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ARIZONA CORPORATION COMMISSION

July 5, 2018

Docket Control
Arizona Corporation Commission
1200 W Washington St.
Phoenix, AZ 85007

RE: Docket No. E-00000Q-16-0289; Review, Modernization and Expansion of the Arizona Energy Standards and Tariff Rules and Associated Rules.

Dear Commissioners and Other Interested Parties:

On June 22, 2018, I submitted a letter to the docket announcing that Landon Stevens and Daniel Schwiebert were drafting a set of formal rules for the Arizona Energy Modernization plan, which were to be presented no later than July 5, 2018. Today, that day has come, and I am pleased to announce that a formal set of rules has been drafted and is officially attached to this Letter for the Commission's review.

As I explained in January, the Arizona Energy Modernization Plan was to use only the existing Renewable Energy Standard and Tariff (REST) framework as the means to modernize the state's energy policies. In-line with that goal, the attached rules have been written to not only pay respect to the language already existing in the REST, but also to accomplish all of the Plan's immediate policy initiatives solely within the bounds of Title 14, Chapter 2, Article 18 of the Arizona Administrative Code. In other words: no new credits will be created, and no other rulemaking dockets will be immediately necessary.

The attached rules rename Article 18 to the "Clean Resource Energy Standard and Tariff" (CREST) and use the CREST as an umbrella to house not only the unchanged REST language and targets, but also the new Clean Peak Standard, Bioenergy Production Requirement, and 2030 Energy Storage and 2050 Clean Energy Goals the Plan originally proposed. Furthermore, the attached rules utilize the same, thoughtful approach the Commission previously used with respect to the ongoing issues of Net Metering and Interconnection, by writing the discussions of Energy Efficiency and Resource Planning into the rules as workshops to be held at a future time. I believe this approach not only allows the CREST umbrella to fully unfold before the Commission begins additional processes, but also ensures that each of these important issues is given its full and respective opportunities to be heard.

I am grateful to have had the opportunity to fully develop and present these rules today, and I appreciate the Commission's due consideration of them at the next Open Meeting on July 19, 2018.

Sincerely,

Andy Tobin
Commissioner

Arizona Corporation Commission

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On this 5th day of July, 2018, the foregoing document was filed with Docket Control as a Correspondence From Commissioner, and copies of the foregoing were mailed on behalf of Andy Tobin, Commissioner - A.C.C. to the following who have not consented to email service. On this date or as soon as possible thereafter, the Commission's eDocket program will automatically email a link to the foregoing to the following who have consented to email service.

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By:



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Commissioner Andy Tobin



Memorandum
From the office of
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(602) 542-3625

TO: Docket Control

DATE: July 5, 2018

FROM: Commissioner Andy Tobin's Office

SUBJECT: Docket No. E-00000Q-16-0289

Draft set of formal rules for the Arizona Energy Modernization Plan (CREST).

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

CHAPTER 2. CORPORATION COMMISSION – FIXED UTILITIES

ARTICLE 18. ~~RENEWABLE~~ CLEAN RESOURCE ENERGY STANDARD AND TARIFF

Section

- R14-2-1801. Definitions
- R14-2-1802. Eligible Renewable Energy Resources
- R14-2-1803. Renewable Energy Credits
- R14-2-1804. Annual Renewable Energy Requirement
- R14-2-1805. Distributed Renewable Energy Requirement
- R14-2-1806. Extra Credit Multipliers
- R14-2-1807. Manufacturing Partial Credit
- R14-2-1808. CREST Tariff
- R14-2-1809. Customer Self-Directed Renewable Energy Option
- R14-2-1810. Uniform Credit Purchase Program
- R14-2-1811. Net Metering, ~~and~~ Interconnection Standards, Energy Efficiency, Resource Planning, and Commission Review
- R14-2-1812. CREST Compliance Reports
- R14-2-1813. CREST Implementation Plans
- R14-2-1814. Electric Power Cooperatives
- R14-2-1815. Enforcement and Penalties
- R14-2-1816. Waiver from the Provisions of this Article
- R14-2-1817. Eligible Bioenergy Resources

[R14-2-1818. Annual Bioenergy Production Requirement](#)

[R14-2-1819. Biomass Capacity Factor and Procurement](#)

[R14-2-1820. Eligible Clean Energy Resources](#)

[R14-2-1821. Annual Clean Peak Standard](#)

