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ORIGINAL

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

- DOUG LITTLE - Chairman
- BOB STUMP
- BOB BURNS
- TOM FORESE
- ANDY TOBIN

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AZ CORP COMMISSION
DOCKET CONTROL

IN THE MATTER OF THE APPLICATION OF
TRICO ELECTRIC COOPERATIVE, INC., AN
ARIZONA NONPROFIT CORPORATION,
FOR A DETERMINATION OF THE
CURRENT FAIR VALUE OF ITS UTILITY
PLANT AND PROPERTY AND FOR
INCREASES IN ITS RATES AND CHARGES
FOR UTILITY SERVICE AND FOR
RELATED APPROVALS.

DOCKET NO. E-01461A-15-0363

**STAFF'S NOTICE OF FILING DIRECT
TESTIMONY (RATE DESIGN AND COST
OF SERVICE)**

Staff of the Arizona Corporation Commission ("Staff") hereby files the Direct Testimony
(Rate Design and Cost of Service) of Ranelle Paladino and Eric M. Van Epps in the above docket.

RESPECTFULLY SUBMITTED this 1st day of June 2016.

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BEFORE THE ARIZONA CORPORATION COMMISSION

DOUG LITTLE
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SERVICES AND FOR RELATED APPROVALS.)
_____)

DOCKET NO. E-01461A-15-0363

DIRECT
RATE DESIGN
TESTIMONY
OF
ERIC VAN EPPS
EXECUTIVE CONSULTANT
UTILITIES DIVISION
ARIZONA CORPORATION COMMISSION

JUNE 1, 2016

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EXECUTIVE SUMMARY
TRICO ELECTRIC COOPERATIVE, INC.
DOCKET NO. E-01461A-15-0363

The Direct Rate Design Testimony of Eric Van Epps presents the results of the Utility Division Staff's ("Staff") review of the rate case application ("Application") of Trico Electric Cooperative, Inc. ("Trico" or "Company") filed with the Arizona Corporation Commission ("Commission") on October 23, 2015 and the results of Staff's evaluation of the Company's Net Metering ("NEM") proposal. Staff witness Ranelle Paladino addresses the remainder of Staff's rate design proposals.

1 **INTRODUCTION**

2 **Q. Please state your name, occupation, and business address.**

3 A. My name is Eric Van Epps. I am an Executive Consultant employed by the Arizona
4 Corporation Commission (“Commission”) in the Utilities Division (“Staff”). My business
5 address is 1200 West Washington Street, Phoenix, Arizona 85007.

6
7 **Q. Briefly describe your responsibilities as an Executive Consultant.**

8 A. I perform studies and provide recommendations to the Commission on matters involving
9 electric and gas utilities.

10

11 **Q. Please describe your educational background and professional experience.**

12 A. I have bachelor’s degrees in Business Administration and Political Science, specializing in
13 international business and international politics and a degree in Sustainability with a focus on
14 alternative energy and resources from Arizona State University. I have been employed with
15 the Commission since January of 2013.

16

17 **Q. What is the scope of your testimony in this case?**

18 A. I will be addressing Net Metering (“NEM”), for Trico Electric Cooperative, Inc. (“Trico” or
19 “Company”).

20

21 **Q. Have you reviewed the testimony submitted by the Company in this case?**

22 A. Yes. I reviewed the testimonies of Company witnesses, Mr. Vincent Nitido, Ms. Karen
23 Cathers and Mr. David Hedrick, as they pertain to NEM.

24

1 **NET METERING**

2 **Q. What is Trico's proposal for changing NEM?**

3 A. The Company has maintained its original NEM proposal, first proposed in February of
4 2015:

5
6 1. For energy generated by a distributed generation ("DG") Member's system that is
7 used to serve that DG Member's load, the DG Member would continue to benefit
8 from a full retail rate offset for that energy (i.e., no change).

9
10 2. For any *excess* energy that is delivered to Trico from the DG Member's system, Trico
11 would provide a credit on the DG Member's bill each month for the excess
12 generation at Trico's 2014 actual wholesale energy avoided cost rate, which is
13 currently \$0.03662 per kWh (thus, no longer rolling excess generation from the DG
14 Member's system month to month).¹

15
16 3. The DG Member would continue to pay Trico for any energy delivered from Trico
17 at the tariff retail rate established in this case.

18
19 4. Trico's proposed change only affects the interval for excess energy and the credit for
20 excess generation from the DG Member's facility.

21
22 **Q. Does Staff accept the Company's proposal to change NEM?**

23 A. No, but Staff may update its position later in this case.
24

¹ It is Staff's understanding the interval of measurement of excess energy would be instantaneous.

1 **Q. Did Trico propose any grandfathering provision with its request to alter NEM?**

2 A. Yes. Trico has proposed that its new Net Metering Tariff apply only to those members who
3 submitted interconnection applications after February 28, 2015. All other DG Members
4 would be grandfathered under its current Net Metering Tariff.²

5
6 **Q. If Staff supported changes to NEM, what would be its position on NEM
7 grandfathering?**

8 A. Staff would be able to support grandfathering up to the date of a decision or settlement in
9 this case. Staff would support partial grandfathering and would recognize that the topic
10 could be revisited during each subsequent rate case by the Commission. Staff would
11 recommend no further grandfathering of DG systems installed after an established cut-off
12 date.

