and the expected time period or contract period during which the Supply-Side Resource will be available for use by the Load-Serving Entity;
    - b. The type of Generating Unit or contract;
    - c. The Load-Serving Entity's share of the Generating Unit's Capacity, or of Capacity under the contract, in megawatts;
    - d. The maximum Generating Unit or contract Capacity, by hour, day, or month, if such Capacity varies during the year;
    - e. The annual Capacity Factor;
    - f. The average Heat Rate of the Generating Unit and, if available, its Heat Rates at specified output levels;
    - g. The average fuel cost for the Generating Unit, in dollars per million Btu for each type of fuel;
    - h. Other variable operating and Maintenance costs for the Generating Unit, in dollars per megawatt hour;
    - i. The purchased power energy costs for each contract exceeding three calendar years, in dollars per megawatt-hour;
    - j. The fixed operating and Maintenance costs of the Generating Unit, in dollars per megawatt;
    - k. The demand charges for purchased power;
    - l. The fuel type for each Generating Unit;
    - m. The minimum Capacity at which the Generating Unit would be run, or purchased power is needed, if applicable;
    - n. Whether, under standard operating procedures, the Generating Unit must be run if it is available to run;
    - o. The description of each Generating Unit as base load, intermediate, or peaking;
    - p. The environmental impacts, including air emission quantities (in metric tons or pounds) and rates (in quantities per megawatt-hour) for carbon dioxide, nitrogen oxides, sulfur dioxide, mercury, particulates, and other air emissions subject to current or expected future environmental regulation;
    - q. The water consumption quantity and rate; and
    - r. The amount of coal ash (by ton) produced per Generating Unit;
  2. For each Supply-Side Resource in the previous calendar year:
    - a. A description of Generating Unit commitment procedures;
    - b. Production Costs;
    - c. Reserve Requirements;
    - d. Spinning Reserve;
    - e. Reliability of the generating, transmission, and Distribution Systems;
    - f. Purchase and sale prices, averaged by month, for the aggregate of all purchases and sales-related contracts with a duration of less than three calendar years; and
    - g. Energy Losses;
  3. The total Capacity of Distributed Generation in the Load-Serving Entity's service area for the previous calendar year; and
  4. An explanation of any resource procurement processes undertaken by the Load-Serving Entity during the previous calendar year that did not include use of an RFP, including the exception under which the process was used.
- D.** A Load-Serving Entity shall file, by May 1 of each year, beginning May 1, 2024, an annual Procurement Activity Report that specifies, at a minimum, the following:
1. The procurement activities the Load-Serving Entity plans to undertake in the following calendar year to effectuate its Commission-approved Action Plan,
  2. All associated cost information related to the Load-Serving Entity's planned procurement activities, and
  3. A timeline describing each planned procurement activity.

#### **R14-2-2711. Electric Energy Efficiency**

- A.** An Electric Utility shall include in its Energy Efficiency Report the following information regarding the Demand-Side Resources used by the Electric Utility:
1. A list of the Electric Utility's current Demand-Side Resources, disaggregated by Customer Class;
  2. For each Demand-Side Resource:
    - a. A brief description;
    - b. The purpose, objectives, and savings targets;
    - c. For the previous three calendar years, disaggregated by year, if applicable:
      - i. The level of Customer participation;
      - ii. The Total Cost incurred, disaggregated by type of cost, such as administrative costs, rebates, and monitoring costs;
      - iii. A description and the results of evaluation and monitoring activities;





- iv. Savings realized, in an appropriate metric (kW, kWh, therms, or Btu);
    - v. The Environmental Benefits realized, including reduced emissions and water savings;
    - vi. Incremental Benefits and net benefits, in dollars;
    - vii. Performance-incentive calculations; and
    - viii. Problems encountered and proposed solutions;
  - d. A description of any modifications proposed for the next three calendar years; and
  - e. Whether the Electric Utility proposes to terminate the Demand-Side Resource and, if so, the proposed date of termination; and
  - 3. A description of the findings from any research projects ordered by the Commission and completed during the previous three calendar years.
  - B.** An Electric Utility shall include in its Energy Efficiency Report any new Demand-Side Resources proposed to be implemented by the Electric Utility in the next three calendar years, and for each Demand-Side Resource shall include:
    - 1. A brief description; and
    - 2. The purpose, objectives, and savings targets.
  - C.** An Electric Utility shall design each Demand-Side Resource:
    - 1. To be Cost-Effective; and
    - 2. To accomplish at least one of the following:
      - a. Provide Energy Efficiency,
      - b. Manage energy consumption,
      - c. Reduce peak demand, or
      - d. Alter Customer energy consumption behavior.
  - D.** An Electric Utility shall consider the following when planning and implementing a Demand-Side Resource:
    - 1. Whether the Demand-Side Resource will achieve Cost-Effective energy savings and peak demand reductions;
    - 2. Whether the Demand-Side Resource will advance market transformation and achieve sustainable savings, reducing the need for future market interventions;
    - 3. Whether the Electric Utility can ensure a level of funding adequate to sustain the Demand-Side Resource and allow the Demand-Side Resource to achieve its targeted goal; and
    - 4. Whether the Electric Utility can allocate a portion of the Demand-Side Resource specifically to Limited-Income Customers.
  - E.** An Electric Utility shall provide an opportunity for all Electric Utility Customer Classes to participate in the Demand-Side Resources, with a portion specifically allocated for Limited-Income Customers.
  - F.** An Electric Utility shall monitor and evaluate each Demand-Side Resource to determine whether it is Cost-Effective and otherwise meets expectations and shall report any unintended consequences to the Commission in its Energy Efficiency Report.
  - G.** An Electric Utility may recover the costs that it incurs in planning, designing, implementing, and evaluating a Demand-Side Resource if the Commission approves such cost recovery for the Electric Utility in a rate case.
  - H.** Staff may request an Electric Utility to perform analyses of a specified Demand-Side Resource to comply with this Article.
- R14-2-2712. Gas Energy Efficiency**
- A.** A Gas Utility shall, by April 1 every third year, beginning April 1, 2023, file with the Commission, for Approval, an Energy Efficiency Report describing each Demand-Side Resource designed to reduce Coincident Peak and energy demand, disaggregated by Customer Class, or, if no Demand-Side Resource was used or is proposed to be implemented, an explanation why no Demand-Side Resource was used or is proposed to be implemented.
  - B.** For each Demand-Side Resource, a Gas Utility shall specify if the Demand-Side Resource is:
    - 1. Proposed to be implemented by the Gas Utility during the next three calendar years;
    - 2. Currently implemented by the Gas Utility; or
    - 3. Proposed to be modified or discontinued by the Gas Utility.
  - C.** A Gas Utility shall include in its Energy Efficiency Report the following information regarding the Demand-Side Resources used by the Gas Utility:
    - 1. A list of the Gas Utility's current Demand-Side Resources, disaggregated by Customer Class;
    - 2. For each Demand-Side Resource:
      - a. A brief description;
      - b. The purpose, objectives, and savings targets;
      - c. For the previous three calendar years, disaggregated by year, if applicable:
        - i. The level of Customer participation;
        - ii. The Total Cost incurred, disaggregated by type of cost, such as administrative costs, rebates, and monitoring costs;
        - iii. A description and the results of evaluation and monitoring activities;
        - iv. Savings realized, in an appropriate metric (kW, kWh, therms, or Btu);
        - v. The Environmental Benefits realized, including reduced emissions and water savings;
        - vi. Incremental Benefits and net benefits, in dollars;
        - vii. Performance-incentive calculations; and
        - viii. Problems encountered and proposed solutions;
      - d. A description of any modifications proposed for the next three calendar years; and
      - e. If the Gas Utility proposes to terminate the Demand-Side Resource, the proposed date of termination; and
    - 3. A description of the findings from any research projects ordered by the Commission and completed during the previous three calendar years.
  - D.** A Gas Utility shall design each Demand-Side Resource:
    - 1. To be Cost-Effective; and
    - 2. To accomplish at least one of the following:





- a. Provide Energy Efficiency.
- b. Manage energy consumption.
- c. Reduce peak demand, or
- d. Alter Customer energy consumption behavior.
- E. A Gas Utility shall consider the following when planning and implementing a Demand-Side Resource:
  - 1. Whether the Demand-Side Resource will achieve Cost-Effective energy savings and peak demand reductions;
  - 2. Whether the Demand-Side Resource will advance market transformation and achieve sustainable savings, reducing the need for future market interventions;
  - 3. Whether the Gas Utility can ensure a level of funding adequate to sustain the Demand-Side Resource and allow the Demand-Side Resource to achieve its targeted goal; and
  - 4. Whether the Gas Utility can allocate a portion of the Demand-Side Resource specifically to Limited-Income Customers.
- F. A Gas Utility shall provide an opportunity for all Gas Utility Customer Classes to participate in the Demand-Side Resources, with a portion specifically allocated for Limited-Income Customers.
- G. A Gas Utility shall monitor and evaluate each Demand-Side Resource to determine whether it is Cost-Effective and otherwise meets expectations and report any unintended consequences to the Commission in its Energy Efficiency Report.
- H. A Gas Utility may recover the costs that it incurs in planning, designing, implementing, and evaluating a Demand-Side Resource if the Commission approves such cost recovery for the Gas Utility in a rate case.
- I. Staff may request a Gas Utility to perform analyses of a specified Demand-Side Resource to comply with this Article.

#### **R14-2-2713. Energy Storage System Tariffs**

- A. Within 120 days after the effective date of this Article, an Electric Utility shall file with the Commission, for Approval, one or more Tariffs and one or more programs that:
  - 1. Establish an incentive program, such as a one-time, upfront incentive, that encourages Customers, including Limited-Income Customers, to purchase or lease Distributed Storage in exchange for the Customer's participation in a Demand Response or other program offered by the Electric Utility; and
  - 2. Establish one or more values for providing compensation to or crediting Customers, Limited-Income Customers, and Aggregators for operational attributes such as, but not limited to, Capacity, Demand Response, demand reduction, load shifting, locational value, voltage support, other ancillary and grid services, Electric Utility control, and any additional operating attributes the Commission may recognize, in order to encourage Customers, Limited-Income Customers, and Aggregators to purchase or lease, or engage in Aggregation of Distributed Storage.
- B. An Electric Utility's Energy Storage System Tariff shall not require that a Customer's Energy Storage System be associated with Distributed Generation.

#### **R14-2-2714. Independent Monitor Selection and Responsibilities**

- A. When a Load-Serving Entity contemplates engaging in an RFP process, the Load-Serving Entity shall consult with Staff regarding the identity of companies or consultants that could serve as Independent Monitor for the RFP process.
- B. After consulting with Staff, a Load-Serving Entity shall create a vendor list of three to five candidates to serve as Independent Monitor and shall file the vendor list with the Commission to allow interested Persons time to review and file objections to the vendor list.
- C. An interested Person shall file with the Commission, within 30 days after a vendor list is filed with the Commission, any objection that the interested Person may have to a candidate's inclusion on a vendor list.
- D. Within 60 days after a vendor list is filed with the Commission, Staff shall issue a notice identifying each candidate on the vendor list that Staff considers to be qualified to serve as Independent Monitor for the contemplated RFP process. In making its determination, Staff shall consider the experience of the candidates, the professional reputation of the candidates, and any objections filed by interested Persons.
- E. A Load-Serving Entity may retain any of the candidates identified in Staff's notice as an Independent Monitor for the contemplated RFP process.
- F. A Load-Serving Entity shall file with the Commission a written notice of its retention of an Independent Monitor.
- G. A Load-Serving Entity is responsible for paying the Independent Monitor for its services and may charge a reasonable bidder's fee to each bidder in the RFP process to help offset the cost of the Independent Monitor's services.
- H. At least one week prior to the RFP deadline for submitting bids, a Load-Serving Entity shall provide the Independent Monitor a copy of any bid proposal prepared by the Load-Serving Entity or an entity Affiliated with the Load-Serving Entity and a copy of any Benchmark-based costs or reference cost the Load-Serving Entity has developed for use in evaluating bids. The Independent Monitor shall take steps to secure the Load-Serving Entity's or Affiliated entity's bid proposal and any Benchmark-based costs or reference cost so that they are inaccessible to any bidder.

#### **R14-2-2715. Confidential Information**

- A. If a Utility believes that a reporting requirement pursuant to this Article may result in disclosure of confidential business data or confidential energy infrastructure information, the Utility shall file with the Commission:
  - 1. A public version of the reporting requirement pursuant to this Article, from which all data or information considered to be confidential has been redacted; and
  - 2. A request to submit the data or information that is considered to be confidential to Staff pursuant to a confidentiality agreement, which request shall cite each statute, rule, court opinion, or other basis supporting the confidential treatment of the data or information.
- B. Data and information protected by a confidentiality agreement shall not be filed with the Commission and shall not be open to public inspection or otherwise made public except upon an order of the Commission entered after written notice to the Utility and upon a finding of good cause for disclosure.

**R14-2-2716. Waivers and Exemptions**

- A. The Commission may waive compliance with any provision of this Article or exempt a Utility from complying with any provision in this Article upon a finding that good cause exists for granting such waiver or exemption and that it will not harm the public interest.
- B. A Utility requesting an exemption or waiver of any provision in this Article shall file with the Commission an application that includes, at a minimum:
  - 1. The reasons why the burden of compliance with the Article, or the specific provision in the Article for which exemption is requested, exceeds the potential benefits to Customers that would result from compliance with the provisions pursuant to this Article;
  - 2. Data supporting the Electric Utility's or Gas Utility's assertions as to the burden of compliance and the potential benefits to Customers that would result from compliance; and
  - 3. The reasons why the public interest would be served or would not be harmed by the requested exemption.
- C. A Load-Serving Entity shall comply with R14-2-2707(A), R14-2-2708(A), and R14-2-2709(A), unless one of the following exceptions applies:
  - 1. The Load-Serving Entity is experiencing an Emergency;
  - 2. The Load-Serving Entity needs to make a short-term acquisition to maintain system Reliability and that acquisition is for a period of no more than 24 months from the time executed;
  - 3. The Load-Serving Entity needs to acquire short term economic purchases for 15 months or less, or other components of energy procurement, such as fuel, fuel transportation, or transmission;
  - 4. The transaction presents the Load-Serving Entity a genuine, unanticipated opportunity to acquire a power supply resource at a clear and significant discount, compared to the cost of acquiring new Generating Units, and will provide unique value to the Load-Serving Entity's Customers; or
  - 5. The Load-Serving Entity is adding Capacity or energy from newly constructed Supply-Side Resources with a net total nameplate rating of not more than 25 megawatt per year and 100 megawatt per five-year planning cycle, with projects supporting Renewable Energy and Energy Storage System deployment prioritized over adding or supporting Conventional Energy Resource Capacity.
- D. If the Commission later determines that the Load-Serving Entity was not entitled to invoke one of the exceptions of subsection (C), the Commission shall not allow cost recovery of the Load-Serving Entity's actions related to such an event.

**R14-2-2717. Cooperatives**


- A. A Cooperative or Load-Serving Cooperative shall employ best reasonable efforts in accordance with Good Utility Practice to comply with the applicable provisions of this Article.
- B. Upon Commission Approval of a distribution cooperative's Clean Energy Implementation Plan describing the Cooperative's existing and planned Clean Energy Resources and Renewable Energy Resources and programs utilized to meet the Cooperative's retail load, the provisions of the Clean Energy Implementation Plan shall substitute for the requirements set forth in this Article.
- C. A Load-Serving Cooperative shall submit to the Commission a limited Integrated Resource Plan filing containing whatever information, data, criteria, and studies the Load-Serving Cooperative has used in its analysis to meet electric demand in a safe, reliable, and efficient manner over a forecasted 15-year period of time.
- D. Upon Commission Approval of a Load-Serving Cooperative's Integrated Resource Plan, including its Action Plan, its provisions shall substitute for the requirements set forth in this Article.
- E. In preparing its Integrated Resource Plan, a Load-Serving Cooperative shall meet with and consider the input of an RPAC.

**R14-2-2718. Cost Recovery and Prudence**

- A. A Utility may request to recover its costs to comply with this Article in a rate case, in whole or in part.
- B. Recovery of the costs requested by a Utility under subsection (A) shall be allowed only if the Commission determines that the costs are prudent.
- C. A Utility's Commission-approved cost recovery mechanisms and programs associated with the Commission's prior renewable energy and energy efficiency rules shall remain in effect until the Commission issues a decision in a future rate case in which the Utility receives cost recovery and program Approval, if applicable, for requirements associated with this Article.

MEMORANDUM

TO: Docket Control

FROM: Elijah O. Abinah   
Director  
Utilities Division

DATE: February 26, 2021

RE: IN THE MATTER OF POSSIBLE MODIFICATIONS TO THE ARIZONA  
CORPORATION COMMISSION'S ENERGY RULES (DOCKET NO. RU-  
00000A-18-0284).

SUBJECT: STAFF REPORT FOR SUMMARY OF COMMENTS MADE REGARDING  
THE NOTICE OF PROPOSED RULEMAKING

Pursuant to Decision No. 77829 (November 23, 2020), the Commission ordered that the Utilities Division Staff ("Staff") shall, by February 26, 2021, file with the Commission's Docket Control (1) a document including (a) a summary of all written and oral comments concerning the Notice of Proposed Rulemaking received between the effective date of this Order and January 22, 2021, along with (b) the Utilities Division's responses to those comments; and (2) a revised Economic, Small Business, and Consumer Impact Statement or a memorandum explaining why no revision of the prior filed Economic, Small Business, and Consumer Impact Statement ("EIS") is necessary. Attached is the staff report which contains a summary of comments made by interested parties regarding the Notice of Proposed Rulemaking ("NOPR"). Staff will be filing its revised EIS in a separate filing to the docket.

EOA:PCL:jn/WVC

Originator: Patrick LaMere

Attachments

(See next page)

**STAFF REPORT  
UTILITIES DIVISION  
ARIZONA CORPORATION COMMISSION**

**IN THE MATTER OF POSSIBLE MODIFICATIONS TO THE ARIZONA  
CORPORATION COMMISSION'S ENERGY RULES  
DOCKET NO. RU-00000A-18-0284**

**STAFF SUMMARY OF COMMENTS MADE REGARDING THE NOTICE OF  
PROPOSED RULEMAKING AND RESPONSE**

**FEBRUARY 26, 2021**

DECISION NO. \_\_\_\_\_



**STAFF ACKNOWLEDGMENT**

The Staff Report for In the Matter of Possible Modifications to the Arizona Corporation Commission's Energy Rules, Docket No. RU-00000A-18-0284, was the responsibility of the Staff members listed below.

Patrick LaMere  
Public Utilities Analyst

Zachary Branum  
Engineering Supervisor

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## INTRODUCTION

The Arizona Corporation Commission ("Commission" or "ACC") Staff hereby files a summary of comments from interested parties regarding the Notice of Proposed Rulemaking ("NOPR") for possible modifications to the Commission's Energy Rules. Pursuant to Decision No. 77829 (November 23, 2020), the Commission ordered that the Utilities Division Staff ("Staff") shall, by February 26, 2021, file with the Commission's Docket Control (1) a document including (a) a summary of all written and oral comments concerning the [NOPR] received between the effective date of this Order and January 22, 2021, along with (b) the Utilities Division's responses to those comments; and (2) a revised Economic, Small Business, and Consumer Impact Statement or a memorandum explaining why no revision of the prior filed Economic, Small Business, and Consumer Impact Statement is necessary.

In compliance with Decision No. 77829, on November 27, 2020, Staff filed with the Office of the Secretary of State a Notice of Rulemaking Docket Opening ("NRDO") and the NOPR. On December 18, 2020, the Secretary of State's office published Staff's filing in the Arizona Register. On January 14, 2021, Staff docketed its preliminary Economic, Small Business, and Consumer Impact Statement ("EIS") pursuant to the requirements of A.R.S. § 41-1057(A)(2). On January 19 and 20, 2021, the Commission's Hearing Division hosted oral proceedings telephonically regarding the NOPR. A number of interested parties participated via providing oral comments, and Staff provided pertinent feedback as appropriate, during these proceedings to the comments received. Staff will be filing its revised EIS in a separate filing to the docket.

### *NOPR Overview*

The Commission has constitutional and statutory authority to make reasonable Rules, regulations, and orders, by which Public Service Corporations ("PSCs") shall be governed in the transaction of business within the State and make and enforce reasonable Rules, regulations and orders for the convenience, comfort and safety, and the preservation of the health of the employees and patrons of PSCs.<sup>1</sup> The proposed Rules contained in the NOPR add a new Article 27, entitled "Energy Rules" to 14 A.A.C. 2, the Chapter containing the Commission's rules for fixed utilities with the new Article 27 including 18 new rules. Furthermore, in the same chapter, this rulemaking (1) Repeals the Commission's Resource Planning and Procurement Rules (14 A.A.C. 2, Article 7); (2) Repeals the Environmental Portfolio Standard Rule (A.A.C. R14-2-1618); (3) Repeals the Renewable Energy Standard and Tariff ("REST") Rules (14 A.A.C. 2, Article 18); (4) Amends A.A.C. R14-2-2302 and R14-2-2307 in the Net Metering Rules; (5) Repeals the Electric Energy Efficiency ("EEE") Rules (14 A.A.C. 2, Article 24); and (6) Repeals the Gas Energy Efficiency Rules ("GEE") (14 A.A.C. 2, Article 25). The new rules establish mandatory standards for Commission-regulated utilities, specifically PSCs under Arizona Constitution, Article 15, § 2, to follow in generating, procuring, and delivering electric or gas service to the public in Arizona.

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<sup>1</sup> See Arizona Constitution Article 15, Section 3. The Commission also has statutory authority to ensure the provision of safe and reliable electric service in the State. See, e.g. Arizona Revised Statutes ("A.R.S.") §§ 40-202, 40-203, 40-321, 40-322(A), 40-332(B), 40-336, 40-361, and 40-374.



Specifically, the Energy Rules require: (1) each Electric Utility to propose a Clean Energy Implementation Plan that achieves a 100 percent reduction in its carbon emissions by January 1, 2050, an average of 1.3 percent annual energy efficiency savings starting in 2021, and a 5 percent energy storage capacity requirement; (2) each Class A Gas utility to consider and propose demand-side resources measures and programs; and (3) each Load-Serving Entity ("LSE") to follow a resource planning process, including, for all new resource procurement, an all-source request for information ("ASRFI") process, and an all-source request for proposals ("ASRFP") process. The purpose of the Energy Rules is to promote regulated utilities to increase the utilization of clean and renewable energy technologies, energy storage, and energy efficiency-based measures while maintaining safe and reliable service to meet the energy needs of their customers. The rules incorporate transparent ASRFI and ASRFP energy procurement processes designed to elicit a least-cost mix of resources for the utility to meet its retail energy demands while maintaining reliability, deliverability, safety, and reducing negative environmental impacts and risk.

### *Energy Rules Background*

On August 22, 2016, the Commission opened Docket No. E-00000Q-16-0289 for the Review, Modernization and Expansion of the Arizona REST Rules and Associated Rules. On August 14, 2018, the Commission directed Staff to initiate a rulemaking docket to evaluate proposed Arizona energy modernization. Accordingly, Docket No. RU-00000A-18-0284 was opened on August 17, 2018. Staff was further directed to research and review existing rules in other states regarding energy-related topics such as, but not limited to: resource planning and procurement, energy efficiency, renewable energy standards, net metering, forest bioenergy, distributed generation, baseload security, transmission project assessment, retail electric competition, electric vehicles, blockchain technology or transactive energy, battery storage, and any other energy-related topic.

The first draft of the Energy Rules was docketed on April 25, 2019. Subsequent drafts were filed by Staff on July 2, 2019, February 19, 2020, July 3, 2020, and July 29, 2020. From February 2019 to March 2020, the Commission hosted six workshops to discuss respective drafts of the proposed Energy Rules, and to engage the public and stakeholders on potential feedback. Written comments to Docket No. RU-00000A-18-0284 and oral comments at workshops and open meetings have been received from representatives of utilities, government agencies, energy efficiency and environmental advocacy groups, utility investors, large industrial consumers, advocates for renewable resources, competitive power providers, advocates for distributed generation, product suppliers, research entities, regulated utility customers, the general public, and others.

### *Commission Dockets Considered*

The following Commission dockets were considered in the development of the NOPR:

- Docket No. E-00000V-19-0034: In the Matter of Resource Planning and Procurement in 2019, 2020 and 2021;

- Docket No. RU-00000A-18-0284: In the Matter of possible modifications to the Arizona Corporation Commission's Energy Rules;
- Docket No. RE-00000A-18-0137: In the Matter of the Proposed Rulemaking to modify the Resource Planning and Procurement Rules;
- Docket No. RE-00000A-17-0260: In the Matter of the Commission's Review and Modification of the Current Net Metering Rules to Comport with Changes in Circumstances Since Their Adoption;
- Docket No. E-00000Q-17-0138: Commissioner Dunn's Inquiry into the Role of Forest Bioenergy in Arizona;
- Docket No. E-00000Q-16-0289: To Open a Docket for Review, Modernization and Expansion of the Arizona Energy Standards and Tariff Rules and Associated Rules;
- Docket No. E-00000V-15-0094: In the Matter of Resource Planning and Procurement in 2015 and 2016.
- Docket No. RE-00000C-14-0112: In the Matter of the Proposed Rulemaking to modify the Renewable Energy Standard and Tariff Rules;
- Docket No. RE-00000C-09-0427: In the Matter of the Notice of Proposed Rulemaking regarding Electric Energy Efficiency Rules;
- Docket No. RE-00000A-09-0249: In the Matter of the Notice of Proposed Rulemaking regarding Resource Planning;
- Docket No. RG-00000B-09-0428: In the Matter of the Notice of Proposed Rulemaking regarding Gas Energy Efficiency Rules;
- Docket No. RE-00000A-07-0608: In the Matter of the Notice of Proposed Rulemaking regarding Net Metering; and
- Docket No. RE-00000C-00-0377: In the Matter of Notice of Rulemaking Amendments to Article 16. Retail Electric Competition, Environmental Portfolio Standard Rules.

### *Commission Rules Considered*

The following Commission Rules under Title 14, Chapter 2 of the Arizona Administrative Code ("A.A.C.") were considered in the development of the NOPR:

- Resource Planning and Procurement Rules (A.A.C. R14-2-701 et seq.);
- Renewable Energy Standard and Tariff Rules (A.A.C. R14-2-1801 et seq.);
- Electric Energy Efficiency Standards Rules (A.A.C. R14-2-2401 et seq.);
- Gas Energy Efficiency Standards Rules (A.A.C. R14-2-2501 et seq.);
- The Environmental Portfolio Standard (A.A.C. R14-2-1618); and
- The Net Metering Rules (A.A.C. R14-2-2301 et seq.).

### **COMMENTS ON NOTICE OF PROPOSED RULEMAKING**

The following contains (i) a summary of written comments made by interested parties regarding the NOPR between the effective date of Decision No. 77829 (November 23, 2020), and January 22, 2021; (ii) a summary of oral comments made at public hearings on January 19 and 20, 2021; and (iii) Staff's response to each comment, if such response was determined necessary. For purposes of this report, Article 27 of this NOPR will be referred to as solely "Energy Rules". Staff has compiled a summary of its recommendations at the end of this report based on the comments provided.

Written Comments filed in the Docket	Staff Response
<p>The following parties filed written comments in general support of the Energy Rules contained in the NOPR:</p> <ul style="list-style-type: none"><li>• <i>Mackenzie McGuffie, individual (12/18/2020);</i></li><li>• <i>Amy Douglass, Climate Reality Project Greater Phoenix Chapter (12/22/20);</i></li><li>• <i>Mark Weathers, Citizen's Climate Lobby Phoenix Central Chapter (12/22/20);</i></li><li>• <i>Todd Makdeksza, Flagstaff City Council (12/29/20);</i></li></ul>	<p>Staff does not recommend modification to the NOPR.</p>

<ul style="list-style-type: none"> <li>• <i>Marjorie Shavlik, Individual (1/11/21);</i></li> <li>• <i>Randy Miller and Kim Bartnikowski, Individuals (1/14/21);</i></li> <li>• <i>Jack Ehrhardt, Individual (1/19/21);</i></li> <li>• <i>Theresa A Paszkiewicz, Individual (1/19/21);</i></li> <li>• <i>Town of Fountain Hills, Mayor Ginny Dickey (1/14/21) and (1/14/21);</i></li> <li>• <i>Conservatives for Responsible Stewardship, David Jenkins (1/21/21);</i></li> <li>• <i>Gabrielle Lawrence, PhD, Individual (1/21/21) and (1/21/21);</i></li> <li>• <i>Various Consumers (1/22/21);</i></li> <li>• <i>Chispa Arizona, Laura Dent (1/22/21); and</i></li> <li>• <i>Stephen P. Cook, Individual (1/22/21);</i></li> <li>• <i>Arizona PIRG Education Fund, Diane E. Brown (Filed 1/22/21; Docketed 1/25/21);</i></li> <li>• <i>Various Consumers (Filed 1/22/21; Docketed 1/25/21); and</i></li> <li>• <i>Various Consumers (Filed 1/22/21; Docketed 1/25/21).</i></li> </ul>	
<p><b><u>HM3 Energy, Inc., Hiroshi Morihara, PhD. (12/3/20)</u></b></p> <p>HM3 Energy, Inc. addresses the potential role unrealized biomass could have toward the Energy Rules target of a 75percent reduction in carbon emissions by 2040, under subsection R14-2-2704(B)(4). Although they do not make a specific proposal to modify the NOPR, they believe that biomass offers opportunity for bio-coal production</p>	<p>In the proposed Energy Rules, Under R14-2-2703(A), both biogas and biopower are classified as a “Renewable Energy Resource”.</p> <p>In May 2017, Docket No. E-00000Q-17-0138 was opened to explore the role of forest bioenergy in Arizona as a means to use the woody biomass generated from public lands to create energy for the</p>



<p>which can help reduce Arizona's risk for catastrophic wildfires.</p> <p>Directly related to the NOPR, they provide a list of positive benefits of ridding woodlands of excess biomass such as the "ability for Arizona to continue using its existing coal-fired power plants for the rest of their useful lives, a savings to rate payers", and "a reduction in the need to build as many wind and solar farms and the required costly transmission lines to connect to the power grid". Additionally, they note that the 4 Forest Restoration Initiative ("4FRI") will be awarding forest thinning contracts to thin at least 750,000 acres of overstocked forests in Arizona. The Company would like to directly work with the Commission in addressing biomass.</p>	<p>electric grid. In Commission Decision No. 76295 (August 8, 2017), the Commission reiterated its interest in forest bioenergy, citing it as a carbon-neutral, renewable energy resource that is becoming increasingly important in Arizona. In Decision No. 77090 (February 22, 2019), applicable utilities were directed to work with Staff to develop a comprehensive plan for biomass generation. On January 16, 2019, the Commission issued a "Policy Statement Regarding the Role of Forest Bioenergy in Arizona". The policy statement concluded the use of forest biomass fuel for electric generation would produce multiple positive externalities such as healthier watersheds, additional employment opportunities and infrastructure to rural areas, and would reduce the frequency and intensity of wildfires.</p> <p>To date, the Commission has not ordered any utility to specifically procure a specific percentage or carveout of biomass. Staff believes the policy statement sufficiently addresses biomass at this time and does not believe any further action regarding biomass is necessary to explore in this NOPR process and does not recommend modification to the NOPR.</p>
<p><u>Abhay Padgaonkar, Individual (12/9/20)</u></p> <p>Mr. Padgaonkar's comments respond to an opinion column posted in the Arizona Republic regarding the clean energy mandates contained in the Energy Rules. He concludes that "...the Commission must remain vigilant about the prudence of future clean-energy decisions and investments of APS and other utilities rather than simply rubberstamping them..." Additionally, he includes a number of various research sources.</p>	<p>Based on the comments provided, Staff does not recommend modification to the NOPR.</p>

<p><u><i>Arizona Technology Council, Steven G. Zylstra (1/6/21)</i></u></p> <p>The Arizona Technology Council supports the carbon-free electricity, energy efficacy and energy storage standards detailed in the NOPR. They provide reference to their report titled "Innovation and Clean Energy industry Recommendations for Economic Recovery: Policy Options from Arizona's Business Community". The report concludes with specific recommendations for Policy Makers that promote clean energy and may help Arizona recover from the economic downturn caused by the pandemic. Notable recommendations include (i) encouraging clean and renewable energy technology adoption; (ii) investing in infrastructure and identifying opportunities for public-private partnerships; (iii) planning for long-term integration of hydrogen into Arizona's energy portfolio and economy; (iv) supporting policies that encourage advanced manufacturing; and (v) prioritizing clean and renewable energy opportunities by creating a state clean energy innovation office or designated clean energy innovation specialist at the Arizona Commerce Authority.</p>	<p>The carbon reduction mandate contained in the Energy Rules can be achieved by means of a technology-agnostic approach that provides enough flexibility for the potential utilization of underdeveloped or future electric energy generation technologies that reduce carbon emissions and may not be realized today. Based on the comments provided, Staff does not recommend modification to the NOPR.</p>
<p><u><i>The Western Way, Dorian Arik Miller (1/14/21)</i></u></p> <p>The Western Way provides general support of the Energy Rules standards contained in the NOPR. They also provide comment on the Integrated Resource Planning process and specifically, the advisory committee made up of stakeholders including ratepayers, to approve future load forecasts and a competitive all-source bid process.</p> <p>The Western Way provides that their recently conducted poll of Arizonans shows that 87 percent of Arizona voters believed that government should play a role to accelerate the development and use of clean energy, and 60 percent of Arizona voters would support the creation of proactive low</p>	<p>Based on the comments provided, Staff does not recommend modification to the NOPR.</p>

emission solutions to ensure compliance with federal Clean Air Standards.	
<p><u><i>The Joint Stakeholders, Caryn Potter (1/19/21); and Twenty-Two Joint Stakeholders (1/21/21)</i></u></p> <p>The Joint Stakeholders comments are filed on behalf of the following organizations: American Council for an Energy-Efficient Economy, American Lung Association, Arizona Interfaith Power and Light, Arizona Solar Energy Industries Association (AriSEIA), Arizona Public Health Association, CHISPA Arizona, Citizen's Climate Lobby, Elders Climate Action, Natural Resources Defense Council, Northern Arizona Climate Change Alliance, Pima County, Prescott Interfaith Climate Action Team, Sierra Club, Solar Energy Industries Association, (SEIA), Solar Gain, Solar United Neighbors, Southwest Energy Efficiency Project (SWEET), Sunrun, Vote Solar, Western Grid Group, Western Resource Advocates (WRA), and Yavapai Climate Change Coalition. The Joint Stakeholders support the Energy Rules and urge the Commission to act expeditiously to finalize and implement its Energy Rules.</p> <p>Additionally, the Joint Stakeholders include supplemental appendices. Appendix A summarizes analyses, studies, white papers, reports, and original research that document the public interest case for clean energy investment and enactment of the Arizona Commission's Energy Rules. Appendix B contains a list of 353 organizations/entities that have filed written comments in general support of the Energy Rules. Appendix C contains a list of 62 individuals and their respective organizations who have provided oral comments in general support of the Energy Rules.</p>	<p>The three appendices attached have helped to assist Staff in the development of the Energy Rules and this report. Based on the comments provided, Staff does not recommend modification to the NOPR.</p>
<p><u><i>115 Arizona Clergy and Faith Leaders, respective members (1/19/21)</i></u></p>	<p>Based on the comments provided, Staff does not recommend modifications to the NOPR.</p>

<p>The written comments provide general support for the Energy Rules; specifically:</p> <ul style="list-style-type: none"> <li>• The Carbon-free Electricity Standard;</li> <li>• An Energy Efficiency Standard;</li> <li>• A Distributed Storage Standard; and</li> <li>• Changes to the Commission's current Integrated Resource Planning Process.</li> </ul>	
<p><u><i>City of Scottsdale, Mayor David D. Ortega (1/20/19)</i></u></p> <p>The City of Scottsdale provides general support and urges the Commission to adopt the modernized Energy Rules. Specifically, the City of Scottsdale notes that the following rules will help cities to reach their own climate action and clean energy goals:</p> <ul style="list-style-type: none"> <li>• The Carbon-free Electricity Standard;</li> <li>• An Energy Efficiency Standard;</li> <li>• A Distributed Storage Standard; and</li> <li>• Changes to the Commission's current Integrated Resource Planning Process.</li> </ul> <p>The City of Scottsdale's comments have been signed by Mayor David D. Ortega, Vice Mayor Solange Whitehead, Councilwoman Tammy Caputi, Councilmember Tom Durham, Councilwoman Betty Janik, Councilwoman Kathy Littlefield, and Councilmember Linda Milhaven.</p>	<p>Based on the comments provided, Staff does not recommend modification to the NOPR.</p>
<p><u><i>Arizona Public Service Company ("APS"), Rodney Ross (1/20/21)</i></u></p> <p>APS provides "general support of the Commission's adoption of its comprehensive</p>	<p>Staff also notes that the Energy Rules include a provision relating to waivers and exemptions under R14-2-2716. Specifically, under subsection (A) "The</p>



<p>Energy Rules package which will help move Arizona towards a clean energy future.”</p> <p>APS notes that the Energy Rules include a compliance report provision (A.A.C. R14-2-2710), which will require electric utilities to provide detailed information by January 31st each year, beginning January 31, 2022, to assess progress in meeting the standards contained in the Energy Rules. APS expresses concern that the timing of this annual filing does not allow sufficient time for the Company to compile the required information. APS requests that the Commission modify this reporting requirement to reflect an April 1st reporting date, rather than January 31st of each year to ensure that the Company has enough time to sure the information is available and accurate.</p>	<p>Commission may waiver compliance with any provision of this Article or exempt a Utility from complying with any provision in this Article upon finding that good cause exists for granting such waiver or exemption and that it will not harm the public interest. to filing a waiver of any rule under R14-2-2716.”</p> <p>Based on the comments provided, Staff does not recommend modification to the NOPR.</p>
<p><u><b>Center for Resource Solutions (“CRS”), Todd Jones (1/20/21)</b></u></p> <p>CRS comments include discussion and recommendations on the following sections of Energy Rules: (i) the required documentation for an electric utility to “demonstrate its ability to deliver energy from Clean Energy Resources and Renewable Energy Resource to its Customers” under A.A.C. R14-2-2704(D); (ii) the “Baseline Carbon Emissions Level” defined under A.A.C. R14-2-2701(8) and the lack of a standardized methodology for calculation of the “Baseline Carbon Emissions Level”; the reporting requirements of applicable utilities under A.A.C. R14-2-2710(A); (iii) clarification regarding the metrics for compliance contained in A.A.C. R14-2-2710(A); (iv) the demonstration of the source of energy used to charge a storage system under A.A.C. R14-2-2704(D)(3); and (v) applicable energy that should be counted for compliance with the clean energy standard under A.A.C. R14-2-2704(B)(4).</p> <p>1) CRS states “Utilities need a uniform compliance instrument to demonstrate delivery of clean and</p>	<p>Staff will respond to each recommendation to the Energy Rules by CRS in chronological order of appearance.</p> <p>1) Regarding incorporating RECs as a compliance instrument. Staff recommends no change to the requirements of an applicable Utility to demonstrate compliance with the Energy Rules, as provided under R14-2-2704(D). The utility has the burden of proof to demonstrate compliance with the Energy Rules and any of the contained mandates, such as the carbon emissions requirement under R14-2-2704(B)(4). Staff recognizes that each applicable utility will have to incur additional costs, including additional administration costs, for generating or acquiring RECs and participating in WREGIS. Staff notes that RECs represent the social and environmental benefits of a kWh of generated energy, can be separated from the unit of electrical energy generated, and are tradable. There is a cost associated from acquiring, or certifying a generated REC. These costs will be</p>

renewable energy to customers and track carbon emissions associated with energy from generating units serving retail sales in compliance with A.A.C. R14-2-2704(B)(4). They provide that the carbon emissions associated with retail sales of electricity cannot be directly measured and should reflect exclusive ownership of tracked and verified generation attributes. They state that the tracking and verification methods included in the Energy Rules are insufficient and additional requirements and use of a compliance instrument to track and verify delivery of clean and renewable energy to utility customers and greenhouse gas emissions associated with retail sales will be critical to ensure the integrity of a clean energy standard in Arizona. CRS suggests that applicable utilities should be required to use renewable energy certifications ("RECs") – specifically, Western Renewable Energy Generation Information System ("WREGIS") certificates, where available, as an accounting instrument for compliance. CRS recommends creating definitions for REC and WREGIS and amending A.A.C. R14-2-2704(D) to require that "compliance shall be monitored, accounted for, and transferred through the use of RECs as recorded by the Western Renewable Energy Generation Information System." CRS provides that "the use of WREGIS certificates for compliance with the proposed clean energy standard would avoid double counting, which may occur, for example, where an electric utility reports zero-emissions energy from a renewable energy resource to the Commission for compliance with [A.A.C.] R14-2-2704(B) while the RECs associated with the same MWh of generation are used for compliance or to serve voluntary customers (i.e. to verify delivery of the same zero-emissions energy) in a different state, or different customers in Arizona". For clean energy resources for which WREGIS certificates are not currently issued, CRS suggests the Commission should require that utilities demonstrate contractual specification of acquisition and retirement of nonpower generation attributes. Specifically, the

reviewed in the context of a utility's rate case and may ultimately be passed down to its ratepayers in the form of rates. Staff recognizes that each utility is unique in size, its service territory, its administration, and most notably how it acquires electric energy. Each utility is provided enough flexibility to provide burden of proof to the Commission in its Clean Energy Implementation Plan that they are in compliance with the carbon emissions mandate under R14-2-2704(B)(4). Each Clean Energy Implementation Plan is filed with the Commission, reviewed by Staff, and considered by the Commission at an Open Meeting. Nothing within the Energy Rules restricts a utility from seeking additional means for demonstrating compliance with the carbon reduction mandate under R14-2-2704(B)(4). All utility requests to recover costs for compliance with the Energy Rules will be reviewed in the context for a rate case, and the Commission will determine which costs are prudent, pursuant to R14-2-2718. Staff does not recommend incorporating the recommendation of CRS and does not believe inclusion of the mandate for a utility to acquire RECs is necessary at this time.