Appendix A. Sample Tariff

ARTICLE 18. ~~RENEWABLE~~-CLEAN RESOURCE ENERGY STANDARD AND TARIFF

R14-2-1801. Definitions

- A.** [“2030 Energy Storage Goal” means a state-wide goal to have in service 3,000 MW of nameplate capacity of Energy Storage Resources in Arizona by 2030.](#)
- B.** [“2030 Clean Peak Standard” means a requirement that an Affected Utility’s 2029 Clean Peak Percentage be 15 whole digits greater than the Affected Utility’s Clean Peak Compliance Baseline.](#)
- C.** [“2050 Clean Energy Goal” means a goal for 80 percent of an Affect Utility’s total annual retail electric sales to come from Clean Energy Resources by 2050.](#)
- ~~A~~D.** “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~~E.** [“Annual Bioenergy Production Requirement” means the portion of an Affected Utility’s Annual Renewable Energy Requirement that the Affected Utility must satisfy with Bioenergy-Derived Renewable Energy Credits.](#)
- ~~B~~F.** “Annual Renewable Energy Requirement” means the portion of an Affected Utility’s annual retail electricity sales that must come from Eligible Renewable Energy Resources.

- G. “Annual Clean Peak Standard” means the percentage of annual retail electricity sales during On Peak Hours that an Affected Utility must derive from Eligible Clean Energy Resources in a calendar year to meet the Affected Utility’s 2030 Clean Peak Standard.
- H. “Arizona Energy Modernization Plan” means the 2050 Clean Energy Goal, 2030 Energy Storage Goal, and Transportation Electrification Goal.
- I. “Biomass Exempt Utility” means an Affected Utility that has never delivered 100,000 MWh or more in a calendar year.
- J. “Bioenergy Resource” means an energy resource that uses Forest Biomass, bio coals, or liquid or gas bio fuels.
- K. “Bioenergy-Derived Renewable Energy Credit” means a Renewable Energy Credit derived from an Eligible Bioenergy Resource.
- L. “Clean Energy Resource” means an energy resource that operates with zero net emissions beyond that of steam.
- M. “Clean Peak Compliance Baseline” means the Affected Utility’s 2018 Clean Peak Percentage.
- N. “Clean Peak Percentage” means the percentage of On-Peak Sales that are Clean Peak Sales.
- O. “Clean Peak Sales” means the kWh of On-Peak Sales that an Affected Utility derives from Eligible Clean Energy Resources.
- CP.** “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.
- Q. “Conventional Emission Resource” means an energy resource that operates with no net

emissions beyond that of steam, such as natural gas, coal, and oil, or electricity that is produced with energy resources that are not Clean Energy Resources.

R. “CREST” means Article 18 and its title, “Clean Resource Energy Standard and Tariff.”

DS. “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.

ET. “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.

FU. “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).

GV. “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.

- W.** “Electric Vehicle Infrastructure” means conduit, wiring, structures, machinery, including battery charging stations and rapid charging stations, necessary and integral to support an electric vehicle.
- HX.** “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.
- Y.** “Energy Storage Resource” means an energy resource that uses electrochemical, mechanical, thermal, or gravitational processes to receive electric energy from the grid or an energy resource and storing for it for later injection of electricity back to the grid, regardless of where the resource is located on the electrical system, including, without limitation, battery storage, pumped hydro, compressed air, flywheels, and other energy storage technologies.
- IZ.** “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.
- AA.** “Forest Biomass” means raw or processed plant-derived organic matter, woody material, or biomass feedstocks available on a renewable basis.
- JBB.** “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, Eligible Bioenergy Resources, Eligible Clean Energy Resources, or combinations of Eligible Renewable Energy Resources, Eligible Bioenergy Resources, and Eligible Clean Energy Resources.
- CC.** “Incremental Clean Energy Goal” means the percentage increase of total annual retail kWh sales from Clean Energy Resources that an Affected Utility determines, under R14-

2-1813, is needed during the relevant calendar year to meet the 2050 Clean Energy Goal.

DD. “Incremental Energy Storage Goal” means the nameplate capacity increase of Energy Storage Resources that an Affect Utility determines, under R14-2-1813, is needed during the relevant calendar year to meet the 2030 Energy Storage Goal.

KEE. “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, Annual Bioenergy Production Requirement, Annual Clean Peak Standard, Incremental Clean Energy Goal, and Incremental Energy Storage Goal, 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.

LFF. “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.

MGG. “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.

HH. “Off-Peak Hours” means hours that the Commission has not established as On-Peak Hours for an Affected Utility.

II. “On-Peak Hours” means the on-peak hours as established by the Commission for the Affected Utility.

JJ. “On-Peak Sales” means the kWh of retail electricity sold by an Affected Utility in a calendar year during On Peak Hours.

