

	ORIGINAL NEW APPLICATION							
1	BEFORE THE ARIZONA CORPORATION COMMISSION							
2 3 4 5 6 7 8 9 10 11	COMMISSIONERS Arizona Corporation Commission TOM FORESE, Chairman Arizona Corporation Commission BOB BURNS DOCKETED DOUG LITTLE ANDY TOBIN BOYD DUNN MAR 0 3 2017 DOCKETED BY Contraction Commission DOCKETED BY Contraction Commission BOYD DUNN MAR 0 3 2017 DOCKETED BY Contraction Commission BOYD DUNN MAR 0 3 2017 DOCKETED BY Contraction Commission F-01749A-17-0063 DOCKET NO. E-01749A-17- COOPERATIVE, INC. FOR APPROVAL OF THE 2017 REST IMPLIMENTATION PLAN AND NET DOCKET NO. E-01749A-17- METERING TARIFF Graham County Electric Cooperative, Inc. ("GCEC") hereby submits the 2017 REST Implementation Plan							
12 13	and Net Metering Tariff for Arizona Corporation Commission approval.							
14 15 16	I. Background GCEC is an Arizona nonprofit corporation certified to provide electricity as a public service corporation in the State of Arizona.							
17 18 19	GCEC now files its 2017 REST plan (attached). The REST Rules (A.A.C. R14-2-1814) allow Cooperatives to file "an appropriate plan for acquiring Renewable Energy Credits from Eligible Renewable Resources for the next calendar year."							
20 21 22 23 24 25 26	GCEC proposed REST plan includes changes to how the budget is allocated among the different categories including more funding for the "PV for Government, Schools, and Non-Profit Program" and the "Large Scale Purchase Power Contract and Generation Program" and updates to the Net Metering Tariff. The proposed Net Metering Tariff includes a reduction in the avoided cost rate from \$0.02410 to \$0.02337 based on the 2016 calendar year. The proposed plan also calls for a reduction in the current incentive levels. The chart below illustrates the proposed changes. The RES Tariff rates have no proposed changes.							

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3	Docket Control Arizona Corporation Commission
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GRAHAM COUNTY ELECTRIC COOPERATIVE, INC.

NET METERING TARIFF SCHEDULE NM

Effective Date:

Availability

Net Metering service is available to all customers of the Cooperative with a qualifying Net Metering Facility. Participation under this schedule is subject to availability of enhanced metering and billing system upgrades. The electric energy generated by or on behalf of the member from a qualifying Net Metering Facility and delivered to the Cooperative's distribution facilities may be used to offset electric energy provided by the Cooperative during the applicable billing period.

Net Metering Facility means a facility for the production of electricity that:

- a. Is operated by or on behalf of the customer and is located on the customer's premises;
- b. Is intended to provide part or all of the customer's requirements for electricity;
- c. Uses Renewable Resources, a Fuel Cell or combined heat and power (CHP) (as defined below);
- d. Has a generating capacity less than or equal to 125% of the customer's total connected load, or in the absence of customer load data, capacity less than or equal to the customer's electric service drop capacity; and
- e. Is interconnected with and can operate in parallel in phase with the Cooperative's existing distribution system.

Service under this tariff is available provided the rated capacity of the customer's Net Metering Facility does not exceed the Cooperative's service capacity. The customer shall comply with all of the Cooperative's interconnection standards. The customer is also required to sign and complete the Net Metering Application prior to being provided Net Metering Service. This service is also referred to as Partial Requirements Service.

Net Metering Facilities with generation capacity that exceeds 100 kilowatts, which are interconnected presently, or desire to become interconnected with a Member, may, at Arizona Electric Power Cooperative's option, be subject to the negotiated terms and conditions set forth in multilateral contracts among the customer, Arizona Electric Power Cooperative and the Cooperative.

Metering

Metering installed for the service provided under this tariff shall be capable of registering and accumulating the kilowatt-hours (kWh) of electricity flowing in both directions in a billing period.

Monthly Billing

If the kWh supplied by the cooperative exceeds the kWh that are generated by the customer's Net Metering Facility and delivered back to the cooperative during the billing period, the customer shall be billed for the net kWh supplied by the Cooperative in accordance with the rates and charges under the customer's standard rate schedule.

NET METERING TARIFF SCHEDULE NM

If the electricity generated by the customer's Net Metering Facility and delivered back to the cooperative exceeds the electric kWh energy supplied by the Cooperative in the billing period, the customer shall be credited during subsequent billing periods for the excess kWh generated. The cooperative shall apply the credit by using the excess kWh generated during the billing period to reduce the kWh supplied (not kW or kVA demand or customer charges) and billed by the Cooperative during the subsequent billing periods.