13
14 **Q. Is there evidence that the Company is under-recovering fixed costs due to current
15 DG installations?**

16 A. Yes, because two-part rates, by definition, include fixed costs in the volumetric rate
17 component and DG reduces kWh usage. Company witness Mr. David Hedrick has
18 indicated that there was an under-recovery associated with the proliferation of DG systems
19 that equated to \$1,262,079 for Trico under the existing residential rate in its 2014 test year.

20
21 **Q. Can Staff verify the \$1,262,079 under-recovery?**

22 A. No. The \$1,262,079 under-recovery is based on assumptions that may or may not be exactly
23 accurate. For example, the Company has production meters on its current DG customers.

² Trico did notice its members that there could be a change to NEM and that they may or may not be grandfathered past February 28, 2015. Staff would also note that when investing in technologies there is a fair amount of risk, one such risk is that value or profit may change over time. In this case some of a DG systems value or profit is derived from the current NEM tariff. Staff believes that Trico has provided adequate notice to its members submitting applications after February 28, 2015, that there could be a change to its NEM tariff.

1 The Company could use this information to more accurately depict the under-recovery
2 attributable to DG customers between its last rate case and the test year.

3

4 **Q. Has the lack of a verifiable under-recovery amount, influenced Staff's opinion in this**
5 **case?**

6 A. No. Staff believes there is a fixed cost under-recovery that can be attributable to DG
7 systems.

8

9 **Q. Given that there is a fixed cost under-recovery that can be attributable to the**
10 **proliferation of DG under current NEM rules, why is Staff reluctant to make a**
11 **recommendation in this case?**

12 A. Typically, fixed cost under recoveries are resolved in the next rate case as the test year billing
13 determinants already incorporate the reduced kWh volumes. Also, due to a number of
14 ongoing electric cases awaiting decisions, Staff prefers to try to allow for their conclusion.

15

16 **Q. Can you further explain?**

17 A. Yes. In this case, the Company has requested a change to NEM that would rely on a
18 substantially reduced export rate. The Company has requested that the export rate be the
19 approved avoided cost rate of \$0.03662/kWh. Although this is one option, the Commission
20 has before it a generic docket investigating the value and cost of distributed generation,
21 (Docket No. E-00000J-14-0023). This docket will continue to provide the Commission and
22 Staff with information about an appropriate export rate which may or may not be the short-
23 term avoided cost. There are various proposals in that docket which include different ways
24 of looking at avoided cost and several different proxies for avoided cost including PPA rates
25 and a methodology which would look at the weighted average of the utility's PPAs and
26 owned utility scale solar revenue requirements.

1 **Q. Does Staff have anything further to add to the Net Metering discussion?**

2 A. Yes. Staff would like to note that there are many possible options when it comes to making
3 adjustments to the way Net Metering currently functions. Further, Staff would like to
4 emphasize the importance of fully understanding the impact of even minor differences
5 between the various proposals currently being considered. It is important to understand
6 how the mechanism and the export rate interact with one another. Variations in the billing
7 methodologies and the export rate can have significant effects on the value to prospective
8 solar customers and to a utility's ability to recover fixed costs. If the mechanism is only
9 slightly changed and the export rate is decreased only slightly, a utility may see little to no
10 improvement in its ability to recover fixed costs. On the other hand, if the mechanism is
11 significantly changed and the export rate is low, the value to potential solar customers would
12 be greatly reduced.

13
14 Staff believes that the inter-relationship between proposed export rates and changes to the
15 net metering billing methodology should be evaluated together. The evaluation should
16 include an analysis with metrics on a utility's ability to recover its fixed costs, the financial
17 impacts for prospective solar customers, and include information on how the proposed
18 changes would affect non-solar customers moving forward. Staff encourages Trico to put
19 forth a more thorough evaluation of its proposed changes and their impact on customers in
20 its rebuttal testimony.

21
22 **Q. Has the Company provided any such analysis?**

23 A. Company witness Mr. David Hedrick provided Exhibit DWH-8, which looks only at annual
24 total lost fixed costs under three different scenarios. However, Staff disagrees with the
25 conclusions illustrated in this study.

26

1 **Q. Please Explain.**

2 A. Exhibit DWH-8 implies that the Company's under-recovery associated with Trico's existing
3 1,262 DG customers would continue after new rates and changes to NEM went into effect.
4 The Company would recover costs previously allocated to these DG customers from all
5 other customers after new rates went into effect. Thus, the estimated \$1,262,079 in under-
6 recovered costs would be memorialized into rates based on test year volumes and as long as
7 sales stayed the same, the Company would see recovery. Further, based on the Company's
8 NEM proposal, the Company would likely see recovery for all energy credited at an export
9 rate through the Company's Wholesale Power Cost Adjustor ("WPCA"). Additionally,
10 because of the discontinuation of banking and the requirement for all kWh coming from the
11 grid to be purchased at the retail rate, under-recovery associated with new DG customers
12 would be drastically reduced.