NKK. “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.

OLL. “Renewable Energy Resource” means an energy resource that is replaced rapidly by a natural, ongoing process and that is not nuclear or fossil fuel.

MM. “Transportation Electrification Goal” means a state-wide goal to have sufficient Electric Vehicle Infrastructure installed and in-service in Arizona to support 1 million electric vehicles registered with the Arizona Department of Transportation by 2050.

PNN. “Tariff” means a Commission-approved rate designed to recover an Affected Utility’s reasonable and prudent costs of complying with these CREST rules.

OO. “Excess Transmission Capacity” means kW capacity on a transmission line that is not being utilized for transmitting electricity or under contract to be utilized for transmitting electricity.

QPP. “Utility Distribution Company” means a public service corporation that operates,

constructs, or maintains a distribution system for the delivery of power to retail customers.

RQQ. “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

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. “Eligible Bioenergy Resources,” as defined under R14-2-1817, except Arizona Bioenergy Co-Generation Plants, as defined under R14-2-1817.

56. “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.

67. “Geothermal Generator” is an electricity generator that uses heat from within the earth’s surface to produce electricity.

78. “Hybrid Wind and Solar Electric Generator” is a system in which a Wind Generator and a solar electric generator are combined to provide electricity.

89. “Landfill Gas Generator” is an electricity generator that uses methane gas obtained from landfills to produce electricity.

910. “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~~11. “Solar Electricity Resources” use sunlight to produce electricity by either photovoltaic devices or solar thermal electric resources.

~~11~~12. “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

- 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.
- G. For Arizona Bioenergy Co-Generation Plants, one Renewable Energy Credit shall be created for each kWh-portion of electricity the Arizona Bioenergy Co-Generation Plant derived from Arizona Forest Biomass, Arizona Biomass Pellets, and Arizona Biomass Gasses, as defined in R14-2-1817, or, if derived from Mixed Biomass Pellets or Mixed Biomass Gasses, as defined in R14-2-1817, the portion of Mixed Biomass Pellets or Mixed Biomass Gasses manufactured or treated from Arizona Forest Biomass.

R14-2-1804. Annual Renewable Energy Requirement

- 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

- 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:

<u>2007</u>	5%
<u>2008</u>	10%
<u>2009</u>	15%
<u>2010</u>	20%

<u>2011</u>	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.

R14-2-1806. Extra Credit Multipliers

- 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:

<u>2001</u>	.3
<u>2002</u>	.2
<u>2003</u>	.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

- 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. CREST Tariff

- A. Within 60 days of the effective date of these CREST rules, each Affected Utility shall file with the Commission ~~a one or more~~ Tariffs in substantially the same form as the Sample Tariff set forth in these CREST rules that proposes methods for recovering the reasonable and prudent costs of complying with these CREST 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 [CREST](#) rules,
 3. Data to support the level of costs that the Affected Utility contends will be incurred in order to comply with these [CREST](#) 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. The Annual Bioenergy Production Requirement shall be effective upon the date as set forth in R14-2-1819, and the Annual Clean Peak Standard shall be effective upon the date as set forth in R14-2-1821.
- E. All reasonable and prudent expenses incurred by an Affected Utility pursuant to these

CREST rules shall be recoverable through its current Tariff. An Affected Utility shall not be prohibited from using its current Tariff to begin collecting, in-advance, the reasonable and prudent costs of complying with its Annual Clean Peak Standards, Annual Bioenergy Production Requirements, and Energy Modernization Plan.

- DF.** If an Affected Utility has an adjustor mechanism for the recovery of costs related to Annual Renewable Energy Requirements, Annual Bioenergy Production Requirements, or Annual Clean Peak Standards, 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.
- EG.** 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

- 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

- 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, Energy Efficiency, Resource Planning, and Commission Review

- A. The Commission Staff shall host, if the Commission Staff has not already hosted, 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, if the Affected Utility has not already filed, file conforming Net Metering tariffs and interconnection standards in Docket Control.

B. Within 120 days of the effective date of these CREST rules, the Commission Staff shall host no less than one workshop addressing the issues of energy efficiency and demand side management in relation to the goals set forth in the Arizona Energy Modernization Plan. Upon completion of this task, the Commission Staff shall commence a new rulemaking to repeal Article 24 and Article 25 of Title 14, Chapter 2, which are the Commission's existing energy efficiency and demand side management rules, tariffs, and standards, and amend this Article to include new rules, tariffs, or standards for energy efficiency and demand side management that align with, and assist Affected Utilities in achieving, the goals set forth in the Arizona Energy Modernization Plan.