Customers taking service under time-of-use rates who are to receive credit in a subsequent billing period for excess kWh generated shall receive such credit during the following billing periods during the on- or off- peak periods corresponding to the on- or off- peak periods in which the kWh were generated by the Customer.

Once each Calendar Year, for the customer bills produced in January (December usage) or in the last billing period that the customer discontinues service under this tariff, the Cooperative shall issue a check or billing credit to customers with Net Metering Facilities for the balance of any credit due in excess of amounts owed by the customer to the Cooperative for Non-Firm Power. The payment for any remaining credits shall be at the Cooperative's Annual Average Avoided Cost of \$0.02337 per kWh. Any payment for Firm Power will be pursuant to a separate contract.

Definitions

- 1. <u>Annual Average Avoided Cost</u> is defined as the average annual wholesale fuel and energy costs per kWh charged by the Cooperative's wholesale power supplier(s) during the calendar year.
- 2. <u>Calendar Year</u>: The Calendar Year is defined as January 1 through December 31, for the purpose of determining the billing credit for the balance of any credit due in excess of amounts owed by the customer to the Cooperative.
- 3. <u>Renewable Resource</u> means natural resources that can be replenished by natural processes, including biomass, biogas, geothermal, hydroelectric, solar or wind.
- 4. <u>Combined Heat and Power or CHP</u> (also known as cogeneration) means a system that generates electricity and useful thermal energy in a single, integrated system such that the useful power output of the facility plus on-half the useful thermal energy output during any 12-month period must be no less than 42.5 percent of the total energy input of fuel to the facility.
- 5. <u>Fuel Cell</u> means a device that converts the chemical energy of a fuel directly into electricity without intermediate combustion or thermal cycles. The source of the chemical reaction must be from Renewable Resources.
- 6. <u>Partial Requirements Services</u>- Electric service provided to a customer that has an interconnected Net Metering Facility whereby the output form its electric generator(s) first supplies its own electric requirements and any excess energy (over and above its own requirements at any point in time) is then provided to the Company. The Company supplies the customer's supplemental electric requirements (those not met by their own generation facilities). This configuration may also be referred to as the "parallel mode" of operation.

NET METERING TARIFF SCHEDULE NM

- <u>Non-Firm Power-</u>Electric power which is supplied by the Customer's generator at the Customer's option, where no firm guarantee is provided, and the power can be interrupted by the Customer at any time.
- Firm Power- Power available, upon demand, at all times (except for forced outages) during the period covered by the Purchase Agreement from the customer's facilities with an expected or demonstrated reliability which is greater than or equal to the average reliability of the Company's firm power sources.
- 9. Standard Rate Schedule- Any of the Company's retail rate schedules with metered kWh charges.
- 10. <u>Time Periods-</u> Mountain Standard Time shall be used in the application of this rate schedule. Because of potential differences of the timing devices, there may be a variation of up to 15 minutes in timing for the pricing periods. On-peak and off-peak time periods will be determined by the applicable Standard Retail Rate Schedule.

Graham County Electric Cooperative, Inc.

REST Plan for Calendar Year 2017

A.A.C. R14-2-1814

March 3, 2017

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Graham County Electric Cooperative, Inc.

I. BACKGROUND

Graham County Electric Cooperative, Inc. ("GCEC") is a rural electric distribution cooperative headquartered in Pima, Arizona and an all-requirements member of Arizona Electric Power Cooperative, Inc. ("AEPCO"). GCEC provides electric service to approximately 8,603 active meters in Graham County as of December 31, 2016.

GCEC filed its first <u>individual</u> Renewable Energy Standard and Tariff ("REST") plan in 2010 for the 2011 calendar year. Prior to the 2011 plan, GCEC participated in a joint renewable energy plan filed by AEPCO on behalf of certain of its Arizona member distribution cooperatives.

The Commission approved the Renewable Energy Standard and Tariff Rules ("REST Rules") in Decision No. 69127. The REST Rules took effect August 14, 2007.

The REST Rules contain a section that specifically addresses electric power cooperatives. R14-2-1814.B instructs the cooperatives to file by July 1 "an appropriate plan for acquiring Renewable Energy Credits from Eligible Renewable Energy Resources for the next calendar year." Upon Commission approval, the provisions of the plan substitute for the requirements of R14-2-1804 and R14-2-1805 for the cooperative which proposes the plan.