13
14 **Q. Do you believe Trico's filings have accounted for all of the variables associated with
15 the changes to Net Metering it has proposed?**

16 A. No. There are many moving parts with regard to a net metering policy direction. The NEM
17 billing methodology (e.g., excess energy measurement interval), the export rate (e.g., how
18 often it would change), adjustors affected by the export rate (e.g., the WPCA), cost shifts
19 (e.g., accurate measurement), and Trico's own renewable goals are among the moving parts.
20 Without a clear picture of all of the impacts of the changes proposed by Trico, it is difficult
21 for Staff to make a recommendation at this time.

22
23 **Q. Does this conclude your direct rate design testimony?**

24 A. Yes, it does.

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DOCKET NO. E-01461A-15-0363

DIRECT
RATE DESIGN
TESTIMONY
OF
RANELLE PALADINO
PUBLIC UTILITIES ANALYST IV
UTILITIES DIVISION
ARIZONA CORPORATION COMMISSION

JUNE 1, 2016

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EXECUTIVE SUMMARY
TRICO ELECTRIC COOPERATIVE, INC.
DOCKET NO. E-01461A-15-0363

Ranelle Paladino's testimony presents the results of the Utilities Division Staff's ("Staff") review of the cost of service study ("COSS"), revenue allocation, and rate design proposals in the rate case application of Trico Electric Cooperative, Inc.'s ("Trico" or "Company"). The application was filed with the Arizona Corporation Commission ("Commission") on October 23, 2015.

Taking into consideration Staff's recommendation that rate design more closely reflect actual cost of service and with Trico's ability to and interest in implementing a three-part rate (customer, demand, and energy), Staff is proposing Trico offer three-part rates and two-part rates to its residential and small commercial customers. By suggesting that Trico offer both options to customers, Staff is supporting Trico in the direction of moving fixed costs out of the variable energy rate.

Based on its review of Trico's COSS, revenue allocation, and rate design proposals, Staff's conclusions and recommendations are as follows:

CONCLUSIONS

- A. Staff concludes that Trico has performed the COSS consistent with methodologies generally accepted in the industry, and developed the allocation factors appropriately.
- B. Staff further concludes that the application of the COSS model is acceptable.
- C. Staff also concludes that the overall revenue allocation developed by Trico is reasonable but Staff modified the allocations slightly to account for changes in billing determinants for the residential customers.
- D. Staff's review of the rate design proposals submitted by Trico concludes:
 - 1. The Residential Service Rate Schedule, Residential Time-of-Use Rate Schedule, and General Service 1 Rate Schedule rate design proposal from the Trico amendment docketed May 4, 2016, is a step in the direction of more closely recovering costs. Implementing the rate design proposal from May 4, 2016 as *mandatory* for Residential, Residential Time of Use and General Service 1 is *not* just, fair and reasonable.
 - 2. The General Service 2 Rate Schedule, General Service 3 Rate Schedule, General Service Time-of-Use Rate Schedule, General Service 4 Rate Schedule, Water Pumping Rate Schedule, Irrigation Service Rate Schedule, Time of Day Pumping Rate Schedule, Security (Outdoor) Lighting Rate Schedule, and Street Lighting Rate Schedule rate design proposals are just, fair and reasonable.

3. The Interruptible Commercial and Industrial Rate Schedule should be combined with the Interruptible Pumping Rate Schedule into the creation of the Interruptible Service Rate Schedule.
 4. The rate design proposal to combine the two existing interruptible schedules into the new Interruptible Service Rate Schedule is just, fair and reasonable.
 5. The new Interruptible Service Rate Schedule should be frozen, not allowing any new customers to sign up for this rate schedule.
- E. Staff concludes that the proposed change to the Schedule of Special Charges (Schedule SC) incorporating language to charge customers for return visits to inspect the installation of DG interconnections is just, fair and reasonable.
- F. Staff concludes that the proposal to offer a new tariff designated as the SunWatts Sun Farm Monthly Participation Tariff (Schedule RESFM) is providing the opportunity for a segment of customers to take part in solar benefits who may have not been able to previously.

RECOMMENDATIONS

- A. Based on the aforementioned conclusions, Staff recommends that the Commission accept Trico's COSS.
- B. Staff also recommends the Commission accept the revenue allocation specified by Staff on page 6 of this testimony.
- C. Staff recommends that the rates proposed by Trico for the General Service 2 Rate Schedule, General Service 3 Rate Schedule, General Service Time-of-Use Rate Schedule, General Service 4 Rate Schedule, Water Pumping Rate Schedule, Irrigation Service Rate Schedule, Time of Day Pumping Rate Schedule, Security (Outdoor) Lighting Rate Schedule, and Street Lighting Rate Schedule be approved.
- D. Staff recommends that Trico offer both a two-part rate alternative and a three-part rate alternative for the Residential Rate Schedule, Residential Time-of-Use Rate Schedule, and the General Service 1 Rate Schedule.
- E. Staff recommends that Trico implement an in-depth customer education program to familiarize residential and general service customers with demand charges and kW measurements.
- F. Staff recommends approval of the Staff-proposed rates found in Exhibit RSP-2 and detailed in this testimony for the Residential Rate Schedule, Residential Time-of-Use Rate Schedule, and the General Service 1 Rate Schedule.
- G. Staff recommends the combination of the Interruptible Commercial and Industrial Rate Schedule with the Interruptible Irrigation and Water Pumping Rate Schedule into one new Interruptible Service Rate Schedule.