C. Within 120 days of the effective date of these CREST rules, the Commission Staff shall host no less than one workshop addressing the issues of integrated resource plans, and the Commission's integrated resource planning rules, requirements, and processes, in relation to the goals set forth in Arizona Energy Modernization Plan. Upon completion of this task, the Commission Staff shall commence a new rulemaking to repeal Article 7, which are the Commission's existing integrated resource planning rules, and amend this Article to include, under R14-2-1812, R14-2-1813, and any other section the Commission deems necessary, new integrated resource planning rules, requirements, or processes that align with, and assist Affected Utilities in achieving, the goals set forth in the Arizona Energy Modernization Plan. As of the effective date of these CREST rules, R14-2-703 and R14-704, related to resource planning, shall be hereby suspended.

D. Every fourth anniversary of the effective date of these CREST rules, the Commission Staff shall host no less than one workshop to determine whether the following goals and standards of this Article continue to meet the needs and circumstances of, and assist Affected Utilities in providing reliable and affordable electric service to, Arizona ratepayers:

- a. the goals set forth in the Arizona Energy Modernization Plan;
- b. the requirements set forth in the Annual Bioenergy Production Requirements, and Annual Clean Peak Standards;
- c. the requirements set forth in the CREST Implementation Plans and CREST Compliance Reports; and
- d. the rules, requirements, standards, and processes set forth in this Article related to energy efficiency and integrated resource planning.

~~A.E.~~ Upon completion of the quadrennial review prescribed in subsection (D), the Commission Staff shall issue a report on its recommendations for amendment of the rules, goals, requirements, and targets set forth in this Article.

R14-2-1812. CREST Compliance Reports

- A.** Within 120 days of the effective date of these CREST rules ~~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 CREST 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, the actual kWh of energy or equivalent obtained from Eligible Clean Energy Resources, the actual kWh of energy or equivalent obtained from Eligible Bioenergy Resources; and the actual kWh of energy or equivalent stored and dispatched from Energy Storage Resources;
2. The kWh of energy or equivalent obtained from Eligible Renewable Energy Resources normalized to reflect a full year's production, the kWh of energy or equivalent of Eligible Clean Energy Resources normalized to reflect a full year's production, the kWh of energy or equivalent of Eligible Bioenergy Resources normalized to reflect a full year's production, and the kWh of energy or equivalent of Energy Storage Resources normalized to reflect a full year's dispatch;
3. The kW of generation capacity, disaggregated by technology type, and the kW of Energy Storage Resource capacity, disaggregated by technology type;
4. Cost information regarding cents per actual kWh of energy obtained from Eligible Renewable Energy Resources, cents per actual kWh of energy obtained from Eligible Clean Energy Resources, cents per actual kWh of energy obtained from Eligible Bioenergy Resources, and—cents per kW of generation capacity, disaggregated by technology type, and cents per kW of Energy Storage Resource 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, including the amount of those Renewable Energy Credits that were

Bioenergy-Derived Renewable Energy Credits and a statement indicating whether those Bioenergy-Derived Renewable Energy Credits were sufficient to satisfy the Affected Utility's Annual Bioenergy Production 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, Eligible Clean Energy Resources, Eligible Bioenergy Resources, and Energy Storage Resources and a certification from an independent auditor that those procedures are fair and unbiased, ~~and~~ have been appropriately applied, and, for Energy Storage Resources, the procedures prioritize retrofits to existing renewable energy resources or the replacement or deferment of transmission and distribution that would otherwise be needed;
7. A declaration of the Affected Utility's proportional share of the total aggregated kWh delivered by all Affected Utilities during the calendar year and the Affected Utility's calculation of the Affected Utility's Annual Biomass Production Requirement;
8. A certification from an independent auditor or agency of the source of the Arizona Forest Biomass, Arizona Biomass Pellets, and Arizona Biogas, as defined in R14-2-1817, from which the Affected Utility's Bioenergy-Derived Renewable Energy Credits were derived;
9. A description of the location and number of acres of forest from which the relevant Arizona Restored Forest Trimmings and Arizona Forest Fuel Break Fuels were harvested, a certification from an independent auditor or agency that the area

was, at the time of the harvesting, assessed by the Arizona Department of Forestry and Fire Management as a “moderate-high,” “high,” “very high,” or “extreme” wildfire threat area, or identified by the United States Forest Service as a “Fire Regime Group I,” “Fire Regime Group II,” “Fire Regime Group III,” “severe” wildfire severity, or “declining forest health” landscape-scale area under the Healthy Forests Restoration Act, and a certification from an independent auditor or agency that no relevant Arizona Restored Forest Trimming was more than 12” in diameter;