Each utility's Clean Energy Implementation Plan should be reviewed on a case-by-case basis. Nothing within the Energy Rules restricts the Commission's ability to issue additional compliance measures for a utility at any time. Staff believes the compliance recommendations of the Energy Rules are sufficient and, like its other Rules under A.A.C. Title 14, Chapter 2, are re-valuated from time to time.

Commission require demonstration that the attributes have been contractually retired on the utility's behalf or cannot be otherwise transacted. CRS also recommends that for specific supply-side data, under R14-2-270(C), whether REC's were obtained and retired and if so, their quantity.

2) CRS provides that there is an inconsistency between the emissions that must be reduced (and reported annually) and the baseline against which the reduction is measured under the clean energy standard. Specifically, under A.A.C. R14-2-270I(8) and 2704(E), "Baseline Carbon Emissions Level" is defined as a utility's emissions "associated with energy produced from all generating units used to serve its kwh sales." Under R14-2-270I(13), "Carbon Emissions" are defined as emissions from generating sources. CRS states that there are two different quantities of emissions-the former representing retail sales while the later represents generation sources. CRS recommends either (i) revising the definition of "carbon emissions" to mean the carbon emissions associated with resources used to serve a utility's retail sales; or (ii) revising the clean energy standard under A.A.C. R14-2-2704(B)(4) to require that utilities reduce the carbon emissions associated with resources used to serve retail sales below its Baseline Carbon Emissions Level and revising requirements 2704(C)(3) and 2710(A) to require reporting of Carbon Emissions associated with retail sales. Additionally, concerning the calculation of the "Baseline Carbon Emissions Level", CRS recommends that the Commission or Commission Staff provide a standardized methodology for calculating emissions and baseline emissions levels, including accounting rules specifying that REC's must be retired by utilities on behalf of their Arizona load in order to assign the emissions of a renewable resource (et. zero emissions) to delivered energy for the purposes of reporting under sections 2704(C)(3)(h), R14-2-2704(F) and 2710(A)(5).

2) Regarding the definition recommendations of "Baseline Carbon Emissions Level" and "Carbon Emissions", Staff does not recommend any change. Staff believes the definitions are sufficient for purposes of the Energy Rules.

Regarding a pre-defined methodology for establishing a Utility's Baseline Carbon Emissions Level, Staff disagrees with the recommendation. Staff believes that sections R14-2-2704(E) through (M) establish an extensive process to review, establish, and verify the methodology for determining the Baseline Carbon Emissions Level in an adequate amount of time. During the process of establishing a Utility's Baseline Carbon Emissions Level, Staff notes that stakeholders will have an opportunity to participate in the process. Under R14-2-2704(I), stakeholders are provided opportunity to comment on a Utility's proposal before any Commission determination on the proposal.

3) Regarding the reporting requirements of the applicable electric utilities, Staff does not believe the recommendation by CRS is necessary. As stated under Staff response No. 1, each Clean Energy Implementation Plan is filed with the Commission for review. The Utility maintains the burden of proof of compliance, which includes providing enough information to prove compliance for the Commission to consider. Staff does not believe an outside third-party verification is necessary.

4) Regarding a utility demonstrating compliance of meeting the standards contained in the Energy Rules, please see Staff response No. 1 and 3.

3) CRS comments that there are inconsistencies between annual reporting requirements and requirements for Clean Energy Implementation Plans. The metrics used in the annual reporting requirements under R14-2-2710(A) are slightly inconsistent with the requirements under R14-2-204(C)(3) for a utility to comply with the Energy Rules. CRS recommends that the energy and emissions information reported annually by utilities under R14-2-2710(A) be consistent with the information included in the Clean Energy Implementation Plan under R14-2-2704(C)(3). They recommend that energy and emissions information that is reported annually be third-party verified similar to the Baseline Carbon Emissions Level. They also recommend that the Commission clarify whether energy "obtained" by a utility, energy from units "used to serve its kwh sales," and energy that it is "[able] to deliver [...] to its Customers" are equivalent and can be demonstrated based on the documentation provided under R14-2-2704(D).

4) CRS provides that the Energy Rules do not specify, under R14-2-2704(D)(3), how utilities will demonstrate that the source of energy used to charge a storage system is a clean or renewable energy resource. CRS recommends the Commission provide more detail on how utilities can and should demonstrate the source used to charge a storage system, the documentation that would be acceptable, and detailed requirements for verification and compliance with this section.

5) CRS provides that energy that has been or will be imported from other states, such as California through the Energy Imbalance Market ("EIM"), should not be counted toward compliance with Arizona's clean energy standard. CRS believes that there may be a risk of double counting zero-emissions electricity without a greenhouse gas attribution mechanism or a REC or other documentation mechanism. CRS recommends that the Commission include a general provision

5) Regarding the non-inclusion of market purchases for compliance purposes of the carbon emissions standard under R14-2-2704(B)(4), Staff does not believe any modification is necessary and recommends the definitions of "Baseline Carbon Emissions Level" and "Carbon Emissions" be unaltered. An electric utility's ability to make market purchases of electric energy is key to its ability to perform its responsibilities of providing reliable energy to its customers. Staff believes, and the Energy Rules provides, that these market purchases should be considered in the context of compliance with the carbon emissions standard under R14-2-2704(B)(4).

Furthermore, regarding a utility demonstrating compliance of meeting the standards contained in the Energy Rules, please see Staff response No. 1 and 3.

Based on the comments provided, Staff does not recommend modification to the NOPR.



<p>prohibiting double counting; a requirement for retirement of RECs associated with renewable energy that is used for compliance with the clean energy standard, and a provision prohibiting renewable energy that is imported from other states to count towards compliance with R14-2-2704(B)(4).</p>	
<p><u><i>American Lung Association, JoAnna Strother and Melissa Ramos (1/20/21)</i></u></p> <p>The American Lung Association supports the carbon-free electricity standard by 2050, with benchmarks along the way. The association provides that over 6 million Arizonans (85 percent of all residents) live in counties with failing grades for ozone and/or particle pollution, according to their State of the Air 2020 report. Furthermore, they provide that Phoenix appears on the Top Ten Most Polluted Cities list for unhealthy ozone, particle pollution days, and annual level of particle pollution. They state that "air pollution contributes to a wide range of negative health impacts including asthma attacks, heart attacks and strokes, lung cancer and premature death. Poor air quality also adds to disparities in exposures to harmful air pollution and associated negative outcomes, including in low-income communities and communities of color."</p>	<p>Based on the comments provided, Staff does not recommend modification to the NOPR.</p>
<p><u><i>Pima County, County Administrator C.H. Huckelberry (1/21/21)</i></u></p> <p>Pima County supports the Energy Rules, specifically (i) the requirements for energy efficiency, renewable energy, energy storage, clean energy, (ii) the three year Clean Energy Implementation Plan, and (iii) the three year Integrated Resource Plan cycle with added requirement of a stakeholder advisory group. Pima County states that they do have concerns for any specific technological requirements to meet the clean energy and renewable energy goals; and</p>	<p>Staff believes Pima County's concerns have been addressed already. In prior docketed drafts of the proposed Energy Rules, a technology-based Renewable Energy Standard and Clean Energy Standard were included, using retail electric energy sales as the utility's performance metric for compliance with the Commissions. The Energy Rules contained in the NOPR, pursuant to Decision No. 77829 focuses on carbon reductions as a performance metric rather than a Clean Energy Standard or Renewable Energy Standard as described</p>

would prefer more incremental dates for increasing the percentages of retail kWh sold as clean energy.	herein. Based on the comments provided, Staff does not recommend modification to the NOPR.
<p><b><u>Western Grid Group, Amanda Ormond (1/22/21)</u></b></p> <p>Western Grid Group supports adoption of the Energy Rules: stating that they are reasonable and in the public interest. Western Grid Group references studies conducted by the National Renewable Energy Lab ("NREL"): <i>Western Wind and Solar Integration Studies ("WWSIS")</i>, which analyze high penetrations of renewable energy in Arizona and the western interconnection region since 2010. They also reference: <i>2035 Report - Plummeting solar, wind, and battery costs can accelerate our clean electricity future</i>, University of California, Berkeley, Center for Environmental Public Policy (June 2020), which concludes that the United States can deliver 90 percent clean, carbon-free electricity nationwide by 2035, dependably, at no extra cost to consumers and without the need for new fossil fuel plants.</p>	Based on the comments provided, Staff does not recommend modification to the NOPR.
<p><b><u>City of Tucson, Mayor Regina Romero (1/22/21); and Tucson City Council, Ward 3, Paul Durham (1/22/21)</u></b></p> <p>The City of Tucson applauds the Commission's Energy Rules and is in general support of its proposed mandates. The City of Tucson provides that they have taken the following actions in reducing their carbon footprint:</p> <ul style="list-style-type: none"><li>• On April 21, 2020, the City of Tucson Mayor and Council approved Resolution 23166 recommending the Commission to adopt a 100 percent clean energy standard by 2050.</li><li>• On January 20, 2021, Mayor and Council formally opposed HB2248 and SB1175. The City supports the Arizona Corporation Commission's constitutional authority to establish energy production standards for Arizona utilities.</li></ul>	Based on the comments provided, Staff does not recommend modification to the NOPR.

<ul style="list-style-type: none"><li>• We established strong climate action goals through Resolution 23222 declaring a Climate Emergency and setting a 2030 carbon neutrality goal for city operations.</li></ul> <p>Mr. Durham, in his written comments, attaches the entirety of Resolution No. 23222.</p>	
<p><u><i>Vote Solar, Solar United Neighbors, Arizona Solar Energy Industries Association, and Sunrun, Ronny Sandoval (1/22/21)</i></u></p> <p>The organizations are in general support of the NOPR and Energy Rules. They provide reference to studies docketed by other stakeholders supporting the mandates contained in the Energy Rules. Additionally, they provide a petition by 5,180 Arizonans in support of:</p> <ul style="list-style-type: none"><li>• Setting a binding 50 percent by 2030 renewable energy standard and 100 percent by 2045 clean standard.</li><li>• Ensuring that 10 percent of electricity comes from local distributed resources like rooftop solar, community solar, and other customer-driven energy options by 2030.</li><li>• Ensuring cumulative energy efficiency savings of 35 percent by 2030.</li><li>• Establishing a more comprehensive and transparent energy planning process in which the ACC would review a utility's Integrated Resource Plan and provide opportunities for public and stakeholder input.</li></ul> <p>The organizations also provide reference to a report by Strategen and prepared for Southwest Energy Efficiency Project (01/21/21).</p>	<p>Based on the comments provided, Staff does not recommend modification to the NOPR.</p>

3Degrees Group, Inc. ("3Degrees"), Maya Kelty  
(1/22/21)

3Degrees' comments focus primarily on the Clean Energy Implementation Plan section of the Energy Rules (R14-2-2704), and the demonstration of compliance for achieving a 100 percent reduction in carbon emissions. They state, "we are concerned that without explicit use of appropriate compliance instruments, the Proposed Rules will not achieve their intended goal and may disadvantage Arizona renewable energy generators from participating in renewable energy markets." They comment that, because the carbon reduction standard contained under R14-2-2704(B)(4), is a load-based policy, the "generation attributes" should be recognized through the enforcement of requiring a Utility to show compliance via RECs.

They have the following recommendations:

- Update R14-2-2704(D) to state "Compliance shall be monitored, accounted for, and transferred through the use of RECs as recorded by the Western Renewable Energy Generation Information System (WREGIS). For clean energy resources for which RECs are not currently issued, the Electric Utility must provide documentation that it owns the non-power attributes of the electricity Generation from the clean energy resources."
- Update R14-2-2704 to include a section after R14-2-2704 (E) that includes a methodology, or a requirement to develop a methodology, for determining the Baseline Carbon Emissions Level. The Proposed Rules should specify that the methodology must require that RECs or relevant generation attributes be retained in order for clean energy resources to be counted.
- Update R14-2-2710(C) to include reporting on whether RECs were obtained and retired, and

Staff believes that it has addressed the three recommendations provided by 3Degrees in this report under its response to CRS.

Based on Staff's review and response to the comments provided by CRS and 3Degrees, Staff does not recommend modification to the NOPR.

<p>the quantity of RECs obtained and retired in WREGIS by the utility.</p>	
<p><b><u>Garkane Energy Cooperative ("Garkane"), William P. Sullivan, Atty (1/22/21)</u></b></p> <p>Garkane's comments support the proposed R14-2-2702 "Applicability" provision. This section makes the proposed Energy Rules applicable to electric public service corporations that have "more than half of its customers located in Arizona." Garkane states approximately 9.3 percent of its customers reside in Arizona, thus, pursuant to the applicability section, the proposed Energy Rules would not apply to them.</p>	<p>Based on the comments provided, Staff does not recommend modification to the NOPR.</p>
<p><b><u>Tucson Electric Power Company ("TEP") and UNS Electric, Inc ("UNS Electric") (Collectively "the Companies") (1/22/21)</u></b></p> <p>TEP and UNS Electric filled collective comments that are supportive of the Energy Rules as amended and approved by the Arizona Corporation Commission on November 13, 2020. They believe the Energy Rules provide a flexible glide path for advancing clean energy policy for Arizona, and are fair, balanced, and achievable, and closely align with TEP's and UNS Electric's 2020 Integrated Resource Plans.</p> <p>The Companies are providing minor, non-substantive changes to the Energy Rules that serve to clarify language and align timing of Energy Rule plans, as follows:</p> <p>A) Carbon Emissions: The companies propose modifying the current definition for "Baseline Carbon Emissions Level" which incorporates language from Section R14-2-2704(E). They note that retail sales are served from generation resources that also include market purchases. They recommend the following redlined modifications:</p>	<p>Staff will address each recommendation in order of appearance.</p> <p>A) Regarding modifying language related to "Baseline Carbon Emissions Level," Staff believes the proposed modifications of subsections R14-2-2701(8) and R14-2-2710(5) are unnecessary and should not be adopted. Staff does not believe the modifications provided by TEP and UNS Electric change the interpretation of current definitions and referenced subsection and thus, are unnecessary.</p> <p>The current definition of "Baseline Carbon Emissions Level" recognizes the importance of including market purchases when evaluating carbon emissions. Without taking into consideration market purchases when evaluating carbon reductions, that is – energy procured by the utility in the market, and not from owned generating units – the Utility would be disincentivized from procuring energy in the market that has been generated with little or no carbon pollutants. Additionally, this can further disincentive the utility from taking advantage of</p>



<p>Under R14-2-2701(8): “Baseline Carbon Emissions Level” means a Utility’s annual gross Carbon Emissions directly associated with energy produced from all <u>Generating Units resources including market purchases used to serve its retail kwh sales, during the consecutive three-calendar-year period of 2016 to 2018</u>, expressed in metric tons.</p> <p>Under R14-2-2701(13): “Carbon Emissions” means carbon dioxide emissions resulting from the combustion of fossil fuels, such as coal, petroleum, natural gas, oil, shale, and bitumen, in a Generating Unit, expressed in metric tons.</p> <p>Under R14-2-2710(5): 5. The total Carbon Emissions disaggregated by all <u>Generating Units portfolio resources used to serve its the Electric Utility’s retail kwh sales</u>, expressed in metric tons;</p> <p>B) All-Source Request for Information (“ASRFI”): Under R14-2-2707, the all-source request for information uses the term “obtain bids”. The Companies believe that because no bids are being obtained in this rule, this language should be modified to “obtain information” under R14-2-2707(A)(1) and (9) and additionally under subsection (9), the term “bidders” should be modified to “vendors”. The recommend a similar change be reflective under R14-2-2708(B)(1).</p> <p>C) Timing: The companies propose minor changes to the timeline of filings throughout the Energy Rules – specifically for the Clean Energy Implementation Plan and the Integrated Resource Plans. They provide a detailed chart of the timeline of filings and actions contained in the proposed Energy Rules. Most notably, they recommend that the IRP and Clean Energy Implementation Plan should be filed together, on April 1, 2023, with Commission approval occurring by February 1, 2024; and reoccurring every three years thereafter. Additionally, they recommend modifying the Electric Utility Annual Reporting Requirements to April 1, rather than January 31.</p>	<p>potentially lower prices in the market. Staff recommends maintaining the current form of the definition for “Baseline Carbon Emissions Level” and subsection R14-2-2710(5).</p> <p>Staff does not recommend modifications to the definition of “Carbon Emissions”, under R14-2-2701(13), as recommended by TEP and UNS Electric. Staff maintains that this definition is intended to use the term “carbon” over “carbon dioxide”. This ensures that other carbon-based pollutants are captured, monitored, and then reported to the Commission by each utility.</p> <p>B) Regarding the term modification in the ASRFI section, R14-2-2707, Staff does not recommend a modification to the NOPR.</p> <p>C) Regarding a number of the dates contained in the Energy Rules, Staff believes modification of these dates is unnecessary at this time.</p> <p>Staff also notes that the Energy Rules include a provision relating to waivers and exemptions under R14-2-2716. Specifically, under subsection (A) “The Commission may waive compliance with any provision of this Article or exempt a Utility from complying with any provision in this Article upon finding that good cause exists for granting such waiver or exemption and that it will not harm the public interest, to filing a waiver of any rule under R14-2-2716.”</p> <p>Based on the comments provided, Staff does not recommend modification to the NOPR.</p>
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<p><u><i>Sierra Club – Grand Canyon Chapter, Sandy Bahr (1/22/21)</i></u></p> <p>Sierra Club supports the Energy Rules. In their comments, they provide reference to the Strategen report provided by SWEEP in its written comments.</p>	<p>Based on the comments provided, Staff does not recommend modification to the NOPR.</p>
<p><u><i>Coalition of Business and Trade Associations (“the Coalition”), Various Stakeholders (1/22/21)</i></u></p> <p>The Coalition of Business and Trade Associations is comprised of the following organizations: Ameresco, Arizona Technology Council, Ball Corporation, Building Performance Association, Cree Lighting, EDF Renewables, Franklin Energy, Google, Hotel Congress, Interwest Energy Alliance, Johns Manville, Lutron Electronics, Merit Foods, NAESCO (National Association of Energy Service Companies), NAIMA (North American Insulation Manufacturers Association), Oracle, Primavera Foundation, REI Co-op, Salesforce, Schneider Electric, Sonoran STEM Science Academy, TechNet, Tucson 2030 District, Uplight, Wildwind Realty, LLC; The Historic Y and Studio Y.</p> <p>They represent major businesses, trade associations, employers, and large energy consumers in Arizona. Collectively, they support the use of renewable energy and energy efficiency in the state and furthermore support strong, enforceable clean energy standards in Arizona. Regarding the Energy Rules, they support: (i) A 35 percent by 2030 Electric Energy Efficiency Resource Standard; and (ii) a 100 percent by 2050 carbon-free electricity standard.</p>	<p>Based on the comments provided, Staff does not recommend modification to the NOPR.</p>
<p><u><i>Dixie Escalante Rural Electric Association (“Dixie-Escalante”), Inc., Jennifer Cranston, Atty (1/22/21)</i></u></p>	<p>Based on the comments provided, Staff does not recommend modification to the NOPR.</p>

<p>Dixie Escalante's comments support the proposed R14-2-2702 "Applicability" provision. This section makes the proposed Energy Rules applicable to electric public service corporations that have "more than half of its customers located in Arizona." Dixie Escalante has approximately 10 percent of its customers that reside in Arizona, thus pursuant to the applicability section, the proposed Energy Rules would not apply to them.</p>	
<p><u><b>Southwest Gas Corporation ("Southwest"), Matt Derr (1/22/21)</b></u></p> <p>Southwest supports the role for natural gas utilities as the proposed rules offer in Section R14-2-2712. Southwest states that "natural gas customers will benefit as natural gas utilities have the opportunity to present Energy Efficiency Reports to the Commission describing how the utility will offer cost effective energy efficiency program for its customers. The Company believes that R14-2-2712 is critical as it maintains parity between natural gas and electric utilities.</p>	<p>Based on the comments provided, Staff does not recommend modification to the NOPR.</p>
<p><u><b>Interwest Energy Alliance, Nate Blouin (1/22/21)</b></u></p> <p>Interwest generally supports the Energy Rules but does offer recommended modifications that, as stated by Interwest, "[s]hould the ALJ and Commission decide not to incorporate Interwest's suggested amendments, we still support implementation of the proposed Rules." Interwest's recommendations are as follows:</p> <p>1) Under R14-2-2701, Definitions:</p> <p>(i) Require the All-Source Request for Proposals" (or "ASRFP") to be overseen by an Independent Monitor.</p> <p>(ii) Under the definition of "Carbon Emissions" include "biopower and biogas" as a fossil fuel.</p>	<p>Staff will address each comment in chronological order of appearance:</p> <p>1) (i) Regarding the request for the ASRFP process to be overseen by an independent monitor. Staff believes Section R14-2-2714, Independent Monitor Selection and Responsibilities, and specifically, subsections R14-2-2714(A) and (F) is sufficient in addressing the recommendation of Interwest.</p> <p>(ii) Staff believes that terms of a Biogas Electric Generator and a Biopower Electric Generator, pursuant to R14-2-2703, should not be modified as recommended. Both are considered as carbon-neutral resources.</p>

<p>(iii) Under "Dispatchable Resources", include inverter-based resources and energy storage.</p> <p>2) Under R14-2-2703. Renewable Energy Resources, for the descriptions of a Biogas Electric Generator and a Biopower Electric Generator, include "greenhouse gas emissions, and particulate emissions".</p> <p>3) Under R14-2-2704. Clean Energy Implementation Plan, under (B)(4), Interwest recommends moving the first interim target from 2032 to 2028. They also comment that they believe 2040 is a reasonable target to aim for 100 percent carbon emission reductions.</p> <p>4) Under R14-2-2705. Development of Proposed Load Forecast and Needs Assessment, under subsection (A), include a provision an additional load forecast related to sensitivities of fuel prices and costs of carbon.</p> <p>5) Under R14-2-2707. All Source Request for Information, under (B)(2), to include an additional stakeholder in a public workshop format; and a new provision (H) that reads "This rule shall not prevent the utility from procuring a particular resource or portfolio of resources found to be prudent in the ASRFP process."</p> <p>6) Under R14-2-2708. ASRFI Process; Integrated Resource Plan Approval, delete subsection (D)(9) related to the consideration of transmission to inform resource planning and replace it with the following "Opportunities to procure cost-effective resources through participation in regional energy markets or through development of transmission infrastructure."</p> <p>Additionally, under subsection (I), the following modification: "The Commission shall issue a decision approving a <del>Resource Portfolio</del> the <u>Integrated Resource Plan</u> to be implemented by the Load-Serving Entity."</p>	<p>(iii) Staff does not believe the inclusion of the terms "inverter-based resource" and "energy resources" are necessary to identify. Staff believes the definition already sufficiently addresses these types of resources.</p> <p>2) Please see Staff response (1)(ii).</p> <p>3) Staff does not recommend adopting Interwest's recommendation of modifying the date of the first interim target of the carbon reduction standard under R14-2-2404(B)(4). Staff has engaged in an extensive review process of the target dates under this standard and believes that 2032 provides each utility enough time and flexibility to achieve the standard without need for filing waivers. Staff notes that each applicable utility is unique in its current sources for acquiring electric energy and if the targets are shortened they may not have enough time to reduce the dispatch of energy generation resources that currently emit carbon in a method that is cost-effective to its ratepayers. In order to reduce the potential consumer impacts, Staff believes the 2032 date is necessary and recommends no modification in this date.</p> <p>4) Staff does not recommend any additional load forecasts be evaluated by an applicable Load-Serving Entity. Staff believes the recommendations under R14-2-2705(A) are appropriate and furthermore, will be evaluated by Staff and the Commission. At that time, Staff encourages stakeholders to participate in the review of each Load-Serving Entity's filings.</p> <p>5) Staff does not recommend any change to makeup of the RPAC is needed. Staff</p>
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<p>7) Under R14-2-2709, Implementation of Action Plan, Interwest encourages the use of an Independent Monitor to oversee the All-source request for Proposals process. They suggest the following language be added to subsection (B): "The Independent Monitor chosen in accordance with R14-2-2714 shall oversee the ASRFP on behalf of the Commission and shall ensure that the ASRFP produced by a utility incorporates stakeholder input and does not favor the utility in question. The ASRFP shall then be approved by the Commission before being issued." They also provide that for any bids submitted under this process, a Load-Serving Entity's Procurement Activity Report shall include the number of bids and the median price of the bids.</p> <p>In conclusion, Interwest provides reference to a survey from Yale Climate Opinion Maps 2020 showing that "73 percent of Arizonans believe that carbon dioxide emissions should be regulated".</p>	<p>believes the RPAC represents a diversely wide range of stakeholders across multiple industries, customer classes, and backgrounds.</p> <p>6) Staff does not recommend the proposed modifications regarding the ASRFI section R14-2-2708 as recommended by Interwest. The ASRFI development process is extensive enough to allow for input from the RPAC, Staff, and the Commission. Specific resources can be considered and weighed in a Load-Serving Entities proposed ASRFI at the time this process is engaged. Staff does not believe any further modification to this Section is necessary at this time.</p> <p>7) Please see Staff response No. 1. Staff believes that the process a utility must follow in retaining an independent monitor is robust and should not be modified. Staff does not believe any further modification of the Independent Monitor section pursuant to R14-2-2714 is necessary.</p> <p>Based on the comments provided, Staff does not recommend modification to the NOPR.</p>
<p><u>City of Phoenix, Mayor Kate Gallego (1/22/21)</u></p> <p>The City of Phoenix supports the proposed targets expressed in the Energy Rules. Specifically, they support:</p> <ul style="list-style-type: none"> <li>• a just and equitable energy transition</li> <li>• 35 percent cumulative energy efficiency savings by 2030</li> <li>• 100 percent clean energy by 2050, and</li> </ul>	<p>Staff will address each recommendation in chronological order of appearance.</p> <p>1) Regarding the recommended language of allowing customers to add a greater share of renewable energy from the market through mechanism such as AG-X, Staff believes that Commission Decision 77043 (January 16, 2019), which contains the Commission's adopted "Policy Statement Regarding AG-Y Alternative Generation/Buy-Through Program" is sufficient in addressing these customers at</p>



- 5 percent energy storage requirement by 2035 (40 percent customer-owned or leased storage)

The City of Phoenix also provides a number of modifications for consideration. They are as follows:

1) Regarding renewable energy, they believe that "there is a specific need for a mechanism that will allow customers to add a greater share of renewable energy in their portfolios not currently offered by the utility while also avoiding any cost-shift to other customers. This could be done by allowing customers to procure renewable energy from the market through mechanisms such as AG-X (in which case it might be named AG-Renewables), through "sleeved purchases" from a renewable energy developer through the utility, or through custom agreements made directly with the utility".

2) Regarding distributed energy resources ("DER"), they recommend the Commission consider a more ambitious distributed generation target.

3) Regarding energy efficiency, recommends a requirement that a specific share of net annual revenue of regulated utilities be set aside to support energy efficiency programs in underserved neighborhoods and communities.

this time. In this Decision, the Commission directed regulated utilities to adopt an alternative generation/buy-through program. Furthermore, Staff notes that Commission Decision No. 76295 (August 18, 2017), approved an Alternative Generation Rate Rider AGX ("AG-X") in APS's service territory. Based on these Commission Decision, Staff does not believe any modification to the Energy Rules, as recommended by City of Phoenix is necessary.

2) Staff does not recommend any modification to the mandate concerning DER dispatchable resources, or specifically energy storage, and provided under R14-2-2704(B)(3), and further addressed in the Energy Rules. Staff notes that these mandates would be the minimum requirement an applicable utility must comply with.

3) Staff does not recommend any modification to the mandates concerning energy efficiency under R14-2-2704(B)(2).

Staff has reviewed the recommendations and does not believe they are needed at this time. Staff does not recommend modification to the NOPR.

Advanced Energy Economy ("AEE"), Shelby Shults (1/22/21)

AEE generally supports the Energy Rules. They provided comments on a number of the sections contained in the Energy Rules such as: (i) Economic benefits of the proposed energy rules; (ii) Net Metering successor tariffs (R14-2-2307); (iii) Carbon emission reduction goal, demand-side resource capacity requirements (R14-2-2704); (iv) Load forecasting, integrated resource planning, and resource procurement (R14-2-2705 through 2709); (v) Electric energy efficiency (R14-2-2711); and (vi) Energy Storage System tariff (R14-2-2713).

AEE strongly supports "green tariffs" or comparable utility offerings that accompany ambitious renewable resource development. They encourage Arizona utilities and the Commission to look into strengthening C&I customer offerings in subsequent proceedings to ensure that these proposed energy rules produce maximum economic benefits.

Regarding net metering tariffs, AEE recommends allowing new customer entry into the existing program with a clear timeline and rules for how the state will eventually transition to the successor tariffs.

Regarding compliance, AEE recommends that REC's be utilized to ensure that portfolios are meeting the requirements for carbon-free generation in Arizona.

Regarding the RPAC, AEE recommends that the Commission clarify if the RPAC will be created via an application process to the LSEs.

Regarding electric energy efficiency, AEE recommends that cost effectiveness be evaluated at the program or portfolio level as opposed to individual resource level. Furthermore, they

Staff appreciates the comments of AEE. Staff will address each of AEE's recommendations in chronological order of appearance.

Staff does not believe that the inclusion of "green tariffs," as described by AEE should be considered in the context of the rules at time. Staff believes the cost recovery section of the Energy Rules under R14-2-2718 properly addresses the means for a utility to recover the cost for compliance with the provisions of the Energy Rules.

Regarding Net Metering, in Decision No. 75859 (January 3, 2017), the Commission ordered Staff to file potential modifications to the current Net Metering Rules, to comport with changes in circumstances since their adoption. Such modifications and discussion of the proceedings are contained in Docket No. E-00000J-14-0023; In the matter of the Commission's Investigation of Value and Cost of Distributed Generation. Staff does not recommend modifying the proposed modifications of the Net Metering Rules contained in the NOPR.

Staff believes it has addressed the recommendations of AEE related to REC's in its response to CRS.

Staff does not recommend any changes to sections R-14-2-2710 and R14-2-2711. Staff believes any changes regarding the energy storage system tariff be addressed on a case-by-case basis so no modification to R-14-2-2713 is needed.