- H. Staff recommends that the new Interruptible Service Rate Schedule be frozen so no new customers can be added to the rate schedule.
- I. Staff recommends that the rates proposed by Trico for the new Interruptible Service Rate Schedule be approved.
- J. Staff recommends Trico notify in writing customers currently on the Interruptible Commercial and Industrial Rate Schedule of the change to the new Interruptible Service Rate Schedule. These customers should be informed of the timing and the implications of the transition.
- K. Staff recommends Trico notify in writing customers currently on the Interruptible Irrigation and Water Pumping Rate Schedule of the change to the new Interruptible Service Rate Schedule. These customers should be informed of the timing and the implications of the transition.
- L. Staff recommends that Trico's proposal to revise the language in the Schedule SC to allow for charges associated with return trips to inspect installations of DG interconnections if the return trip is due to a customer or DG installer issue be approved.
- M. Staff recommends that Trico modify its Interconnection Agreements for leased and owned systems to incorporate language that customers may be charged a return trip fee for a return trip to inspect installations of DG interconnections.
- N. Staff recommends that the proposed SunWatts Sun Farm Monthly Participation Tariff be approved.
- O. Staff recommends that reporting of the revenue and expenses associated with the new SunWatts Sun Farm Monthly Participation Tariff along with the reporting of the Renewable Energy Credits ("RECs") be incorporated into the reporting process currently in place for the Renewable Energy Standards and Tariff annual plan filings for Trico.

1 **INTRODUCTION**

2 **Q. Please state your name, occupation, and business address.**

3 A. My name is Ranelle Paladino. I am a Public Utilities Analyst employed by the Arizona
4 Corporation Commission (“Commission”) in the Utilities Division (“Staff”). My business
5 address is 1200 West Washington Street, Phoenix, Arizona 85007.

6
7 **Q. Have you previously filed testimony in this docket?**

8 A. Yes. I filed direct testimony concerning the adjustments to billing determinants, the base cost
9 of power and operating revenue adjustments.

10
11 **Q. As part of your employment responsibilities, were you assigned to review matters
12 contained in Docket No. E-01461A-15-0363?**

13 A. Yes.

14
15 **Q. What is the purpose of your testimony in this case?**

16 A. The purpose of my testimony is to discuss Staff’s review of Trico Electric Cooperative, Inc.’s
17 (“Trico” or “Company”) Cost of Service Study (“COSS”) for the rate case, and present the
18 results of this review.

19
20 In addition, my testimony also incorporates Staff’s recommendations regarding the revenue
21 allocation and the proposed changes to Trico’s rate design. My testimony also includes Staff’s
22 recommendations regarding the discontinuance of a rate schedule, the implementation of a
23 service call fee for return visits to interconnect photovoltaic (“PV”) systems and the addition
24 of a new community solar program.
25

1 **Q. Are you addressing net metering in your testimony?**

2 A. No. I am not addressing net metering in my testimony. Net metering will be addressed in
3 the testimony of Eric Van Epps.
4

5 **COST OF SERVICE STUDY**

6 **Q. Has Trico provided a COSS?**

7 A. Yes. Trico provided a COSS in its rate application based on the Test Year (twelve-month
8 period ended December 31, 2014).¹ The COSS provides the individual class returns for the
9 Company's thirteen rate schedules plus wheeling activity for two other customers.
10

11 **Q. What is the purpose of preparing a COSS?**

12 A. The purpose of preparing a COSS includes: (1) relating costs to different groups of
13 customers based on which customers caused those costs to occur; (2) determining how to
14 recover costs from customers within each class, (3) calculating costs of services based on how
15 much the utility has to spend on each cost, and (4) separating costs between regulatory
16 jurisdictions if necessary. A complete allocated COSS ultimately tries to determine the
17 specific cost to serve each customer class and subclass.
18

19 **Q. How will a COSS be used?**

20 A. A fully allocated COSS would be used as a guideline to allocate revenue among classes. The
21 COSS may also be used as a determinant in rate design if the purpose is to design rates based
22 on the costs to serve each customer class.
23

¹ Trico Rate Application Filing Schedule G.

1 **Q. Is there a standard COSS methodology?**

2 A. No. There is no one right methodology for designing a COSS so the COSS should be used
3 as a guideline for revenue allocation and designing rates.
4

5 **Q. Have you reviewed the COSS model presented by Trico?**

6 A. Yes. The COSS was provided in Trico's rate application on Schedules G-1 through G-7.1. I
7 reviewed the allocations and developed and reviewed the answers to the Data Requests by
8 Staff. In addition, I reviewed the test year rate base, revenues, and expenses, including the
9 test year adjustments, in the COSS and matched them with the appropriate schedules in the
10 application.
11

12 **Q. What model was used by Trico in developing its COSS?**

13 A. Trico utilized the services of Guernsey Engineers, Architects and Consultants
14 ("Consultants"), out of Oklahoma City, Oklahoma. The Consultants prepared the COSS
15 using their in-house model, named CoOPTIONS. This model was used by Trico in its last
16 full rate case under Arizona Administrative Code ("A.A.C.") R14-2-103, Decision No. 71230
17 dated August 6, 2009.
18