10. The Affected Utility’s On-Peak Hours, On-Peak Sales, Clean Peak Sales, Clean Peak Percentage, and Annual Clean Peak Standard for each of the two years preceding the current calendar year;
11. A description of the Affected Utility’s procedures for choosing Eligible Clean Energy Resources and Energy Storage Resources for the Affected Utility’s use or dispatch during On-Peak Hours, and a certification from an independent auditor that those procedures are fair and unbiased, have been appropriately applied, and prioritize retrofits to existing renewable energy resources or the replacement or deferment of transmission and distribution that would otherwise be needed;
12. The Affected Utility’s Incremental Clean Energy Goal and Incremental Energy Storage Goal for the previous calendar year and a description of the following:
 - a. the amount of progress that the Affected Utility made toward each of its Incremental Clean Energy Goals and Incremental Energy Storage Goals;
 - b. whether the progress described under subpart (a) achieved each of its Incremental Clean Energy Goals and Incremental Energy Storage Goals,

and if not, an explanation explaining why the Affected Utility did not achieve each of its Incremental Clean Energy Goals and Incremental Energy Storage Goals; and

b. how the progress described under subpart (a) contributes to meeting the goals set forth in the 2050 Clean Energy Goal and 2030 Energy Storage Goal;

13. A description of all Transportation Electrification Infrastructure added, including the number, type, cost, and location of the infrastructure and a classification of each location as residential, commercial, industrial, or public; and

14. A description of all Excess Transmission Capacity that occurred during the previous calendar year on transmission lines that the Affected Utility utilized that were constructed and in service in Arizona prior to January 1, 2018; a description of the Eligible Renewable Energy Resources, Eligible Clean Energy Resources, Eligible Bioenergy Resources, and Energy Storage Resources that the Affected Utility added, procured, installed, or otherwise utilized to fill the Excess Transmission Capacity, and a description of the kW of nameplate capacity of each of those resources and the kWh utilized from each of those resources.

C. The Commission may hold a hearing to determine whether an Affected Utility's compliance report satisfies the requirements of these CREST rules.

R14-2-1813. CREST Implementation Plans

A. Within 120 days of the effective date of these CREST rules~~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 [CREST](#) 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, [Eligible Clean Energy Resources, Eligible Bioenergy Resources, and Energy Storage 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;
 - a. [for Eligible Clean Energy Resources, an additional description of the kWh to be sold from each of Eligible Clean Energy Resource during On-Peak Hours;](#)
 - b. [for Eligible Bioenergy Resources, an additional description of the duration of the Affected Utility's procurement arrangements for each Eligible Bioenergy Resource and an additional estimation of the annual acreage amount of restoration attributable to each Eligible Bioenergy Resource as a result of related Arizona Forest Biomass harvesting; and](#)
 - c. [For Energy Storage Resources, an additional description of the estimated benefit, or impact to, the Affected Utility's grid operations for each Energy Storage Resource.](#)
2. The estimated cost of each Eligible Renewable Energy Resource, [Eligible Clean Energy Resource, Eligible Bioenergy Resource, and Energy Storage 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,

each Eligible Clean Energy Resource, each Eligible Bioenergy Resource, and each Energy Storage 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 CREST 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, Eligible Clean Energy Resource, Eligible Bioenergy Resource, and Energy Storage Resource described in the Affected Utility's implementation plan;
6. A declaration of the Affected Utility's proportional share of the total aggregated kWh delivered by all Affected Utilities during the previous calendar year and of the Affected Utility's calculation of the Affected Utility's Annual Biomass Production Requirement for the current calendar year;
7. A declaration of the Affected Utility's On-Peak Hours, On-Peak Sales, Clean Peak Sales, and Clean Peak Percentage for the previous calendar year, a calculation of the Affected Utility's Annual Clean Peak Standard for the current and next calendar years, and a detailed plan describing how the Affected Utility will meet its Annual Clean Peak Standard for both the current and next calendar years, including a description of the Affected Utility's plans to retrofit existing

renewable intermittent energy resources to maximize their respective dispatchability or effectiveness during On-Peak Hours;

8. An Incremental Clean Energy Goal and an Incremental Energy Storage Goal, which the Affected Utility shall set for itself for both the current and next calendar years, and a detailed description of the following:

a. the Affected Utility's plans to achieve each of its Incremental Clean Energy Goals and an Incremental Energy Storage Goals;

b. how the Affected Utility's Incremental Clean Energy Goals and an Incremental Energy Storage Goals contribute to meeting the goals set forth in the 2050 Clean Energy Goal and 2030 Energy Storage Goal; and

c. the degree to which the Affected Utility's plans to achieve each of its Incremental Clean Energy Goals and an Incremental Energy Storage Goals prioritize retrofits to existing renewable energy resources to include Energy Storage Resources or the replacement or deferment of new transmission and distribution.