Staff believes that all of AEE's recommendations have been addressed. Based on the comments provided, Staff

<p>suggest examining the developed framework of the National Standard Practice Manual for Benefit-Cost Analysis for Distributed Energy Resources to incorporate a set of fundamental principles for assessment, creating a multi-step process, and developing guidance for secondary tests.</p> <p>Regarding the energy storage system tariff, AEE recommends that the tariff should strive to compensate customer for response to dynamic system-wide and local distribution needs.</p>	<p>does not recommend modification to the NOPR.</p>
<p><u><b>Southwest Energy Efficiency Project ("SWEEP"),</b></u> <u><b>Ellen Zuckerman and Caryn Potter (1/22/21)</b></u></p> <p>SWEEP provides an independent analysis of the energy system and ratepayer impacts of the Commission's Energy Rules conducted by Strategen Consulting. They stated that in order to conduct the analysis, Strategen built a capacity expansion model of the Arizona power system and determined the state's cheapest, most reliable mix of energy options moving forward. The results of this least cost analysis were then compared with the Energy Rule's requirements (as approved in November 2020).</p> <p>The analysis identified the optimal, least-cost electricity generation resource portfolio from 2021 through 2035 for APS and TEP. Regarding ratepayer benefits, SWEEP highlights a number of key findings:</p> <ul style="list-style-type: none"><li>• From 2010-2019, the efficiency programs of TEP, APS, and UNS Electric delivered more than \$1.4 billion in net economic benefits to all Arizonans.</li><li>• Efficiency has created more than 40,000 jobs across our state, including more than 28,000 jobs in Phoenix and 6,000 jobs in Tucson.</li></ul>	<p>Staff has reviewed the recommendations and does not believe changes are needed at this time. Staff does not recommend modification to NOPR.</p>

<ul style="list-style-type: none"><li>• Together, APS and TEP's efficiency programs have saved more than 15 billion gallons of water.</li><li>• From 2010-2019, APS's efficiency programs alone avoided more than 1,000 MWs which is equivalent to avoiding the construction of 10 combustion turbine units at Ocotillo [Generating Station].</li><li>• From 2010-2019, every \$1.00 of ratepayer money invested in APS and TEP efficiency programs returned ~\$3.92 in total benefits to ratepayers.</li></ul> <p>SWEEP states that the Commission must act expeditiously to finalize and implement the Energy Rules to ensure reliable, least cost power for all Arizona ratepayers.</p>	
<p><b><u>Solar Energy Industries Association ("SEIA") and Arizona Solar Energy Industries Association, Scott F. Dunbar, Atty. (1/22/21)</u></b></p> <p>SEIA supports the Energy Rules' proposed (i) requirement that electric utilities develop Clean Energy Implementation Plans that will eliminate all carbon emissions by 2050, with interim standards requiring a 50 percent reduction in emissions by 2032 and a 75 percent reduction in emissions by 2040; and (ii) the distributed energy storage system tariff requirement.</p> <p>At the Commission's public comment hearing on January 20, 2021, SEIA identified and described several implementation issues with the proposed Energy Rules. Upon further reflection, SEIA has decided not to recommend any modifications to the Energy Rules at this time. SEIA states that they intend to be involved in future proceedings implementing the Energy Rules and may raise these implementation issues at the appropriate future time.</p>	<p>Staff does not believe any comment is needed and does not recommend any modifications to the NOPR.</p>

Western Resource Advocates ("WRA"),  
Adam Stafford, Atty. (1/22/21); and (Filed  
1/22/21; Docketed 1/25/2)

WRA generally supports a clean energy standard based on carbon emission reductions that requires zero emissions by mid-century. They provide a number of recommendations related to the Energy Rules, as follows:

1) R14-2-2701 and R14-2-2704: WRA attached a proposed amendment which modifies the definitions in R14-2-2701 relevant to the carbon rule in R14-2-2704(B)(4), as well as corresponding changes to R14-2-2704.

First, WRA states that carbon dioxide (CO<sub>2</sub>) is completely absent from R14-2-2701. WRA believes this to be an oversight and that the definitions associated with "carbon emissions" were intended to specifically reference "carbon dioxide," however, it is important that clarification is made.

Second, WRA has proposed modification to other definitions, such as "Arizona Load" and "Annual Carbon Emissions". They state that these definitions have been proposed to resolve discrepancies in the current definitions that specify "retail" sales and those that do not, as well as accounting for line losses associated with retail load.

Third, WRA includes additional definitions such as "Specified Emissions" and "Unspecified Emissions" to differentiate between the emissions from specific power plants, whether the plant is owned by a utility or if the utility purchases the power from a designated generating unit, from those market purchases where the utility purchases power but the generating resource is not identified.

Staff believes that all of WRA's recommendations related to definitions have been addressed by Staff's response to CRS, Interwest and the City of Phoenix. Regarding the Stakeholder process, Staff believes that Stakeholders will have an opportunity to participate in the review and evaluation of filings. Staff does not believe modification should be made.

Staff believes that all of WRA's recommendations have been addressed. Based on comments provided, Staff does not recommend modifications to the NOPR.



<p>2) Interim Years in R14-2-2704. WRA recommends that the first interim year in R14-2-2704(B)(4) should be 2030 and not 2032.</p> <p>3) Stakeholder Process: WRA suggests that stakeholder engagement be added as a component of the utilities' Clean Energy Implementation Plans under R14-2-2704.</p> <p>4) Carbon Accounting Mechanism. WRA states that they understand that utilizing Clean Energy Credits ("CECs") or RECs would be a substantial change from the current rule and does not advocate incorporating their use at this time. Although, WRA advocates that the Commission should consider incorporating a CECs or RECs in its next update.</p> <p>Additionally, WRA filed a list of 52 Arizona residents who added their name in support of the Commission's Energy Rules update as individuals and not on behalf of WRA.</p>	
<p><u><b>Western States Petroleum Association ("WSPA"), Margo Parks (1/22/21)</b></u></p> <p>WSPA encourages the Commission to avoid any energy rules that would exclude the procurement of certain types of fuel and technology resources, essentially picking winners and losers, without considering a more flexible option that would allow the most cost effective and reliable resources to provide the desired emissions characteristics and fill any potential gaps in service. WSPA supports the three pillars that should serve as the foundation of any energy rules that were discussed in the letter filed by Chairwoman Marquez Peterson in this docket: sustainability, reliability, and cost-effectiveness.</p> <p>WSPA goes on to say that pursuant to subsection R14-2-2704(B)(4), regarding an electric utility's requirement to meet a 100 percent reduction in carbon emissions below a baseline carbon</p>	<p>At this time, Staff does not recommend the modifications proposed by WSPA. Staff recommends maintaining the mandates in their current form under R14-2-2704, and as ordered by the Commission in Decision No. 77829.</p>

emissions level by December 31, 2050, the 100 percent emission reduction leaves little room for flexibility related to fuel-, technology-, or reliability-based needs. They state that certain clean energy technologies, such as energy storage required by Section R14-2-2704(B)(3), are still unproven in their ability to cover extended periods of demand and meet reliability requirements cost-effectively. They believe that as an influx of economically competitive renewables enters Arizona's grid, natural gas resources will be crucial to fill in the "gaps" of intermittency, which requires on-demand energy from spinning reserves, typically supplied by natural gas.

WSPA commends the Commission's work on developing new energy rules but does not support the 100 percent carbon reduction standard as drafted.

*The Institute for Policy Integrity at NYU Law*  
*("Policy Integrity"),*  
*Iliana Paul, et. al. (1/22/21)*

In their comments, Policy Integrity makes reference to their October 15, 2020, comments in Docket No. R-00000V-19-0034 – In the Matter of Resource Planning and Procurement in 2019, 2020, and 2021. Their comments pertain to requiring LSEs to not only provide quantities of air pollutants they expect to emit in their respective IRPs, but also monetized estimates of the damages expected to result from those emissions. They state that monetizing the emissions impacts from pollutants would better inform comparisons of the costs and benefits of different generation mixes.

Policy Integrity attached three studies to their comments:

- Valuing Pollution Reductions: How to Monetize Greenhouse Gas and Local Air Pollutant Reductions from Distributed Energy Resources (2018).

Staff has reviewed the filings provided. Based on the comments, Staff does not recommend modification to the NOPR.

<ul style="list-style-type: none"> <li>• Getting the Value of Distributed Energy Resources Right: Using a Societal Value Stack (2019); and</li> <li>• Making the Most of Distributed Energy Resources: Subregional Estimates of the Environmental Value of Distributed Energy Resources in the United States (2020).</li> </ul>	
<p><b><u>Arizona Corporation Commissioner Justin Olson (1/22/21)</u></b></p> <p>Commissioner Olson's written comments can be found in the docket filed on January 22, 2021.</p> <p><a href="https://docket.images.azcc.gov/0000202932.pdf?i=1614380930700">https://docket.images.azcc.gov/0000202932.pdf?i=1614380930700</a></p>	<p>Staff does not have any comment on Commissioner Olson's written comments at this time.</p>
<p><b><u>Oral Comments (1/19/21 &amp; 1/20/21)</u></b></p> <p>Administrative Law Judge ("ALJ") Belinda A. Martin did not ask Staff to address any specific aspects of the NOPR although ALJ Martin did ask Staff to provide a statement regarding the rulemaking.</p>	<p><b><u>Staff Response</u></b></p> <p>Staff's statement regarding the rulemaking was presented on January 19, 2021, and can be found in the transcript of the proceedings, docketed on February 2, 2021.</p>
<p>The following parties provided oral comments in general support of the proposed Energy Rules contained in the NOPR:</p> <ul style="list-style-type: none"> <li>• Jeanne Devine;</li> <li>• Char Hoffman;</li> <li>• Autumn Johnson, WRA;</li> <li>• Richard Sigler;</li> <li>• Will Humble, Arizona Public Health Association;</li> <li>• Rivko Knox;</li> <li>• Amy Douglas;</li> </ul>	<p>Staff does not recommend any changes to the NOPR based on the comments provided.</p>

- Kimberly Faddoul;
- Doug Bland, Arizona Interface Power and Light;
- Paul Getty;
- Kim Maddox;
- Melissa Ramos, American Lung Association;
- Beth Ballmann;
- Dr. Judith Anderson;
- Matt Derr, Southwest Gas Corporation;
- Doran Miller, The Western Way;
- Daniel Holcom;
- Amanda Ormond, Western Grid Group;
- Andrea Packard, member of Mormon Women for Ethical Government;
- Robert and Marquette White,
- Sophia Von Hippel;
- Mark Weathers, Citizens' Climate Lobby and the Climate Reality Project Organization.
- Gloria Montano, CHISPA Arizona;
- Theo Massey;
- Diane Brown, Arizona PIRG;
- Sandy Bahr, Sierra Club's Grand Canyon Chapter;

<ul style="list-style-type: none"><li>• Rachel Scholes;</li><li>• Gabrielle Lawrence; Citizens Climate Lobby;</li><li>• Caryn Potter. SWEEP;</li><li>• Bret Fanshaw, Solar United Neighbors;</li><li>• Steven Zylstra, Arizona Technology Council;</li><li>• Kyle Kline;</li><li>• Kay Baldwin;</li><li>• Peter Lafford;</li><li>• Russell Lowes, advisory board member of Arizonans for Community Choice;</li><li>• Julian Boggs, U.S. Energy Storage Association;</li><li>• Frederick Davis; and</li><li>• Danielle Corbett, member of Mormon Women for Ethical Government;</li></ul>	
<p><b><u>Maureen McBride, Individual</u></b></p> <p>Ms. McBride comments on the November 2018 election results of Arizona's Proposition 127, which did not pass. She describes that Proposition 127 was a mandate that, if passed, would have replaced the current plan for increasing renewable energy requirements from 15 percent by 2025 to a percentage increasing annually from 12 percent in 2020 to 50 percent in 2030.</p> <p>She states that "regardless of ideological, political, or individual beliefs and disagreements on climate, carbon CO2 and renewable resources, because the majority of Arizonans defeated Prop. 127, the ACC does not have the consent of the governed or the</p>	<p>Staff does not have any further comments regarding Proposition 127.</p>



<p>mandate to pass and force on Arizonans Article 27 Energy Rules.” She “request the court uphold the Prop 127 majority vote.”</p>	
<p><b><u>Nate Blouin, Interwest</u></b></p> <p>Mr. Blouin’s comments are generally in support of the standards contained in the Energy Rules. Mr. Blouin provides one proposal: to include language that will consider the benefits of regional markets and transmission development which can save Arizona ratepayers billions of dollars over the time frame considered during resource planning.</p>	<p>Staff has addressed the comments of Interwest in the written comments section of this report. Staff does not believe any further comment is necessary.</p>
<p><b><u>Dr. Judith Anderson, Individual</u></b></p> <p>Dr. Anderson is in general support of the Energy Rules and urges the Commission to vote on the proposed rules immediately. She continues to provide a few suggestions:</p> <ol style="list-style-type: none"> <li>1) She questions why there is no accountability for utilities is built into the proposed rules; and</li> <li>2) She requests that the ACC mount an immediate legal challenge to Senate Bill 1175 and the companion House Bill.</li> </ol>	<p>The Energy Rules contained in the NOPR, if passed would become a legally enforceable Article of the Arizona Administrative Code. The Commission is granted authority under Article XV, § 3, Constitution of Arizona and A.R.S. § 40-202 et seq. to adopt rules and take any action on noncompliance of its Rules by a regulated utility pursuant to Title 14, Chapter 2 of the Arizona Administrative Code.</p> <p>Staff has no comment to any proceedings currently ongoing at the State legislature at this time.</p>
<p><b><u>Todd Jones, CRS</u></b></p> <p>Mr. Jones of CRS provided oral comments in line with the filed written comments outlining CRS’s proposed modifications of the Energy Rules. The written comments of CRS have been included in written comments section of this report.</p>	<p>Staff has addressed the comments of CRS in the written comments section of this report.</p>
<p><b><u>Scott Dunbar, SEIA</u></b></p> <p>Mr. Dunbar of SEIA provided comments generally in support of the Energy Rules. Mr. Dunbar had a number of recommendations to the Energy Rules. In SEIA’s written comments, SEIA referenced</p>	<p>Staff does not believe any comment is necessary.</p>

<p>their initial recommendations through their oral comments but retracted these comments and decided not to recommend any modifications to the Energy Rules at this time.</p> <p>A brief overview of SEIA's recommendations in their oral comments include:</p> <p>1) Adding a Solar Energy representative to a Utility's required RPAC;</p> <p>2) Adding an additional priority that a Utility must consider in developing their IRP, specifically, a mandatory criterion to minimize the occurrence and appearance of anticompetitive behavior and self-dealing between the electric utilities and affiliated interests. Additionally, to add similar language for an Independent Monitor to analyze their evaluation; and</p> <p>3) Removing the Utility's reporting requirements related to a third-party owner operation and maintenance costs.</p>	
<p><b><u>Michael Sheehan, TEP and UNS Electric</u></b></p> <p>Mr. Sheehan, on behalf of TEP and UNS Electric has supplemented his oral comments with written comments to the docket.</p>	<p>Staff has responded to the comments of TEP and UNS Electric in the written comments section of this report.</p>
<p><b><u>Julian Boggs, U.S. Energy Storage Association ("ESA")</u></b></p> <p>Mr. Boggs on behalf of ESA presented comments generally in support of the Energy Rules. ESA did provide a technical language recommendation related to the energy storage section of the Energy Rules. ESA recommends including the term "contracted" along with owned and leased in the description of the customer-sited energy storage systems for the purposes of the energy storage system tariff and the energy storage target. ESA states that Customer ownership and leases are common business models in the energy storage market. Energy storage site at a commercial and</p>	<p>Staff does not object to the proposed modification by ESA but does not believe it is necessary at this time. Staff believes that the interpretation of the referenced section is clear and does not directly result in any negative unintended consequences.</p>

industrial location is commonly contracted as a service rather than owned or leased by the customer.	
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#### **SUMMARY OF STAFF RECOMMENDATIONS**

Based on Staff's review of the written comments filed to the docket during the formal comment period and the oral comments provide at the telephonic oral proceedings, Staff does not believe changes are necessary and recommends adoption of the rules approved in Decision No. 77829.

#### **ECONOMIC IMPACT STATEMENT**

Pursuant to Decision No. 77829, Staff should file a revised EIS on February 26, 2021. Staff will separately docket a report containing its revised EIS.

**Exhibit C****Summary of the Comments Made on the Rulemaking and the Agency Response to Them,  
Prepared Pursuant to A.R.S. § 41-1001(14)(d)(iii)**

The written and oral comments received by the Arizona Corporation Commission (“Commission”) concerning the Notice of Proposed Rulemaking (“NPRM”) are included in the following table, along with the Commission’s response to each. The Commission has included several comments received before the NPRM was published on December 18, 2020, but after Commission Decision No. 77829 (November 23, 2020), which adopted the language for the NPRM.

<b>Written Comments on NPRM</b>	
<b>Public Comment</b>	<b>Commission Response</b>
<p><u>HM<sup>3</sup> Energy, Inc., Dr. Hiroshi Morihara, Ph.D. (December 3, 2020)</u></p> <p>HM<sup>3</sup> Energy, Inc. (“HM<sup>3</sup>”) expressed support for the carbon emission standards adopted by the Commission in the Energy Rules, but encouraged the use of “biocoal” to achieve the reduction in carbon emissions.</p> <p>HM<sup>3</sup> stated that fire suppression has resulted in excess fuels in Northern Arizona’s forests, posing a severe risk of wildfire, and that the U.S. Forest Service has been unable to support the necessary thinning and restoration projects because of the low value of wood.</p> <p>HM<sup>3</sup> stated that its “biocoal” production uses biomass from forests and has several positive benefits, including using existing coal-fired power plans for the rest of their useful lives; reducing the number of wind and solar farms needed along with the required transmission lines; restoring forests and reducing the harmful effects of forest fires, including carbon emissions; reducing emissions from coal-fired power plants; and creating jobs. Additionally, HM<sup>3</sup> noted that it received a 2019 Wood Innovations grant from the U.S. Forest Service and has completed Phase I engineering for the first commercial “biocoal” production plant.</p> <p>HM<sup>3</sup> did not make specific suggestions regarding the NPRM, but expressed an interest in working with the Commission regarding the biomass issue.</p>	<p>Under R14-2-2703(A), “Renewable Energy Resource” includes a biopower electric generator using as fuel plant-derived organic matter available on a renewable basis and with zero net life-cycle carbon emissions, expressly including several types of forest products. The Energy Rules allow utilities flexibility in achieving the requirements of the rules through a mix of Renewable and Clean Energy Resources, as described in the utility’s Clean Energy Implementation Plan.</p> <p>On May 12, 2017, the Commission opened Docket No. E-00000Q-17-0138, titled <i>Commissioner Dunn’s Inquiry into the Role of Forest Bioenergy in Arizona</i>, the purpose of which was to investigate using forest bioenergy from public lands for energy because biomass fuel is a carbon-neutral renewable energy source that can reduce the risk of wildfires. On January 26, 2019, the Commission issued Decision No. 77045, adopting the Commission’s Policy Statement Regarding the Role of Forest Bioenergy in Arizona (“Biomass Policy”). The Biomass Policy discusses the benefits of and the concerns from using forest biomass as a fuel source. The Biomass Policy ultimately encourages the</p>

	<p>development of alternative uses for forest biomass that have little or no impact on ratepayers, and finds multiple positive externalities from the use of forest biomass fuel for electric generation. On February 22, 2019, in Decision No. 77090, the Commission ordered all utilities affected by the Renewable Energy Standard and Tariff (“REST”) Rules to begin working with Staff to develop a comprehensive plan for biomass generation as part of each utility’s REST plan.</p> <p>The Commission concludes that no change is needed in response to the comments. The Commission’s Biomass Policy sufficiently addresses forest biomass, and the Energy Rules allow the use of forest biomass as part of a utility’s Resource Portfolio without prescribing inflexible standards for its use.</p>
<p><u>Abhay Padgaonkar (December 9, 2020)</u></p> <p>Mr. Padgaonkar’s comments on December 9, 2020, responded to an opinion column in the <i>Arizona Republic</i> critical of the Energy Rules and supportive of the use of natural gas. He provided a copy of his published response, which stated that natural gas is composed of 70-90% methane, which is a greenhouse gas; asserted that methane leaks during natural gas production can cancel the benefits of eliminating coal; and noted that emissions from natural gas exceeded emissions from coal last year in the U.S. Mr. Padgaonkar’s comments included a list of resources and concluded that “the Commission must remain vigilant about the prudence of future clean-energy decisions and investments APS and other utilities make rather than simply rubberstamping them” so that ratepayers are required to pay regardless of the outcome.</p>	<p>The Commission appreciates the support for the Energy Rules.</p> <p>R14-2-2718 provides that a utility’s costs to comply with the Energy Rules will be allowed only if the Commission determines in a rate case that the costs are prudent. In addition, the Energy Rules focus on the early stages of the development of the Clean Energy Implementation Plan, which the Commission expects will help ensure that the utility’s generation resources will be acceptable to the Commission.</p> <p>The Commission concludes that no change is needed in response to these comments.</p>
<p><u>Mackenzie McGuffie (dated December 18, 2020, and filed December 21, 2020)</u></p> <p>Ms. McGuffie expressed support for the rulemaking and a transition to carbon-free and renewable energy.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>



<p><u>Amy Douglass, member of Climate Reality Project Greater Phoenix Chapter (dated December 21, 2020, and filed December 22, 2020)</u></p> <p>Ms. Douglass expressed support for achieving 100% clean energy by 2050, discussed the threat of global climate change, and discussed the economic benefits of transitioning to clean energy.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Mark Weathers, Citizen's Climate Lobby Phoenix Central Chapter and the Climate Reality Project Greater Phoenix Chapter (dated December 20, 2020, and filed December 22, 2020)</u></p> <p>Mr. Weathers expressed support for the requirement of 100% clean energy by 2050 as a means to combat the imminent and existential threat of global climate change to food supply, national security, and the economy. Mr. Weathers stated that the managed and gradual reduction proposed in the Energy Rules provides the best balance between saving society and inevitable disruptions and that thousands of new jobs will be created. Mr. Weathers stated that fossil fuels have made everything we have possible but also threaten everything we have. He provided extensive information about the current state of climate change and its threats.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Todd Madeksza, Flagstaff City Council (dated December 28, 2020, and filed December 29, 2020)</u></p> <p>Mr. Madeksza stated that the Flagstaff City Council encouraged the Commission to adopt the clean energy standard of 100% carbon-free clean energy by 2050. He noted that the City of Flagstaff had declared a Climate Emergency and an intent to achieve carbon neutrality by 2030.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Arizona Technology Council, Steven G. Zylstra (January 6, 2021)</u></p> <p>Arizona Technology Council ("ATC") encouraged the Commission to adopt the Energy Rules, specifically expressing support for the carbon-free, energy efficiency, and energy storage standards.</p> <p>In addition, ATC noted that it and the Western Way had convened a stakeholder process to generate ideas</p>	<p>The Commission appreciates the supportive comments. In addition, the Commission notes that the Energy Rules are compatible with the technological innovation encouraged by ATC in its comments and report. The Energy Rules promote energy efficiency measures and permit use of a diverse range of Renewable Energy Resources. Also, to the extent that technological innovation</p>

<p>and recommendations for incorporating clean energy innovation into the State's economic recovery. The process culminated in a report entitled <i>Innovation and Clean Energy Industry Recommendations for Economic Recovery: Policy Options for Arizona's Business Community</i>, available at <a href="http://www.aztech.council.org/public-policy">www.aztech.council.org/public-policy</a>, which outlines economic benefits of energy innovation and includes recommendations for policymakers.</p> <p>The report specifically recommends: (1) encouraging support of demand-side adoption of energy efficiency measures and clean and renewable energy technologies, with additional provisos; (2) investing in infrastructure and identifying opportunities for public-private partnerships; (3) planning for integration of renewable hydrogen into energy portfolios and the economy; (4) supporting policies that encourage advanced manufacturing and bring talent into the clean energy and advanced manufacturing sectors; and (5) prioritizing clean and renewable energy opportunities by creating a state office or designated specialist at the Arizona Commerce Authority.</p>	<p>results in technologies that are not enumerated, the Energy Rules provide for Commission approval of new technologies as Renewable Energy Resources.</p> <p>No change is needed in response to these comments.</p>
<p><u>Marjorie Shavlik (dated January 7, 2021, and filed January 11, 2021)</u></p> <p>Ms. Shavlik expressed support for the Energy Rules, specifically the 100% clean energy standard by 2050. She stated that even though some utilities had stated an intention to transition to more clean energy, it was important to set specific goals and have milestones and accountability in meeting those goals due to climate change and its consequences. Ms. Shavlik further stated that the Energy Rules will help stimulate clean energy industries and generate the kind of jobs needed to recover economically from the COVID-19 pandemic.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>The Western Way, Doran Arik Miller (dated January 15, 2021, and filed January 14, 2021)</u></p> <p>Mr. Miller praised the extensive and bipartisan stakeholder process used to create the Energy Rules and expressed support for 100% carbon-free electricity by 2050, the updated energy efficiency standard, the battery storage requirement, and the updated Integrated Resource Plan ("IRP") process that includes</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>

<p>both an advisory committee and a competitive all-source bid process to drive lowest cost resources and benefit customers. Mr. Miller stated that the Energy Rules will provide the long-term market certainty needed to support utilities as they work toward compliance and will spur rural economic development. Mr. Miller also stated that polling by The Western Way showed 87% of Arizona voters believe government should play a role to accelerate the development and use of clean energy and 60% of Arizona voters support creation of proactive low emission solutions to ensure compliance with federal Clean Air Standards. Mr. Miller further stated that a 2019 economic impact study released by The Western Way and the Yuma County Chamber of Commerce found that 34 rural renewable projects constructed in Arizona from 2001 to 2017 resulted in economic benefits to rural Arizona including \$9.4 billion contributed to the economy, 17,971 jobs, \$1.2 billion in wages to employees, and \$16.7 million in state and local tax revenues. Mr. Miller stated that the study further showed annual contributions after construction of \$63 million along with more than 700 jobs with combined wages of more than \$33 million and nearly \$1 million in property tax revenues benefiting schools. Mr. Miller stated that the costs of renewable energy continues to fall to make it competitive with conventional generation and that costs for utility scale short duration lithium-ion storage continues to increase, making solar photovoltaic ("PV") with storage systems economically attractive.</p>	
<p><u>Randy Miller; Kim Bartnikowski (January 14, 2021)</u> Mr. Miller and Ms. Bartnikowski both expressed support for the Energy Rules. Mr. Miller also stated that Arizona needs to use more renewable energy, especially rooftop solar, to address climate change.</p>	<p>The Commission appreciates the supportive comments. Although the Energy Rules are technology neutral in terms of generation resources, the Commission expects that they will result in significant increases in the use of renewable energy resources to meet the clean energy standard. No change is needed in response to these comments.</p>
<p><u>Joint Stakeholders (January 19 and January 21, 2021)</u>  On January 19 and 21, 2021, joint comments were filed on behalf of the American Council for an Energy-Efficient Economy, American Lung Association, Arizona Interfaith Power and Light, Arizona Solar Industries Association, AZ Public Health Association,</p>	<p>The Commission appreciates the supportive comments. A number of the reports listed in Appendix A were used by Staff and the Commission in the development of the Energy Rules, and some have been cited by Staff in the EIS. In addition, the written and oral</p>

<p>Chispa Arizona, Citizen’s Climate Lobby, Elders Climate Action, Natural Resources Defense Council, Northern Arizona Climate Change Alliance, Pima County, Prescott Interfaith Climate Action Team, Sierra Club, Solar Energy Industries Association, Solar Gain, Solar United Neighbors, Southwest Energy Efficiency Project, Sunrun, Vote Solar, Western Grid Group, Western Resource Advocates, and Yavapai Climate Change Coalition. The January 21, 2021, comments included all of those listed above as well as Tó Nizhóni Ání (collectively “Joint Stakeholders”).</p> <p>The Joint Stakeholders expressed strong support for the Energy Rules, including the carbon-free standard and interim standards, the energy efficiency standard, the distributed storage standard, and the improvements to the IRP process. The Joint Stakeholders noted that the Energy Rules are necessary to address climate change and were the product of an extensive process involving significant stakeholder input.</p> <p>The Joint Stakeholders included two appendices. Appendix A describes various analyses, studies, white papers, reports, and original research that the Joint Stakeholders identify as documenting the public interest case for the Energy Rules. Appendix B is a list of 353 organizations and individuals that have submitted written comments in support of the Energy Rules from November 9, 2018, to January 6, 2021, and a list of 62 individuals that provided supportive oral comments on behalf of themselves or various organizations between April 30, 2019, and March 11, 2020.</p>	<p>comments provided by the numerous Stakeholders listed in Appendix B were essential to the development and refinement of the Energy Rules.</p> <p>No change is needed in response to these comments.</p>
<p><u>Theresa A. Paszkiewicz (January 19, 2021)</u></p> <p>Ms. Paszkiewicz expressed support for the Energy Rules to address climate change, clean air, water conservation, health, and the economy. In particular she expressed support for the clean energy standards and interim carbon emission standards, the energy efficiency requirements, distributed generation, preferential siting of renewable resources in coal-impacted communities, and a transparent and accountable planning process.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>



<p><u>115 Clergy and Faith Leaders (dated January 14, 2021, and filed January 19, 2021)</u></p> <p>One hundred and fifteen clergy and faith leaders signed a letter expressing support for the Energy Rules, specifically the carbon-free standard and interim standards, the energy efficiency standard, the distributed storage standard, and the improvements to the IRP process.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>American Lung Association, JoAnna Strother and Melissa Ramos (January 20, 2021)</u></p> <p>The American Lung Association expressed support for the Energy Rules, including the carbon-free electricity standard by 2050 and benchmarks. The American Lung Association believes that the Energy Rules are necessary to address the impacts of climate change and to achieve clean, healthy air. The Association's 2020 State of the Air report indicated that 6 million Arizonans, 85% of all residents, live in counties with failing grades for ozone or particle pollution. In addition, the Phoenix metropolitan area is included in the Top Ten Most Polluted Cities for ozone and particle pollution. The Association noted that poor air quality contributes to many negative health impacts, including asthma, heart attacks, stroke, lung cancer, and premature death. The Association also included a polling memo that, <i>inter alia</i>, concluded that Arizona voters overwhelmingly recognize that climate change presents a significant present-day threat, that the majority of Arizona voters want to see the state use more solar and wind, that many Arizona voters want to see the state use less oil and coal, and that most Arizona voters want to see America make significant investments in clean energy and benefit communities most impacted by pollution.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Center for Resource Solutions, Todd Jones (January 20, 2021)</u></p> <p>The Center for Resource Solutions ("CRS") provided nine comments and recommendations for modifications to the Energy Rules, primarily related to the required documentation for an electric utility to demonstrate its ability to deliver energy from Clean Energy Resources and Renewable Energy Resources as required by R14-2-2704(D).</p>	<p>(1), (2), (3) The Commission disagrees that RECs should be incorporated into the Energy Rules as a mandatory compliance instrument. The utility has the burden of demonstrating compliance with the Energy Rules, including the requirement to demonstrate the ability to deliver energy from Clean Energy Resources and Renewable Energy Resources under R14-2-2704(D).</p>



(1) CRS stated that utilities need a “uniform compliance instrument” to demonstrate delivery of clean and renewable energy and to track carbon emissions in compliance with R14-2-2704(B)(4). CRS noted that carbon emissions associated with retail sales of electricity cannot be directly measured and should reflect exclusive ownership of tracked and verified generation attributes. It stated that the tracking and verification methods in the Energy Rules are insufficient, and additional requirements and the use of a compliance instrument are necessary to track and verify the delivery of clean and renewable energy and to track and verify greenhouse gas emissions, ensuring the integrity of a clean energy standard.

(2) CRS recommended that utilities be required to use renewable energy certificates (“RECs”), specifically Western Renewable Energy Generation Information System (“WREGIS”) certificates, as the compliance instrument to demonstrate delivery of renewable energy and associated carbon emissions to customers and track attributes in compliance with R14-2-2704(B)(4). CRS stated that the use of WREGIS certificates would prevent double counting, which could occur if an electric utility reports zero-emissions energy from a renewable energy resource to the Commission, while the WREGIS certificate associated with the same amount of generation is used for compliance or to serve voluntary customers in a different state or different customers in Arizona. CRS noted that RECs are a legally enforceable contractual instrument for verifying the use and delivery of renewable electricity. CRS recommended adding definitions for REC and WREGIS in the Energy Rules and adding a requirement in or after R14-2-2704(D) that states, “compliance shall be monitored, accounted for, and transferred through the use of RECs as recorded by the Western Renewable Energy Generation Information System.” CRS further stated that for clean energy resources where WREGIS certificates currently are not issued, such as large hydropower, the Commission should require utilities to demonstrate contractual specification of acquisition and retirement of nonpower generation attributes, specifically documentation that the attributes have

Utilities would incur additional costs, including administration costs, from generating or acquiring RECs and from participating in the WREGIS. These costs would be reviewed in a rate case, and potentially would be recoverable from ratepayers. The Energy Rules account for the differences among electric utilities in their size, service territory, administration, and how each acquires energy. The Energy Rules intentionally provide electric utilities flexibility in how to demonstrate their compliance with the carbon emissions standard in R14-2-2704(B)(4), and expressly allow Staff (in R14-2-2704(M)) the ability to seek additional information demonstrating compliance with the carbon reduction mandate and to obtain an independent consultant if necessary to perform the analysis. The Clean Energy Implementation Plans are reviewed by Staff and considered by the Commission at an Open Meeting, providing adequate opportunities to ensure compliance. The Commission finds that a requirement for a utility to acquire RECs is not necessary and may impose unnecessary costs on ratepayers.

(4), (6) The Commission finds that the definition of “Carbon Emissions” as included in the NPRM is sufficiently clear. The Commission also finds that the definition of “Baseline Carbon Emissions Level” as included in the NPRM should be clarified by adding at the end of the definition “, and calculated in accordance with R14-2-2704(E),” to ensure that stakeholders reading the rules do not overlook this subsection concerning how the Baseline Carbon Emissions Level is to be determined. Because R14-2-2704(B)(4) specifically refers to reductions in Carbon Emissions below a utility’s Baseline Carbon

been contractually retired on the utility's behalf or cannot otherwise be transacted. CRS raised concerns that the Commission is creating a barrier to private investment by not using RECs because investors will not make investments in renewable energy that can be double counted.

(3) CRS stated that RECs are the appropriate compliance instrument for the clean energy standard in the Energy Rules because emissions allocated to Arizona load should match the fuel type allocated to Arizona load, and RECs are the only way to ensure alignment of fuel type and emissions. CRS noted that states with similar emissions-based and load-based clean energy standards use RECs to track emissions, and that RECs are recognized for their role in retail carbon accounting by various governmental agencies and non-governmental organizations.

(4) CRS stated that there is an inconsistency between the emissions that must be reduced and reported annually, and the baseline against which the reduced emissions are measured. CRS stated that "Baseline Carbon Emissions Level" under R14-2-2-2701(8) and R14-2-2704(E) is defined as a utility's emissions "associated with energy produced from all generating units used to serve its kWh sales," and under R14-2-2701(13), "Carbon Emissions" is defined as emissions from generating sources. CRS stated that the Baseline Carbon Emissions Level represents retail sales but Carbon Emissions represents generation sources, and R14-2-2704(B)(4) requires an electric utility to achieve a 100% reduction in Carbon Emissions from generation sources below its Baseline Carbon Emissions Level associated with retail sales. CRS recommended (1) revising the definition of "Carbon Emissions" in R14-2-2701(13) to be the carbon emissions **associated with resources used to serve a utility's retail sales**; or (2) revising the clean energy standard in R14-2704(B)(4) to require that utilities reduce the Carbon Emissions **associated with the resources used to serve retail sales** below its Baseline Carbon Emissions Level and revising the requirements in R14-2-2704(C)(3) and R14-2-2710(A) to require reporting of Carbon Emissions **associated with retail sales**.

Emissions Level, which is determined using retail kWh sales per R14-2-2704(E), it should be clear that the Carbon Emissions that are to be reduced under the Energy Rules are those associated with a utility's retail kWh sales.

In response to CRS's concern that reporting requirements are not sufficiently consistent with the clean energy standard requirements, the Commission finds that R14-2-2710(A)(5) and R14-2-2704(C)(3)(b) should be clarified by inserting "retail" before "kWh." The addition of "retail" is consistent with the requirements of R14-2-2704(B)(4), (C)(3)(f), and (E).

The Commission disagrees that adoption of an established methodology for determining Baseline Carbon Emissions Level, total Carbon Emissions, and total Carbon Emission reductions is necessary and in the public interest. The Energy Rules, in R14-2-2704(E) through (M), provide an extensive process for establishing, reviewing, and verifying the Baseline Carbon Emissions Level, including a stakeholder process and independent third-party verification. This collaborative process is preferable to a mandatory established methodology. The Energy Rules are intentionally flexible and provide significant opportunities for stakeholder input, review by Staff, and approval by the Commission.

(5) The Commission finds that with the revision to R14-2-2705(A)(10) described above, the annual reporting requirements are sufficiently clear and consistent with the requirements for the Clean Energy Implementation Plans. Again, the utility has the burden of

(5) CRS stated that there are inconsistencies between the annual reporting requirements and the requirements for Clean Energy Implementation Plans. CRS noted that the data to be reported in R14-2-2710(A)(1) and (5) differs from the metrics required in R14-2-2704(C)(3) for Clean Energy Implementation Plans. CRS recommended that the energy and emissions information reported under the annual reporting requirements in R14-2-2710(A) be consistent with the information included in the Clean Energy Implementation Plan under R14-2-2704(C)(3). CRS also recommended that the energy and emissions information reported be verified by a third-party, similar to the requirement for reporting the Baseline Carbon Emissions Level. CRS further recommended that the Commission clarify whether energy “obtained” by a utility, energy from units “used to serve its kWh sales,” and energy that it is “[able] to deliver to its Customers” are equivalent and can be demonstrated based on the documentation provided in R14-2-2704(D).

(6) CRS stated that the Energy Rules do not include a standardized methodology for calculating Baseline Carbon Emissions Level, and that standardized methodologies are missing for Total Carbon Emissions, and Total Carbon Emissions reductions. CRS recommended that the Commission provide a standardized methodology for calculating emissions and baseline emissions levels, including accounting rules specifying that RECs must be retired by utilities on behalf of their Arizona load in order to assign the emissions of a renewable resource to delivered energy for the purposes of the reporting requirements in R14-2-2704(C)(3)(h), R14-2-2704(F), and R14-2-2710(A)(5).