19 **Q. Did Trico adjust or normalize its usage or revenues?**

20 A. Trico utilized a test year ending December 31, 2014. As detailed in my direct testimony on
21 pages 2-3, Trico made three adjustments to test year billing determinants: (1) adjust the
22 number of billed consumers to reflect the revenue collected from the customer charge
23 divided by the customer charge, (2) adjust the billed consumers and kWh sold to show a
24 reclassification of accounts moving from the General Service Schedule GS 3 ("GS 3") to
25 General Service Schedule GS 4 ("GS 4") and (3) adjust residential kWh sales downward to
26 reflect estimates of a decline in kWh attributed to the growth in net metered customers that

1 occurred in late 2014 and continued into 2015.² The adjustments to the billing determinants
2 resulted in a reduction to test year base revenue of \$1,296,163.³

3
4 In addition, the revenues were adjusted by the Consultants to account for the fuel bank
5 charges during the test year, restate the Wholesale Power Cost Adjustor (“WPCA”) revenue
6 to allow for the full amount of WPCA revenue, and adjust Other Revenue for the addition of
7 6,657 new net metering customers paying the \$3.38 net metering tariff charge. The total
8 revenue adjustments other than base revenue resulted in an increase to adjusted test year
9 revenue of \$1,621,212. The total test year revenue adjustment was an increase in test year
10 revenues of \$325,049.⁴

11
12 **Q. Did Trico make adjustments to the COSS allocation factors from the prior rate case?**

13 A. Trico utilized similar demand, energy, and customer-based allocation factors between this
14 COSS and the prior rate case with the exception of the allocation of Account 368
15 Transformers. This COSS separated Account 368 into customer-related and capacity-related
16 costs. Staff considers this adjustment to be appropriate.

17
18 **Q. What did Staff determine from its review of the COSS?**

19 A. Staff’s review of Trico’s COSS determined that acceptable methods were utilized to
20 functionalize, classify, and allocate costs. Staff has determined the COSS model appropriately
21 calculated the components of the rate application. Staff did not fully agree with the
22 adjustments made to test year residential billing determinants as detailed on pages 3-4 of my
23 direct testimony filed on May 4, 2016. Staff did not agree with the lowering of residential
24 billing determinants attributed to net metered customers. Staff is still evaluating the actual

² Payne Direct page 3 lines 16-26 and page 4 lines 1-3.

³ Payne Direct page 4 line 6.

⁴ Trico Rate Application Schedule A-1.0.

1 production data for those net metered customers supplied by Trico on April 27, 2016. If the
2 production data support a test year adjustment to residential billing determinants, Staff may
3 make the appropriate changes in its surrebuttal testimony to be filed on July 8, 2016. Staff
4 did not recalculate the COSS contained in the G Schedules of Trico's rate application as this
5 study was used as a guideline in the rate design process, and Staff didn't feel the roughly 1
6 percent adjustment to test year billing determinants for the residential class would materially
7 affect the results of the COSS.

8
9 **Q. Did the methods used by Trico comply with industry standards?**

10 A. Trico utilized methodologies that are generally accepted in the utility industry for its COSS.
11 Allocation of plant and operating expenses were assigned to the respective customer classes
12 on the basis of demand, energy and other customer-related factors.

13
14 **Q. Does Staff have a recommendation concerning Trico's COSS?**

15 A. Staff recommends the Commission accept Trico's COSS in this case.
16

17 REVENUE ALLOCATION

18 **Q. Please describe the revenue increase allocation?**

19 A. Trico's rate application included a request for a revenue increase of \$2,182,076 on adjusted
20 test year revenues of \$87,480,736 for a proposed revenue requirement of \$89,662,812. Staff
21 witness Mary J. Rimback in her direct testimony recommended a revenue increase of
22 \$1,972,842 on adjusted test year revenues of \$87,824,867 for a Staff-proposed revenue
23 requirement of \$89,797,709. Table 1 details the adjusted test year revenue and Staff-proposed
24 revenue increase by rate schedule.

25

Table 1: Staff's Proposed Revenue Allocation

Trico Rate Schedule	Test Year Adj. Rev. \$*	Staff Proposed Rev. \$**	% Increase
Residential	\$53,263,752	\$55,126,101	3.50%
Residential Time of Use	\$4,428,768	\$4,796,920	8.31%
GS 1	\$1,764,280	\$1,844,061	4.52%
GS 2	\$1,814,862	\$1,911,985	5.35%
GS 3	\$14,967,633	\$14,427,413	-3.61%
GS Time of Use	\$170,535	\$171,992	0.85%
GS 4	\$7,239,836	\$7,239,836	0.00%
Water Pumping	\$462,950	\$498,535	7.69%
Irrigation	\$38,217	\$41,231	7.89%
Time of Day Pumping	\$618,859	\$645,720	4.34%
Interruptible	\$1,142,715	\$1,176,258	2.94%
Lighting	\$142,046	\$147,243	3.66%
Wheeling	\$149,317	\$149,317	0.00%
Other Revenue	\$1,621,097	\$1,621,097	0.00%
Total Revenue	\$87,824,867	\$89,797,709	2.25%

*Total Adjusted TY Revenue detailed on RSP-1.