9. A plan describing how the Affected Utility intends to work with and assist all Affected Utilities in meeting a Transportation Electrification Goal, including a description of the Transportation Electrification Infrastructure the Affected Utility proposes to add, by year, for the next five years and a description of the estimated cost of each proposed infrastructure addition, including the total cost of all proposed additions, and the anticipated annual expense to the Affected Utility to maintain the proposed infrastructure additions each year.

10. For the description of each Transportation Electrification Infrastructure proposed

to be added each year for the next five years, a description of the type or nature of the infrastructure, the location of the infrastructure, the benefit that the Affected Utility anticipates the infrastructure will have on daytime load or load occurring during Off-Peak Hours, and a classification of the proposed location of the charging stations as residential, commercial, industrial, or public.

11. A description of all transmission lines constructed and in service in Arizona prior to January 1, 2018, that the Affected Utility utilizes and knows, or should reasonably know, will have Excess Transmission Capacity during the next five calendar years; and

12. A description of the Eligible Renewable Energy Resources, Eligible Clean Energy Resources, Eligible Bioenergy Resources, and Energy Storage Resources that the Affected Utility proposes to add, procure, or install to fill the Excess Transmission Capacity and a description of the kW of nameplate capacity and kWh to be obtained from each of those resources.

C. The Commission may hold a hearing to determine whether an Affected Utility's implementation plan satisfies the requirements of these CREST rules.

R14-2-1814. Electric Power Cooperatives

A. Within 60 days of the effective date of these CREST 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~~2019, 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

- A.** If an Affected Utility fails to meet the annual requirements set forth in any of R14-2-1804, ~~and~~ R14-2-1805, R14-2-1818, and R14-2-1821 it shall include with its annual compliance report a notice of noncompliance.
- B.** The notice of noncompliance shall provide the following information, as applicable to the requirement the Affected Utility failed to meet:
1. A computation of the difference between the Renewable Energy Credits required by R14-2-1804, ~~and~~ R14-2-1805, and R14-2-1818 and the amount actually obtained,
 2. A computation of the difference between the Clean Peak Percentage required by R14-2-1821 and the Clean Peak Percentage actually achieved,
 - ~~23.~~ A plan describing how the Affected Utility intends to meet the shortfall from the previous calendar year in the current calendar year, and
 - ~~34.~~ 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

- A. The Commission may waive compliance with any provision of this Article for good cause.
- B. Any 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 these [CREST](#) rules shall have priority over other matters filed at the Commission.
- D. Compliance with the Annual Bioenergy Production Requirement and all provisions of this Article related to the Annual Bioenergy Production Requirement are waived for a Biomass Exempt Utility.

R14-2-1817. Eligible Bioenergy Resources

- A. “Eligible Bioenergy Resources” are applications of the following defined technologies that are Bioenergy Resources, located in Arizona, and operated for the relevant calendar year at an annual average capacity factor of no less than 70 percent:

1. “Arizona Forest Bioenergy Plants” are Biomass Electricity Generators that generate electricity at an annual average cost of not more than \$0.125 per kWh using no less than 80 percent of Arizona Forest Biomass, Arizona Biomass Pellets, Arizona Biomass Gasses, as defined below, and any one or more combinations of these:

a. “Arizona Forest Biomass” is Forest Biomass that is one or more of the following defined fuel sources:

i. “Arizona Restored Forest Trimmings” are small-diameter forest thinnings of not more than 12” in diameter that, when trimmed, increase the basal area of residual trees, promote healthy forest stands, maximize the retention of old-growth and large trees, and reduce fire hazards, and are sourced no less than 100 percent from locations in Arizona, the location in Arizona from which the thinnings are sourced having met one or more of the following criteria:

(a) The Arizona Department of Forestry and Fire Management currently assess the location as a “moderate-high,” “high,” “very high,” or “extreme” wildfire threat area; or

(b) The United States Forest Service currently identifies the location as “Fire Regime Group I,” “Fire Regime Group II,” “Fire Regime Group III,” “severe” wildfire severity on its wildfire hazard severity maps for communities under Section 210 of the Healthy Forests Restoration Act, or a “declining forest health” landscape-scale area under Section 602 of the