(7) CRS stated that the Energy Rules do not specify how utilities will demonstrate that the source of energy used to charge a storage system is a clean or renewable energy source as required by R14-2-2704(D)(3). CRS recommended that the Commission provide more detail on how utilities can demonstrate the source used to charge a storage system, what documentation would

providing sufficient information to the Commission to establish compliance. The terms for which CRS has requested clarification have commonly understood meanings and are clear and understandable as used in the Energy Rules. The Clean Energy Implementation Plan and the annual reports will be filed with the Commission for review. Because of the opportunities for review by Staff and the Commission, a mandatory requirement for third-party verification is an unnecessary expense for which each utility would likely request recovery from ratepayers.

(7) R14-2-2704(D)(3) requires an electric utility to provide documentation of the source of the energy used to charge an Energy Storage System. That information is required to be included in the Clean Energy Implementation Plan, which will be reviewed by Staff and approved by the Commission. The Commission does not believe that additional specification is necessary to direct electric utilities on how to meet the requirements of the rules and what specific information should be required to prove the source of energy used to charge a storage system. Under R14-2-2704(M), Staff can require additional information, data, and analyses, and can request an order from the Commission to require the utility to fund an independent consultant to assist in analyzing the Clean Energy Implementation Plan if necessary. Utilities should be afforded flexibility in meeting their burden of proving compliance with the Energy Rules, with sufficient opportunity for Staff to request additional information when needed. Prescriptive requirements for specific documentation may not be consistent with future developments in



<p>be acceptable, and the requirements for verification and compliance.</p> <p>(8) CRS commented that annual reporting of supply-side resource data under R14-2-2710(C) should include whether RECs were obtained and retired, and the quantity of RECs obtained and retired in the WREGIS for the utility's load and sales for renewable generation units.</p> <p>(9) CRS stated that clean and renewable energy imported to California, such as through the Energy Imbalance Market, should not be counted toward compliance with Arizona's clean energy standard because of the risk of double counting. CRS recommended that the Commission include a general provision prohibiting double counting, a requirement for retirement of RECs associated with renewable energy that is used for compliance with the clean energy standard, and a provision prohibiting renewable energy that is imported to California from being used toward compliance with R14-2-2704(B)(4).</p>	<p>the industry, which could be accommodated through the existing requirement.</p> <p>(8) As stated above, because the Commission does not find that RECs should be incorporated as a mandatory compliance instrument into the Energy Rules, a requirement to include data regarding RECs in an electric utility's annual reporting of supply-side resource data under R14-2-2710(C) similarly should not be required.</p> <p>(9) The Commission disagrees that market purchases should be excluded from determining an electric utility's compliance with the Carbon Emissions standard in R14-2-2704(B)(4). Market purchases are a necessary component of providing reliable and affordable energy to customers and should be considered as part of a utility's compliance with the Energy Rules.</p> <p>The Commission finds that no changes are needed in response to these comments.</p>
<p><u>Ginny Dickey, Mayor, Town of Fountain Hills (dated January 14, 2021, and filed twice on January 20, 2021)</u></p> <p>Mayor Dickey urged the Commission to approve the Energy Rules, stating that as a former ADEQ staffer who assisted the late Senator Carolyn Allen in passing clean air laws and other legislation that has benefitted Arizona, she believes the Energy Rules will also help Arizona attract residents and businesses.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Arizona Public Service Company (January 20, 2021)</u></p> <p>Arizona Public Service Company ("APS") expressed general support for the Energy Rules. APS raised one concern regarding the reporting deadline set forth in R14-2-2710, which contains reporting requirements for electric utilities to be filed by January 31 of each year for the prior calendar year, beginning on January 31, 2022. APS requested a deadline of April 1 of each</p>	<p>R14-2-2710 requires an electric utility to file, by January 31 of each year, beginning on January 31, 2022, a report describing its compliance with the Clean Energy Implementation Plan requirements in R14-2-2704(B). The report must include information regarding energy production, capacity, and cost; carbon emissions; capacity of</p>

<p>calendar year because it believes a January 31 deadline does not allow it sufficient time to compile the requested information. APS suggested that an April 1 reporting deadline would align with other similar reporting requirements currently in place.</p>	<p>energy storage systems; and capacity of distributed storage. The report also must include certain items of demand-side resource data and supply-side resource data. Electric utilities also are required to file an annual Procurement Activity Report by May 1 of each year, beginning on May 1, 2024.</p> <p>The data required to be filed by R14-2-2710 can be gathered on a cumulative basis throughout the calendar year, lessening the burden for the utility to provide the report by January 31 of each calendar year. The January 31 deadline ensures that in the event there are compliance issues or other concerns raised in the reporting, the issues can be addressed by the Commission promptly and corrections can be made early in the year. Additionally, in years in which Clean Energy Implementation Plans will be filed, it allows Commission Staff time to review the reported information before the Clean Energy Implementation Plan filings are made.</p> <p>To the extent that special circumstances prevent an electric utility from complying with the reporting deadline, R14-2-2716 allows the Commission to grant a waiver or exemption from any provision of Article 27 upon a finding of good cause and a finding that granting the waiver or exemption will not harm the public interest.</p> <p>The Commission finds that no change is needed in response to these comments.</p>
<p><u>The City of Scottsdale (January 20, 2021)</u></p> <p>City of Scottsdale Mayor David D. Ortega, Vice Mayor Solange Whitehead, and Councilmembers Tammy Caputi, Tom Durham, Betty Janik, Kathy Littlefield, and Linda Milhaven expressed support for the Energy Rules, which they believe will help cities reach their climate action and clean energy goals.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>



<p>Specifically, they expressed support for the carbon-free standard to enable cities to protect citizens from the impacts of climate change by investing in innovative and next-generation technologies, the energy efficiency standard to reduce carbon emissions in a cost-effective way, the distributed storage standard to provide cities the opportunity to participate in customer-sited power generation, and the resource planning rules that will provide local governments the opportunity to participate in the utility planning process.</p>	
<p><u>Pima County, C.H. Huckelberry, County Administrator (dated November 12, 2020, and filed January 21, 2021)</u></p> <p>Pima County expressed support for the Energy Rules' requirements for energy efficiency, renewable energy, energy storage, and clean energy, which will provide reductions in carbon and other greenhouse gas emissions. Pima County also expressed support for the filing of Clean Energy Implementation Plans every three years and maintaining the requirement that IRPs be updated every three years with the involvement of stakeholder advisory groups. Pima County expressed concern for any specific technological requirement to meet the clean energy and renewable energy goals. Pima County also stated that it would prefer more incremental dates for increasing the percentage of retail sold as clean energy.</p>	<p>The Energy Rules as contained in the NPRM do not contain a technology-based renewable energy or clean energy standard. Instead, the Energy Rules mandate a reduction in carbon emissions, with incremental interim standards of 50% by 2032, 75% by 2040, and 100% by 2050. The Commission finds that the interim standards are sufficient to ensure that carbon emissions reductions are accomplished in a reasonable timeframe while allowing each utility adequate flexibility to reach the benchmarks at the lowest cost.</p> <p>The Commission finds that no changes are needed in response to these comments.</p>
<p><u>Conservatives for Responsible Stewardship, David Jenkins (January 21, 2021)</u></p> <p>Conservatives for Responsible Stewardship expressed strong support for the Energy Rules as contained in the NPRM, particularly the 100% carbon-free standard by 2050, the expanded energy efficiency standards, the energy storage standard, and the more transparent IRP process. They noted that the rules are consistent with those passed in neighboring states with bipartisan support, and with plans put forth by APS and Tucson Electric Power Company ("TEP"). They also noted that the price of electricity generated by new utility scale solar plants with storage is cheaper than electricity from coal and natural gas generation. With the phase-out of coal already planned by utilities, they</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>

<p>stated, replacement with solar and storage is in the best interest of ratepayers.</p>	
<p><u>Gabrielle Lawrence, Ph.D. (two separate comments, both dated January 17, 2021, and both filed on January 21, 2021)</u></p> <p>Dr. Lawrence, supported adoption of the Energy Rules to reduce carbon emissions, address climate change, provide for clean air, conserve water, and promote healthy and economically sound communities. She also supported the increase in energy efficiency requirements, distributed solar, preferential siting of renewable resources in coal-impacted communities, and the transparent planning process. Dr. Lawrence noted the heat crisis resulting from climate change and the corresponding environmental disasters and heat-related deaths. Dr. Lawrence stated that energy efficiency and renewable energy are the cheapest options and will help control utility costs, create jobs, and build a cleaner energy future. She advocated for more energy efficiency and renewable energy and increased investment in distributed solar with storage.</p>	<p>The Commission appreciates the supportive comments. Although the Energy Rules are technology neutral in terms of generation resources, the Commission expects that they will result in significant increases in the use of renewable energy resources to meet the clean energy standard. Additionally, the Energy Rules include specific standards for both energy efficiency and distributed storage systems, which should increase investment in each. No change is needed in response to these comments.</p>
<p><u>Institute for Policy Integrity at New York University School of Law (January 22, 2021)</u></p> <p>The Institute for Policy Integrity (“Institute”) referred to (and attached) comments it filed on October 15, 2020, in Docket No. R-00000V-19-0034, <i>In the Matter of Resource Planning and Procurement in 2019, 2020, and 2021</i>. The comments sought to require load-serving entities to provide in their IRPs, in addition to quantities of air pollutants expected to be emitted, monetized estimates of the damages expected to result from those emissions. The Institute stated that monetizing emissions impacts better informs comparisons of the costs and benefits of different generation mixes, and would help the Commission determine if each IRP is in the public interest.</p> <p>The Institute also attached three studies cited in the October 15, 2020, comments:</p> <ul style="list-style-type: none"> <li>• <i>Valuing Pollution Reductions</i>, Jeffrey Shrader et al., Institute for Policy Integrity (2018)</li> <li>• <i>Getting the Value of Distributed Energy Resources Right</i>, Justin Gundlach and Burcin Unel, Institute for Policy Integrity (2019)</li> </ul>	<p>The Commission appreciates the information provided by the Institute. At this time, the Commission believes that a requirement in the Energy Rules for utilities to provide information monetizing the impact of their emissions would be unduly burdensome. The Clean Energy Implementation Plan requirements in R14-2-2704, the Load Forecast and Needs Assessment Approval process in R14-2-2706, the ASRFI process in R14-2-2707, and the ASRFP process in R14-2-2708 are sufficient to ensure that the costs and benefits of the different generation mixes are appropriately evaluated and to ensure that the Commission’s approvals are in the public interest.</p> <p>The Commission finds that no changes are needed in response to these comments.</p>

<p><i>Making the Most of Distributed Energy Resources</i>, Matt Butner et al., Institute for Policy Integrity (2020).</p>	
<p><u>Coalition of businesses, trade associations, employers, and large energy consumers (two filings on January 22, 2021)</u></p> <p>Comments were filed jointly by a coalition of businesses, trade associations, employers, and large energy consumers (“Coalition”), comprised of the following organizations: Ameresco, Arizona Technology Council, Ball Corporation, Building Performance Association, Cree Lighting, EDF Renewables, Franklin Energy, Google, Hotel Congress, Interwest, Johns Manville, Lutron Electronics, Merit Foods, the National Association of Energy Service Companies, the North American Insulation Manufacturers Association, Oracle, Primavera Foundation, REI Co-op, Salesforce, Schneider Electric, Sonoran STEM Science Academy, TechNet, Tucson 2030 District, Uplight, and “Wildwind Realty, LLC: The Historic Y and Studio Y.” In the first filing, EDF Renewables was omitted and ON Semiconductor was included.</p> <p>The Coalition stated its commitment to increasing the use of renewable energy and energy efficiency in Arizona and its preference for clean and affordable energy resources. Specifically, the Coalition expressed support for a 35% electric energy efficiency resource standard by 2030 and a 100% carbon-free electricity standard by 2050. The Coalition noted that clean energy targets will provide necessary market signals for businesses to make additional investments in Arizona and help to ensure continued job growth. The Coalition also noted the public health benefits from clean energy investment.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Western States Petroleum Association, Margo Parks (January 22, 2021)</u></p> <p>Western States Petroleum Association (“WSPA”) stated that it does not support the 100% carbon reduction standard in the Energy Rules. WSPA discouraged the Commission from adopting rules that exclude procurement of certain types of fuel and technology resources without considering a flexible standard that allows the most cost-effective and</p>	<p>The Commission appreciates the comments from WSPA but believes that the standards and requirements in R14-2-2704 are in the public interest and are necessary for the convenience, comfort, and safety, and the preservation of the health, of the employees and patrons of electric utilities.</p>

reliable resources to be used. WSPA asserted that the Energy Rules should be focused on sustainability, reliability, and cost-effectiveness.

WSPA also asserted that the Clean Energy Implementation Plan requirements in R14-2-2704 do not allow for flexibility related to fuel, technology, and reliability needs, which could increase rates for customers. WSPA stated that the energy storage required by R14-2-2704(B)(3) is unproven in its ability to meet demand and reliability requirements in a cost-effective manner. WSPA also stated that any rules should be sufficiently flexible to account for changes in the energy economy, including improvements in existing technologies, the introduction of new technologies, advances in climate science, and the implementation of overlapping policies.

Additionally, the Commission notes that R14-2-2708(C) requires a Load-Serving Entity to prioritize “[m]inimizing the cost of providing electric energy service to Customers through a combination of Supply-Side Resources and Demand-Side Resources that will result in the lowest overall, lifetime costs to meet Customers’ energy needs safely and reliably.”

Once the Energy Rules have been implemented, the Commission will analyze the efficacy of the rules and any need for revision. The Commission invites WSPA to keep the Commission abreast of any new technologies or changes in existing technologies that might warrant revision of the Energy Rules in a future rulemaking.

The Commission finds that no changes are needed in response to these comments.

Solar Energy Industries Association and the Arizona Solar Energy Industries Association, Scott F. Dunbar and Giancarlo G. Estrada, Attorneys (January 22, 2021)

The Solar Energy Industries Association (“SEIA”) and the Arizona Solar Energy Industries Association (“AriSEIA”) (collectively “SEIA/AriSEIA”), expressed support for the Energy Rules’ requirement for development of Clean Energy Implementation Plans eliminating carbon emissions by 2050 with interim standards, which SEIA/AriSEIA stated will support thousands of new clean energy jobs. SEIA/AriSEIA stated that it would have preferred the existing distributed generation standards to be continued and expanded, but expressed support for the distributed energy storage system tariff requirement, which it stated will support the transition to a cleaner, fairer, and more distributed grid.

SEIA/AriSEIA stated that while it identified several implementation issues with the Energy Rules at the

The Commission appreciates the supportive comments. No change is needed in response to these comments.



<p>public comment hearing on January 20, 2021, it has decided not to recommend any modifications at this time, but will be involved in future proceedings to implement the Energy Rules and may raise the issues at that time.</p>	
<p><u>Chispa Arizona, Laura Dent (dated January 20, 2021, and filed January 22, 2021)</u></p> <p>Chispa Arizona, a program of the League of Conservation Voters (“Chispa”), expressed support for the Energy Rules, noting that it originally supported more aggressive standards, but now supports the Energy Rules as written as a compromise of various stakeholders. Chispa noted that other states have demonstrated that renewable energy paired with battery storage is affordable and popular. Chispa further noted that communities of color are disproportionately impacted by climate change. Chispa expressed support for the energy efficiency standards that reduce energy waste, and the transparent process for resource planning. Chispa also stated that policies facilitating a just and equitable transition will support impacted communities and build renewable energy economies.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Western Resource Advocates, Adam Stafford, Attorney, and Autumn T. Johnson, Energy Policy Analyst (January 22, 2021)</u></p> <p>Western Resource Advocates (“WRA”) expressed support for the clean energy standard that is technology-neutral, stating it will allow utilities to employ the most cost-effective carbon reduction strategies and that it incentivizes new technology. WRA offered four suggested changes, but noted that it did not advocate for substantial changes that would require an additional notice and comment period. WRA stated that to the extent its comments are substantial, WRA included them for future consideration when the Energy Rules are revised and updated.</p> <p>(1) WRA included a proposed amendment to modify definitions in R14-2-2701 relevant to the carbon rule and make corresponding changes to R14-2-2704. First, WRA proposed modifying the definition for “Carbon Emissions” to specifically reference carbon</p>	<p>(1) As stated in response to the comments from TEP and UNSE, the Commission does not believe there is a need to narrow the definition of “Carbon Emissions” to include carbon dioxide only. The need for definitional changes to clarify “retail” sales also is addressed in response to TEP and UNSE, and CRS. Because R14-2-2704(E) specifically states that “Baseline Carbon Emissions” shall be the “average <u>annual</u> metric tons of Carbon Emissions from all Generating Units used to meet the Electric Utility’s <u>retail</u> kWh sales, during the consecutive three-calendar-year period of 2016 to 2018,” the suggested definitions from WRA to clarify retail sales and annual emissions are not necessary. Additionally, the Commission believes that WRA’s suggested language changes, such as the insertion of the new concept of an</p>



dioxide. Second, WRA proposed new definitions that it stated would resolve discrepancies concerning the use of “retail” in definitions. Third, WRA proposed new definitions that it said would differentiate between emissions from specific power plants and from market purchases where the generating resource is not identified. WRA specifically proposed definitions of “Annual Carbon Emissions,” “Arizona Load,” “Average Emission Rate,” “Carbon Emission Rate,” “Specified Emissions,” “Specified Generating Unit,” “Total Specified Emissions,” “Total Unspecified Emissions,” “Unspecified Generating Unit,” and “Unspecified Power Emission Rate.”

WRA also suggested adding “Annual” before the references to “Carbon Emissions” in R14-2-2704(B)(4), (F), (J), (K), and (L); replacing “Total” with “Annual” in R14-2-2704(C)(3)(h) and (i); adding “by each Generating Unit and Unspecified Generating Unit” after “disaggregated in R14-2-2704(C)(3)(h); and deleting R14-2-2704(E).

(2) WRA recommended that the first interim year in R14-2-2704(B)(4) be 2030 instead of 2032, and stated that the IRPs submitted by APS and TEP indicated that the interim date of 2030 is achievable. In addition, WRA stated that a 2030 interim date is consistent with recommendations from the Intergovernmental Panel on Climate Change for the actions needed to keep to a 1.5°C increase in global temperature, which call for a 45% carbon reduction by 2030. WRA stated that the 2032 date is not based on science but only on APS’s announcement that it will exit coal by 2031.

(3) WRA suggested that in future updates to the Energy Rules, stakeholder engagement be added as a component of the Clean Energy Implementation Plans, possibility utilizing the RPAC.

(4) WRA explained the “Clean Energy Credit” concept, which was included in a Joint Stakeholder proposal, and suggested that the Commission consider incorporating Clean Energy Credits or RECs at a future date. WRA recognized that doing so at this time would be a substantial change.

“Unspecified Power Emission Rate” to be calculated using a prescribed method based on eGRID reports, would result in a rule that would be “substantially different” than the NPRM under A.R.S. § 41-1025. The Commission requests that WRA propose the language again in any future rulemaking to revise the Energy Rules after their implementation and a determination of their efficacy, so that the language can be fully evaluated in a workshop environment, if WRA continues to believe that the changes are warranted.

(2) As stated in response to Interwest, the carbon reduction standard and interim target dates are the culmination of an extensive stakeholder process with input from the Commission. The first interim deadline of 2032 provides affected utilities with sufficient time and flexibility to achieve the standard, and is necessary to reduce potential customer impacts.

(3) The Commission believes that stakeholders will have the opportunity to review and evaluate Clean Energy Implementation Plans without any modification to the Energy Rules. Under R14-2-2704(A), (N), and (O), the Clean Energy Implementation Plans will be filed with the Commission, Staff will submit a memorandum and proposed order for Commission consideration, and the Commission will consider the proposed order at an Open Meeting. This process affords opportunities for public comment, both through written comments to the docket and oral comments at Open Meeting. However, the Commission requests that WRA raise the issue again in any future rulemaking to revise the Energy Rules after their implementation and a

	<p>determination of their efficacy, so that the issue can be fully evaluated in a workshop environment, if WRA continues to believe that it is warranted.</p> <p>(4) The Commission appreciates the information provided by WRA regarding Clean Energy Credits. For the reasons stated in response to CRS, 3Degrees, and AEE, the Commission does not believe that it is appropriate to incorporate Clean Energy Credits or RECs at this time.</p>
<p><u>Southwest Energy Efficiency Project (“SWEEP”), Ellen Zuckerman and Caryn Potter (January 22, 2021)</u></p> <p>SWEEP provided a report prepared for SWEEP by Strategen, dated January 21, 2021, and entitled <i>AZ Energy Rules Analysis</i>, which SWEEP described as an independent analysis of the energy system and ratepayer impacts of the Energy Rules. The analysis was performed using a capacity expansion model of Arizona’s power system to determine the cheapest, most reliable mix of energy options, and compared the least cost analysis to the requirements in the Energy Rules, using data from APS and TEP.</p> <p>According to Strategen, the optimal, least-cost electricity generation resource portfolio for APS and TEP from 2021 to 2035 includes: (1) a significant expansion of solar and battery storage, (2) robust continued investment in energy efficiency, (3) maintenance of zero carbon electricity from the Palo Verde Nuclear Generating Station, (4) integration of wind resources from New Mexico, (5) a modest decline in natural gas generation from existing resources, and (6) retirement of uneconomic coal resources as soon as practicable. Strategen determined that the optimal resource portfolio would meet and surpass the provisions in the Energy Rules for energy efficiency, energy storage, and carbon emissions through 2035, and would reduce total generation costs by more than \$2 billion, an 11% reduction, through 2035.</p> <p>SWEEP also highlighted some of the ratepayer benefits from the Electric Energy Efficiency Standard</p>	<p>The Commission appreciates the information and appreciates the supportive comments. No change is needed in response to these comments.</p>

adopted by the Commission in 2010, which SWEEP noted the Energy Rules will build on:

- From 2010-2019, the efficiency programs of APS, TEP, and UNSE delivered over \$1.4 billion in net economic benefits to all Arizonans.
- Efficiency has created over 40,000 jobs in Arizona that pay well, are local, are hands-on, and cannot be easily outsourced.
- APS and TEP's efficiency programs together have saved over 15 billion gallons of water
- From 2010 to 2019, APS's efficiency programs avoided more than 1,000 MWs, which is equivalent to avoiding the construction of 10 combustion turbine units at the Ocotillo Generating Station.
- From 2010 to 2019, every \$1.00 of ratepayer money invested in APS and TEP efficiency programs returned \$3.92 in benefits to ratepayers.

Advanced Energy Economy, Shelby Stults, Policy Principal (January 22, 2021)

Advanced Energy Economy ("AEE") expressed support for the Energy Rules and stated that they will strengthen the advanced energy industry in Arizona and will provide cost-effective, clean energy to utility customers. AEE provided specific comments and suggestions in six areas.

(1) AEE supports the use of "green tariffs," which are voluntary programs that allow customers to purchase bundled renewable energy and RECs at long-term, market-based prices. AEE noted that commercial and industrial customers are interested in the ability to control energy costs and source energy from local renewable resources. AEE encouraged utilities and the Commission to strengthen commercial and industrial customer offerings to maximize the economic benefits from the Energy Rules.

(2) AEE noted that the Energy Rules allow existing net metering customers to continue receiving their current rates while the Commission continues to investigate new methods for compensating customers who install a distributed generation facility and export energy back

(1) For the reasons described concerning the Commission's AG-Y Policy, in response to the City of Phoenix, the Commission does not believe that any additional requirements should be incorporated into the Energy Rules at this time.

(2) The Commission has ordered Staff to file potential modifications to the current Net Metering Rules to comport with changes since their adoption in Decision No. 75859 (January 3, 2017). Because the Commission's investigation into modifications to the Net Metering Rules is ongoing, the Commission does not believe it is appropriate at this time to make additional modifications to the Net Metering Rules in this rulemaking.

(3) The Commission appreciates the support for the Clean Energy Implementation Plan standards. Regarding mandatory use of RECs, the Commission's response to CRS applies equally here.

to a utility. AEE requested that the current net metering tariffs continue to be available to new customers and that the Commission establish a clear timeline and rules for transitioning to new net metering tariffs.

(3) AEE expressed support for the mandated reductions in carbon emissions, the demand-side resource capacity requirements, and the energy storage requirements. AEE suggested that RECs be used to demonstrate compliance with a utility's Clean Energy Implementation Plan.

(4) AEE expressed support for the ASRFI and ASRFP processes as transparent and accessible means for load forecasting and resource planning. AEE suggested that the Commission clarify whether or not the RPAC will be created via an application process, and on what basis a utility should accept or reject an application. AEE asserted that a strong and fair process would allow interested parties to submit applications to the utilities that are approved absent a compelling reason.

AEE also stated that utilities and RPAC members would benefit from clearer guidance on how to incorporate distributed energy resource technologies and market forecasts into load forecast scenarios. AEE stated that utilities should develop estimates of the growth of each type of distributed energy resource to determine investment plans.

(5) AEE recommended that the cost-effectiveness of demand-side resources be evaluated at the program or portfolio level instead of at the individual resource level. AEE suggested that the Commission evaluate the framework of the National Standard Practice Manual for Benefit-Cost Analysis for Distributed Energy Resources.

(6) AEE expressed support for the development of Energy Storage System tariffs, and programs that establish incentives and pathways for additional customer and grid value from distributed storage, whether or not the system is associated with distributed generation. AEE stated that the tariff should

(4) R14-2-2705(B) ensures that the RPAC includes a diverse range of interested persons by specifying the stakeholder interests/groups that must be included, without limiting the utility from including interested persons beyond the enumerated list. Because the Energy Rules specify the minimum stakeholder interests/groups to be included in the RPAC, the Commission does not believe that prescribing an application process in the rules is necessary. The Commission believes that utilities should be afforded flexibility in their processes for forming their RPACs. If a stakeholder determines in the future that a utility has not complied with R14-2-2705(B) in forming its RPAC, the stakeholder could submit a complaint to the Commission, which the Commission would need to investigate and resolve.

The Commission does not believe that it is necessary to provide specific direction on incorporating distributed energy resources into the Load Forecast and Needs Assessment. The requirement to provide five alternatives, and the requirement to share with the RPAC all data and information, including modeling assumptions, outputs, and methodologies, is sufficient to ensure that all information is considered appropriately in development of the scenarios.

(5) The Commission believes that the reporting requirements in R14-2-2711 and the requirements for considerations in planning and implementing a Demand-Side Resource are sufficient to evaluate cost-effectiveness at the appropriate scale. Further, the Commission notes that per R14-2-2701,



<p>compensate customers for response to dynamic system-side and local distribution needs.</p>	<p>a “DSM Program” that includes multiple “DSM Measures” is one type of “Demand-Side Resource.”</p> <p>(6) The Commission believes that it is appropriate to address each utility’s Energy Storage System tariff on a case-by-case basis and that no modification to R14-2-2713 is necessary.</p> <p>The Commission finds that no changes are needed in response to these comments.</p>
<p><u>Paul Durham, City of Tucson Council Member, Ward 3 (January 22, 2021)</u></p> <p>Council Member Durham expressed support for adoption of a 100% carbon reduction standard to combat climate change. Council Member Durham noted that the City of Tucson recently committed to reaching carbon neutrality by 2030 and passed a Climate Emergency Declaration, Resolution No. 23222 (September 9, 2020), outlining the initial steps to achieve that goal. Council Member Durham attached the Resolution to his comments.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>City of Phoenix, Mayor Kate Gallego (dated January 21, 2021, and filed January 22, 2021)</u></p> <p>The City of Phoenix expressed support for the Energy Rules, specifically a just and equitable energy transition, 35% cumulative energy efficiency savings by 2030, 100% clean energy by 2050, and a 5% energy storage requirement by 2035 with a 40% customer-owned or leased storage requirement.</p> <p>The City of Phoenix proposed three modifications:</p> <p>(1) The City of Phoenix stated that there is a need for renewable energy offerings as a component of a utility’s energy portfolio, and a mechanism to allow customers to add a greater share of renewable energy to their portfolios without shifting costs to other customers. The City of Phoenix recommended allowing customers to procure renewable energy from the market using mechanisms such as AG-X and “sleeved purchases” from a renewable energy</p>	<p>(1) The Commission’s Decision No. 77043 (January 16, 2019), adopted a “Policy Statement Regarding AG-Y Alternative Generation/Buy-Through Program” (“AG-Y Policy”). The AG-Y Policy directed APS to expand and modify its current alternative generation program (AG-X) to allow medium-size commercial customers to participate, or to propose a new alternative generation/buy-through program for medium-size commercial customers in its next rate case, and directed TEP and UNS Electric (“UNSE”) to propose an alternative generation/buy-through program for medium- and large-size commercial and industrial customers in their next rate cases. The Commission believes that it is appropriate for these programs to be considered for utilities on a case-by-case basis, in a rate case</p>



developer through the utility or through customer agreements made directly with the utility. The City of Phoenix noted that new employers recruited by its economic development team have indicated that a clean energy supply is a priority.

(2) The City of Phoenix recommended a more ambitious distributed generation target, noting that distributed energy resources provide clean energy at substation and neighborhood scales, are resistant to central system failures, provide grid resilience, and could lead to neighborhood-scale energy independence.

(3) The City of Phoenix recommended that a specific share of net annual revenue from utilities be set aside to support energy efficiency programs in underserved neighborhoods and communities. The City of Phoenix supported the energy efficiency standard, but noted that there can be barriers to participating in energy efficiency measures in disadvantaged communities.

setting, to ensure that the impacts on customers can be sufficiently addressed. Thus, the Commission believes that the AG-Y Policy is sufficient to address the City of Phoenix's comments at this time, although the Commission is likely to continue to evaluate these programs in the future.

(2) The Commission does not believe that it is necessary to increase the requirements for distributed energy resources or energy storage in the Energy Rules. Because the Energy Rules require reductions in a utility's Carbon Emissions, they will naturally result in increased Renewable Energy Resources, which are likely to include Distributed Generation, particularly because R14-2-2704(B)(3) imposes a minimum requirement for installation of Energy Storage Systems, and specifically Distributed Storage. The Commission expects that utilities may be incentivized to achieve a higher target because of the benefits noted by the City of Phoenix.

(3) The Commission appreciates the position of the City of Phoenix, but does not believe that mandatory allocation of a portion of net annual revenue to specific communities is in the public interest at this time. The Commission further believes that such a mandate may more appropriately be considered in a rate case for a specific utility where the impacts of such an allocation on all other customers could be evaluated. Additionally, the Commission notes that R14-2-2711(D)(4) specifically requires an electric utility to consider, during its planning and implementation process, whether a portion of a Demand-Side Resource can be allocated specifically to limited-income customers.

	The Commission finds that no changes are needed in response to these comments.
<p><u>Southwest Gas, Matthew D. Derr, Director/Regulation &amp; Energy Efficiency (January 22, 2021)</u></p> <p>Southwest Gas expressed support for R14-2-2712. Southwest Gas stated that natural gas customers will benefit from the requirement for natural gas utilities to present Energy Efficiency Reports to the Commission describing cost-effective energy efficiency programs for its customers. Southwest Gas further stated that R14-2-2712 is important because it maintains parity between natural gas and electric utilities, which is important to provide consumers the opportunity to evaluate and select a fuel of their choice.</p>	The Commission appreciates the supportive comments. No change is needed in response to these comments.
<p><u>Interwest Energy Alliance, Nate Blouin, Policy Manager (January 22, 2021)</u></p> <p>Interwest Energy Alliance (“Interwest”) expressed support for the Energy Rules and had some recommendations for modifications.</p> <p>(1) Interwest recommended including language requiring the ASRFP process to be overseen by an independent monitor. Interwest suggests adding the language “to be overseen by an Independent Monitor” to the definition of ASRFP in R14-2-2701(5).</p> <p>(2) Interwest recommended adding biopower and biogas as fossil fuels to the definition of Carbon Emissions in R14-2-2701(13) “in order to capture the fullest picture of the state’s actual carbon emissions.”</p> <p>(3) Interwest recommended that the Commission not define Dispatchable Resource too narrowly, stating that renewable resources, particularly when paired with storage, can be dispatched similarly to a traditional dispatchable resource. Interwest provided the following redline modification to R14-2-2701(28): “Dispatchable Resource” means an electric power system resource for which power output supplied to the electric grid can be turned on and off or otherwise adjusted on demand, <u>including inverter based resources and energy storage.</u></p>	<p>(1) The definition of “Independent Monitor” specifically identifies the person’s role “to oversee the conduct of a competitive procurement process.” R14-2-2714 requires a Load-Serving Entity to consult with Staff concerning the identity of an Independent Monitor when the Load-Serving Entity contemplates engaging in an ASRFP process. The rule also establishes requirements for the selection of an Independent Monitor and requires notice of retention of an Independent Monitor. The Commission finds that these provisions are sufficient to address Interwest’s comment that the ASRFP process be overseen by an Independent Monitor, and no modification to the definition of “All-Source Request for Proposals” is necessary. However, the Commission does believe that all references to “RFP” in R14-2-2714 should be replaced with “All-Source RFP” to clarify the rule.</p> <p>(2) The Commission disagrees with the suggested modifications to the definition of Carbon Emissions, because both biogas and biopower, as described in</p>

(4) For the list of Renewable Energy Resources in R14-2-2703(A), Interwest made the following redline suggestions:

(1) A Biogas Electric Generator, which produces energy using as fuel Gas derived from any of the following and produces zero net life-cycle Carbon Emissions, greenhouse gas emissions, and particulate emissions:

(2) A Biopower Electric Generator, which uses as fuel any of the following raw or processed plant-derived organic matter available on a renewable basis and that has zero net life-cycle Carbon Emissions, greenhouse gas emissions, and particulate emissions:

(5) Interwest recommended modifying R14-2-2704(B)(4) to require the first interim target of 50% in 2028 and stated that a 100% reduction in Carbon Emissions by 2040 would be reasonable. Interwest also recommended that the Commission adopt a renewable energy standard, which Interwest stated will attract investment and competition, and reduce costs for consumers, by sending a policy signal that there is a stable market for renewable energy products.

(6) Interwest recommended adding a requirement in R14-2-2705(A), which requires the preparation of five alternative 15-year Load Forecasts and Needs Assessments, for the utility to model and report relevant sensitivities, including fuel prices and costs of carbon, for each Load Forecast and Needs Assessment.

(7) Regarding the ASRFI process in R14-2-2707 and the requirement in subsection (B)(2) for the utility to meet with the RPAC in a workshop environment to obtain input on the draft ASRFI language, Interwest recommended specifying that the workshop be “open and public” to include additional stakeholders. Interwest also recommended adding a new R14-2-2707(H) that states: “This rule shall not prevent the utility from procuring a particular resource or portfolio of resources found to be prudent in the ASRFP process.”

(8) Interwest recommended striking the language in R14-2-2708(D)(9), which provides “reducing the need

R14-2-2703(A), are considered to be carbon-neutral renewable energy resources.

(3) The Commission believes that including the terms “inverter-based resource” and “energy resources” is not necessary because the definition of “Dispatchable Resource” is sufficiently broad to encompass those types of resources.

(4) The Commission disagrees with the suggested modifications to the definitions of Biogas Electric Generator and Biopower Electric Generator. The Energy Rules are focused on achieving reductions in Carbon Emissions and impose requirements to realize those reductions. The Commission believes that the Energy Rules will also result in reductions in greenhouse gas emissions and particulate emissions, but the Energy Rules do not create standards for the reduction of such emissions, and the Commission does not believe that it is necessary or appropriate to further restrict the descriptions of Biogas Electric Generator and Biopower Electric Generator as proposed by Interwest, as both of these resources are considered to be carbon-neutral.

(5) The Commission does not believe it is reasonable and in the public interest to modify the interim target date as suggested by Interwest or to adopt a renewable energy standard. The carbon reduction standard and interim target dates are the culmination of an extensive stakeholder process with input from the Commission. The first interim deadline of 2032 provides utilities with sufficient time and flexibility to achieve the standard. It is essential that utilities have time to acquire the resources necessary

to build new transmission to support the new resource” as one of the factors a utility may consider when determining the resources to include in the IRP. Interwest recommended replacing the language with the following factor: “Opportunities to procure cost-effective resources through participation in regional energy markets or through development of transmission infrastructure.”

In addition, Interwest recommended that under R14-2-2708(I), the Commission should approve the IRP instead of a Resource Portfolio. Interwest also stated that utilities should not be precluded from investing in resources that may be more cost effective but not included in the Resource Portfolio.

(9) Interwest urged the use of an Independent Monitor, hired on behalf of the Commission, to oversee the ASRFP process and ensure a competitive outcome. Interwest suggested adding the following provision to R14-2-2709: “The Independent Monitor chosen in accordance with R14-2-2714 shall oversee the ASRFP on behalf of the Commission and shall ensure that the ASRFP produced by a utility incorporates stakeholder input and does not favor the utility in question. The ASRFP shall then be approved by the Commission before being issued.” Interwest also recommended that language regarding the annual Procurement Activity Report, reporting the results of the ASRFP process as required by R14-2-2709(B), be amended to add that the report shall retain confidentiality for individual bids and shall include the number of bids and median price of the bids.

to meet the standard in a cost-effective manner for ratepayers. The 2032 deadline is necessary to reduce potential customer impacts. The carbon-reduction standard accomplishes the public interest objectives of the Commission while providing utilities with more flexibility than would a renewable energy standard, while still signaling that there is a stable market for renewable energy products, as renewable energy resources are clean energy resources.