Pursuant to these requirements, GCEC submits this REST Plan for calendar year 2017 (the "2017 REST Plan").

II. GCEC 2017 REST PLAN

GCEC uses surcharge dollars for the Renewable Energy Standard Tariff ("REST") to fund renewable programs. The 2017 REST plan has decreased support for distributed generation projects including residential and commercial photovoltaic, solar water heating, wind generation and other renewable technologies. Instead funds have been reallocated to support primarily the Large Scale Purchase Power and Generation Program and the PV for Government, Schools, & Non-Profits. Funds are also used to pay for the administration, advertising and promotion of SunWatts programs.

The 2017 REST plan continues rebate support for the solar and wind technologies that were approved as part of the 2016 REST Plan filed by GCEC and approved in Decision No. 75591 dated June 27, 2016. GCEC is proposing to eliminate support for unused programs such as solar water heating and solar daylighting. GCEC proposes to keep the same RES tariff rates that were approved in the 2016 REST plan. GCEC does however propose lower Up Front Incentives ("UFI") to take effect on the decision date by the Arizona Corporation Commission ("ACC") for the 2017 plan. GCEC requests approval to allocate more of the proposed budget funds to the "PV for Government, Schools, and Nonprofits Program" and the "Large Scale Purchase Power Contract and Generation Program" as detailed below. There are three SunWatts programs that make up the GCEC 2017 REST plan:

(1) The SunWatts Rebate Program;

(2) The Large-Scale Purchase Power Contract & Generation Program; and

(3) The PV for Government, Schools and Nonprofits Program.

Each of these programs is discussed in greater detail below.

(1) SunWatts Rebate Program: The rebate program pays customers UFI's to encourage the installation of qualifying photovoltaic ("PV") and small wind systems. Subject to available budget funds, GCEC currently pays a UFI of \$0.15 per installed watt for solar and wind systems. Projects receiving a UFI are currently limited to a maximum incentive of \$1,500. GCEC will own all the renewable energy credits ("RECs") from a project receiving a UFI for its operational life.

As approved in the 2015 REST plan, GCEC will only accept the customer owned system model and not the leased system model for the UFI. GCEC will also continue support for the Willcox Greenhouse ("WGH") geothermal project which is a 10-year agreement to purchase renewable energy credits ("REC's") approved in 2010.

Subject to the foregoing, distributed generation projects will be rebated on a first-come, first-served basis until funding is exhausted. Projects must be approved before construction and funds must also be available before the systems are approved. Eligible customers may be placed on a waiting list until additional funding is available. When funding is available and the project is approved for construction, rebates will be paid to the customer following a final inspection of the system. System installations are required to be performed by a licensed renewable energy contractor or electrician. If local conditions dictate, GCEC may allow self-installations as long as the customer has the installation inspected and verified by a licensed contractor.

GCEC currently offers a UFI of \$0.15 per watt up to a maximum incentive of \$1,500. GCEC is proposing to reduce the UFI to \$0.02 per watt up to a maximum of \$200 as part of this plan and allocate more funds to Large Scale solar projects. GCEC will continue to provide the current \$0.15 per watt UFI during the first part of 2017 based on the current approved UFI until the Commission has approved the 2017 plan. The proposed rebate budget of \$96,400 should be sufficient to pay the current incentive of \$0.15 per Watt until the Commission approves the lower incentive at which time GCEC will only pay an incentive of \$0.02 per Watt up to \$200.

There are several reasons why GCEC has proposed to reduce the UFI. First, GCEC has seen a significant increase in the number of solar applications and installations in the past 6 months. The chart below shows the number of systems that were installed in GCEC service area during the past three years.

	# OF PV		
YEAR	SYSTEMS	WATTS	MW (dc)
2014	10	128,080	0.128
2015	9	98,000	0.098
2016	19	138,880	0.139
2017 YTD	15	116,095	0.116
TOTAL ALL YEARS	224	1,586,235	1.586

GCEC RENEWABLE SYSTEMS (ALL)

Since August of 2016, a total of 27 systems have been installed in the GCEC service area. In January of 2017 alone a total of 12 systems were installed. There are several factors that are driving this increased demand. As a result of the Commission's recent decision to change net metering, GCEC has seen increased demand for solar in order to be "grandfathered" in the existing net metering rules. Another reason for the increased demand over the past several years has been the lower costs for solar installations. As demand for solar increases, the need for a subsidy incentive funded by all GCEC members decreases. GCEC also recognizes that many other utility companies in Arizona have reduced or eliminated their solar increatives. GCEC desires to set a solar incentive that is appropriate for the unique service territory it serves and takes into account the increased demand and budget constraints.