Healthy Forests Restoration Act;

ii. “Arizona Forest Fuel Break Fuels” are flammable woody and plant materials, ladder fuels, shrubs, vegetation, dead and downed trees, and other forest fuels that, if removed, create a fuel break, as defined under the Healthy Forests Restoration Act, or otherwise reduce or minimize the risk of crown fires or the risk of the spread of fire, and that are sourced no less than 100 percent from locations in Arizona, the location in Arizona from which the fuels are sourced having met one or more of the following criteria:

(a) The Arizona Department of Forestry and Fire Management currently assesses the location as a “moderate-high,” “high,” “very high,” or “extreme” wildfire threat area; or

(b) The United States Forest Service currently identifies the location as “Fire Regime Group I,” “Fire Regime Group II,” “Fire Regime Group III,” “severe” wildfire severity on its wildfire hazard severity maps for communities under Section 210 of the Healthy Forests Restoration Act, or a “declining forest health” landscape-scale area under Section 602 of the Healthy Forests Restoration Act;

iii. “Arizona Utility Hazard Trees” are hazard trees, as defined under Title V of the Federal Land Policy and Management Act, and vegetation pruned or removed as a result of vegetation management activities, as defined under Title V of the Federal Land Policy and Management

Act.

- b. “Arizona Biomass Pellets” are carbonized, coalized, or other heat and pressure-treated biomass products that are manufactured or treated in Arizona from no less than 100 percent Arizona Forest Biomass; and
- c. “Arizona Biomass Gasses” are liquefied, gasified, or other treated or processed biomass products that are in a liquid or gas form and that are processed or treated in Arizona from no less than 100 percent Arizona Forest Biomass.

2. “Arizona Bioenergy Co-Generation Plants” are Conventional Energy Resources that are retrofitted to use, in addition to its conventional non-renewable fuel source, one or more of the following defined fuel sources:

- a. “Mixed Biomass Pellets” are carbonized, coalized, or other heat and pressure-treated products, such as bio-coal pellets, that are manufactured or treated in Arizona from no less than 80 percent Arizona Forest Biomass, and that generate electricity at an annual average cost of not more than \$0.125 per kWh;
- b. “Mixed Biomass Gasses” are liquefied, gasified, or other treated or processed products that are in a liquid or gas form, that are processed or treated in Arizona from no less than 80 percent Arizona Forest Biomass, and that generate electricity at an annual average cost of not more than \$0.125 per kWh;
- c. Arizona Biomass Pellets that generate electricity at an annual average cost of not more than \$0.125 per kWh;

d. Arizona Biomass Gasses that generate electricity at an annual average cost of not more than \$0.125 per kWh; and

e. Arizona Forest Biomass that generates electricity at an annual average cost of not more than \$0.125 per kWh.

B. The Commission may adopt pilot programs in which additional technologies are established as Eligible Bioenergy Resources. Any such additional technologies shall be Biomass Resources that produce electricity from fuel sources sourced not less than 80 percent from Arizona and that generate electricity at an annual average cost of not more than \$0.125 per kWh.

R14-2-1818. Annual Bioenergy Production Requirement

A. Effective January 1, 2022, each Affected Utility shall be required to satisfy an Annual Bioenergy Production Requirement by satisfying a portion of its Annual Renewable Energy Standard with Bioenergy-Derived Renewable Energy Credits.

B. An Affected Utility's Annual Bioenergy Production Requirement shall be calculated each calendar year by applying the Affected Utility's proportional share of the total aggregated kWh delivered by all Affected Utilities during the previous calendar year to 367,920,000 Renewable Energy Credits.

C. Within 30 days of the effective date of these rules, each Affected Utility shall file with Docket Control a declaration of the Affected Utility's estimated proportional share of the total aggregated kWh delivered by all Affected Utilities during the previous calendar year and of the Affected Utility's calculation of that share applied to 367,920,000 Renewable Energy Credits.

D. An Affected Utility may not use Bioenergy-Derived Renewable Energy Credits from a

previous calendar year to satisfy its Annual Bioenergy Production Requirement.

- E. An Affected Utility may ask the Commission to preapprove agreements to purchase Bioenergy-Derived Renewable Energy Credits or nameplate capacity of Eligible Bioenergy Resources.
- F. Affected Utilities may work collaboratively to generate Bioenergy-Derived Renewable Energy Credits or procure nameplate capacity of Eligible Bioenergy Resources.