(6) The Commission finds that it is unnecessary to include in R14-2-2705(A) the additional information Interwest suggests because each utility is already required in R14-2-2706(A) to provide with its request for Approval all of the data and information used to develop the refined Load Forecast and Needs Assessment, including but not limited to the modeling assumptions, outputs, and methodologies used. Together with the involvement by Staff, stakeholders, and the RPAC in the review of the five alternative Load Forecasts and Needs Assessments, the Commission believes that this is sufficient to ensure that all necessary information will be reviewed and considered.

(7) The Commission does not believe it is appropriate to require that the RPAC workshop process be “open and public,” which is understood to mean that anyone who may desire to attend and participate could do so. R14-2-2705(B) requires that an RPAC involve a diverse range of stakeholders representing a broad spectrum of interests, and the Energy Rules do not prohibit a utility from allowing any additional interested persons to attend and participate in RPAC workshops. Although the

Commission would encourage utilities to engage in their RPAC workshop processes in an open and transparent manner, the Commission is concerned that mandating an “open and public” RPAC workshop process could negatively impact the efficiency of the workshop process. Additionally, Interwest’s suggested addition of a new R14-2-2707(H) is superfluous because R14-2-2707 would not prevent the utility from procuring a resource found to be prudent in the ASRFP process.

(8) The Commission does not believe that the modification recommended by Interwest is necessary. R14-2-2708(D)(9) is one of many enumerated factors in a non-exhaustive list that a Load-Serving Entity may, or may not, consider when determining the resources to include in its refined IRP. The subsection does not preclude consideration of resources that may require new transmission infrastructure.

Further, the Commission disagrees that IRPs should be approved in place of Resource Portfolios. The Resource Portfolio creates the Action Plan to be implemented by the utility. Approval of the Resource Portfolio ensures compliance with the Energy Rules and appropriately generally limits utilities to the resources that have been carefully considered and selected through the ASRFI process. Yet R14-2-2709 allows for an Action Plan to be updated, and R14-2-2716 allows for waivers or exemptions of the Energy Rules upon the Commission’s determination that there is good cause and that the waiver or exemption will not harm the public interest. R14-2-2716(C) also allows for acquisitions to be made under specified extenuating circumstances, providing



	<p>further flexibility. In light of these provisions, it is unnecessary to add the provision requested by Interwest.</p> <p>(9) The Commission does not believe that it is necessary to include Interwest's proposed language regarding the Independent Monitor in R14-2-2709, for the same reasons as identified in (1) above. Additionally, the Commission does not believe that it is necessary for the Commission to approve a utility's ASRFP because the ASRFP will be created to procure the resources in the Commission-approved Action Plan, and the ASRFP process will be overseen by an Independent Monitor determined to be qualified by Staff after consideration of any objections filed by stakeholders.</p> <p>Further, the Commission disagrees that additional information is needed in R14-2-2709(B) regarding bids and a requirement for confidentiality of those bids in a utility's annual Procurement Activity Report. The requirement in R14-2-2709(B) for the utility to "report the results of its All-Source RFP process," coupled with the confidentiality provisions in R14-2-2715, is sufficient to obtain the information mentioned by Interwest and to protect confidential information.</p>
<p><u>Sandy Bahr, on behalf of approximately 676 stakeholders (January 22, 2021)</u></p> <p>The letter signed by the stakeholders expressed support for clean energy rules to adopt carbon emissions to help address climate change, clean the air, conserve water, and promote healthy and economically vibrant communities. The letter stated that Arizona needs a Clean Energy Standard that requires carbon reductions of 100% by 2050, 75% by 2040, and 50% by 2032; and supported energy efficiency and distributed solar, preferential siting of renewable resources in coal-impacted communities, and a transparent and accountable planning process.</p>	<p>The Commission appreciates the supportive comments. No changes are required by these comments.</p>

<p><u>Dixie Escalante Rural Electric Association, Inc., Jennifer Cranston, Attorney (January 22, 2021)</u></p> <p>Dixie Escalante Rural Electric Association, Inc. expressed support for R14-2-2702, which limits the applicability of the Energy Rules to utilities with more than half of their customers located in Arizona. The Association stated that application of the Energy Rules to multi-jurisdictional utilities would create a hardship.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Sierra Club – Grand Canyon Chapter, Sandy Bahr, Chapter Director (January 22, 2021)</u></p> <p>Sierra Club expressed support for the Energy Rules, noting that clean, renewable energy and energy efficiency are important for cleaner air, a stronger economy, and reduced electricity costs. Sierra Club referred to a report by Strategen Consulting (“Strategen”) providing evidence that the rules will result in cost savings for ratepayers, saving ratepayers over \$2 billion if APS and TEP meet and exceed the requirements of the Energy Rules.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>TEP and UNSE, Inc. (January 22, 2021)</u></p> <p>TEP and UNSE (together, “the Companies”) expressed support for the Energy Rules, stating that they provide a flexible path for advancing clean energy policy; are “fair, balanced, and achievable”; and align with the Companies’ 2020 IRPs.</p> <p>TEP and UNSE offered minor changes to clarify language and align timing of plans under the Energy Rules:</p> <p>(1) The Companies proposed modifying the definition for Baseline Carbon Emissions Level, noting that retail sales are served from generation resources that include market purchases. The Companies also proposed clarifying language for the definition for “Carbon Emissions.” The Companies proposed the following redlined modifications:</p> <p>R14-2-2701(8): “Baseline Carbon Emissions Level” means a Utility’s annual gross Carbon Emissions <del>directly</del> associated with energy <del>produced</del> from all <del>Generating Units</del> <u>resources including market purchases used to serve its retail kWh sales, during the</u></p>	<p>(1) The Commission finds that the suggested modifications to the definition of “Baseline Carbon Emissions Level” are not necessary because they do not change the interpretation of the current definition. The current definition of “Baseline Carbon Emissions Level” refers to “Generating Units.” Generating Units are the sources of Carbon Emissions, whether the energy from a Generating Unit is acquired because the utility owns the Generating Unit or because the utility has made a market purchase of energy produced by a Generating Unit owned by another. The defined terms do not exclude market purchases from consideration when determining Carbon Emissions. The Commission believes that the Energy Rules require consideration of market purchases when evaluating a utility’s reduction in Carbon Emissions, so that utilities that procure energy from the market are incentivized to procure energy generated with little or no Carbon</p>

consecutive three-calendar-year period of 2016 to 2018, expressed in metric tons.

R14-2-2701(13): “Carbon Emissions” means carbon dioxide emissions resulting from the combustion of fossil fuels, such as coal, petroleum, natural gas, oil, shale, and bitumen, in a Generating Unit, expressed in metric tons.

R14-2-2710(A)(5): The total Carbon Emissions disaggregated by all ~~Generating Units~~ portfolio resources used to serve ~~its~~ the Electric Utility’s retail kWh sales, expressed in metric tons;

(2) The Companies noted that in previous versions of the Energy Rules, a portion of the rules pertaining to an All Source Request for Proposal (“ASRFP”) was revised as an All Source Request for Information (“ASRFI”). Consequently, the Companies recommend that the use of the term “bid” should be replaced with “information.” The Companies proposed the following redlined modifications:

R14-2-2707(A)(1): Designed to obtain ~~bids~~ information from numerous and diverse vendors of Supply-Side Resources and Demand-Side Resources. .

R14-2-2707(A)(9): Designed to provide notice to ~~bidders~~ vendors that RPAC members will be able to review the ~~bids~~ information resulting from the ASRFI.

R14-2-2708(B)(1): Review and consider ~~each bid~~ information submitted to satisfy all or any part of the Load-Serving Entity’s approved Load Forecast and Needs Assessment . . .

(3) The Companies proposed that IRPs be filed along with the Clean Energy Implementation Plan and that both plans be approved together because the IRP provides the basis for the Clean Energy Implementation Plan. They also noted that aligning the timing of the two plans would provide Staff with additional time for review and workshops, and extend the final Commission approval from December to January. The Companies specifically commented that

Emissions. The Commission has determined that the definition of “Baseline Carbon Emissions Level” should be revised as noted above in response to the comments from CRS, and those revisions address portions of the Companies’ comments on the definition.

In addition, the Commission does not agree that the definition of “Carbon Emissions” should be modified by inserting “dioxide,” as it is in the public interest for the Commission to receive information on any other carbon-based pollutants that may be produced by Generating Units.

The Commission believes that, with the exception of inserting the word “retail,” as described above in response to the comments from CRS, the suggested revisions to R14-2-2710(A)(5) are unnecessary because the language is already clear, and replacing the defined term “Generating Unit” with the undefined term “portfolio resource” would not increase clarity.

(2) The Commission determined that the use of the term “bid” and “bidders” in reference to the ASRFI remains appropriate, as the term “information” would be overly general and would not evoke the intended meaning unless additional language was inserted to specify what information was to be provided. The responses to an ASRFI are intended to be provided in a bid format so that utilities have the information necessary to formulate their IRPs. Therefore, the modification suggested by the Companies is not necessary.

(3) The Commission finds that the Companies’ suggested modifications to the deadlines contained in the Energy

the IRPs and Clean Energy Implementation Plans would be filed by April 1, 2023, with Commission approval occurring by February 1, 2024, reoccurring every three years. The Companies also proposed changing the Electric Utility Annual Reporting Requirements to April 1 instead of January 31, enabling utilities sufficient time to gather and review the required data. The Companies included a table with a proposed revised timeline.

The Companies also responded to comments filed in the docket suggesting that the Energy Rules should be modified to provide a set methodology for establishing the Baseline Carbon Emissions Level and the process for annual reporting. The Companies disagreed and noted that the Energy Rules provide an extensive process for reviewing, establishing, and verifying the methodology used to determine Baseline Carbon Emissions Level, and that R14-2-2704(I) provides a 120-day timeframe for stakeholders to comment and the Commission to determine the methodology for measuring the Baseline Carbon Emissions Level. In addition, R14-2-2704(J) through (M) require third-party verification of a utility's Carbon Emissions. Therefore, the Companies do not believe that it is necessary to further define the methodology for establishing the Baseline Carbon Emissions Level or Carbon Emissions reporting requirements.

Rules are not necessary and may not be in the public interest. The Commission believes that having both the Clean Energy Implementation Plan and the IRP filed at the same time—although the Energy Rules require Staff to engage in a review process for each and to create a Memorandum and Proposed Order for each, and the Commission to consider each at an Open Meeting, with slightly different and not lengthy timelines—would increase the burden on Staff's workload without providing significant benefits. For the Companies' suggestion to be in the public interest, the Energy Rules would need to be revamped significantly by combining the Clean Energy Implementation Plan and the IRP into the same filing. The Commission will monitor the effectiveness of the Energy Rules to determine whether that would be appropriate once they have been implemented, but does not believe that making such significant changes would be appropriate at this time.

For the same reasons addressed in response to the comments from APS above, extending the deadline for the annual report required under R14-2-2710 is not in the public interest.

The Commission finds that no changes are needed in response to these comments.

Garkane Energy Cooperative, Inc. (January 22, 2021)

Garkane Energy Cooperative, Inc. ("Garkane") expressed support for the "Applicability" provision in R14-2-2702, which provides that the new Article 27 applies to utilities with more than half of their customers located in Arizona. Garkane expressed appreciation for the Commission's recognition of the burden placed on multi-jurisdictional cooperatives from conflicting regulations across the jurisdictions they operate in.

The Commission appreciates the supportive comments. No change is needed in response to these comments.



<p>Garkane did not take a position on the other provisions in the Energy Rules.</p>	
<p><u>3Degrees Group, Inc., Maya Kelty, Director, Regulatory Affairs (January 22, 2021)</u></p> <p>3Degrees Group, Inc. (“3Degrees”) submitted comments pertaining to R14-2-2704 and demonstrating compliance with the requirement for a 100% reduction in Carbon Emissions by 2050 and the interim targets. 3Degrees stated that it is “concerned that without explicit use of appropriate compliance instruments, the Proposed Rules will not achieve their intended goal and may disadvantage Arizona renewable energy generators from participating in renewable energy markets.” 3Degrees further stated that because the clean energy standard is load-based, the methodology for assessing compliance should require the use of appropriate accounting instruments to demonstrate delivery of clean energy.</p> <p>3Degrees stated that RECs are used to deliver and to verify use of renewable electricity and that other states with policies requiring delivery of clean energy to customers require the use of generation attributes to track emissions. 3Degrees contended that because the Energy Rules do not require generation attributes, including RECs where applicable, to demonstrate compliance, the generation attributes could be purchased by compliance entities in other states, giving those entities a rightful claim to use renewable energy or zero emissions power and leaving Arizona utilities unable to claim delivery of the renewable energy or zero emissions power. 3Degrees also stated that clean energy generation in Arizona may be disadvantaged from participating in clean energy markets in neighboring states because those markets would need to take additional administrative steps to ensure that electricity generated in Arizona is not being claimed towards compliance with the clean energy requirements in R14-2-2704.</p> <p>3Degrees proposed the following changes:</p> <ul style="list-style-type: none"> <li>• Revise R14-2-2704(D) to state “Compliance shall be monitored, accounted for, and transferred through the use of RECs as recorded by the Western Renewable</li> </ul>	<p>The Comments from 3Degrees are similar to some of the comments from CRS and are adequately addressed by the Commission’s response to CRS above.</p> <p>In summary, the Commission believes that mandating the use of RECs would impose an additional administrative and cost burden on utilities, which would attempt to recover the costs from ratepayers. Additionally, the Commission believes that the collaborative process for determining Baseline Carbon Emissions Level is preferable to an established methodology.</p> <p>The Commission finds that no changes are needed in response to these comments.</p>



<p>Generation Information System (WREGIS). For clean energy resources for which RECs are not currently issued, the Electric Utility must provide documentation that it owns the nonpower attributes of the electricity generation from the clean energy resources.”</p> <ul style="list-style-type: none"> <li>• Add a section after R14-2-2704(E) that includes a methodology or a requirement to develop a methodology for determining the Baseline Carbon Emissions Level, specifying that the methodology must require RECs or relevant generation attributes to be retained in order for clean energy resources to be counted.</li> </ul> <p>Revise R14-2-2710(C) to include reporting on whether RECs were obtained and retired and the quantity of RECs obtained and retired in WREGIS by the utility.</p>	
<p><u>Vote Solar, Solar United Neighbors, AriSEIA, Sunrun (January 22, 2021)</u></p> <p>These organizations jointly expressed their support for the Energy Rules. They stated that the carbon reduction goals are important for addressing climate change and the risk of wildfires; extreme temperatures; and near-term impacts to public health, safety, and prosperity. They also noted that the strategies and investments envisioned in the Energy Rules may contribute substantially to the Arizona economy. They also acknowledged the flexibility in the Energy Rules for achieving the standards and the mechanisms for accountability.</p> <p>The organizations also included a petition signed by 5,180 Arizona residents and dated March 9, 2020, supporting the following:</p> <ul style="list-style-type: none"> <li>• A binding 50% renewable energy standard by 2030 and 100% clean energy standard by 2045.</li> <li>• A requirement for 10% of electricity to come from local distributed resources like rooftop solar and other customer-driven energy options by 2030.</li> <li>• A standard for cumulative energy efficiency savings of 35% by 2030.</li> <li>• A more comprehensive and transparent energy planning process in which the Commission would review a utility’s IRP and provide opportunities for public and stakeholder input.</li> </ul>	<p>The Commission appreciates the supportive comments and notes that while the Energy Rules do not adopt each of the policy positions in the petition, they do contain provisions addressing each of the policies supported by the petitioners. No change is needed in response to these comments.</p>

<p><u>City of Tucson, Mayor Regina Romero (January 22, 2021)</u></p> <p>The City of Tucson expressed its support for the Energy Rules, characterizing them as important steps in ensuring “the health of future generations and the sustainable growth of our economy.”</p> <p>The City of Tucson stated that it has taken the following actions to reduce its carbon footprint: (1) on April 21, 2020, the Mayor and Council approved Resolution 23166 recommending the Commission adopt a 100% clean energy standard by 2050; (2) on January 21, 2021, the Mayor and Council formally opposed HB2248 and SB1175, supporting the Commission’s constitutional authority to establish energy production standards; and (3) in Resolution 23222, the City of Tucson declared a Climate Emergency and set a 2030 carbon neutrality goal for city operations.</p> <p>The City of Tucson stated that it specifically supports the 2050 carbon-free electricity standards and incremental standards, the energy efficiency standard to reduce carbon emissions in the most cost-effective way, the distributed storage standard to allow for customer power generation, and the strengthened resource planning rules for greater stakeholder participation.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Four Stakeholders (January 22, 2021)</u></p> <p>The comments of four stakeholders, submitted to the Commission between January 14 and 15, 2021, and all supportive of the Energy Rules, were filed as a group. The four stakeholders further stated the following:</p> <ul style="list-style-type: none"> <li>• Jeanne Devine, a retired sociologist and senior citizen, expressed dismay at the adverse impacts of increased heat on nature and people; advocated for more energy efficiency and renewable energy resources; advocated for renewable energy investments in coal-impacted communities, which will continue to suffer health effects and also frequently lack water and infrastructure; advocated for a complete moratorium on new fossil fuel generation in Arizona; and stated that both nuclear plants and natural gas plants are bad</li> </ul>	<p>The Commission appreciates the supportive comments and shares concerns related to the adverse impacts of climate change.</p> <p>The Commission agrees that solar energy generation, including from rooftop solar, and other renewable energy resources are valuable, but has determined that it is appropriate to adopt a technology-neutral carbon-emissions based standard without prescribing specific resources to be used. To reach the carbon reductions required by the Energy Rules, Arizona utilities will need to use Clean Energy Resources, which include Energy Efficiency and Renewable Energy Resources (including</p>

<p>alternatives because of the cost and water use of nuclear plants and because of the pollution and land degradation from fracking associated with natural gas.</p> <ul style="list-style-type: none"> <li>• Steve Muratore indicated that the Energy Rules may not go far enough.</li> <li>• Jeff Simpson stated that data show utilities with the greatest penetration of renewable have the slowest increasing utility rates; cited the health and environmental improvements that result from transitioning away from fossil fuel generation; stated that in 2015, the AZ State Energy Economist reported that each Arizona resident sent \$2,175 out of state for energy, which he said makes no sense because of solar abundance and Palo Verde; stated that the excess energy from Palo Verde should be used to create a hydrogen resource; supported the use of energy efficiency, distributed solar, and behind-the-meter battery storage; and questioned whether the rules could be changed so that commercial electric vehicle chargers could sell by the kWh instead of by the hour.</li> <li>• Doug Bland provided the comments from 115 Arizona Clergy and Faith Leaders, which are described above.</li> </ul>	<p>solar), among others. The Energy Rules also require each utility to install Energy Storage Systems. Because these are often coupled with solar generation, the requirement is likely to result in increased solar installation as well.</p> <p>The Commission understands that the inclusion of nuclear plants as Clean Energy Resources is concerning to some stakeholders, but reiterates that the Commission determined it was in the public interest for the Energy Rules to focus on carbon-emissions reduction rather than specific technologies.</p> <p>The Energy Rules attempt to further just and equitable transition for coal-impacted communities by prioritizing the siting of renewable and clean energy resources in those communities.</p> <p>Electric vehicle infrastructure was not addressed in this rulemaking. Rather, the Commission has adopted the EV Policy Statement and EV Policy Implementation Plan, as described above. The Arizona Department of Agriculture's Weights and Measures Services Division informed the Commission in September 2019 that there is a legal requirement for providers of public electric vehicle charging to sell fuel on a kWh or joules basis rather than a time basis. Nothing in the Energy Rules contradicts that position.</p> <p>No change is needed in response to these comments.</p>
<p><u>Western Grid Group, Amanda Ormond, Director (January 22, 2021)</u></p> <p>Western Grid Group ("WGG") supported adoption of the Energy Rules and stated that the adoption of the new resource planning process will allow for greater transparency in the planning and procurement process through increased stakeholder involvement, will provide more certainty to utilities through approval of the 5-year action plan, will allow utilities to have a preference for renewable energy built on tribal lands to</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>

lessen impacts on coal communities, and will require a competitive process that in other states has reduced costs and increased resource options. In addition, WGG stated that the carbon emission standard will provide utilities with flexibility to reduce pollutants that cause climate change and will make Arizona competitive with New Mexico, Colorado, and California to attract business demanding clean energy. WGG also stated that adopting an energy efficiency and demand side management standard will ensure utilities incorporate cost-effective resources and will provide a range of programs and technologies to income-limited and vulnerable populations to lower their energy costs. WGG further stated that the distributed storage standard will ensure that utilities provide options for customers to store energy, will support experimentation with battery storage to more fully utilize solar generation resources, and will provide utilities with operational flexibility.

WGG referred to studies that concluded a low-carbon electricity system can be achieved with similar or increased reliability at a lower cost. First, WGG referenced the Western Wind and Solar Integration Studies, which were prepared for the National Renewable Energy Laboratory by GE Energy to analyze high penetrations of renewable energy in Arizona and the Western Interconnection since 2010, and which first concluded that the Arizona system could be reliably operated with one-third of the energy coming from wind and solar (available at <https://www.nrel.gov/grid/wwsis.html>). Second, WGG referenced the *2035 Report – Plummeting solar, wind, and battery costs can accelerate our clean electricity future* from the University of California, Berkeley, Center for Environmental Public Policy (available at <https://www.2035report.com/>). The report concluded that the United States can deliver 90% clean, carbon-free electricity nationwide by 2035 that is dependable, at no extra cost to consumers, and without the need for new fossil fuel plants. The study also concluded that employment increases with a 90% clean energy economy.

Stephen Cook (January 22, 2021)

The Commission appreciates the supportive comments. No change is needed in response to these comments.

Mr. Cook expressed support for the Energy Rules, noting that the cost of solar energy has fallen dramatically since he first bought solar panels in 1980 (\$10/watt), bought them again in 2014 (\$0.65/watt), and sees them now (\$0.16/watt). Mr. Cook asserted that the price of contracted solar with battery backup is now much cheaper than the cost for coal-fired generation. He noted the results of the *Arizona Coal Plant Valuation Study* that analyzed the cost savings associated with replacing coal-burning power plants. Mr. Cook also asserted that approval of the Energy Rules will create jobs, and he noted the positive health impacts from renewable energy.

48 Stakeholders, submitted collectively (dated January 22, 2021, docketed January 25, 2021)

A group of 48 separate letters supporting the Energy Rules were filed together, with most of them either including language the same as or substantially similar to the letter signed by more than 110 individuals described above or including language from a shorter form letter urging the Commission to finalize the Energy Rules' commitment to 100% carbon-free energy by 2050 and citing economic and environmental benefits. More than half of the stakeholders also provided additional comments related to the Energy Rules:

- Boyd White stated that he has been involved in the energy efficiency and renewable energy field for 36 years; that solar photovoltaic is a proven, cost-effective technology; that great progress has been made with battery storage; and that the Commission needs to mandate what the utilities will do rather than allowing the utilities to decide.
- Dean Chaussee stated that he gets great financial benefit from his rooftop solar units and that they should be made available to all Arizonans.
- Lawrence Smith expressed support for clean energy and solar energy, based on concern for U.S. energy security and the future of the planet.
- John Commerford expressed concern for Arizona's delay in addressing anthropogenic global warming, which jeopardizes real estate

The Commission appreciates the support for finalization of the Energy Rules.

The Commission shares stakeholders' concerns about climate change, air pollution, and drought and considered these factors in reaching the carbon reduction requirements in the Energy Rules. Although the Commission agrees that sooner might be better from an environmental perspective, the Commission determined that the carbon reduction standard and interim target dates in the Energy Rules are appropriate. The standard and dates are the culmination of an extensive stakeholder process with input from the Commission. The interim deadlines and 2050 deadline provide affected utilities with sufficient time and flexibility to achieve the standard and are necessary to reduce potential customer impacts.

The Commission agrees that solar energy generation, including from rooftop solar, is a valuable resource and appreciates the information provided to support solar, but has determined that it is appropriate to adopt a technology-neutral carbon-emissions based standard without prescribing specific resources to be used. To reach the carbon reductions required by the Energy Rules, Arizona utilities will need to use Clean Energy Resources, which include Energy



values; stated that resiliency must be built into the system and that distributed solar and storage will help with that; and cited cleaner air and water as secondary benefits.

- Salar Naini, Vice President of Business Development, TurningPoint Energy (a clean tech company focused on utility and community solar), stated that although Arizona has the potential to be the biggest solar market in the country, it has been necessary to operate in the solar industry in markets outside of Arizona; that the Commission needs to consider other opportunities to get more solar industry investment in Arizona; and that community solar policies can help bring investment and jobs and allow for renters and low- and moderate-income customers to participate in solar without having the install rooftop solar.
- Jack Walden, Owner of Walden's Greenergy Solar, LLC, stated that there is a climate crisis, that action must be taken to stop global warming, that making Arizona 100% carbon free will help, and that solar companies like his can provide good-paying jobs to help the economy recover.
- Sandy Kravetz expressed surprise that the state has not required new home builds to have solar hot water heaters and/or solar electrical.
- Duncan Brown stated that climate change is real and needs to be addressed as quickly as possible, that fossil fuel energy sources are some of the strongest drivers of climate change, and that action needs to be taken to transition away from fossil fuels and to renewable energy sources such as solar.
- Rebecca Richardson stated that time is running out to take action on climate change, which has already compromised air and water and soil, and to save the world.
- Charles Houy urged the Commission to accomplish the 100% carbon free standard by 2035 and stated that his own home and electric car are already 90% carbon free.
- Joseph Freeman stated that the current regulatory/economic infrastructure made the

Efficiency and Renewable Energy Resources (including solar), among others. The Energy Rules also require each utility to install Energy Storage Systems. Because these are often coupled with solar generation, the requirement is likely to result in increased solar installation as well.

The Energy Rules provide a number of opportunities for significant stakeholder input and Commission involvement in selecting the most appropriate blend of resources to be used. The All-Source RFI and All-Source RFP processes are expected to result in participation of numerous and diverse vendors of resources, including vendors of solar resources. The Commission expects the Energy Rules to allow for innovation and flexibility in the identification and selection of appropriate resources.

Finally, the Commission notes that it does not have jurisdiction to require installation of solar equipment on new construction.

No change is needed as a result of these comments.

up-front costs of converting to solar electricity at his home too high and the payback period too long.

- Thomas Oviatt stated that the 100% carbon-free by 2050 standard should be approved as long as it is fiscally responsible and does “not put[] a heavy load on other polluting measures like batteries” and that a holistic approach to sustainability should be taken that includes cost savings for the most vulnerable.
- Patty McCredie stated that 2050 is too slow because the Earth is at risk of losing all of its species and will be uninhabitable with a dead ocean.
- Daniel Hosking stated that 2050 is longer than needed to become 100% carbon free and encouraged the Commission to read a specific article and book explaining why clean energy should be advanced faster.
- Troy Deckert asserted that climate change could result in 125°F days all summer in Arizona, which would ruin the Arizona economy; encouraged the Commission to vote yes on carbon-free standards to benefit future generations; and encouraged us as a society to commit to any extra costs needed to mitigate climate change.
- Ty Scott urged the Commission to make specific goals that are inclusive of all renewable energy markets—residential, commercial, utility, and subscription-based (solar gardens) and the companies and stakeholders that depend on them. He noted the opportunity to grow Arizona’s economy, lock in energy costs, and create a cleaner future for Arizona.
- Kevin Byers stated that Arizona should be using solar to generate most of its power, that this would necessitate more energy storage, and that the state can encourage homeowners and utilities to invest in solar generation and storage.
- Justin Paluch stated that the reduced water usage and greenhouse gas emissions with renewable energy will help combat rising

<p>temperatures and diminishing groundwater supplies.</p> <ul style="list-style-type: none"> <li>• Taza Guthrie stated that it is a travesty solar is not required on all new construction in Arizona.</li> <li>• Spencer Hunter stated that 2030 is the timing that is urgently needed for 100% carbon-free energy but that 2050 is better than nothing.</li> <li>• Steve Barancik stated that the carbon-free standard will result in jobs and energy savings and that solar use by Arizona citizens should be incentivized.</li> <li>• Carolyn Hargrave stated that saving energy and switching to renewables will result in cleaner air and water and savings on electricity costs, and that 2050 is too late for 100% carbon-free electricity.</li> <li>• Lynne Avril expressed excitement for carbon-free energy by 2050 and stated that she would be even more excited if it could happen sooner, as there is no time to waste with climate change.</li> <li>• Theo Rosenberg stated that local consultants and installers should be provided resources to assist Arizona homeowners in investing in owning their own power.</li> <li>• Susan Benton encouraged any Commissioner with reservations about the need for clean energy to watch David Attenborough's Our Planet.</li> <li>• Nancy Jamison stated that this is a critical moment for the future of Arizona and the planet, and that fossil fuel energy must be replaced by clean and renewable sources.</li> </ul>	
<p><u>52 Stakeholders, submitted by WRA (dated January 22, 2021, docketed January 25, 2021)</u></p> <p>Fifty-two Arizona residents signed a letter in support of the Energy Rules, specifically supporting the carbon-free energy standard by 2050. The letter noted that the Energy Rules will help address climate change, that the Southwest has been experiencing a megadrought, and that Phoenix is one of the 10 worst cities for ozone and particulate air pollution.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>

<p><u>Approximately 111 Stakeholders (January 25, 2021)</u></p> <p>Approximately 111 stakeholders signed a letter expressing support for the Energy Rules, specifically the carbon-reduction standard (100% by 2050, 50% by 2032, and 75% by 2040); the 5% energy storage requirement; the energy efficiency standard (35% savings by 2030); support for a just and equitable transition for coal-impacted communities; and increased accountability through a more transparent utility planning process. The letter stated that the carbon-free standard will drive new investment in Arizona, the energy storage requirement will help keep people safe and supply energy during outages, the energy efficiency measures will save consumers money, and the new planning process will deliver the least expensive energy and renewable energy desired by customers. The letter stated that the Energy Rules will result in a more reliable, resilient grid.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Arizona PIRG Education Fund, Diane E. Brown, Executive Director (dated January 22, 2021, and docketed January 25, 2021)</u></p> <p>The Arizona PIRG Education Fund (“PIRG”) expressed support for the Energy Rules, noted that ratepayers overwhelmingly support the Energy Rules, and urged the Commission to finalize the Energy Rules without substantive changes. PIRG noted in particular its support for the Energy Efficiency Standard, stating that approximately every \$1 of ratepayer money invested in energy efficiency by APS and TEP has returned \$4 in benefits to ratepayers. PIRG stated that the existing Energy Efficiency Standard has provided energy savings, saved water, and produced economic benefits. PIRG stated that the Energy Efficiency Standard should be extended and expanded to provide ratepayers with assurances that they will receive financial benefits from energy efficiency programs and to provide regulatory certainty for businesses and employers. PIRG emphasized the significant input from Commissioners, Staff, stakeholders, and ratepayers that has resulted in the Energy Rules.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>37 Stakeholders, filed collectively (January 26, 2021)</u></p> <p>Thirty-six of the 37 separate stakeholder comments, submitted to the Commission between January 15 and 21, 2021, supported final adoption of the Energy</p>	<p>The Commission appreciates the support for finalization of the Energy Rules. The Commission shares stakeholders’ concerns about climate change, air</p>

Rules. A number of the 36 stakeholders referenced the need for action due to climate change, the need for water conservation and cleaner air, and the economic benefits expected from the Energy Rules. A number of the 36 stakeholders also provided additional comments related to the Energy Rules:

- Judith Anderson stated that the rules are not strong enough to protect public health and the environment, stated that renewables are cheaper and cleaner than coal and (in the long term) than gas, questioned why the rules do not include accountability for utilities, and urged the Commission to mount a legal challenge to the Arizona Legislature's bills designed to limit Commission authority.
- Jim Gale stated that the Navajo Nation and Hopi Tribe need to be supported because they provided Arizona cheap power (resulting in polluted water and skies) and that energy storage needs to be encouraged to make energy available locally and without line losses.
- Sarah Scott urged the Commission to prioritize renewable energy.
- John Neville expressed support for renewable energy and supporting communities impacted by coal plant closures by siting new renewable energy development in those communities.
- Karl Schaeffer expressed support for a more robust and decentralized power grid.
- Cem Erispaha expressed support for renewable energy and other clean energy technologies but stated that nuclear energy should not be considered clean energy because of the risks of nuclear waste, for which the U.S. has no long-term national plan, as well as the potential for nuclear plant accidents.
- Richard Sigler expressed support for just transition for poor and marginalized communities that will be affected by coal plant closures and expressed a desire to see more transparency in utilities.
- Alexis Reed stated that climate justice means an equitable transition to clean energy and transparent, accountable, and inclusive utility planning.

pollution, and drought and considered these factors in reaching the carbon reduction requirements in the Energy Rules. Although the Commission agrees that sooner might be better from an environmental perspective, the Commission determined that the carbon reduction standard and interim target dates in the Energy Rules are appropriate. The standard and dates are the culmination of an extensive stakeholder process with input from the Commission. The interim deadlines and 2050 deadline provide affected utilities with sufficient time and flexibility to achieve the standard and are necessary to reduce potential customer impacts.

The Commission agrees that solar energy generation, including from rooftop solar, and other renewable energy resources are valuable, but has determined that it is appropriate to adopt a technology-neutral carbon-emissions based standard without prescribing specific resources to be used. To reach the carbon reductions required by the Energy Rules, Arizona utilities will need to use Clean Energy Resources, which include Energy Efficiency and Renewable Energy Resources (including solar), among others. The Energy Rules also require each utility to install Energy Storage Systems. Because these are often coupled with solar generation, the requirement is likely to result in increased solar installation as well.

The Commission understands that the inclusion of nuclear plants as Clean Energy Resources is concerning to some stakeholders, but reiterates that the Commission determined it was in the public interest for the Energy Rules to focus on carbon-emissions reduction rather than specific technologies.

The Energy Rules attempt to further just and equitable transition for coal-



- Jess Bristow stated that Arizona needs bolder standards and rules, with 100% renewable energy by 2030.
- Patricia VanMaanen stated that as a nurse she has seen an increase in chronic obstructive pulmonary disease and asthma and that air quality is worsening and requires urgent action.
- Bailey Spears suggested that Commissioners who argue they are protecting ratepayers' pocket books by not supporting carbon-free commitments should consider Arizonans' accumulated medical bills for pollution-related health conditions including respiratory infections, heart disease, and lung cancer and, further, stated that being lax about climate solutions now will bring greater economic, societal, and environmental costs in the future.
- Maria Nasif stated that the Southwest is in a 30-year megadrought driven by climate change and that Phoenix is among the nation's 10 worst cities for dangerous ozone and particulate air pollution.
- W. Mark Day stated that solar power and storage technologies are the most cost-effective means of power generation, especially in Arizona.
- Gabrielle Lawrence expressed support for preferential siting of renewable resources.
- Ross Lampert stated that rural electric cooperatives such as Sulphur Springs Valley Electric Cooperative, Inc. ("SSVEC") should be held to the same standards as the major utilities because the benefits of the clean energy rules should benefit his community too.
- Gretchen Reinhardt expressed support for preferential siting of renewable resources in coal-impacted communities and asserted that it is smart for the Energy Rules to focus on outcomes rather than micro-managing how energy providers get to those outcomes.
- Nona Siegel stated that, as a retired Family Nurse Practitioner, she has observed that greenhouse gases produced by fossil fuel generation have led to extreme heat and drought, wildfires, and poor air quality, which has increased lung disease and increased

impacted communities by prioritizing the siting of renewable and clean energy resources in those communities.

The Energy Rules will improve transparency by providing a number of opportunities for significant stakeholder input and Commission involvement in selecting the most appropriate blend of resources to be used.

The Commission does not have jurisdiction to regulate automobile emissions, but has adopted the EV Policy Statement and EV Policy Implementation Plan, as described above, in recognition of the value of EV adoption.

The Commission has determined that it is appropriate to adopt more lenient requirements for electric utilities that are cooperatives in the Energy Rules, in recognition of the cooperatives' non-profit status, smaller size, and differing operating conditions, particularly their operation by a local board comprised of customers.

In response to Mr. Peters, the Commission notes that R14-2-2708(C)(2) requires a Load-Serving Entity to prioritize "[m]inimizing the cost of providing electric energy service to Customers through a combination of Supply-Side Resources and Demand-Side Resources that will result in the lowest overall, lifetime costs to meet Customers' energy needs safely and reliably." The Commission also notes the comments from advocates included in this summary document asserting that the Clean Energy Implementation Plan will result in lower costs for Customers. No change is needed as a result of these comments.