**Staff-Proposed Total Revenue from RSP-2.

Looking at the relative rates of return calculated in the COSS for each rate schedule illustrates which relative rates of return are negative, close to 1.0, or above 1.0. Rate increases designed to more closely recover costs to serve a rate schedule should move the relative rates of return closer to 1.0. Trico's COSS on Schedule G-1.0 illustrates that, to varying degrees, the GS 3, GS Time of Use, GS 4, and Interruptible Rate Schedules are paying more than their cost of service leading to the lower percentage increases in rates noted above. The Residential, Residential Time of Use, and GS 1 rate schedules are slightly under 1.0 leading to the moderate increase noted above. The Water Pumping, Irrigation, Time of Day Pumping, and Lighting rate schedules are paying less than their cost of service. As indicated on Schedule G-1.0, the overall system return is reported to be approximately 5.086 percent.

As can be seen on Schedule G-2.0, after incorporating the proposed revenue increase, the overall system return has increased to 6.33 percent. The proposed revenue increases also led

1 to an improvement of the relative rates of return of all rate schedules with a relative rate of
2 return below 1.0 or negative.

3

4 **RATE DESIGN**

5 **Q. Please describe Staff's position on Rate Design?**

6 A. Rates are designed to collect a specific revenue requirement. The breakdown of that revenue
7 requirement by rate schedule has been split in recovery between a fixed and a variable
8 component for the residential, GS 1, irrigation, and water pumping rate schedules. All other
9 rate schedules except for the lighting segment have an additional billing demand component.
10 The lighting segment has a per-unit rate. Historical rate design, especially for the residential
11 customer class, has allowed recovery of Trico's fixed costs partly through a customer charge
12 and partly through a variable rate or energy charge.

13

14 Variations in usage among customers in the same class have increased for a number of
15 reasons (including seasonal customers, vacant homes, and distributed generation ("DG")).
16 Existing rate design does not always account for these variations in usage. Staff believes that
17 rates should now be more closely based on the actual costs to serve each customer class.
18 However, Staff recognizes that rate design may need to evolve gradually. One option allows
19 for each customer to pay for the level of service they may require at any point in time through
20 a customer charge, demand charge, and energy charge—in essence, a three-part rate.
21 However, Staff recognizes that a change in rate design from a two-part rate to a three-part
22 rate requires extensive education for customers to understand a demand charge and their
23 ability to control the level of demand within their own household.

24

1 **Q. Please summarize the Company's rate design proposal.**

2 A. Trico has indicated in its rate application that the proposed rates are designed to gradually
3 move toward better matching revenue recovery to actual cost of service.⁵

4
5 **Q. What was the Company's primary concern in developing its rate design proposals?**

6 A. Trico's application indicates the Company has requested a 2.49 percent overall increase in
7 adjusted test year total revenue. Trico explains that this increase is necessary to address
8 concerns over the significant changes the Company has seen in how its members use energy.
9 Specifically, Trico's application is proposed to address increased energy conservation efforts,
10 overall milder weather and expanded DG deployment within its service territory.⁶

11
12 **Q. How did Trico propose implementing its rate design changes?**

13 A. Trico's application proposed increases to the monthly customer charge for all rate schedules.
14 The Company is hoping to improve revenue stability and lessen the amount of fixed costs
15 collected in the energy charge. Specifically for the residential rate schedule, Trico proposed
16 two-tier inclining block energy charges to incent energy conservation and lessen the impact of
17 the increase in the customer charge on low-use customers.

18
19 On May 4, 2016, Trico filed an amendment to its application ("May 4th Amendment"). The
20 amendment proposed a modification to the rate design that would apply to all residential and
21 small commercial (GS 1) customers. The modified rate design incorporated a fixed monthly
22 demand charge of \$4.00 per customer based on a minimum billed demand of 2 kW at \$2.00
23 per kW. The demand charge for any kW demand over 2 kW will be billed at \$0.00 per kW.
24 Trico indicated this would allow customers the ability to see what their demand is on a
25 monthly basis and how changes in behavior affect the monthly kW prior to any charge being

⁵ Trico Application page 4 lines 26-27.

⁶ Trico Application page 2 lines 23-27.

1 implemented. The energy charge proposed in the modifications is slightly lower than in the
2 original rate application.

3
4 **Q. Is Trico's cost per customer analysis in Schedule G-6.0 useful in evaluating its
5 proposed customer charges and demand charges?**

6 A. Yes. If the goal of a restructuring of rate design is to more accurately recover fixed costs
7 through a fixed charge, Schedule G-6.0 from the COSS is useful. Schedule G-6.0 details the
8 monthly cost per consumer broken down into purchased power demand, purchased power
9 energy, distribution (wires), and total customer costs (which includes such items as billing and
10 metering).

11
12 For example, Schedule G-6.0 indicates that it costs \$31.83 per month per residential customer
13 in fixed monthly customer costs. Other fixed costs incurred for residential customers include
14 distribution system (wires, poles, etc.) and the fixed portion of purchased power charges paid
15 to primarily Arizona Electric Power Cooperative ("AEPSCO"), Trico's generation and
16 transmission provider, on a monthly basis. In a perfect recovery scenario, Trico would assess
17 fixed charges which fully recover its fixed costs as shown in Table 2 below. In a practical
18 application of rates to recover costs, Staff has considered the impact on the consumer of
19 increased fixed charges and how to gradually recover those fixed costs.