R14-2-1819. Biomass Capacity Factor, Procurement, and Cost

- A. To ensure ongoing electricity reliability and compliance with these rules, an Affected Utility shall, within 15 days of the Affected Utility's knowledge of the following, notify the Commission in writing of any of the following:
 - a. that the operation of an Eligible Bioenergy Resource has fallen or may fall below an average capacity factor of 70 percent for the relevant calendar year; or
 - b. that a procurement arrangement for an Eligible Bioenergy Resource has terminated or may terminate prior to its contracted duration, or a party to the procurement contract is or may be in material breach of the arrangement.
- B. Unless an Affected Utility has procured Eligible Bioenergy Resources to meet its Annual Bioenergy Production Requirement for 20 or more consecutive years before January 1, 2022, cost recovery for an Eligible Bioenergy Resource may be denied if the procurement is less than 20 consecutive years, unless the Commission preapproved the procurement under R14-2-1818(E).
- C. An Affected Utility may not apply to its Annual Bioenergy Production Requirement a Bioenergy-Derived Renewable Energy Credit that was derived from an Eligible Bioenergy Resource that, during the relevant calendar year, had an average capacity

factor of less than 70 percent.

D. An Affected Utility may not apply to its Annual Bioenergy Production Requirement a Bioenergy-Derived Renewable Energy Credit that was derived from an Eligible Bioenergy Resource that, during the relevant calendar year, had an average annual cost per kWh of not more than \$0.125.

E. No provision of this Article with respect to Eligible Bioenergy Resources and the Annual Bioenergy Production Requirement shall be construed to prevent an Affected Utility from meeting seasonal grid needs or engaging in seasonal curtailments or strategic outages of Eligible Bioenergy Resources in the Affected Utility's procurement arrangements, so long as each Eligible Bioenergy Resource maintains an annual average capacity factor of no less than 70 percent.

R14-2-1820. Eligible Clean Energy Resources

A. "Eligible Clean Energy Resources" are applications of the following defined technologies that are Clean Energy Resources:

1. Eligible Renewable Energy Resources that are Clean Energy Resources.
2. "Fuel Cells that Use Only Clean Fuels" are fuel cell electricity generators that operate with zero net emissions beyond that of steam, such as hydrogen created from water by Eligible Renewable Energy Resources or Eligible Clean Energy Resources. Hydrogen created from non-Clean Energy Resources, such as natural gas or petroleum products, is not a zero net emission fuel.
3. "Nuclear Power Generators" are generators located in Arizona that produce electricity using nuclear fusion or fission, including, without limitation, pressurized water reactors, small modular reactors, molten salt reactors, liquid

metal reactors, magnetic confinement reactors, inertial confinement reactors, and other reactor types.

4. Eligible Bioenergy Resources that are Clean Energy Resources.

R14-2-1821. Annual Clean Peak Standard

A. In order to ensure affordable electric service for ratepayers and reduce the cost of retail electricity during periods of peak demand, each Affected Utility shall be required to satisfy a 2030 Clean Peak Standard by satisfying an Annual Clean Peak Standard each year from 2020 until 2029.

B. An Affected Utility's Annual Clean Peak Standard for the relevant calendar year shall be calculated each calendar year by adding the following applicable whole digits to the Affected Utility's Clean Peak Compliance Baseline during that calendar year:

<u>2020</u>	<u>1.5</u>
<u>2021</u>	<u>3</u>
<u>2022</u>	<u>4.5</u>
<u>2023</u>	<u>6</u>
<u>2024</u>	<u>7.5</u>
<u>2025</u>	<u>9</u>
<u>2026</u>	<u>10.5</u>
<u>2027</u>	<u>12</u>
<u>2028</u>	<u>13.5</u>
<u>2029</u>	<u>15</u>

C. The Annual Clean Peak Standard shall never be calculated as a percent of a percent.

D. If an Affected Utility's Clean Peak Percentage in a calendar year is higher than the

Affected Utility's Annual Clean Peak Standard, then the Affected Utility may apply the difference to the Affected Utility's Annual Clean Peak Standards in following years.

E. An Affected Utility may fail to meet its Annual Clean Peak Standard in any one or more years if the Affected Utility explains in its CREST Compliance Report and demonstrates in its CREST Implementation Plan that the Affected Utility can and will compensate for the failure in a later year and meet the 2030 Clean Peak Standard.

F. Each Affected Utility shall satisfy its Annual Clean Peak Standard no later than December 31 of the relevant calendar year by making On-Peak Sales from Eligible Clean Energy Resources.

Appendix A. Sample Tariff

Unless otherwise ordered by the Commission, the ~~renewable~~-clean resource 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.