<p>vulnerability to COVID-19. Ms. Siegel further stated that there should be a requirement for 50% renewable energy sources by 2030 and 100% by 2050.</p> <ul style="list-style-type: none"> <li>• Robert Weissler urged the Commission to require rural electric cooperatives such as SSVEC to comply to the same clean energy, energy efficiency, and battery storage standards as the larger utilities; urged the Commission to reinstate net metering, which he stated provides fair compensation to rooftop solar customers and would encourage more homeowners to install such systems; and urged the Commission to consider recommending and encouraging adoption of the American Bird Conservancy's Bird-Smart Wind Energy strategies.</li> <li>• Lisa Glenn expressed support for a transparent IRP process and reductions in car emissions.</li> </ul> <p>Additionally, 1 stakeholder comment of the 37, submitted on January 17, 2021, opposed the Energy Rules:</p> <p>Gerald Peters stated that moving toward 100% carbon reduction will mean higher expense and less reliability, that the goal should be reliable and cheap energy, even if fossil fuels continue to be used.</p>	
<p><u>24 Stakeholders, filed collectively (January 26, 2021)</u></p> <p>Twenty-four separate comments, submitted to the Commission between January 12 and 21, 2021, were filed as a group. Twenty-two of the stakeholders supported final adoption of the Energy Rules, with a number of them referencing the need for action due to climate change, the need for water conservation and cleaner air, and the economic benefits expected from the Energy Rules. A number of the 22 stakeholders also provided additional comments related to the Energy Rules:</p> <ul style="list-style-type: none"> <li>• Harold Suiter expressed support for the Energy Rules' free market approach to reducing carbon emissions and stated that if the U.S. Congress passes legislation similar to H.R. 763 (Energy Innovation and Carbon Dividend Act of 2019), which he expects, the Energy Rules will perfectly align with the new federal law. Mr. Suiter added that economists concluded that H.R. 763 would add 2.1 million jobs to the</li> </ul>	<p>The Commission appreciates the support for finalization of the Energy Rules.</p> <p>The Commission shares stakeholders' concerns about climate change, air pollution, and drought and considered these factors in reaching the carbon-reduction requirements in the Energy Rules.</p> <p>The Commission agrees that solar energy generation, including from rooftop solar, and other renewable energy resources are valuable, but has determined that it is appropriate to adopt a technology-neutral carbon-emissions based standard without prescribing specific resources to be used. To reach the carbon reductions required by the Energy Rules, Arizona utilities will need to use Clean Energy Resources, which include Energy Efficiency and</p>

U.S. economy in 10 years and increase the GDP by \$80 billion per year in five years.

- Brandon Singer expressed support for a just and equitable transition for coal-impacted communities.
- Ronen Berechman expressed support for transition to power production from full renewable resources.
- Hope Wiltfong expressed support for use of renewable energy resources rather than fossil fuel resources.
- Ronald Faullkner, LTC, USA (Ret.), Annie McGreevy, Joelle Buffa, and Joan Murphy urged the Commission to require rural electric cooperatives, such as SSVEC, to comply with the same standards as the investor owned utilities and to reinstate net metering to provide fair compensation to rooftop solar customers and encourage solar installations.
- Susan Waites stated that she has saved a lot of money with energy efficiency, would like to see utilities do more to help ratepayers lower their bills by promoting energy efficiency and rooftop solar, and believes Clean Energy should be Arizona's 6<sup>th</sup> "C."
- William Polakowski stated that he supports the clean energy standard's inclusion of nuclear as a key pillar of a carbon-free future and urged the Commission to require rural electric cooperatives, such as SSVEC, to comply with the same standards as the investor owned utilities and to reinstate net metering to provide fair compensation to rooftop solar customers and encourage solar installations.
- Alicia Harvie, Community & Government Affairs for REI Co-op ("REI"), stated that REI is committed to increasing the use of renewable energy and energy efficiency in Arizona and has a Net Zero Energy LEED Platinum certified distribution center in Goodyear powered by a 2.2 MW rooftop solar array; that its members support strong, enforceable clean energy standards in Arizona, specifically a 35% electric energy efficiency resource standard by 2030 and a 100% carbon-free electricity standard by 2050; that clean energy

Renewable Energy Resources (including solar), among others. The Energy Rules also require each utility to install Energy Storage Systems. Because these are often coupled with solar generation, the requirement is likely to result in increased solar installation as well.

The Commission understands that the inclusion of nuclear plants as Clean Energy Resources is concerning to some stakeholders, but reiterates that the Commission determined it was in the public interest for the Energy Rules to focus on carbon-emissions reduction rather than specific technologies.

The Energy Rules attempt to further just and equitable transition for coal-impacted communities by prioritizing the siting of renewable and clean energy resources in those communities.

The Energy Rules will improve transparency by providing a number of opportunities for significant stakeholder input and Commission involvement in selecting the most appropriate blend of resources to be used.

The Commission has determined that it is appropriate to adopt more lenient requirements for electric utilities that are cooperatives in the Energy Rules, in recognition of the cooperatives' non-profit status, smaller size, and differing operating conditions, particularly their operation by a local board comprised of customers.

The Commission disagrees with Mr. DuHamel's positions that carbon emissions do not contribute to global warming and that solar and wind generation cannot produce reliable power to the grid. The Commission notes the distributed storage requirement in R14-2-2704(B)(3) and that distributed storage has a valuable role in increasing reliability.

investments improve air quality and associated health costs; that the REST has been found to produce nearly \$2 billion in gross benefits to Arizona utility customers and the public from 2008-2018; and that the energy savings efforts implemented by the three largest utilities have created nearly \$3 billion in net economic benefits, saving families and businesses money on their energy bills.

- Christie Black, Andrea Dalton, Danielle Corbett, Rachel Scholes, and Emma Petty Addams, on behalf of the Mormon Women for Ethical Government (“MWEG”), expressed support for the Energy Rules, specifically the 100% carbon-free standard by 2050, energy efficiency, and energy storage standards; stated that faith and history compel MWEG to consider the immediate and long-term effects of climate change; stated that marginalized populations suffer the most direct consequences from climate change; expressed the need to mitigate the environmental and human costs associated with climate change; and noted that the Energy Rules, which are vital, will benefit long-term economic expansion by creating jobs in the clean energy sector and will support economic recovery for coal-impacted communities.
- Gregory Penniston expressed support for promotion of solar and wind energy.
- Todd Jones again filed the January 20, 2021, CRS comments described above.
- Will Humble, Executive Director, Arizona Public Health Association (“AzPHA”), expressed AzPHA’s support for the Energy Rules, particularly the standard for 100% emissions-free electricity by 2050; stated that the Energy Rules are comprehensive and incorporate the essential core elements of good public health policy because they will (1) reduce carbon emissions, (2) address the climate crisis, (3) help clean air, (4) conserve water, and (5) improve the health of communities; that the technology-neutral nature of the Energy Rules will lead to more efficient economic decisions that will keep

In response to Carrie N., the Commission notes that R14-2-2708(C)(2) requires a Load-Serving Entity to prioritize “[m]inimizing the cost of providing electric energy service to Customers through a combination of Supply-Side Resources and Demand-Side Resources that will result in the lowest overall, lifetime costs to meet Customers’ energy needs safely and reliably.” The Commission also notes the comments from advocates included in this summary document asserting that the Clean Energy Implementation Plan will result in lower costs for Customers. No change is needed as a result of these comments.



rates down, which is important to allow working families to provide a healthy environment; that by leveraging energy efficiency and renewable energy, the Energy Rules will control utility costs and create jobs; that distributed storage will allow customers another means of saving money on utility bills; and that the Energy Rules protect low income communities through preferential siting of renewable energy projects in communities impacted by coal-plant closures. Mr. Humble also cited the extensive public support for the Energy Rules' concepts and the extensive public process engaged in by the Commission to create the rules.

- Russell Lowes, member of the Advisory Board of Arizonans for Community Choice, expressed support for the Energy Rules and a "Solar Blend" of solar energy, energy efficiency, battery storage, and wind energy, which he stated would save the typical household a substantial amount of money while also dramatically reducing carbon emissions. Mr. Lowes provided an analysis showing that the Solar Blend strategy would save a family in APS territory with monthly usage of 750 kWh approximately \$41 per month and reduce the household's monthly CO<sub>2</sub> production by approximately 96%, as compared to APS's current blend. Mr. Lowes stated that lower economic classes and minorities are disproportionately affected by the negative cost and ecological impacts of fossil and nuclear energy and that the Solar Blend will improve that. Mr. Lowes also criticized the use of nuclear energy, which he stated is contrary to the best interests of ratepayers because nuclear is more costly than the Solar Blend and becoming more expensive and included an article he co-authored, entitled *Hansen is Wrong About Nuclear Power*, that was published in *Public Utilities Fortnightly* in May 2016.

Additionally, the following two comments opposing the Energy Rules were filed in this group:



<ul style="list-style-type: none"> <li>Jonathan DuHamel stated that there is no physical evidence that carbon dioxide plays a significant role in controlling global temperatures (citing <a href="https://wryheat.wordpress.com/2019/01/03/a-review-of-the-state-of-climate-science/">https://wryheat.wordpress.com/2019/01/03/a-review-of-the-state-of-climate-science/</a>); that solar and wind-generated electricity is unreliable and cannot respond to supply and demand, making the electric grid unstable; that modular nuclear generation stations can supply reliable energy without carbon dioxide emissions; and that natural gas generation has relatively low emissions compared to coal; that solar and wind generation of electricity should not be encouraged; and that there is nothing people can do to stop climate change, which has been continuous for billions of years.</li> <li>Carrie N. stated that ordering companies to “go green” makes the poor pay for futile efforts; that California’s green efforts have rendered it unable to produce enough electricity for its residents; that solar gets financial breaks and does not pay its fair share of grid expenses; and that even a \$5 monthly increase hurts the poor.</li> </ul>	
<p><u>22 Stakeholders, filed collectively (January 26, 2021)</u></p> <p>Twenty-two separate comments, submitted to the Commission on January 21 and 22, 2021, were filed as a group, with all of the stakeholders supporting final adoption of the Energy Rules, and a number of them referencing the need for action due to climate change, the need for water conservation and cleaner air, and the economic benefits expected from the Energy Rules. A number of the 22 stakeholders also provided additional comments related to the Energy Rules:</p> <ul style="list-style-type: none"> <li>Julia Allison stated that utilities have too much power and need to be held accountable for their decisions concerning clean and renewable energy and should be regulated by those who pay for their services.</li> <li>Larry Marchman expressed support for a 100% carbon-free standard and for solar, particularly rooftop solar, and energy storage. He stated that homes, schools, cities, and businesses should be able to generate and store energy locally, and connect to the grid and obtain a market rate for excess generation. Mr.</li> </ul>	<p>The Commission appreciates the support for finalization of the Energy Rules.</p> <p>The Commission shares stakeholders’ concerns about climate change, air pollution, and drought and considered these factors in reaching the carbon-reduction requirements in the Energy Rules.</p> <p>The Commission believes that the Energy Rules, with their inclusion of robust stakeholder involvement throughout the resource planning process, will allow customers to have more influence over the resources utilities use to provide their power. Additionally, under the Energy Rules, the Commission will be more involved in the earlier stages of resource planning, which should help to ensure utility accountability.</p> <p>The Commission agrees that solar energy generation, including from</p>

<p>Marchman also stated that nuclear power is not carbon free because of the uranium mining, milling, and enrichment process, which should be discussed before the Energy Rules are finalized; requires a significant amount of water to operate; and creates a significant amount of toxic waste. Mr. Marchman further stated that the free market will result in more employment, increased GDP, and reduced operating expenses for businesses (allowing for innovation) and that an Arizona with a cleaner environment and low energy costs will attract businesses and investment in Arizona.</p> <ul style="list-style-type: none"> <li>• Vania Guevara expressed support for a just and equitable transition.</li> <li>• Greg Lewis asserted that southern Arizona's severe drought and the summer wildfires in the Santa Catalina Mountains are precursors to future natural disasters and that it is essential to act now to draw down atmospheric carbon.</li> <li>• Hilary Lewis, Communications Director, Vote Solar, stated that her comments were accompanied by 48 individual letters and a petition signed by more than 100 of Vote Solar and Solar United Neighbors' Arizona advocates, all in favor of the Energy Rules. The attachments were not included with the comments as docketed.</li> <li>• Courtney Hough, Koren Sherrick, and Stephanie Cordel stated that it is important to hold utilities accountable and to ensure that infrastructure is built to provide clean, renewable, and affordable energy.</li> </ul>	<p>rooftop solar, and other renewable energy resources are valuable, but has determined that it is appropriate to adopt a technology-neutral carbon-emissions based standard without prescribing specific resources to be used. To reach the carbon reductions required by the Energy Rules, Arizona utilities will need to use Clean Energy Resources, which include Energy Efficiency and Renewable Energy Resources (including solar), among others. The Energy Rules also require each utility to install Energy Storage Systems. Because these are often coupled with solar generation, the requirement is likely to result in increased solar installation as well.</p> <p>The Commission understands that the inclusion of nuclear plants as Clean Energy Resources is concerning to some stakeholders, but reiterates that the Commission determined it was in the public interest for the Energy Rules to focus on carbon-emissions reduction rather than specific technologies.</p> <p>The Energy Rules attempt to further just and equitable transition for coal-impacted communities by prioritizing the siting of renewable and clean energy resources in those communities.</p> <p>No change is needed in response to these comments.</p>
<p><u>Gabrielle Lawrence, Ph.D., member of Citizens Climate Lobby ("CCL") (dated January 21, 2021, filed January 26, 2021)</u></p> <p>Dr. Lawrence provided a written copy of her comments made at the oral proceeding on January 20, 2021.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Bruce Plenk, Solar Possibilities Consulting (dated January 22, 2021, filed January 26, 2021)</u></p> <p>Mr. Plenk stated that his rooftop solar PV panels and solar water-heating panels have reduced his monthly electric bill to almost zero; that distributed generation benefits both individual consumers and the utility company because it avoids additional transmission and</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>

<p>distribution lines and allows for power when there are fires or other disruptions at centralized plants; and that energy efficiency is important because it saves money for consumers and is the cheapest way for utilities to meet load. Mr. Plenk stated that wind and solar are now the cheapest sources of power; that wind and solar will create good local jobs; and that the rules will help fight global warming and increase the resiliency of Arizona communities, making it a more attractive place for business. Mr. Plenk also suggested that Prop. 127 was rejected by voters in 2018 because many did not want a permanent constitutional amendment, others were concerned about cost, and others felt that the Commission should adopt such policies. Mr. Plenk urged the Commission to oppose attempts by the Arizona State Legislature to dilute its expertise.</p>	
<p><u>Masavi Perea (submitted January 23, 2021, filed January 26, 2021)</u></p> <p>Mr. Perea urged the Commission to finalize the Energy Rules, stating that they will help reduce bills, clean the air, preserve water, and provide more transparency. Mr. Perea further expressed support for clean and renewable energy, a just and equitable transition away from fossil fuels, and increased energy efficiency.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Corey D. Woods, Mayor of the City of Tempe, Randy Keating, Vice Mayor, and Lauren Kuby, Councilmember (submitted by Brianne Fisher on January 26, 2021, and filed January 29, 2021; also filed February 4, 2021 (with date of July 10, 2020))</u></p> <p>The City of Tempe stated that it passed a Climate Action Plan in 2019 and adopted a carbon neutrality target for 2060. The City of Tempe stated that requiring clean energy by 2050 will enable investment in renewables and energy efficiency to drive economic growth and expressed support for the increased energy efficiency standard in the Energy Rules, as it will ensure that utilities invest in programs that its residents and businesses need to reduce costs during uncertain times. The City of Tempe expressed appreciation for APS and noted that it has partnered with APS to co-develop climate actions and carbon-reduction goals. It also noted that there are additional details to work out for achieving an energy transition that does not create a cost burden on low-income residents and that supports communities impacted by coal plant closures.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>

<p>Last, the City of Tempe noted that jobs and development will come from a clean energy economy.</p> <p><u>Candice Carr Kelman (submitted January 29, 2021, and docketed February 1, 2021)</u></p> <p>Ms. Kelman stated that Arizona needs to commit to carbon-free energy in the next 15 years and that it cannot wait until 2050.</p>	<p>The Commission appreciates the support for carbon-free energy. The carbon reduction standard and interim target dates are the culmination of an extensive stakeholder process with input from the Commission. The 2032, 2040, and 2050 dates will provide utilities with sufficient time and flexibility to achieve the standard. It is essential that utilities have time to acquire the resources necessary to meet the standard in a cost-effective manner for ratepayers. With a more accelerated schedule, there would potentially be additional customer economic impacts.</p> <p>No change is needed in response to this comment.</p>
<p><u>WRA, Adam Stafford, Attorney, and Arizona Center for Law in the Public Interest, Jennifer B. Anderson Attorney (February 1, 2021)</u></p> <p>WRA and the Arizona Center for Law in the Public Interest (“AZCLPI”) submitted comments in response to the letter filed on January 22, 2021, by Commissioner Justin Olson regarding the Commission’s authority to promulgate the Energy Rules in light of the Arizona Supreme Court’s Decision in <i>Johnson Utilities, L.L.C. v. Arizona Corporation Commission</i>, 249 Ariz. 215 (2020) (“<i>Johnson</i>”).</p> <p>WRA and AZCLPI stated that the Court in <i>Johnson</i> did not hold that the Energy Rules fall outside of the Commission’s plenary rate making authority under Article 15, Section 3 of the Arizona Constitution (“Art. 15, § 3”). WRA and AZCLPI also stated that the Court in <i>Johnson</i> clearly indicated that the Commission’s permissive authority under Art. 15, § 3 includes consideration of public benefits. WRA and AZCLPI included references to a number of instances in the <i>Johnson</i> opinion where the Court referred to the Commission’s permissive authority to take actions to benefit/protect the “public at-large,” the “public,” “public health and safety,” and “public health, safety,</p>	<p>The Commission appreciates the information. No change is needed in response to these comments.</p>

convenience, and comfort.” WRA and AZCLPI conclude that the *Johnson* Court clearly held that the Commission has permissive authority under Art. 15, § 3 to regulate public service corporations for the benefit of public health and safety and for the benefit of employees and patrons of public service corporations. WRA and AZCLPI asserted that the Energy Rules do not establish broad public-health policy, but only apply to public service corporations. WRA and AZCLPI further stated that the Commission has permissive authority under Art. 15, § 3 to regulate the emissions of public service corporations. WRA and AZCLPI also observed that under Article 15, Section 6 of the Arizona Constitution and case law, the Arizona State Legislature may enlarge the powers of the Commission but may not decrease them; that the Legislature has not exercised or delegated its police power authority to regulate carbon emissions; and that the Energy Rules’ regulation of carbon emissions would be superseded by a statute regulating carbon emissions if there were a conflict between such a statute and the Energy Rules. WRA and AZCLPI further opined that enacting a law prohibiting the Commission from regulating public service corporation’s carbon emissions for public health and safety reasons would not be a valid exercise of the Legislature’s police power.

20 Stakeholders, filed collectively (filed February 5, 2021)

On February 5, 2021, the office of Chairwoman Lea Marquez Peterson filed the comments of 20 stakeholders that had been emailed directly to her office between January 11 and February 2, 2021.

Three of the stakeholders expressed support for the Energy Rules, as follows:

- Michael Pagel supported the battery storage standard, stating that it will help thousands of Arizona households benefit from solar and storage technology; and advocated for 50% renewable energy by 2035.
- Bud Suiter stated that the Energy Rules are critical to address global warming, as there have been record global temperatures in 19 of the last 20 years and an equally challenging record in Arizona. Mr. Suiter also expressed support for H.R. 763, the Energy Innovation and Carbon Dividend Act of 2019, backed by

The Commission appreciates the supportive comments.

The Commission disagrees that it does not have authority to adopt the Energy Rules. Under both its permissive constitutional authority under Art. 15, §3 and its statutory authority (cited in the NPRM), the Commission has the power to make rules to protect the comfort, safety, and health of the employees and patrons of public service corporations and the Arizona public generally. The Energy Rules fall within that power. The Commission expects the Energy Rules to improve air quality, help mitigate climate change, aid coal-impacted communities, and protect ratepayers from the rising economic costs of fossil fuel generation, while also spurring



<p>Citizens Climate Lobby, which he described as a market-based solution that has the greatest impact on global temperatures by charging a fee on carbon emissions that would be distributed fairly to all Americans every month.</p> <ul style="list-style-type: none"> <li>• Sarah Scott expressed support for renewable energy growth, to mitigate the threats of extreme heat and drought.</li> </ul> <p>Seventeen of the stakeholders expressed opposition to the Energy Rules, with most of them expressing opposition to “Green New Deal Energy Mandates,” a “Green New Deal,” the “New Green Deal,” “Green energy,” or “sustainability,” and with the following providing additional information:</p> <ul style="list-style-type: none"> <li>• Tony Cabanillas stated that approving the Energy Rules would drive up costs for consumers, significantly impacting those on fixed incomes and on the lower end of the socio-economic spectrum, and that California has shown that such a mandate would be inefficient and lead to failure in electric delivery.</li> <li>• Darrell Campbell stated that the Energy Rules are an end-run around voters and will only increase costs on individuals, especially those who cannot afford it.</li> <li>• Rick McDowell stated that Arizona should strive for energy independence through nuclear energy and fossil fuels.</li> <li>• Georgia Cifelli, Linda Rizzo, Lawrence Wangler, James Roth, and Valerie Giramberk stated that energy policy is the role of the Arizona State Legislature, not the Commission, and that Arizona voters clearly demonstrated their will by rejecting Proposition 127 in 2018.</li> <li>• Charles and Diana Mettillle stated that Arizona is not a blue state, that they do not represent globalists or outside interests, that creating energy policy is the responsibility of the Arizona State Legislature and not the Commission, that voters overwhelmingly showed their opposition to the goals of the Green New Deal by rejecting Proposition 127 in 2018, and that the Energy Rules would raise electric rates.</li> </ul>	<p>economic growth and job creation. The Energy Rules are not the same as Proposition 127, perhaps most notably in that they do not change the Arizona Constitution and thus can more readily be modified if future circumstances warrant such modification. Additionally, the Energy Rules allow use of a nuclear power plant as a clean energy resource.</p> <p>No change is needed in response to these comments.</p>
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<ul style="list-style-type: none"> <li>• Jennifer Mayer stated that Maricopa County does not want anything that says sustainability.</li> <li>• John Powell stated that the Energy Rules would ensure that Arizona energy users would have less access to energy and at a significantly increased, unsustainable price.</li> </ul>	
<p><u>Energy Storage Association, Julian Boggs, State Policy Director (February 8, 2021)</u></p> <p>The Energy Storage Association (“ESA”) expressed support for an expeditious approval and finalization of the Energy Rules so that the energy storage industry may operate and invest with certainty in Arizona’s energy storage policy. The ESA praised the Energy Rules’ focus on the “least-cost, best-fit” portfolio of resources to meet the standard of zero carbon emissions by 2050, noting that energy storage complements any portfolio of resources because it can make the grid more flexible and affordable, increase resiliency, and reduce the need for spare generation capacity to meet peak demand and thus costs that must be borne by ratepayers. The ESA stated that energy storage also enables increased penetration of renewable energy resources and reduced dependency on emitting technologies. The ESA expressed support for the changes to the IRP process, particularly the addition of the ASRFI process, the energy storage targets, and the requirement for energy storage tariffs. ESA stated that it looks forward to continued discussions with APS and other stakeholders to develop a model energy storage tariff.</p> <p>The ESA suggested one modification to the Energy Rules where there are references to customers owning or leasing Distributed Storage. The ESA suggested adding “contract” and “customer-contracted” to R14-2-2704(B)(3) and R14-2-2713(A)(1) and (2), in addition to “purchase, or lease” and “Customer-owned or Customer-leased” because energy storage at commercial and industrial customer locations is commonly contracted as a service. The ESA stated that the addition will ensure that commercial and industrial customers are able to participate in Energy Storage System Tariffs.</p>	<p>The Commission appreciates the supportive comments. Staff did not object to the proposed modifications by ESA but opined that they were unnecessary at this time because the interpretation of the provisions is clear and does not directly result in any negative unintended consequences.</p> <p>The Commission appreciates the information provided by ESA related to commercial and industrial customers contracting for (as opposed to owning or leasing) energy storage systems. However, the Commission has determined that retaining the “Customer-owned or Customer-leased Distributed Storage” language in R14-2-2704(B)(3) and the consistent language in R14-2-2713(A)(1) and (2) would not deprive commercial and industrial energy storage systems from being used toward the standard, as the Customer-related criteria apply only to the 40% carveout in R14-2-2704(B)(3) and not to the other 60% of energy storage system capacity that must be installed by December 31, 2035. Likewise, the Commission concludes that R14-2-2713 does not preclude a utility from including in its energy storage system tariff a program for Customer-contracted energy storage systems that is similar to the program required for Customer-owned or Customer-leased Distributed Storage.</p>
<p>The letter signed by the stakeholders expressed support for clean energy rules to adopt carbon emissions to</p>	

<p>help address climate change, clean the air, conserve water, and promote healthy and economically vibrant communities. The letter stated that Arizona needs a Clean Energy Standard that requires carbon reductions of 100% by 2050, 75% by 2040, and 50% by 2032; and supported energy efficiency and distributed solar, preferential siting of renewable resources in coal-impacted communities, and a transparent and accountable planning process.</p>	
<p><u>Three Stakeholders, filed collectively (submitted February 3-9, 2021, and filed February 11, 2021)</u></p> <p>On February 11, 2021, the office of Chairwoman Lea Marquez Peterson filed the comments of 3 stakeholders that had been emailed to her office.</p> <ul style="list-style-type: none"> <li>• Harold Suiter, in an email directed to Senator Livingston and Representatives Toma and Carroll, Arizona State Legislature, stated that he was aware of the Arizona Supreme Court ruling in <i>Johnson</i> “that opens the door for the Legislature to overrule the [Commission] in setting [the Energy Rules]”; that the Energy Rules’ requirement for zero carbon emissions by 2050 is right on target; that managing carbon emissions in the manner of the Energy Rules has been supported by 3,587 U.S. economists and 28 Nobel Laureates; and that the Legislature should work with the Commission to obtain carbon management.</li> <li>• John Pio opposed the Energy Rules, stating that they would raise electric rates, that the Legislature has the responsibility to create energy policy, and that Arizona voters oppose the “Green New Deal” as demonstrated by rejection of Proposition 127 in 2018.</li> <li>• Anneliese Goodwin opposed the Energy Rules, stating that the Commission must not overstep its authority and that Arizona voters demonstrated their will by rejecting Proposition 127.</li> </ul>	<p>The Commission appreciates the supportive comments from Mr. Suiter.</p> <p>The Commission disagrees that it does not have authority to adopt the Energy Rules. Under both its permissive constitutional authority under Art. 15, §3 and its statutory authority (cited in the NPRM), the Commission has the power to make rules to protect the comfort, safety, and health of the employees and patrons of public service corporations and the Arizona public generally. The Energy Rules fall within that power. The Commission expects the Energy Rules to improve air quality, help mitigate climate change, aid coal-impacted communities, and protect ratepayers from the rising economic costs of fossil fuel generation, while also spurring economic growth and job creation. The Energy Rules are not the same as Proposition 127, perhaps most notably in that they do not change the Arizona Constitution and thus can more readily be modified if future circumstances warrant such modification.</p> <p>No changes are needed in response to these comments.</p>
<p><u>Sheryl Hamlin (February 11, 2021)</u></p> <p>Ms. Hamlin stated that she opposes exclusive reliance on solar energy, noting that there is no good solution for battery disposal, which is environmentally unfriendly, and that batteries and blades from wind turbines are not recyclable. Ms. Hamlin stated that any</p>	<p>The Commission appreciates the information provided and notes that the Energy Rules do not prescribe a specific mix of resources and technologies to be used by electric utilities, instead requiring reductions in carbon emissions. The Commission further</p>

<p>energy solution should be a mix of options. Ms. Hamlin also provided a link to an article that she said shows solar does not work in snow and freezing temperatures:  <a href="https://21stcenturywire.com/2021/02/09/achtung-baby-its-cold-outside-germanys-green-energy-fail-rescued-by-coal-and-gas/">https://21stcenturywire.com/2021/02/09/achtung-baby-its-cold-outside-germanys-green-energy-fail-rescued-by-coal-and-gas/</a>.</p>	<p>notes that because much of Arizona is not subject to the extremely cold temperatures and abundant snow cited in the article about challenges Germany has experienced with a lack of solar and wind energy during winter freezes, similar problems are unlikely to occur.</p> <p>No change is needed as a result of the comment.</p>
<p><u>Arizona Speaker of the House Russell W. “Rusty” Bowers, Senate President Karen Fann, Representative Gail Griffin, and Senator Sine Kerr (February 17, 2021)</u></p> <p>Speaker Bowers, President Fann, Representative Griffin, and Senator Kerr (collectively “Legislators”) expressed concern that the Commission “may be overstepping its authority and passing policies that are contrary to the public interest.” The Legislators stated that the Economic, Small Business, and Consumer Impact Statement (“EIS”) filed in support of the Energy Rules was insufficient because it did not cite any of the supporting documentation or evidence “claimed” to be in the docket. The Legislators stated that the Administrative Procedures Act (“APA”) requires the Commission to use facts and evidence when adopting rules, including, under A.R.S. § 41-1052(D)(3), evidence demonstrating that the alternative selected by the Commission results in the “least burden and costs” to those affected by it. The Legislators further stated that the EIS did not include any computations relating to the potential cost impacts on small businesses and consumers, did not include evaluation of less intrusive or less costly alternative methods of achieving the purpose of the rulemaking, and did not evaluate data, all as required by A.R.S. § 41-1055(B)(7)-(8). The Legislators acknowledged that under A.R.S. § 41-1057, the Commission is not required to have its rules reviewed by the Governor’s Regulatory Review Council (“GRRC”), but stated that the Commission is required to adopt “substantially similar rule review procedures,” which would include the requirement for an EIS to include all the information required by law (citing A.R.S. § 41-1057) and that the Commission reject any rule that does not</p>	<p>The Commission appreciates the information provided but has determined that it has constitutional and statutory authority to promulgate the Energy Rules under Arizona Constitution, Article 15, §§ 3 and 13, and A.R.S. §§ 40-202, 40-203, 40-204, 40-281, 40-282, 40-321, 40-322(A), 40-332(B), 40-336, 40-361, and 40-374.</p> <p>Regarding the EIS, the Commission notes that a revised EIS was filed on February 26, 2021, after the comments were submitted. The revised EIS contains information addressing each of the criteria described in A.R.S. § 41-1055(B), and includes a list and description of data, reports, and analyses provided to the Commission and relied on in the development of the Energy Rules.</p> <p>The Commission notes that it is exempt from the provisions of A.R.S. Title 41, Chapter 6, Article 5 (pertaining to GRRC), which includes A.R.S. § 41-1052. Under A.R.S. § 41-1057, the Commission is required to adopt substantially similar rule review procedures, including the preparation of an economic impact statement and a statement of the effect of the rule on small business. The Commission has complied with all applicable requirements.</p>



<p>reflect the “least burden and costs” to those affected by it (citing A.R.S. § 41-1052). The Legislators stated that it is a significant problem that the Commission’s internal policies and procedures do not include “rule review procedures” that are “substantially similar” to those required by A.R.S. Title 41, Chapter 6, Article 5. The Legislators requested a response concerning the lack of a Commission rule review procedure and the inadequacy of the EIS.</p>	<p>Further, the Commission notes that R14-2-2708(C)(2) requires a Load-Serving Entity to prioritize “[m]inimizing the cost of providing electric energy service to Customers through a combination of Supply-Side Resources and Demand-Side Resources that will result in the lowest overall, lifetime costs to meet Customers’ energy needs safely and reliably.” The Commission also notes the comments from multiple stakeholders included in this summary document asserting that the Clean Energy Implementation Plan will result in lower costs for Customers.</p> <p>Finally, the Commission refers the Legislators to the comments of WRA and AZCLPI, filed on February 1, 2021, in which the Commission’s legal authority to adopt the Energy Rules is discussed.</p> <p>No change is needed in response to these comments.</p>
<p><u>WRA, Adam Stafford, Attorney (February 22, 2021)</u></p> <p>WRA provided a table of studies, reports, and plans pertaining to the transition to clean energy, stating that the Energy Rules were based on data and that the Energy Rules docket and the other dockets incorporated by reference provide a robust foundation on which to move forward. WRA suggested that the Commission include the documents in the final EIS for this matter.</p>	<p>The Commission appreciates WRA’s submission of information in its February 22, 2021, letter. The Commission has included a number of these resources in its EIS.</p> <p>No changes are necessary in response to this comment.</p>
<p><u>Arizona Technology Council, Steven Zylstra, President and CEO; Ceres, Emily Duff, Manager of State Policy; and The Western Way, Doran Miller, Arizona Director (March 10, 2021)</u></p> <p>In an article published in the <i>Phoenix Business Journal</i> on March 8, 2021, Arizona Technology Council, Ceres, and the Western Way, as leaders representing a coalition of more than 800 large and small companies, expressed the Arizona business community’s support for the Energy Rules and emphasized the bipartisan</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>



<p>support for the rules. They also stated that a number of bills at the Arizona State Legislature that seek to block the Energy Rules would create market uncertainty for current and future companies seeking to do business in Arizona and would discourage companies from relocating to or expanding their presence in Arizona.</p>	
<p><u>Judith LeFevre (submitted January 22, 2021, filed March 20, 2021)</u></p> <p>Ms. LeFevre expressed support for the Energy Rules, particularly 100% carbon-free energy by 2050.</p>	<p>The Commission appreciates the supportive comment. No change is needed in response to this comment.</p>
<p><u>John Blumberg and Joan Moses, separately submitted but filed collectively (March 19, 2021)</u></p> <p>In his comments submitted on January 22, 2021, Mr. Blumberg stated that we should err on the side of caution to protect the environment now.</p> <p>In her comments submitted on January 22, 2021, Ms. Moses stated that she supports the Energy Rules, especially the standard for 100% carbon-free energy by 2050. Ms. Moses states that the Energy Rules will help address climate change and provide economic benefits. Ms. Moses stated that Arizona is in a 30-year megadrought driven by climate change and that Phoenix ranks among the nation's 10 worst cities for ozone and particulate air pollution.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>WRA, Adam Stafford, Attorney; PIRG, Diane Brown, Executive Director; Sierra Club – Grand Canyon Chapter, Sandy Bahr, Chapter Director; AZCLPI, Jennifer Anderson, Attorney; AriSEIA, Nicole LaSlavic, Executive Director; WGG, Amanda Ormond, Director; SWEEP, Ellen Zuckerman, Co-Director, Utility Program (dated March 23, 2021, and docketed March 24, 2021)</u></p> <p>The stakeholder group wrote in response to a March 17, 2021, letter filed by Chairwoman Lea Marquez Peterson in the IRP Docket, Docket No. E-00000V-19-0034. The group stakeholders described the letter as stating that the Energy Rules Docket and IRP Docket are “inextricably connected” and suggesting that approval of the Energy Rules should wait until conclusion of IRP inquiries. The stakeholder group urged the Commission not to delay adoption of the Energy Rules because doing so “would make a bad</p>	<p>The Commission appreciates the stakeholder group's support for final adoption of the Energy Rules, agrees with the benefits identified, and agrees that it is appropriate to move forward with final adoption so that the benefits of the Energy Rules, including significant improvements to the IRP process, can be realized.</p> <p>No change is needed in response to this comment.</p>

situation worse.” The stakeholder group stated that there is no need to delay the Energy Rules to protect Arizona ratepayers, because R14-2-2716 allows the Commission to waive compliance if the costs of compliance exceed the benefits and the Commission in any event has authority to waive compliance with its rules if necessary to maintain affordability or reliability. The stakeholder group further stated that it is important to approve the Energy Rules now because they significantly modify the existing IRP rules, improving the process, and utilities are now starting to work on their next IRPs. The stakeholder group further recommended that an amendment could be done to alleviate the Chairwoman’s concerns, provided that the amendment would not constitute a substantial change necessitating supplemental rulemaking. The stakeholder group asserted that it would not make sense to delay adoption of the Energy Rules, which will result in substantial benefits.

Abhay Padgaonkar (April 7, 2021)

Mr. Padgaonkar stated that a carbon-free energy mix is critical, as the concentration of atmospheric CO<sub>2</sub> at the Mauna Loa Observatory was measured at more than 420 parts per million for the first time in recorded history, and CO<sub>2</sub> has caused the world to be 2°F warmer than it was before the Industrial Revolution. Mr. Padgaonkar noted that the highest number of heat-related deaths reported by Maricopa County before 2016 was 110, while the numbers since 2016 have increased annually, with 336 deaths in 2020. Mr. Padgaonkar said that the Commission needs to consider not only financial costs but also the associated values or benefits from each energy portfolio. Mr. Padgaonkar stated that the Environmental Protection Agency (“EPA”) has developed a set of tools to help state and local government policymakers estimate the outdoor air quality-related public health benefits of investments in energy efficiency and renewable energy using a benefits-per-kWh method. Mr. Padgaonkar estimated that if 50% of the kWh generated from fossil fuels in 2019 were replaced by solar by 2032, the monetized annual public health benefit would be \$411 million, and at 75% replacement, it would be \$616 million. Mr. Padgaonkar identified two additional EPA tools, the Avoided Emissions and Generation

The Commission appreciates the information provided concerning the benefits of carbon emissions reduction and methods to calculate such benefits. Commission Staff will be obtaining an economic analysis pertaining to the Energy Rules under an existing consulting contract.