20
21 Table 2: Trico's Total Residential Fixed Costs

Trico's Fixed Costs Categories	\$
Purchased Power Costs	\$41.41
Distribution (Wires) Costs	\$27.40
Customer Costs	\$31.83
TOTAL RESIDENTIAL FIXED COSTS	\$100.64

1 *Residential*

2 **Q. Please describe the Residential Service Rate Schedule?**

3 A. Residential Service in Trico's territory is available for residential use to private dwellings and
4 individually metered apartments, condominiums, and similar residential units where all service
5 is supplied at one point of delivery and where energy is metered through one meter.

6
7 **Q. What changes did Trico propose for the Residential Service Rate Schedule?**

8 A. For the Residential Service Rate Schedule, Trico's original application proposed increasing the
9 customer charge from \$15.00 to \$20.00 per month. The energy charge originally was
10 proposed to go from a flat kWh charge to an inclining block rate with two blocks. The
11 existing energy charge is \$0.1216 per kWh. The originally proposed rate for the first 800 kWh
12 per month is \$0.1176 per kWh. The originally proposed rate for usage over 800 kWh per
13 month is \$0.1276 per kWh.

14
15 The May 4th Amendment modified the rates for the Residential Service Rate Schedule. The
16 modified rates still incorporate raising the customer charge from \$15.00 to \$20.00 per month.
17 A minimum demand charge has been added assessing \$2.00 per kW for the first 2 kW per
18 month. Any kW demand over the 2 kW level will be shown on the customer's bill but will be
19 charged a rate of \$0.00 per kW to allow the customer time to familiarize themselves with kW
20 billing. The energy charge is based on the inclining block rate of \$0.1128 per kWh for the
21 first 800 kWh per month and \$0.1228 per kWh for usage over 800 kWh.

22
23 **Q. Did Trico propose any other changes for the Residential Class?**

24 A. No.

25

1 **Q. Please describe the Residential Time-Of-Use (“TOU”) Service Rate Schedule?**

2 A. Residential TOU Service in Trico’s territory is available for residential use in individual private
3 dwellings and in individually metered apartments, condominiums, and similar residential units
4 where all service is supplied at one point of delivery and energy is metered through one
5 meter. TOU customers’ rates vary for usage during on-peak time versus usage during off-
6 peak time. For Residential TOU customers, on peak time is between 1:00 pm and 9:00 pm
7 Monday through Friday during the months of April through October. The on-peak time
8 during the months of November through March is 6:00 am to 10:00 am and 6:00 pm to 10:00
9 pm Monday through Friday.

10
11 **Q. What changes did Trico propose for the Residential TOU Service Rate Schedule?**

12 A. For the Residential TOU Service Rate Schedule, Trico’s original application proposed
13 increasing the customer charge from \$19.00 to \$24.00 per month. The existing on-peak
14 energy charge was originally proposed to go from \$0.1932 per kWh to \$0.1979 per kWh. The
15 existing off-peak energy charge was originally proposed to go from \$0.0732 per kWh to
16 \$0.0779 per kWh.

17
18 The May 4th Amendment modified the rates for the Residential TOU Service Rate Schedule.
19 The modified rates still incorporate raising the customer charge from \$19.00 to \$24.00 per
20 month. A minimum demand charge has been added assessing \$2.00 per kW for the first 2
21 kW per month. Any kW demand over the 2 kW level will be shown on the customer’s bill
22 but will be charged a rate of \$0.00 per kW to allow the customer time to familiarize
23 themselves with kW billing. The on-peak energy charge is proposed to increase from \$0.1932
24 per kWh to \$0.19412 per kWh. The off-peak energy charge is proposed to increase from
25 \$0.0732 per kWh to \$0.07412 per kWh.

1 **Q. What are the Residential Rate Schedule and Residential TOU Rate Schedule**
2 **customer costs?**

3 A. As discussed above in Table 2, Schedule G-6.0 illustrates for the Residential Rate Schedule
4 the fixed purchased power costs of \$41.41, fixed distribution (wires) costs of \$27.40 and fixed
5 customer costs per residential consumer of \$31.83.

6
7 Table 3 below shows the fixed costs for the Residential TOU Rate Schedule.

8
9 Table 3: Trico's Total Residential TOU Fixed Costs

Trico's Fixed Costs Categories	\$
Purchased Power Costs	\$52.16
Distribution (Wires) Costs	\$31.92
Customer Costs	\$37.92
TOTAL RESIDENTIAL TOU FIXED COSTS	\$122.00

10
11 **Q. Does Staff support the changes to the Residential Service Rate Schedule proposed by**
12 **Trico?**

13 A. Staff supports a change to the rates for the Residential Service Rate Schedule but has
14 modified the rates.

- 15
16 • Staff supports implementation of both rate structures proposed by Trico (in its
17 original application and its May 4th Amendment) as alternatives for the residential
18 class of customers. Staff believes offering a three-part rate is another rate design
19 option that is available to allow companies to recover fixed costs. Staff proposes
20 offering residential customers the choice between a three-part rate which incorporates
21 a demand charge and a two-part rate which incorporates an increase in the monthly
22 customer charge and a higher energy charge. Possible alternatives to offer residential
23 customers can be seen in Exhibit RSP-2. Staff assumed an average monthly demand

1 for the residential class of 5 kW. Staff realizes that this is merely a starting point for
2 the creation of a demand rate and recommends the Company adjust the rates in its
3 rebuttal testimony if it does not agree with Staff's assumptions.
4