Another important reason for the proposed reduction in the incentive is GCEC's desire to incorporate more large scale solar projects into its portfolio. As of December 2016, GCEC has exceed the distributed generation requirement but does not have any large scale generation. The chart in Appendix 4 shows the amount of solar installed in GCEC service area over the past three years compared to the REST targets.

Even though section R14-2-1814.B of the REST rules precludes electric cooperatives from meeting the REST requirement, GCEC has consistently achieved the distributed generation portion of the requirement. GCEC now desires to shift more of the available budget to support the large scale generation projects and the PV for Government, Schools and Non-profits programs that benefit a greater percentage of our members than individual rooftop solar projects.

GCEC expects the rebate program and the Willcox Greenhouse will support the installation of approximately 726 kW of new qualifying renewable technologies in 2017.

(2) The SunWatts Large-Scale Purchase Power Contract and Generation Program: The SunWatts large-scale program calls for GCEC, on its own or in partnership with others, to

participate and assist in the development of large-scale renewable resources, either through purchase power agreements or by construction of utility-owned resources. GCEC is planning a large solar installation with its all requirement power provider AEPCO to install large-scale purchase power generation. GCEC anticipates the project will be completed in September 2017 of which GCEC will own the REC's and purchase power for approximately 2 MW. GCEC will continue to review potential partnerships with AEPCO to install large-scale purchase power generation. GCEC requests authority from the Commission to transfer unused funds between programs in the event GCEC is able to contract additional large-scale solar.

(3) PV for Government, Schools and Nonprofits Program: GCEC will encourage installation of renewable energy systems on government, school and nonprofit buildings within its service territory by offering a UFI to third-party developers or those with access to stimulus funding interested in installing renewable systems on such structures. The objective of this program is to use GCEC funding and leverage it to provide greater benefits to such entities. The amount of the UFI will be negotiated with the entity requesting funds from this project based on the cost of the proposed system and the available funding.

III. ADMINISTRATION OF THE SUNWATTS PROGRAM

<u>Annual Reporting and Plan Development</u>: By April 1, 2018, GCEC will file a report describing results achieved under this 2017 REST Plan. On or before July 1 of each year, GCEC will file an updated plan as required by R14-2-1814.B.

<u>Advertising and Promotion</u>: SunWatts programs are promoted in a variety of media, for example: bill inserts and ads/stories in monthly newsletters; counter cards and posters; and participation at local events, such as the GCEC annual meeting and county fairs. Additionally, a SunWatts promotional presence outlining GCEC programs is maintained on our website at www.gce.coop.

Rebate Program Process and Procedures

Projects eligible to receive a UFI incentive are handled based on procedures similar to the following. First, the member submits an enrollment form to GCEC indicating interest in the program. The enrollment form is evaluated to determine project eligibility and form completeness. If the enrollment form is not sufficient or the project is not eligible, the member is notified of project status. If the project qualifies, GCEC determines funding availability. If funds are available, the member is notified of project acceptance and that the project must be ready for inspection within 120 days of the application date. If the 120 days expires prior to inspection, the member must resubmit the project (an extension may be granted for good cause on a case-by-case basis). If no funding is available, the project is put on a waiting list and the member is notified as to that status. All projects on a waiting list will be funded in the order received as additional funding becomes available. Once GCEC accepts a project, the member must complete an interconnection agreement, submit a system schematic and provide copies of the project estimate and all permits within 30 days. Once the system is installed, the member informs GCEC, the system is then inspected and the interconnection is verified. Once the system passes the inspection, GCEC processes the incentive.

Members can, at their own risk and discretion, assign their utility incentive to the contractor installing their system by contacting the Cooperative in advance of the installation and making the necessary arrangements.

IV. ESTIMATED RESULTS/BUDGET/TARIFFS

Estimated Results

Based on the programs proposed and projects currently in place, as well as the assumptions stated in this 2017 REST plan, GCEC anticipates a full year's operation would generate approximately 15,032 MWh of distributed renewable energy.

Budget

The budget for the 2017 REST plan is provided in Appendix 3. The total GCEC program budget for 2017 is \$489,787 (\$195,000 from REST fund collections and \$294,787 from a rollover balance from 2016). Of this proposed budget, 20% of the budget is allocated to support DG program activities and 72% is allocated to support Large Scale Purchase Power & Generation Program and PV for Government, Schools, & Non-Profits Program. GCEC requests authority to move budgeted funds from program areas where funding is unspent to other program areas as needed. GCEC plans to use the rollover amount to fund projects primarily in the PV for Government, Schools, & Non-Profits category.