<p>Tool (AVERT) and the Co-Benefits Risk Assessment (COBRA) Health Impacts Screening and Mapping Tool. He urged the Commission to retain a consultant thoroughly familiar with well-established cost and benefit calculation methodologies and to have the consultant perform Cost-Benefit Analyses and Return on Investment calculations using an appropriate discount rate so that there is a full and balanced picture of the financial impacts of the Energy Rules.</p>	
<b>Oral Comments on Notice of Proposed Rulemaking, Oral Proceeding 1/19/21 and 1/20/21</b>	
<b>Public Comment</b>	<b>Commission Response</b>
<p><u>Jeanne Devine (January 19, 2021)</u></p> <p>Ms. Devine expressed support for the Energy Rules and the provisions to reduce carbon emissions and interim benchmarks. She expressed the need to address climate change, clean up our air, conserve water, and promote health and economically vibrant communities. She noted the high summer temperatures and associated health impacts, forest fires, and impacts on native vegetation. She urged the Commission to take strong action for clean renewable energy and energy efficiency.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Char Hoffman (January 19, 2021)</u></p> <p>Ms. Hoffman stated that caring for creation is a part of her Roman Catholic Faith and that, in that context, and as a ratepayer, she supports the Energy Rules to reduce carbon emissions, address climate change, clean up the air, conserve water, and improve the health of our communities. She noted that energy efficiency and renewable energy keep electricity costs low, and are consistent, predictable, and reliable. She further stated that energy efficiency creates jobs and renewables preserve health communities. Last, she noted that the Energy Rules include preferential siting of renewable energy projects in coal-impacted communities, which is essential for a just and equitable transition.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Autumn Johnson, WRA (January 19, 2021)</u></p> <p>Ms. Johnson, on behalf of WRA, expressed support for the clean energy standard based on reductions in carbon emissions, noting that emissions-based regulation provides flexibility in meeting the standard, allows utilities to use the most cost-effective strategies, and incentivizes new technology. Ms. Johnson stated</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>

<p>that the WRA encourages the Commission to finalize the rulemaking as soon as possible. She further noted that major corporations have made commitments to be carbon-neutral or carbon-negative, and that attracting those companies requires adoption of the Energy Rules. Last, Ms. Johnson mentioned the effects of climate change, including wildfires and extreme weather events.</p>	
<p><u>Richard Sigler (January 19, 2021)</u></p> <p>Mr. Sigler stated he supports the Energy Rules because he is concerned about climate change, and solar energy is continuing to get cheaper. He further noted that energy efficiency is a positive step forward and that he believes in a just transition to renewables that considers the impacts on Native Americans.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Will Humble, AzPHA (January 19, 2021)</u></p> <p>Mr. Humble stated that AzPHA supports the Energy Rules because climate change is a dominant public health issue and because of heat-related illnesses associated with increasing summer temperatures. He further indicated that the Energy Rules will benefit clean air and will have positive economic benefits. He also expressed support for the preferential siting of renewable energy projects in coal-impacted communities. Last, he mentioned that the Energy Rules will generate new jobs to help support families.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Rivco Knox (January 19, 2021)</u></p> <p>Ms. Knox stated that climate change is a long-term problem that affects her because of the summer temperatures. She further stated that she appreciates the requirement for greater transparency and accountability in the planning process. She noted the importance of addressing climate change, clean air, water conservation, developing healthy and economically viable communities, and the needs of coal-impacted communities. She urged the Commission to adopt the Energy Rules.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Amy Douglass (January 19, 2021)</u></p> <p>Ms. Douglass expressed support for the Energy Rules because they will help reduce carbon emissions, address the climate crisis, help clean air, conserve water, and improve public health. She noted that</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>

<p>energy efficiency and renewable energy will help control utility costs while fossil fuels increase in cost, and new technologies will create new jobs.</p>	
<p><u>Maureen McBride (January 19, 2021)</u></p> <p>Ms. McBride stated that in November 2018, Arizona’s Proposition 127 did not pass. Had it passed, she said, it would have replaced the current plan for increasing renewable energy requirements from 15% by 2025 to a percentage increasing annually from 12% in 2020 to 50% in 2030. She further stated that “regardless of ideological, political, or individual beliefs and disagreements on climate, carbon CO<sub>2</sub> and renewable resources, because the majority of Arizonans defeated Prop 127[,] the ACC does not have the consent of the governed or the mandate to pass and force on Arizonans Article 27 Energy Rules.”</p>	<p>The Commission appreciates the comments but has determined that it has constitutional and statutory authority to promulgate the Energy Rules under Arizona Constitution, Article 15, §§ 3 and 13, and A.R.S. §§ 40-202, 40-203, 40-204, 40-281, 40-282, 40-321, 40-322(A), 40-332(B), 40-336, 40-361, and 40-374. The Commission also notes that during the stakeholder process to develop the Energy Rules and during the formal comment period on the NPRM, the Commission has received overwhelming support for the Energy Rules.</p> <p>No change is needed in response to these comments.</p>
<p><u>Kimberly Faddoul (January 19, 2021)</u></p> <p>Ms. Faddoul expressed support for the Energy Rules, noting that energy efficiency and renewable energy are options that are available now and will help control utility costs, create jobs, and build a cleaner energy future. She noted that renewable energy conserves resources and reduces pollution and emissions that contribute to climate change.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Doug Bland, Arizona Interfaith Power and Light (January 19, 2021)</u></p> <p>Mr. Bland expressed support for the clean energy and energy efficiency measures, the improvements to the IRP process, and the efforts to assist communities impacted by fossil fuels. He stated that the Energy Rules are a “much needed step in the response to the existential threat of climate change,” and that clean energy is not just a political or economic or scientific or health issue, but is also a moral issue.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Paul Getty (January 19, 2021)</u></p> <p>Mr. Getty expressed support for the Energy Rules and urged the Commission to adopt them as urgently as possible. He advocated for retraining workers from the</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>



fossil fuel industries to provide a just and equitable transition to low-carbon energy.	
<u>Kim Maddox (January 19, 2021)</u>  Ms. Maddox stated her support for the Energy Rules to reduce carbon emissions, address climate change, clean up the air, conserve water, and promote healthy, economically vibrant communities.	The Commission appreciates the supportive comments. No change is needed in response to these comments.
<u>Melissa Ramos, American Lung Association (January 19, 2021)</u>  Ms. Ramos stated that the American Lung Association strongly supports the Energy Rules, stating that they provide strong, consistent action to reduce harmful pollutants and protect lung health. She noted that Phoenix is one of the 10 most polluted cities for ozone and particle pollution. She stated that they conducted a poll in December 2020 that indicated 78% of Arizona voters view climate change as a serious problem and 70% support the Energy Rules.	The Commission appreciates the supportive comments. No change is needed in response to these comments.
<u>Beth Ballmann (January 19, 2021)</u>  Ms. Ballmann mentioned her experience with wildfires and the impact of climate change on our daily lives. She expressed support for the Energy Rules, noting that energy efficiency can create local, well-paying jobs. She further stated that the plan has been well-researched and will keep electricity costs lower, consistent, predictable, and reliable.	The Commission appreciates the supportive comments. No change is needed in response to these comments.
<u>Nate Blouin, Interwest (January 19, 2021)</u>  Mr. Blouin expressed general support for the Energy Rules, stating they will bring new jobs, revenues, and economic development to Arizona. He stated that Interwest supports the requirement for zero net carbon emissions by 2050 and the interim targets and that Interwest also supports the resource planning rules, but stated that they would be submitting written comments that include suggestions for broadening the range of portfolios and stakeholders to be considered, and to otherwise strengthen the procurement process. He also stated that Interwest advocates for including language that considers the benefits of regional markets and transmission development.	The Commission has addressed the comments of Interwest in the written comments section. No change is needed in response to these comments.
<u>Dr. Judith Anderson (January 19, 2021)</u>	The Commission appreciates the supportive comments. The Commission

<p>Dr. Anderson urged the Commission to adopt the Energy Rules immediately, and stated that they were not strong enough to protect public health and the environment. She noted that the Strategen report concluded that renewable energy is cheaper and cleaner than coal, and in the long term will be cheaper and cleaner than gas. Dr. Anderson asked why there was no accountability for utilities built into the proposed rules. She also urged the Commission to commence a legal challenge to Senate Bill 1175 and the comparable House Bill.</p>	<p>states that the Energy Rules, if passed, will become a legally enforceable Article of the Administrative Code. The Commission has authority under Article 15, Section 3 of the Arizona Constitution and under A.R.S. Title 40, Chapter 2 to regulate public service corporations and to adopt and enforce its rules. The Commission does not have a comment on pending legislation at this time.</p> <p>No change is needed in response to these comments.</p>
<p><u>Matt Derr, Southwest Gas Corporation (January 19, 2021)</u></p> <p>Mr. Derr stated that he agreed with the NPRM and Staff's description at the beginning of the oral comment proceedings as to the role for natural gas utilities in the Energy Rules and Southwest Gas's ability to provide cost-effective energy efficiency programs to its customers.</p> <p>Staff had described the Energy Rules as requiring each Class A gas utility to consider and propose energy efficiency measures and programs.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Doran Miller, the Western Way (January 19, 2021)</u></p> <p>Ms. Miller urged the Commission to adopt the Energy Rules, noting that they are the product of an extensive and bipartisan stakeholder process. She stated that the energy efficiency standard will increase the use of existing energy efficiency measures and will create innovation in home storage, automation, and smart grid technology. She also expressed support for the updated IRP process to include a more transparent advisory committee to approve future load forecasts and a competitive bid process to achieve lower cost resources and benefit consumers. She noted a recent poll conducted by the Western Way that found 87% of Arizona voters believe the government should play a role in accelerating the development and use of clean energy, and 60% of Arizona voters would support low emissions solutions to comply with federal clean air standards.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>

<p><u>Todd Jones, CRS (January 19, 2021)</u></p> <p>Mr. Jones provided comments consistent with the written comments filed by CRS. He advocated for a uniform compliance instrument to demonstrate the delivery of clean and renewable energy and to track carbon emissions, specifically recommending RECs.</p> <p>The recommendations of CRS are discussed in greater detail in the written comments portion.</p>	<p>The Commission has addressed the comments of CRS in the written comments section. No change is needed in response to these comments.</p>
<p><u>Daniel Holcom (January 19, 2021)</u></p> <p>Mr. Holcom expressed support for the Energy Rules to reduce carbon emissions, address climate change, clean up the air, conserve water, and promote healthy and economically vibrant communities. He expressed support for the requirement for a reduction in carbon emissions, and for investments in energy efficiency and distributed solar storage. Mr. Holcom also expressed support for preferential spending on renewable resources in communities impacted by coal plants and for a transparent planning process.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Amanda Ormond, WGG (January 19, 2021)</u></p> <p>Ms. Ormond described the involvement of WGG in the process to develop the Energy Rules and stated that individuals and organizations have had adequate opportunity to provide input. She stated that WGG supports all aspects of the Energy Rules, including the energy efficiency and IRP changes. She encouraged the Commission to adopt the Energy Rules as soon as possible.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Andrea Packard (January 19, 2021)</u></p> <p>Ms. Packard stated that she supports the Energy Rules because she values the health of her community and because the Energy Rules will help mitigate the environmental impacts of climate change. She stated that adoption of the Energy Rules will keep Arizona competitive economically and that it is important to support vulnerable communities with a just and equitable energy transition.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Robert and Marquetta White (January 19, 2021)</u></p> <p>Mr. White expressed support for the Energy Rules to reduce carbon emissions, address climate change,</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>

clean up the air, conserve water, and improve the health of our communities. He also stated that renewable energy keeps electricity costs lower, and is consistent, predictable, and reliable.	
<u>Sophia Von Hippel (January 19, 2021)</u>  Ms. Von Hippel noted the health effects of increasingly higher temperatures and air pollution on disadvantaged community members. She stated that the Energy Rules will have positive social and health benefits and that the clean energy standard will stimulate the local renewable energy industry.	The Commission appreciates the supportive comments. No change is needed in response to these comments.
<u>Mark Weathers (January 19, 2021)</u>  Mr. Weathers stated that we must act quickly to address climate change. He stated that the technology changes needed to be carbon free present an opportunity for jobs and the economy.	The Commission appreciates the supportive comments. No change is needed in response to these comments.
<u>Gloria Montaña, Chispa Arizona (January 19, 2021)</u>  Ms. Montaña stated that Chispa supports the Energy Rules. She noted that air pollution disproportionately impacts lower income families, Latinos, and communities of color through higher rates of respiratory illness and higher energy bills. She also stated that the Energy Rules are overdue as technology has increased and other states that have adopted similar standards have demonstrated that it is more affordable. She stated that all policymakers should work to address climate change and improve community health.	The Commission appreciates the supportive comments. No change is needed in response to these comments.
<u>Theo Massey (January 19, 2021)</u>  Ms. Massey stated that Arizona needs to be a leader in establishing clean, renewable energy, and that there is an opportunity to demonstrate our commitment to carbon reduction, clean air, and clean water.	The Commission appreciates the supportive comments. No change is needed in response to these comments.
<u>Diane Brown, PIRG (January 20, 2021)</u>  Ms. Brown emphasized support for the energy efficiency standard, noting that energy efficiency reduces waste and saves money for ratepayers. She stated that the current energy efficiency standard is one of the most significant and successful policies adopted by the Commission, returning \$4 in benefits to ratepayers for every \$1 invested by APS and TEP. It also has provided savings equivalent to the energy use	The Commission appreciates the supportive comments. No change is needed in response to these comments.

<p>of over 500,000 homes, saved over 14 million gallons of water, and produced more than \$1 billion in economic benefits. She encouraged the Commission to adopt the Energy Rules without the addition of substantive changes.</p>	
<p><u>Sandy Bahr, Sierra Club Grand Canyon Chapter (January 20, 2021)</u></p> <p>Ms. Bahr noted the impacts of climate change, including extreme heat and the associated energy burden on vulnerable populations, drought, and more frequent and larger fires. She stated that clean energy is essential for addressing the climate crisis. She further commented that clean renewable energy and energy efficiency are essential for cleaner air, a stronger economy, and reduced electricity costs. She stated that because the Energy Rules affect the energy mix and affect how rates are established and the prudence of energy investments, they relate to ratemaking. Last, she noted that one argument made against Prop 127 was that it should be addressed by the Commission and not as a constitutional amendment.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Rachel Scholes (January 20, 2021)</u></p> <p>Ms. Scholes expressed support for the Energy Rules' requiring 100% carbon-free energy production by 2050. She expressed support for increasing energy efficiency measures.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Gabrielle Lawrence (January 20, 2021)</u></p> <p>Ms. Lawrence expressed appreciation on behalf of the Citizens' Climate Lobby for the process and effort to create the Energy Rules. She noted the environmental disasters resulting from increased temperatures and heat-related deaths. She stated that the Energy Rules will control utility costs, create jobs, build a cleaner energy future, and improve air and water quality.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Scott Dunbar, SEIA (January 20, 2021)</u></p> <p>Mr. Dunbar provided comments in support of the Energy Rules. Mr. Dunbar offered several recommendations for modifications to the Energy Rules:</p> <p>(1) Adding a solar energy representative to the required RPAC;</p>	<p>The Commission appreciates the support and the suggestions provided.</p> <p>In subsequent written comments filed by SEIA on January 22, 2021, SEIA stated that it no longer recommends these modifications but will be involved in future proceedings to implement the Energy Rules and may raise the issues at that time.</p>




<p>(2) Adding an additional priority that an electric utility must consider in developing its IRP, specifically a mandatory criterion to minimize the occurrence and appearance of anticompetitive behavior and self-dealing between electric utilities and affiliated interests, and adding language to empower and direct the Independent Monitor to ensure that the ASRFP process is conducted in a way so that there is no anticompetitive behavior; and</p> <p>(3) Removing the utility's reporting requirements related to third-party owner operation and maintenance costs.</p>	<p>No change is needed as a result of these comments.</p>
<p><u>Caryn Potter, SWEEP (January 20, 2021)</u></p> <p>Ms. Potter expressed support for the Energy Rules, including the adoption of the technology-neutral clean energy standard, and the expanded energy efficiency standard. She stated that the energy efficiency standard is the least cost energy and capacity resource and has created well-paying jobs. Last, Ms. Potter expressed support for the distributed storage standard and the strengthened IRP process.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Bret Fanshaw, Solar United Neighbors (January 20, 2021)</u></p> <p>Mr. Fanshaw urged the Commission to quickly finalize the Energy Rules. He stated that Solar United Neighbors supports the major components of the Energy Rules and that the battery storage standard is an innovative policy that will drive smart investment.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Michael Sheehan, TEP and UNSE (January 20, 2021)</u></p> <p>Mr. Sheehan provided comments consistent with the written comments filed by TEP and UNSE. He expressed general support for the Energy Rules and suggested minor clarifications and date changes to the IRP schedule.</p>	<p>The Commission has addressed the comments of TEP and UNSE in the written comments section. No change is needed in response to these comments.</p>
<p><u>Steven Zylstra, Arizona Technology Council (January 20, 2021)</u></p> <p>Mr. Zylstra urged the Commission to adopt the Energy Rules "to reflect recent energy technology advances and new market realities in sunny Arizona." He expressed specific support for the carbon-free electricity standard, energy efficiency, and energy storage standards. He noted that companies are</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>

increasingly demanding power from renewable sources.	
<p><u>Kyle Kline, Arizona Youth Climate Coalition, Tucson chapter (January 20, 2021)</u></p> <p>Mr. Kline stated that the Arizona Youth Climate Coalition supports the Energy Rules to ensure Arizona's economic and environmental longevity. He noted that a rapid and just transition away from fossil fuels will protect public health. He also noted the impacts of climate change and stated that adopting clean energy rules will lead to investments in local jobs and ensure community health.</p>	The Commission appreciates the supportive comments. No change is needed in response to these comments.
<p><u>Kay Baldwin (January 20, 2021)</u></p> <p>Ms. Baldwin discussed the negative effects of climate change, including extreme heat and drought, crop failure, hunger, economic decline, increased illnesses, and unprecedented fires. She stated that she supports the Energy Rules for the health and well-being of the community, the economy, and the environment.</p>	The Commission appreciates the supportive comments. No change is needed in response to these comments.
<p><u>Peter Lafford (January 20, 2021)</u></p> <p>Mr. Lafford expressed support for the carbon-free energy standard and the Energy Rules, which he stated will help build an environmentally sustainable future.</p>	The Commission appreciates the supportive comments. No change is needed in response to these comments.
<p><u>Russell Lowes (January 20, 2021)</u></p> <p>Mr. Lowes expressed support for the Energy Rules and appreciation for the support of low carbon dioxide energy sources and energy efficiency. He stated ratepayers will benefit from a resource blend that relies on solar, energy efficiency, battery storage, and wind energy. He also stated that more energy can be delivered from every dollar spend on solar than on nuclear power.</p>	The Commission appreciates the supportive comments. No change is needed in response to these comments.
<p><u>Julian Boggs, ESA (January 20, 2021)</u></p> <p>The comments from Mr. Boggs were similar to the comments submitted in writing on behalf of the ESA. He expressed support for the Energy Rules and recommended a modification to include "contracted" energy storage systems along with customer "owned" and "leased" energy storage systems because commercial and industrial consumers frequently use energy storage sites as a contracted service.</p>	The Commission has addressed the comments of the ESA in the written comments section. No change is needed in response to these comments.

<p><u>Frederick Davis (January 20, 2021)</u></p> <p>Mr. Davis expressed support for the Energy Rules, particularly the energy efficiency provisions. He supports adoption of the most vigorous, comprehensive energy plan possible.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>
<p><u>Danielle Corbett (January 20, 2021)</u></p> <p>Ms. Corbett stated that she supports the Energy Rules because of the local and global health impacts from greenhouse gas emissions. She noted the increased wildfires, air quality issues, and unbearable heat. She further stated that a strong renewable energy portfolio will result in investment in jobs and better wages.</p>	<p>The Commission appreciates the supportive comments. No change is needed in response to these comments.</p>

**MEMORANDUM**

TO: Docket Control

FROM: Elijah O. Abinah   
Director  
Utilities Division

DATE: February 26, 2021

RE: IN THE MATTER OF POSSIBLE MODIFICATIONS TO THE ARIZONA  
CORPORATION COMMISSION'S ENERGY RULES (DOCKET NO. RU-  
00000A-18-0284).

SUBJECT: STAFF REVISED ECONOMIC, SMALL BUSINESS, AND CONSUMER  
IMPACT STATEMENT.

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The Utilities Division Staff ("Staff") hereby files its revised Economic, Small Business, and Consumer Impact Statement ("EIS") in accordance with Decision No. 77829 (November 23, 2020).

EOA:PCL:jn/WVC

Originator: Patrick LaMere

Attachment

**Note:** The Commission is exempt from the requirements of A.R.S. § 41-1055 relating to economic, small business, and consumer impact statements. However, under A.R.S. § 41-1057, the Commission is required to prepare a “substantially similar” statement.

## **A.R.S. § 41-1055**

### **Economic, Small Business, and Consumer Impact Statement**

#### **1. Identification of the proposed rulemaking.**

With this rulemaking, the Arizona Corporation Commission (“Commission”) adds a new Article 27, entitled “Energy Rules,” to Title 14, Chapter 2, of the Arizona Administrative Code (“A.A.C.”), the Chapter containing the Commission’s rules for fixed utilities. Furthermore, in the same Chapter, this rulemaking (i) Repeals the Resource Planning and Procurement Rules (14 A.A.C. 2, Article 7); (ii) Repeals the Environmental Portfolio Standard (“EPS”) Rule (A.A.C. R14-2-1618); (iii) Repeals the Renewable Energy Standard and Tariff (“REST”) Rules (14 A.A.C. 2, Article 18); (iv) Amends A.A.C. R14-2-2302 and R14-2-2307 in the Net Metering Rules; (v) Repeals the Electric Energy Efficiency (“EEE”) Rules (14 A.A.C. 2, Article 24); and (vi) Repeals the Gas Energy Efficiency Rules (“GEE”) (14 A.A.C. 2, Article 25).

The Commission routinely evaluates its existing energy-related rules for fixed utilities as technology evolves, changes in energy policy have been endorsed at the state and federal level, or other changes in the energy marketplace have occurred. An integral part of this evaluation is a cost-benefit analysis due to the impact on customer rates. The costs associated with any changes must be closely evaluated to ensure that such changes can be implemented cost effectively and that customer rate structures are also changed as necessary to appropriately reflect the Energy Rule changes. The timing of such changes is critical, and any changes and transition will need to incorporate gradualism as necessary.

The Commission adopted Resource Planning Rules in Decision No. 56313 (January 12, 1989), and revised the rules to include Procurement in Decision No. 71722 (June 3, 2010). Since adoption of the Resource Planning Rules, the Commission has adopted a number of Articles related to the methods and processes regulated utilities follow in generating, procuring and delivering energy. In Decision No. 63364 (February 8, 2001), modified by Decision No. 63486 (March 29, 2001), the Commission adopted the EPS Rule which imposes requirements for a Load-Serving Entity (“LSE”) to obtain a specified percentage of total retail energy sold from new solar resources or renewable electricity technologies. In 2006, the Commission adopted the REST Rules, in Decision No. 69127 (November 14, 2006), and later, in Decision No. 74882 (December 31, 2014), amended the REST Rules to clarify and update how the Commission deals with renewable energy compliance. The REST Rules require affected utilities to satisfy an annual renewable energy requirement of up to 15 percent of a utility’s sales by 2025. In Decision No. 70567 (October 23, 2008), the Commission adopted rules for net metering which provides consumers the opportunity to be compensated for installing a distributed technology resource and be compensated for energy generated in excess of their energy needs. In 2010, the Commission adopted energy efficiency rules for electric and gas utilities, respectively, Decision No. 71819 (August 10, 2010), and Decision No. 72042 (December 10, 2010); requiring an affected utility to achieve cumulative annual energy savings, measured in kilowatt-hours (“kWh”) or therm or therm-equivalents, equal to a



percentage of the utility's retail energy sales for a specific calendar year. The EEE Rules require affected electric utilities to satisfy an energy efficiency standard of 22 percent by 2020. The GEE Rules require affected gas utilities to satisfy an energy efficiency standard of six percent by 2020.

At the federal level, a number of policies focused on promoting energy conservation, and encouraging alternative energy resources, have influenced the Commission's development of the Energy Rules. Notable examples include: The Public Utility Regulatory Act of 1978 or "PURPA" (part of the National Energy Act), The Energy Policy Act of 1992, The Energy Policy Act of 2005, and The Energy Independence and Security Act of 2007. In line with these policies, the Commission has enacted, identified and modified a number of its existing rules. Furthermore, at the state level, as of September 2020, 30 States, including Arizona, had enacted a renewable energy portfolio standard, many requiring some percentage of an electric utility's procured or sold electricity to come from renewable energy sources. Among those, eight have a renewable energy portfolio standard of 100 percent by a specific year.

On August 17, 2018, Docket No. RU-00000A-18-0284 was opened at the direction of the Commission for the purpose of evaluating and updating the Commission's rules. Subjects to be evaluated included: (i) modernizing the current energy-related Commission Articles (REST Rules, EEE Rules, GEE Rules, Net Metering Rules, Resource Planning and Procurement Rules, and Retail Electric Competition Rules (which include the EPS Rule)); (ii) reviewing existing generic dockets at the Commission, such as but not limited to the investigation of value and cost of distributed generation, reducing system peak demand costs, energy efficiency reporting requirements, the role of forest bioenergy and biofuels, baseload security, retail electric competition, the Commission's PURPA policy, and the reliability of current electric distribution systems; and (iii) researching electric vehicles, interconnection of distributed generation facilities, blockchain technology or transactive energy, technological developments in generation and delivery of energy, forest bioenergy, baseload security, the statutory Biennial Transmission Assessment, and other energy-related topics such as battery storage.

The Commission's proceedings in Docket No. RU-00000A-18-0284 and the development of the resulting Energy Rules reflect a lengthy and comprehensive process that included stakeholder workshops, incorporation of written and oral comments, and Special Open Meetings at the Commission. The proposed rules represent an evaluation of the current energy-related Articles and incorporate more modernized approaches to the generation, procurement, and delivery of energy and the transition to clean energy resources, to ensure reliability and fair and reasonable rates to customers.

The new Article 27 ("Energy Rules") includes 18 new rules. The Energy Rules establish standards and methods to cause regulated utilities to increase the utilization of clean and renewable energy technologies, energy storage, and energy efficiency-based measures while maintaining reliability, deliverability, cost-effectiveness, and safety, and reducing negative environmental impacts and risks.

Currently, the Commission's Resource Planning and Procurement Rules require annual filing of historical demand-side data and supply-side data; biennial filing of load data and analyses, including a 15-year forecast; biennial filing of prospective analyses and plans, including a 15-year resource plan; biennial filing of a compilation of analyses and plans

regarding errors and risks; biennial filing of an Integrated Resource Plan ("IRP") and three-year Action Plan, which must include renewables to meet the Renewable Energy Standard of R14-2-1804, Distributed Generation to meet the Distributed Generation Standard of R14-2-1805, and Energy Efficiency to meet standards in the Electric Energy Efficiency Rules; biennial filing of a work plan regarding IRP development and stakeholder involvement; Staff review and recommendations on each IRP; Commission acknowledgement (or not) of each IRP; use of a Request for Proposals ("RFP") process for wholesale energy acquisition unless an exception applies; and use of an Independent Monitor during the RFP process. Additionally, the EPS Rule imposes a solar resources or renewables requirement for LSEs, and the EEE Rules and GEE Rules impose Energy Efficiency Standards for electric and gas utilities.

Perhaps most notably, the Energy Rules eliminate the current Renewable Energy Standard and Distributed Generation Standard in the REST Rules, the current solar resources or renewables requirement in the EPS Rule, and the Energy Efficiency Standards in the EEE and GEE Rules. In their place, the Energy Rules require an Electric Utility, every three years, to file with the Commission, for approval, a Clean Energy Implementation Plan that describes how the Electric Utility intends to comply with the Energy Rules. Specifically, an Electric Utility is required to accomplish the following through its Clean Energy Implementation Plan:

- If an LSE, by January 1, 2030, to have its resource portfolio include a demand-side resource capacity equal to at least 35 percent of its 2020 peak demand;
- Through demand-side management ("DSM") programs, to average at least 1.3 percent annual Energy Efficiency over each three-year planning period;
- By December 31, 2035, to have installation of Energy Storage Systems ("ESS") with aggregate capacity of at least 5 percent of 2020 peak demand, with at least 40 percent derived from customer-owned or-leased distributed storage; and
- By January 1, 2050, to reduce carbon emissions by 100 percent below its baseline carbon emissions level, with interim standards of 50 percent by January 1, 2032, and 75 percent by January 1, 2040.

The Energy Rules provide that an Electric Utility's baseline carbon emissions are the average annual metric tons of carbon emissions from all generating units used to meet the electric utility's retail kWh sales during the three-year period of 2016 through 2018.

By focusing on carbon reduction as opposed to requirements to obtain specific levels of technology-specific generation resources, the Energy Rules allow electric utilities additional flexibility in selecting their generation resources while accomplishing environmental benefits. The Commission acknowledges the adverse impacts of climate change and the role of fossil fuel generation in that change. The Commission also acknowledges and desires to improve the air pollution and environmental pollution that result from fossil fuel generation.

The Energy Rules also require annual filing of demand-side resource data and supply-side data, but place additional emphasis on the earlier stages of a LSE's formulation of its IRP by requiring the LSE to develop at least five alternative 15-year Load Forecasts and Needs

Assessments based on different assumptions, to form a Resource Procurement Advisory Committee that includes representation from specified stakeholder groups, to hold workshops with the utility's developed Resource Planning Advisory Council ("RPAC"), and to file a refined Load Forecast and Needs Assessment with the Commission for approval every three years. The Energy Rules also require the Commission to hold at least one workshop and to accept written comments on the Load Forecast and Needs Assessment before making its decision. Furthermore, the Energy Rules include requirements for development of All Source Request for Information ("ASRFI") language, which will be used to obtain bids for supply-side resources and demand-side resources to meet the LSE's Load Forecast and Needs Assessment and ensure neutrality as to technology, fuel, location (with one exception), size, and vendor. The Energy Rules require the LSE to meet with the RPAC in a workshop to obtain input on changes to draft ASRFI language and to submit refined ASRFI language to the Commission for review and approval. The Energy Rules then require the LSE to conduct its ASRFI process using the ASRFI language and to review and consider each bid before formulating its draft IRP, which must include at least three alternative Resource Portfolios. The LSE must meet with the RPAC in a workshop to obtain input on changes to the draft IRP and then must refine the IRP. When deciding on its IRP resources, the LSE is required to prioritize meeting the Clean Energy Implementation Plan requirements, minimizing the cost to customers by selecting resources that will result in the lowest overall lifetime costs to meet energy needs safely and reliably, and giving preference to renewable and clean energy resources sited or deployed in coal-impacted communities. The LSE also may consider a number of additional factors that have a reasonable nexus to ratemaking, such as providing adequate service to customers; decreasing peak demand; and reducing the costs associated with complying with local, state, and federal regulations. After the draft IRP is refined, the LSE is required to submit it to the Commission for approval of a Resource Portfolio. The Commission is required to hold at least one workshop to obtain input on the IRP. The first five years of a LSE's approved Resource Portfolio are referred to as its Action Plan, and the Energy Rules require a LSE to implement it and, with some exceptions, to use an All Source RFP ("ASRFP") process to procure its resources.

By focusing on the early stages of IRP plan development, the Energy Rules make it possible for the Commission to ensure that a LSE considers the factors necessary to ensure cost-effective provision of safe and reliable electric service to its customers, while also meeting the Clean Energy Implementation Plan requirements. The Energy Rules are expected to provide LSEs more assurance that their procured resources will be acceptable to the Commission and potentially to increase the likelihood that LSEs will be able to obtain cost recovery for the resources through future ratemaking.

The Energy Rules adopt more flexible requirements for Gas Utilities, requiring each Class A Gas Utility, every third year, to file an Energy Efficiency Report for Commission approval. Gas Utilities are not required to meet specific standards for reduction in coincident peak or energy demand but are required to identify any demand-side resources implemented or proposed to be implemented.

The Energy Rules also adopt more lenient requirements for Electric Utilities that are cooperatives, in recognition of the cooperatives' non-profit status and different operating conditions. Cooperatives, including Load-Serving Cooperatives, are required to use best reasonable efforts in accordance with Good Utility Practice to comply with the Energy Rules. The Energy Rules provide that a distribution cooperative's approved Clean Energy

Implementation Plan substitutes for the requirements of the Energy Rules and that a Load-Serving Cooperative's approved IRP substitutes for the requirements of the Energy Rules.

Additionally, the Energy Rules encourage the use of energy storage systems by requiring each Electric Utility to file an Energy Storage System Tariff with the Commission for approval and requiring that each such tariff establish an incentive program to encourage customers to purchase or lease distributed storage and establish values to compensate or credit customers or aggregators for beneficial operating attributes resulting from distributed storage.

Most renewable and clean technology resources have little to no fuel costs (specifically solar, wind and geothermal heat) and are available locally in Arizona and are not subject to disruptions or manipulation of market prices. In addition, conventional technology resources such as generating units that utilize fossil fuels, emit carbon-based pollutants and greenhouse gases which may have a negative impact on human health and the environment. From a health and safety perspective, the public may see reduced negative health problems associated with reduced harmful pollutants, limiting the negative impacts to overall air quality. Reducing emissions of carbon-based pollutants and greenhouse gases, may result in increased public health and safety, and societal and economic benefits that are challenging to quantify, overall.

Electricity consumers of applicable regulated utilities will also benefit from the energy efficiency standards. Energy efficiency measures and programs are designed to reduce the overall consumption of electrical energy by end-users, reducing the need to generate additional electricity. Since energy consumption may be reduced, the total energy load and peak demand of the utility providing electricity may be reduced. Additional cost savings may be realized by consumers if they purchase less electricity to meet their energy needs.

The exact costs to meet the requirements of the Rules will vary over time. Each applicable regulated utility is required to comply with the standards contained in the Energy Rules and file updates with the Commission on its progress and capability to meet those standards. Electric utilities can expect increased investment in clean and renewable technologies and energy storage, which may increase overall costs for generating electricity. This is dependent on each electric utility's current technologies utilized for meeting its retail load and peak demand, and the remaining useful life of those technologies. Electric utilities who own generating units that emit carbon-based pollutants can expect costs associated with the potential curtailment and earlier-than-expected retirement of these units. With the repeal of a number of current Articles, a utility may see a benefit in the total cost for complying with the filing requirements contained in this rulemaking as compared to the rules that exist currently. At this time, it is uncertain whether there will be a need for any additional utility personnel in order to comply with the standards contained in this rulemaking. Furthermore, it is uncertain at this time whether electric utilities that are considered as load-serving entities will have additional costs or benefits for complying with the requirements of this rulemaking. Forecasting and additional analyses will need to be performed by each applicable regulated utility following the adoption of the Energy Rules, and enough time has passed for significant data collection, respective to the capability of each utility, in order to accurately assess the total costs and benefits. All potential costs and benefits incurred by each electric utility for complying with the Energy Rules will directly impact its customers in the form of electric rates.



Electric utilities considered to be cooperatives are granted greater flexibility to meet the standards due to their smaller size and unique status as a non-profit ran by a local board. The costs to customers will vary over time and will directly follow the costs to the cooperative, which are expected to be passed through to the customer.

The Commission has jurisdiction over retail rates, generator siting, local distribution facilities, and intra-state electricity commerce associated with regulated utilities. Furthermore, the Commission sets, reviews, and approves retail rate tariffs and considers purchase power agreements and utility capital costs that are to be reimbursed by ratepayers, through a prudency review in order to determine whether projects are completed at a reasonable cost. The Energy Rules include provisions for flexibility to each applicable utility so overly burdensome costs are not borne by its customers. The Energy Rules do not include provisions that would be in conflict with the jurisdictions of the Federal Energy Regulatory Commission ("FERC") and the North American Electric Reliability Corporation ("NERC").

2. Persons who will be directly affected by, bear the costs of, or directly benefit from the proposed rulemaking.

The persons ("stakeholders") most affected by the Energy Rules include:

- a. Electric Utilities and Class A Gas Utilities that are under the Commission's jurisdiction and providing electric or gas service in Arizona ("regulated utilities");
- b. Customers receiving electric or gas service in Arizona from regulated utilities;
- c. Entities engaging in commerce directly related to clean and renewable energy technologies, energy storage, and energy efficiency-based technologies and services;
- d. Individuals directly engaged in activities associated with conventional generating units (e.g. coal, natural gas, and oil);
- e. Public entities, such as schools, cities, counties, or state agencies;
- f. The general public, as the Energy Rules impact health and safety; and
- g. The Arizona Corporation Commission.

3. Cost-benefit analysis.

The Energy Rules ensure safe and reliable service while promoting the use of newer, cleaner technologies and more modern processes. As described above, the Energy Rules include several major differences from the Commission's current rules regarding the procurement of clean and renewable energy, energy efficiency, and resource planning. Depending on a LSE's current resources and future plans, the Energy Rules may result in significant capital costs, which may ultimately be borne by the utility's customers, if determined to be prudent by the Commission in a rate case. The potential costs will vary depending on the current energy resources owned and utilized by each regulated utility.



Quantifying these costs accurately is speculative, as the prices of energy resources change over time, as do the technologies available, and it is likely that each utility will be impacted differently depending on their specific circumstances and choices.

Notably, in January 2020, Arizona's largest electric utility, Arizona Public Service Company ("APS") made a voluntary commitment to (1) transition to providing 100 percent clean, carbon-free electricity to customers by 2050; (2) transition to a resource mix of 65 percent clean energy, with its generation portfolio including 45 percent renewable energy, by 2030; and (3) end all coal-fired generation by 2031, seven years earlier than previously projected. As a result of this voluntary commitment to transition to clean, carbon-free electricity, APS will not be impacted by the Energy Rules to the same extent as may be a LSE that has not already independently decided to transition to clean energy and that relies more heavily on fossil-fuel generation sources.

In June 2020, Tucson Electric Power Company ("TEP") filed with the Commission its required IRP. In its filing, TEP provides "given recent declines in the cost of zero-emission renewable technologies and the current outlook that these declines will continue, TEP's long-term strategy is now focused on completing the transition to 100[%] clean energy. What remains to be determined is how quickly this transformation can occur." In addition, TEP developed a wide range of portfolios and presented a total of 15 in its 2020 IRP. These portfolios were used to evaluate the implications of various policy positions in terms of overall cost and environmental performance. TEP's analysis found that a carbon emissions standard can achieve lower emissions at a lower cost than a clean or renewable energy portfolio standard.

Significant requirements contained in the Energy Rules that directly affect the energy resources owned and utilized by each regulated utility and that may result in a net cost or net benefit include:

- For all applicable regulated electric utilities:
  - Averaging at least 1.3 percent annual energy efficiency measured by megawatt-hour savings over the three-year planning period, without carrying over energy savings credits from programs implemented before January 1, 2021;
  - By December 31, 2035, the installation of ESS with an aggregate capacity equal to at least 5 percent of the electric utility's 2020 peak demand, of which at least 40 percent shall be derived from customer-owned or customer-leased distributed storage; and
  - A 100 percent reduction in carbon emissions by January 1, 2050, with interim standards of at least a 50 percent reduction in an electric utility's determined baseline carbon emissions by January 1, 2032, and at least 75 percent reduction by January 1, 2040;

- For a regulated electric utility that is an LSE:
  - Maintaining a resource portfolio with a demand-side resource capacity equal to at least 35 percent of the LSE's 2020 peak demand;
  - Incorporating an ASRFP and ASRFI process; and
  - Performing additional studies and analyses and providing the results to the Commission; and
- For all regulated utilities, applicable mandatory filing requirements (although the mandatory filing requirements are different than but should not be more burdensome than the filing requirements in the Commission's current rules).

The associated requirement for regulated electric utilities to achieve carbon reductions of 100 percent by 2050 through clean and renewable technologies is expected to result in benefits in the form of:

- Decreased demand for fossil fuels (e.g., coal, natural gas, and oil).
  - Decreased fuel costs and cost volatility.
  - Decreased transmission and distribution line losses resulting from increased distributed generation and energy efficiency.
  - Decreased negative health impacts associated with carbon-based pollutants emitted from generating units utilizing fossil fuels;
  - Decreased dependability on water resources due to the transition from more water-intensive generating units to technologies that use little to no water resources;
  - Increased utilization of newer technologies for electric generation which directly impacts greater economic development in the clean and renewable energy industry; and
  - Increased overall air quality.
- a. Probable costs and benefits to the implementing agency and other agencies directly affected by the implementation and enforcement of the proposed rulemaking.

Probable Costs to the Commission of the proposed rules would include costs resulting from:

- a. Commission staff review of regulated utility compliance reports; and

- b. Potentially increased time spent in hearings.

The Commission will not incur any fixed upfront cost with adoption of the proposed rulemaking.

The Arizona Department of Environmental Quality ("ADEQ") is responsible for monitoring and assessing the state's air quality including measuring pollutants such as those caused from the combustion of carbon. Furthermore, ADEQ determines Arizona's current air quality status in regard to attaining the Environmental Protection Agency's National Ambient Air Quality Standards ("NAAQS"). The carbon reduction standard contained in the Energy Rules directly relates to ADEQ's reports on air quality monitoring and its assessment responsibilities. The Commission does not believe that ADEQ would be impacted by the incorporation of the carbon reduction standard contained in the Energy Rules.

To the extent that the implementing agency and other agencies are customers of regulated utilities and install energy efficiency measures, probable costs will include initial costs for the measures. Benefits may include lower utility bills and improved air quality.

- b. Probable costs and benefits to a political subdivision of this state directly affected by the implementation and enforcement of the proposed rulemaking.

To the extent that the political subdivisions of Arizona are customers of regulated utilities and install energy efficiency measures, probable costs will include initial costs for the energy efficiency measures and any future impacts on customer bills. Benefits may include lower utility bills and improved air quality.

- c. Probable costs and benefits to businesses directly affected by the proposed rulemaking, including any anticipated effect on the revenues or payroll expenditures of employers who are subject to the proposed rulemaking.

All Commission-regulated utilities that are subject to the Energy Rules may incur increased payroll expenditures of employees and increased administrative time complying with the rules, at least during the initial implementation of the Energy Rules while becoming familiar with the changed requirements. Currently, regulated utilities file reporting requirements associated with the Commission's Resource Planning and Procurement Rules (14 A.A.C. 2, Article 7); the REST Rules (14 A.A.C. 2, Article 18); the EEE Rules (14 A.A.C. 2, Article 24); and the GEE Rules (14 A.A.C. 2, Article 25). Repealing these rules may result in decreased regulated-utility administration time spent on developing and filing reporting requirements with the Commission, as the Energy Rules consolidate some of the existing reporting requirements and reduce others.

4. Probable impact on private and public employment in businesses, agencies, and political subdivisions of this state directly affected by the proposed rulemaking.

The Commission does not expect the Energy Rules to have more than a minimal impact on private and public employment in businesses, agencies, or political subdivisions. Businesses participating in industries of clean and renewable energy, energy efficiency, and energy storage can expect greater opportunities to do business with regulated utilities, which may result in greater employment for these businesses. Typically, coal and natural gas energy generating units are mechanized and capital intensive. The installation of clean and renewable energy generating units are more labor intensive. This, in association with the necessary increase in the total capacity of clean and renewable generating units, may result in more jobs being created in these associated industries. Additional industries that could potentially experience job growth in the long run include those businesses associated with energy efficiency measures and technologies, distributed generation, and energy storage.

5. Probable impact of the proposed rulemaking on small businesses.

a. Identification of the small businesses subject to the proposed rulemaking.

To the extent that small businesses are customers of regulated utilities and install energy efficiency measures, probable costs will include initial costs for the energy efficiency measures. Benefits may include lower utility bills and improved air quality.

Small businesses directly involved in clean and renewable energy technologies, energy storage, or energy efficiency technologies and services may be impacted due to greater opportunities to support regulated utilities in compliance with the Energy Rules. A benefit of the Energy Rules is an increase in investment certainty for Arizona commerce involved in the industry.

The Energy Rules will apply to regulated electric cooperatives, some of which may be small businesses.

b. Administrative and other costs required for compliance with the proposed rulemaking.

To the extent that regulated cooperative utilities are small businesses subject to the Energy Rules, these utilities can expect to incur increased administrative time allocated toward complying with the reporting requirements of the Energy Rules. The cost for complying with the standards pursuant to the Energy Rules would be unique to each regulated cooperative.

At the same time, regulated cooperative utilities can expect to incur decreased administrative time associated with the allocation of resources in developing and filing reporting requirements associated with the rules being repealed.

c. A description of the methods that the agency may use to reduce the impact on small businesses.

To the extent that small businesses are private entities operating in the energy industry, the Commission has not taken steps to reduce the impact on small businesses and does not believe that any such steps are necessary, as the Energy Rules do not apply to these entities.

To the extent that small businesses are regulated electric cooperative utilities, the Energy Rules include waiver requirements, along with greater flexibility for these entities to comply with the proposed rules due to their unique status stated herein.

d. Probable cost and benefit to private persons and consumers who are directly affected by the proposed rulemaking.

The Commission expects the costs and benefits to private persons and consumers (as the general public, or customers of a regulated utility) to vary with adoption of the Energy Rules. For customers of regulated utilities, the costs for complying with the standards pursuant to the Energy Rules would be unique to each utility. The costs for complying with the Energy Rules would be a factor in rates paid by its customers, as prudently incurred costs of compliance should be recoverable through rates after completion of a Commission rate case. Additionally, with a number of Articles being repealed, and their associated mandatory standards, customers can expect to see any surcharge associated with these Articles to be removed, reduced, or altered.

The Commission expects customers of regulated utilities to have greater opportunities in deploying and utilizing distributed generation, ESS, and energy efficiency technologies. Federal renewable tax credits and investment tax credits are available to qualifying individuals, dependent on the type of individual resource investment. The Energy Rules provide mandatory percentage standards for regulated utilities to acquire these technologies and make them accessible to their customers. Specifically, the Energy Rules include a rule that requires each applicable regulated electric utility to file a tariff implementing one or more programs related to customer adoption of ESS. The costs and benefits of such programs will vary for each electric utility depending on the program(s) proposed.

Regarding health and safety, the Commission anticipates the Energy Rules will result in improved air quality, which will benefit the public. Carbon-based pollutants are widely recognized to negatively impact health and to aggravate or cause breathing problems, neurological damage, and a number of other serious problems, when exposure occurs in large quantities and over time. The reduction of carbon-based pollutants should result in improved air quality over time. However, determining quantitative costs or benefits would be speculative at this time.



Individuals directly engaged in activities associated with conventional generating units (e.g., coal, natural gas, and oil) may experience negative economic impacts due to the potential closure and non-use by electric utilities of these types of generating units. However, as noted previously, APS has already decided to cease its coal-fired generation seven years earlier than previously stated, and there has been a trend toward such earlier coal-fired plant closures in this region of the U.S. Thus, it may not be apparent the extent to which any such future closure decisions are based on the Energy Rules as opposed to other factors such as the cost-effectiveness of continued plant operations.

6. Probable effect on state revenues.

Any effect on state revenues resulting from the Energy Rules is not quantifiable at this time.

7. Less intrusive or less costly alternative methods of achieving the purpose of the proposed rulemaking.

The Commission is unaware of any alternative methods of achieving the purposes of the rulemaking that would be less intrusive or less costly.

8. Description of any data on which the rule is based.

The Commission relied upon a myriad of studies, reports, and information in support of the Energy Rules, much of which was presented to the Commission by stakeholders in various workshops and filed with the Commission's Docket Control. Although the Commission did not independently verify the data from these reports and studies, the Commission believes the data is acceptable data that supports the Energy Rules because the data is empirical in nature, and the stakeholders can replicate and test the data based on the supporting documentation, statistics, reports, studies or research that the stakeholders included. Attachment A, incorporated herein, is a compilation of the various reports, studies, and sources of the data applicable to the development of the Energy Rules.

C. If for any reason adequate data are not reasonably available to comply with the requirements of subsection B of this section, the agency shall explain the limitations of the data and the methods that were employed in the attempt to obtain the data and shall characterize the probable impacts in qualitative terms.

This section is not applicable.

8. **Description of any data on which the rule is based.**

Throughout the development of the proposed rules, data related to development of the Energy Rules was provided to the Commission in the following Commission dockets:

- Docket No. RU-00000A-18-0284 In the Matter of possible modifications to the Arizona Corporation Commission's Energy Rules;
- Docket No. E-00000V-19-0034 In the Matter of Resource Planning and Procurement in 2019, 2020 and 2021;
- Docket No. E-00000V-15-0094: In the Matter of Resource Planning and Procurement in 2015 and 2016.

**Docket No. RU-00000A-18-0284**

The following data was presented in Docket No. RU-00000A-18-0284:

I. *The Western Way, The Economic Benefits of Arizona Rural Renewable Energy Facilities*, March 2019.

<https://docket.images.azcc.gov/E000000808.pdf?i=1613771598389>

On May 16, 2019, The Western Way filed an analysis on the economic and fiscal benefits of rural renewable energy facilities in Arizona. The analysis concludes that: “from 2001 to 2017, the total direct and indirect benefits of rural renewable energy development activity in Arizona was an estimated \$9.4 billion in total output (\$4.6 billion direct output + \$4.7 billion indirect and induced output) produced by 17,971 employees (9,054 direct employees + 8,917 indirect employees) earning a total of about \$1.2 billion (\$717.2 million direct earnings + \$477 million indirect earnings).”

The benefits included a direct fiscal benefit to Arizona of an estimated \$16.7 million in transaction privilege and use tax revenue. In 2018, the total direct and indirect benefits of annual rural renewable energy operations in Arizona will be an estimated \$63.3 million in total output (\$39.5 million direct output + \$23.8 million indirect and induced output) produced by 702 employees (234 direct employees + 468 indirect employees) earning a total of about \$33.5 million (\$15.1 million direct earnings + \$18.4 million indirect earnings). The benefits will include a direct fiscal benefit to schools in Arizona of an estimated \$882,000 in property tax revenue.”

II. *Strategen Consulting, Arizona Coal Plant Valuation Study*, September 18, 2019.

<https://docket.images.azcc.gov/E0000002986.pdf?i=1613778004653>

On September 25, 2019, Sierra Club and Strategen filed an independent analysis which found that Arizona’s electric utilities can save more than \$3 billion

by replacing all remaining coal-burning power plants that are slated to operate through at least 2035 with new renewable energy resources.

- III. Ceres, *Arizona Renewable Energy Standard and Tariff: 2020 Progress Report*, February 20, 2020.  
<https://docket.images.azcc.gov/E000005256.pdf?i=1613771598389>

On March 11, 2020, Ceres filed a copy of an independent analysis of the costs and benefits of the Commission's Renewable Energy Standard and Tariff ("REST") Rules since their adoption in 2006. The report states:

Implementation of the REST has delivered significant benefits in the form of avoided energy and generation capacity costs, reduced carbon emissions, reduced criteria air pollutants, water savings, increased investment in the state for a growing new industry, and technology cost reductions. Based on the benefits which could be readily quantified, Strategen estimates that from 2008 to 2018, gross benefits to utility customers and the public from implementing the REST have totaled over \$1.5 billion for [Arizona Public Service Company ("APS")] and over \$469 million for [Tucson Electric Power Company ("TEP")].

The report shows that APS and TEP are both ahead of their 2020 REST requirement of 10 percent. Ceres states the estimated total avoided conventional energy costs due to renewable energy additions are reported as \$166 million annually for APS and \$58 million annually for TEP. APS has 688 MW of renewable energy capacity that is equal to \$56 million annually in avoided conventional power plant capacity costs and \$297 million in cumulative avoided conventional power plant capacity costs from 2008-2018. TEP has 219 MW of capacity resources that were displaced by renewable energy and are equal to \$18 million annually in avoided conventional power plant capacity costs and \$82 million in cumulative avoided conventional power plant capacity costs from 2008-2018.

Ceres also states that Arizona had had a 10 percent decline of CO<sub>2</sub> emissions since 2016 that can be attributed to the REST. The cumulative calculated CO<sub>2</sub> benefit from 2008 through 2018 was approximately \$234 million for APS and \$75 million for TEP, or about \$309 million total. Using the Environmental Protection Agency's ("EPA") 2019 Emissions Health Benefits per kWh Report (July 2019), CERES calculated that REST resources deployed from 2008-2018 have yielded approximately \$185 million in cumulative benefits for APS and \$61 million in benefits for TEP.

- IV. Western Resource Advocates and Clean Air Task Force, *Western Interconnect Clean Energy Study*, March 2020,  
<http://docket.images.azcc.gov/E000005265.pdf?i=1614114723809>



On March 12, 2020, Western Resource Advocates and the Clean Air Task Force filed a copy of the Western Interconnection Clean Energy Study (“WICES”). The WICES modeled five scenarios – each scenario representing a portfolio of generation resources – for the Western Interconnection (see Table 2).

**Table 2**

Scenario	Carbon Emissions Standard (“CES”)	Renewable Portfolio Standard (“RPS”)
1	81% in 2030 & 100% in 2045	50%
2	81% in 2030 & 100% in 2045	None
3	80% in 2030 & 100% in 2045	50%
4	80% in 2030 & 100% in 2045	None
5	None	50% in 2030/100% in 2045

The WICES presented results for the entire Western Interconnection but also presented results for Arizona. Overall, the WICES concluded that the Western Interconnection can achieve a zero-carbon grid by 2045 and by allowing resources that do not emit carbon (i.e. nuclear), a generation cost increase of 40 percent can be avoided as compared to scenarios that exclude such capacity (RPS only). The study found that, for Arizona, costs would be 30-40 percent higher with an RPS only when compared to pursuing a CES or CES & RPS. Further, the WICES concludes that a CES will support further technological and market developments that will avoid a generation cost increase of 50 percent, reduce in-state generating capacity requirements by more than 60 percent, and reduce required interstate high voltage transmission line capacity by 85 percent.

- V. Various Stakeholder, *Response to Commissioner Marquez Peterson's Inquiry Requesting Information and Studies Documenting the Benefits of Clean Energy for Arizona*, March 19, 2020.  
<https://docket.images.azcc.gov/E000005407.pdf?i=1613070112791>

On March 19, 2020, the Southwest Energy Efficiency Project, Western Resource Advocates, Vote Solar, Chispa Arizona, and the Sierra Club provided an “index of studies, information, and other relevant documents on the performance and opportunity for clean energy, renewable energy, distributed generation, energy efficiency, just transition/securitization, and integrated resource planning in Arizona.”

- VI. Southwest Energy Efficiency Project, *Value of Energy Efficiency Resource Standard*, April 8, 2020.  
<https://docket.images.azcc.gov/E000005829.pdf?i=1613771598389>

On April 8, 2020, Southwest Energy Efficiency Project (“SWEET”) filed two presentations in the docket titled:

- *Energy Efficiency: Standards Versus IRPs*; and

- *The Effectiveness and Value of Energy Efficiency Resource Standards.*

The presentations concluded that EE standards have been much more effective than Integrated Resource Plans (“IRP”) at delivering cost-effective energy savings.

- VII. Ceres, John D. Wilson; Mike O'Boyle; Ron Lehr; and Mark Detsky; *Making the Most of the Power Plant Market: Best Practices for All-Source Electric Generation Procurement*, April 2020.

<https://docket.images.azcc.gov/E000006575.pdf?i=1613771598389>

On May 19, 2020, Ceres filed a report, *Making the Most of the Power Plant Market: Best Practices for All-Source Electric Generation Procurement*, in the docket. The report recommends that regulators adopt or revisit five best practices to run an all-source procurement process and describes a model bid evaluation.

- VIII. Sierra Club, and Rocky Mountain Institute, *Recommendations on Using Securitization as a Financial Tool: Harnessing Financial Tools to Transform the Electric Sector*, November 2018.

<https://docket.images.azcc.gov/E000007581.pdf?i=1613771598389>

On July 13, 2020, information regarding securitization was filed in the docket by Diné CARE, Sierra Club, Tó Nizhoni Ani, Western Clean Energy Campaign, and Western Grid Group.

- IX. Lazard, *Lazard's Levelized Cost of Energy Analysis – Version 13.0*, July 30, 2020.

<https://docket.images.azcc.gov/E000007907.pdf?i=1613771598389>

On July 30, 2020, Lazard's Levelized Cost of Energy Analysis (“LCOE”) was filed in the docket. Lazard finds “that renewable energy technologies are complementary to conventional generation technologies, and believe[s] that their use will be increasingly prevalent for a variety of reasons, including to mitigate the environmental and social consequences of various conventional generation technologies, RPS requirements, carbon regulations, continually improving economics as underlying technologies improve and production volumes increase, and supportive regulatory frameworks in certain regions.”

- X. Southwest Energy Efficiency Project, *Independent Analysis of the Energy System and Ratepayer Impacts of the Arizona Corporation Commission's Energy Rules*, January 22, 2021.

<https://docket.images.azcc.gov/E000011309.pdf?i=1614114723809>

On January 22, 2021, the Southwest Energy Efficiency Project (“SWEEP”) and Stragen Consulting filed an independent analysis of Arizona's energy system



and the ratepayer impacts of the Commission's proposed Energy Rules. Strategen utilized a capacity expansion model of the Arizona power system to determine Arizona's cheapest, most reliable mix of energy options and compared the results with the Commission's proposed Energy Rules.

SWEEP summarized the following key findings of the analysis:

- The analysis identified the optimal, least-cost electricity generation resource portfolio from 2021 through 2035 for APS and TEP.
- This "Optimal Resource Portfolio" is characterized by: A significant expansion of solar and battery storage totaling ~6,000 MW each, Robust continued investment in energy efficiency, with cumulative savings equivalent to ~15 percent of retail sales over the next 10 years, Maintenance of zero carbon electricity from the Palo Verde Nuclear Generating Station, Integration of high-quality wind resources from New Mexico (over 1,000 MW), A modest decline in natural gas generation from existing resources, and Retirement of all uneconomic coal resources as early as is practicable.
- The Optimal Resource Portfolio meets and even surpasses the Energy Rules' provisions for energy efficiency, energy storage, and carbon emissions through 2035.
- When compared to a Reference Case that approximates "business as usual," the Optimal Resource Portfolio reduces total electricity system generation costs by more than \$2 billion (net present value) through 2035. This amount represents an 11 percent reduction in generation costs relative to the Reference Case, thereby yielding significant corresponding benefits to APS and TEP customers.

XI. Arizona Department of Environmental Quality ("ADEQ"), *Comments to the Commission regarding possible modifications to the Arizona Corporation Commission's Energy Rules*, May 20, 2019.

<https://docket.images.azcc.gov/0000198082.pdf?i=1614376930513>

On May 20, 2019, ADEQ filed comments on possible modifications to the Commission's Energy Rules. The comments focused on the health impacts and regulatory costs of ozone and the impact of energy policy on ozone pollution. The comments also addressed:

- the reduction in total NOx emissions in Arizona that would result from meeting an 80 percent clean energy goal in 2050;
- emissions reductions from the combustion of biomass; and

- reduced emissions from electric vehicles.

The ADEQ provides health impacts ADEQ provides information and statistics on the health impacts and regulatory costs of ozone. This includes changes that were made because of the Clean Air Act. ADEQ indicates that Arizona did not meet the ambient air quality standards for ozone in 2017-2018. Regarding the ozone, ADEQ provides that:

At ground level, ozone is an air pollutant that endangers public health and welfare. Some of the health effects of ozone that have been observed include: Induction of respiratory symptoms, including coughing, throat irritation, pain, burning, or discomfort in the chest when taking a deep breath, chest tightening, wheezing, or shortness of breath due to the constriction of the muscles in the airways and trapping air in the alveoli; decrements in lung function; and Inflammation of airways and increased risk of respiratory infections, among other health issues.

ADEQ states that “the Phoenix area, including parts of Gila and Pinal Counties, is currently a nonattainment area for the 2015 national ambient air quality standards (“NAAQS”) for ozone of 70 parts per billion. Based on 2018 monitoring data, Phoenix ozone concentration has been steadily increasing since 2016. If EPA determines that Phoenix did not attain the 2008 ozone NAAQS in 2017, the area will be reclassified from moderate to serious (subject to the classification of the EPA)

- XII. American Lung Association, *Poll: Arizona Voters Concerned about Climate, Strongly Support Clean Energy Policies, December 10, 2020.*  
<https://docket.images.azcc.gov/E000011247.pdf?i=1614114723809>

The American Lung Association provides a poll of Arizona voters, from research conducted by Global Strategy Group that Arizona voters demonstrate significant concern about climate change and want to see the state move away from fossil fuels like coal and oil and toward clean energy like wind and, especially, solar. Notable results include that nearly eight in 10 voters call climate change a serious problem (a crisis, a very serious problem, or a somewhat serious problem), and over half say it is a crisis or a very serious problem. Moreover, nearly seven-in-10 agree that climate change is already having a serious impact on the southwest region.

The association also provides reference to its 2020 “*State of the Air*” Report (American Lung Association, April 2020. <https://www.lung.org/media/press-releases/state-of-the-air-arizona>) that over 6 million Arizonans (85 percent of all residents) live in counties with failing grades for ozone and/or particle pollution, according to their State of the Air 2020 report. Furthermore, they provide that



Phoenix appears on the Top Ten Most Polluted Cities list for unhealthy ozone, particle pollution days, and annual level of particle pollution.

Senior Advocacy Director, JoAnna Strother provides, regarding Ozone pollution, that “ozone pollution can harm even healthy people, but is particularly dangerous for children, older adults and people with lung diseases like COPD or asthma... Breathing ozone-polluted air can trigger asthma attacks in both adults and children with the disease, which can land them in the doctor’s office or the emergency room. Ozone can even shorten people’s lives.”

Regarding Particle pollution, Ms. Strother provides “Particle pollution can lodge deep in the lungs and can even enter the bloodstream. It can trigger asthma attacks, heart attacks and strokes and cause lung cancer...”

#### **Docket No. E-00000V-19-0034**

The following data was presented in Docket No. E-00000V-19-0034:

- I. APS, and Energy + Environmental Economics (“E3”), *Exploration of Energy Policy Option for Arizona*, July 31, 2019; and APS 2019 Preliminary Integrated Resource Plan: E3 Study Work.  
<https://docket.images.azcc.gov/0000199276.pdf?i=1613762633204>

In APS’s 2019 Preliminary IRP, APS included information from E3 which estimated a range of cost and carbon impacts for the APS system. E3 went on to conclude that “scenarios with broadly-defined policies to encourage clean energy and carbon reductions provide more affordable and flexible options than prescriptive targets for specific technologies that narrow utilities’ choices (e.g., RPS).”

- II. APS, *Arizona Public Service Integrated Resource Plan IRP*, June 26, 2020.  
<https://docket.images.azcc.gov/E0000007312.pdf?i=1614184562620>

In January 2020, APS announced a goal of delivering 100 percent clean, carbon-free, and affordable electricity to customers by 2050. In order to achieve the 2050 goal, APS has planned to have a resource energy mix which leads to 65 percent clean energy with 45 percent of customers’ electricity needs served by renewable energy by 2030. In addition, APS has committed to end the use of coal-fired generation by 2031.

On June 26, 2020, APS filed its 2020 IRP, which included an analysis of several portfolios designed to achieve its 2030 and 2050 resource goals. APS’s IRP states that “the benefits of a 100 percent clean energy portfolio include helping customers achieve their own sustainability goals and attracting more employers to Arizona who want to be served fully by carbon-free resources at a reasonable cost and without compromising reliability.”

III. TEP, *Tucson Electric Power Company IRP*, June 26, 2020.

<https://docket.images.azcc.gov/E000007291.pdf?i=1614184562620>

On June 26, 2020, TEP filed its 2020 IRP. TEP's IRP states: "[G]iven recent declines in the cost of zero-emission renewable technologies and the current outlook that these declines will continue, TEP's long-term strategy is now focused on completing the transition to 100 percent clean energy. What remains to be determined is how quickly this transformation can occur."

TEP developed a wide range of portfolios and presented a total of 15 in its 2020 IRP. These portfolios were used to evaluate the implications of various policy positions in terms of overall cost and environmental performance. TEP's analysis found that a carbon emissions standard can achieve lower emissions at a lower cost than a clean or renewable energy portfolio standard.

IV. UNS Electric, *UNS Electric, Inc. IRP*, August 26, 2020.

<https://docket.images.azcc.gov/E000008574.pdf?i=1614184562620>

On August 26, 2020, UNS Electric, Inc. ("UNSE") filed its 2020 IRP. According to UNSE, its 2020 Integrated Resource Plan is designed to gradually divert the capacity mix from utilizing purchased power to predominantly utilizing self-reliant generation. UNSE has committed to reaching a goal of supplying 50 percent of its energy to retail customers from renewable resources by 2035, while also remaining committed to reducing its carbon emissions. UNSE's IRP stated that with the cost of solar and wind drastically declining in recent years, stakeholders have expressed support for increasing renewable resources, so long as it does not negatively impact affordability. UNSE's IRP further states:

During stakeholder workshops held in December 2019 in Lake Havasu City and Kingman, participants expressed support for increasing the amount of renewable resources serving UNSE customers, if it could be done without negatively impacting affordability. In addition, the workshop participants recognized the uncertainty in the long-term cost effectiveness of certain resources. They expressed hesitancy in investing in nascent storage technologies that are projected to cost less in future years, and in investing in natural gas-fired resources that could see steep increases in fuel prices. In short, the participants preferred to avoid "big bets" on long-term assets with uncertain futures.

UNSE developed a series of resource portfolios based on key planning metrics. These metrics consist of cost to customers, carbon dioxide emissions, and water consumption. The evaluated portfolios range from moderate to aggressive renewable energy and energy efficiency targets.



- V. Institute of Policy Integrity at New York University School of Law, *Comments from Institute for Policy Integrity*, October 15, 2020  
<https://docket.images.azcc.gov/E000009545.pdf?i=1614182822739>

On October 15, 2020, the Institute for Policy Integrity at New York University School of Law (“Policy Integrity”) submitted comments which provided reference to the following reports:

- Policy Integrity, *Valuing Pollution Reductions: How to Monetize Greenhouse Gas and Local Air Pollutant Reductions from Distributed Energy Resources*, 2018.  
<https://policyintegrity.org/publications/detail/valuing-pollution-reductions>;
- Policy Integrity, *Getting the Value of Distributed Energy Resources Right: Using a Societal Value Stack*, 2019.  
<https://policyintegrity.org/publications/detail/getting-the-value-of-distributed-energy-resources-right>; and
- Policy Integrity, *Making the Most of Distributed Energy Resources: Subregional Estimates of the Environmental Value of Distributed Energy Resources in the United States*, 2020.  
<https://policyintegrity.org/publications/detail/making-the-most-of-distributed-energy-resources>.

**Docket No. E-00000V-15-0094**

The following data was presented in Docket No. E-00000V-15-0094:

- I. Joint Stakeholders, *Joint Stakeholder Comments on the Integrated Resource Plans of Arizona Public Service Company & Tucson Electric Power: Alternate Portfolios*, February 8, 2018.  
<https://docket.images.azcc.gov/0000185642.pdf>

On February 8, 2018, joint comments were filed by Western Resource Advocates, Arizona Utility Ratepayer Alliance, Diné CARE, Tó Nizhoni Ani, Western Grid Group, Arizona Interfaith Power and Light, Conservative Alliance for Solar Energy, Tucson 2030 District, Arizona Solar Energy Industries Association, Efficiency First Arizona, National Association of Energy Service Companies, Solar Energy Industries Association, Polyisocyanurate Insulation Manufacturers Association, Arizona Community Action Association, Southwest Energy Efficiency Project, and Our Mother of Sorrows Catholic Church regarding the 2017 Integrated Resource Plans filed by APS and TEP.

The comments describe Alternative Portfolios for both APS and TEP that the parties believe would provide a better path going forward in terms of meeting



customer needs than the portfolios selected by APS and TEP in their 2017 IRPs. The comments state that:

Collectively the Alternative Portfolios would eliminate the need for over 4,520 MW of natural gas additions planned by APS and TEP. They would also put each utility on a path towards approximately 40% renewable energy by 2030, while investing in over 2,530 MW of new energy storage resources, and reducing peak demand by over 2,640 MW through energy efficiency and over 540 MW through demand management and demand response. Moreover, the Alternative Portfolios could save Arizona utility customers over \$542 million when compared to the plans selected by APS and TEP.

### Other Data

In addition to the information filed in the dockets described above, Staff reviewed:

- (i) Data provided by the U.S. Energy Information Administration (“EIA”): EIA, “Annual Energy Outlook 2019, January 24, 2019.  
<https://www.eia.gov/outlooks/aeo/>;
- (ii) Data provided by the Department of Energy: Department of Energy, “Quadrennial Technology Review: An Assessment of Energy and Technologies and Research Opportunities, September 2015.  
<https://www.energy.gov/quadrennial-technology-review-2015>; and
- (iii) The renewable energy, clean energy, and carbon reduction goals/standards of Western States as presented by the National Conference of State Legislatures (<https://www.ncsl.org/research/energy/renewable-portfolio-standards.aspx>).

Information regarding each Western State is provided as follows:

#### *I. California*

California has a 60 percent by 2030 RPS and a 100 percent by 2045 clean energy standard. According to the *2020 Padilla Report* (California Public Utilities Commission, May 2020).

[https://www.cpuc.ca.gov/uploadedFiles/CPUCWebsite/Content/About\\_Us/Organization/Divisions/Office\\_of\\_Governmental\\_Affairs/Legislation/2020/2020%20Padilla%20Report.pdf?\\_ac\\_lkid=2a14-b0f6-39ef-d2f417268072d07](https://www.cpuc.ca.gov/uploadedFiles/CPUCWebsite/Content/About_Us/Organization/Divisions/Office_of_Governmental_Affairs/Legislation/2020/2020%20Padilla%20Report.pdf?_ac_lkid=2a14-b0f6-39ef-d2f417268072d07)) on the costs and cost savings for the RPS, the RPS resources promote stable retail rates for electric service by providing a steady hedge against the volatile traditional resources costs because their long-term contracts provide consistent expenditures year-to-year. In 2019, based on the volume of RPS and non-RPS eligible

procurement expenditures, the Investor-Owned utilities realized the following cost savings (positive figures) or premiums (negative figures):

- PG&E – (\$388 million)
- SCE – (\$35 million)
- SDG&E - \$416 million
- Liberty – (\$111 million)
- PacifiCorp - \$141 million

## II. *Colorado*

Colorado has a 30 percent by 2020 RPS for Investor Owned Utilities, 10 percent or 20 percent for municipalities and electric cooperatives depending on size, and 100 percent clean energy by 2050 for utilities serving 500,000 or more customers.

According to the *Colorado Greenhouse Gas Pollution Reduction Roadmap Report* (Colorado Energy Office, January 14, 2021, <https://energyoffice.colorado.gov/climate-energy/ghg-pollution-reduction-roadmap>) there is high confidence that the State's utilities can achieve the target of at least an 80 percent reduction in greenhouse gas emissions by 2030 without significant rate increases.

## III. *Montana*

Montana has an RPS of 15 percent by 2015. In the 2013 Montana Energy and Telecommunications Interim Committee report on the *Environmental Impacts of Montana's Renewable Portfolio Standard* (ETIC Staff, October 2013, <https://leg.mt.gov/content/Committees/Interim/2013-2014/Energy-and-Telecommunications/Meetings/October-2013/EnvironmentalRPS.pdf>), 542 MW of renewable generation displaced natural-gas generation resulted in a reduction of 1.1 million tons of carbon dioxide, 95 tons of sulfur dioxide and 11,615 tons of nitrogen oxides. Further, the report states that if that renewable energy was to displace coal-fired generation, then 2.1 million tons of carbon dioxide, 13,300 tons of sulfur dioxide and 5,700 tons of nitrogen oxides would have been displaced.

## IV. *Nevada*

Nevada has an RPS of 50 percent by 2030 and 100 percent carbon-free by 2050. A February 2019 analysis performed by Western Resource Advocates titled *It's Time to Light Up Nevada's Clean Energy Economy with a 50% Renewable Portfolio Standard* (<https://westernresourceadvocates.org/blog/its-time-to-light->

[up-nevadas-clean-energy-economy-with-a-50-renewable-portfolio-standard/](#)), found that a clean energy portfolio could save customers nearly \$200 million (net present value) over the business-as-usual case modeled by NV Energy.

*V. New Mexico*

New Mexico has an RPS of 40 percent by 205 and 80 percent by 204, and 100 percent by 2045 zero-carbon standard.

*VI. Oregon*

Oregon has an RPS of 25 percent by 2025 (utilities with 3 percent or more of the state's load); 50 percent by 2040 (utilities with 3 percent or more of the state's load); 10 percent by 2025 (utilities with 1.5–3 percent of the state's load); 5 percent by 2025 (utilities with less than 1.5 percent of the state's load).

*VII. Utah*

Utah has an RPS of 20 percent by 2025.

*VIII. Washington*

Washington has an RPS of 15 percent by 2020, 100 percent by 2030 greenhouse gas neutral standard, and a 100 percent by 2045 renewable or zero-emitting standard.