Tariffs

No adjustment to the current GCEC surcharge tariff is needed to fund the 2017 REST plan.

APPENDIX 1

REBATE PROGRAM INCENTIVE MATRIX

Technology	UFI	PBI	
Solar Electric	\$0.15 per watt (Current Rate) Cannot exceed \$1,500 per rebate \$0.02 per watt (After ACC Approval) Cannot exceed \$200 per rebate	Not Eligible	
Small Wind	\$0.15 per watt (Current Rate) Cannot exceed \$1,500 per rebate \$0.02 per watt (After ACC Approval) Cannot exceed \$200 per rebate	Not Eligible	

APPENDIX 2

REBATE PROGRAM INCENTIVE HISTORY

Program item	2009	2010- 2012	2013	2014	2015	2016	2017 Proposed (1 ST half)	2017 Proposed (2 nd half)
Up Front Incentive (UFI)								
UFI Per Watt	\$ 4.00	\$ 3.00	\$1.00	\$0.35	\$0.15	\$0.15	\$0.15	\$0.02
Maximum Incentive	n/a	n/a	n/a	\$3,500	\$1,500	\$1,500	\$1,500	\$200
Maximum UFI percentage based on the total cost	50%	40%	30%	n/a	n/a	n/a	n/a	n/a
Solar Water Heating							*	
Per kWh Rebate based on first year kWh output (per OG- 300)	\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	n/a

Proposed GCEC 2017 REST Budget

	2017
Estimated Collected REST Funds	\$195,000
Rollover Balance from 2016	\$294,787
Total Fund Available	\$489,787
Rebate Program	(\$109,800)
Residential DG	(\$98,400)
Commercial DG	(\$11,400)
L-S Purchase Power & Generation Program	(\$91,987)
PV for Government, Schools, & Non-Profits	(\$250,000)
Advertising	(\$1,000)
Administration	(\$37,000)
Total Expenses	(\$489,787)

APPENDIX 4

GCEC Total Installed Renewable Resources

Year	2014	2015	2016
ACC REST Requirement	4.50%	5.00%	6.00%
GCEC Forecasted Sales (MWh)	153,485	148,553	142,062
REST Target (MWh)	6,907	7,428	8,524
Residential Distributed Generation %	15.0%	15.0%	15.0%
Residential DG REST Targets (MWh)	1,036	1,114	1,279
Installed Resources Residential DG (kW)	938	992	1,131
Installed Resources Residential DG (MWh)	2,053	2,173	2,477
Less REC Allocation Agreement (MWh)	556	556	556
Total Installed Resources Residential DG (MWh)	1,498	1,617	1,921
Surplus / (Deficit) Target (MWh)	462	503	643
% of Target	145%	145%	150%
Commercial Distributed Generation %	15.0%	15.0%	15.0%
Commercial DG REST Targets (MWh)	1,036	1,114	1,279
SunWatts Commercial DG (kW)	243	243	243
WGH Commercial DG (kW)	375	117	56
AEPCO HQ Commercial DG (25 kW @ 6.4%)	2	2	2
GCEC HQ Commercial DG (96.390 kW @ 100%)	53	96	96
Total Installed Resources Commercial DG (kW)	672	458	397
Installed Resources Commercial DG (MWh)	1,472	1,002	869
Surplus / (Deficit) Target (MWh)	436	(112)	(409)
% of Target	142%	90%	68%
Total Distributed Generation %	30.0%	30.0%	30.0%
Total DG REST Targets (MWh)	2,072	2,228	2,557
Installed Resources Total DG (MWh)	2,970	2,619	2,790
DG REST Requirement (%)	1.35%	1.50%	1.80%
% of Total Sales	1.93%	1.76%	1.96%
Surplus / (Deficit) Target (MWh)	898	391	233
% of Target	143%	118%	109%
Large Scale Generation %	70.0%	70.0%	70.0%
Large Scale REST Targets (MWh)	4,835	5,199	5,967
Installed Resources Large Scale (MWh)	-	-	-
Surplus / (Deficit) Target (MWh)	(4,835)	(5,199)	(5,967)
% of Target	0%	0%	0%
Total			
REST Target (MWh)	6,907	7,428	8,524
Total Resources Installed (MWh)	2,970	2,619	2,790
Total REST Requirement	4.50%	5.00%	6.00%
% of Total Sales	1.93%	1.76%	1.96%
Surplus / (Deficit) Target (MWh)	(3,937)	(4,808)	(5,733)
% of Target	43%	35%	33%