- 5 • Staff supports the implementation of a three-part rate which includes no change to
6 the customer charge, a minimum demand charge for the first 2 kW and a meaningful
7 demand charge for any kW demand over 2 kW. At the same time, the energy charge
8 would be reduced. Staff also supports offering a two-part rate to residential
9 customers which incorporates a higher customer charge.
10

- 11 • Staff recommends that for purposes of measuring demand to be billed, Trico should
12 utilize the non-coincident peak demand in an hour period of time. If Trico's meters
13 measure demand on a fifteen minute interval, Trico could average the four reads for
14 the hour to determine the peak demand in an hour period. As mentioned in Trico's
15 May 4th Amendment, Staff agrees that it is beneficial for Trico to add demand data
16 to all customers' bills going forward.
17

- 18 • Staff recommends that Trico implement an in-depth customer education program
19 with regard to three-part rates. Trico should spend considerable time explaining
20 demand, how it would be measured, and what steps customers can take to affect
21 demand. Trico should also demonstrate to customers that the implementation of a
22 demand charge has a corresponding reduction in energy charge.
23

24 As indicated on Exhibit RSP-3, the estimated bill impact of the two rate options is: (1) under
25 the two-part rate, an increase for the average usage residential customer using 837 kWh is
26 \$0.89 per month which represents a 0.76 percent increase, and (2) under the three-part rate,

1 **Q. Does Staff support the changes to the Residential TOU Service Rate Schedule**
2 **proposed by Trico?**

3 A. Staff supports a change to the rates for the Residential TOU Service Rate Schedule but has
4 modified the rates.

5
6 • Staff supports implementation of both rate structures proposed by Trico (in its
7 original application and its May 4th Amendment) as alternatives for the residential
8 TOU class of customers. Staff believes offering a three-part rate is another rate
9 design option that is available to allow companies to recover fixed costs. Staff
10 proposes offering residential TOU customers the choice between a three-part rate
11 which incorporates a demand charge and a two-part rate which incorporates an
12 increase in the monthly customer charge and a higher energy charge. Possible
13 alternatives to offer residential TOU customers can be seen in Exhibit RSP-2. Staff
14 assumed an average monthly demand for the residential TOU class of 5 kW. Staff
15 realizes that this is merely a starting point for the creation of a demand rate and
16 recommends the Company adjust the rates in its rebuttal testimony if it does not
17 agree with Staff's assumptions.

18
19 • Staff supports the implementation of a three-part rate which includes no change to
20 the customer charge, a minimum demand charge for the first 2 kW and a meaningful
21 demand charge for any kW demand over 2 kW. At the same time, the energy charge
22 would be reduced. Staff also supports offering a two-part rate to residential TOU
23 customers which incorporates a higher customer charge.

24
25 • Staff recommends that for purposes of measuring demand to be billed, that Trico
26 utilize the non-coincident peak demand in an hour period of time. If Trico's meters

1 measure demand on a fifteen minute interval, Trico could average the four reads for
2 the hour to determine the peak demand in an hour period. As mentioned in Trico's
3 May 4th Amendment, Staff agrees that it is beneficial for Trico to add demand data
4 to customers' bills going forward.

- 5
- 6 • Staff recommends Trico implement an in-depth customer education program with
7 regard to three-part rates. Trico should spend considerable time explaining demand,
8 how it is measured, and what steps customers can take to affect demand. Trico
9 should also demonstrate to customers that the implementation of a demand charge
10 has a corresponding reduction in energy charge.

11

12 As indicated on Exhibit RSP-3 (and in Trico's application on Schedule H-4.1), the estimated
13 bill impact of the two rate options is: (1) under the two-part rate, an increase for the average
14 usage residential TOU customer using 1,058 kWh is \$9.90 per month which represents a 7.43
15 percent increase, and (2) under the three-part rate, an increase for the average usage
16 residential customer using 1,058 kWh is \$9.87 per month which represents a 7.41 percent
17 increase.

18

19 As can be seen in Table 6 below, under the two-part rate option, Staff is proposing the
20 residential TOU customer charge go from \$19.00 to \$24.00. At the same time, Staff's
21 proposed on-peak energy charge for residential TOU customers would be \$0.19790. Staff's
22 proposed off-peak energy charge would be \$0.07790 per kWh. These rates mirror what Trico
23 proposed in its application for the residential TOU rate schedule.

24

Table 6: Residential TOU Service Two-Part Rates

	Existing	Staff-Proposed
Customer Charge	\$19.00	\$24.00
On-Peak Energy Charge (per kWh)	\$0.19320	\$0.19790
Off-Peak Energy Charge (per kWh)	\$0.07320	\$0.07790
Monthly Bill Impact for an Average Residential TOU Customer		\$9.90

As can be seen in Table 7 below, under the three-part rate option, Staff is proposing the residential TOU customer charge remain at \$19.00. For the first 2 kW, the minimum charge would be \$2.00 per kW. For any kW over 2 kW, the proposed rate would be \$2.50 per kW. At the same time, Staff's proposed on-peak energy charge for residential TOU customers would be \$0.19180 per kWh. Staff's proposed off-peak energy charge would be \$0.07170 per kWh.

Table 7: Residential TOU Service Three-Part Rates

	Existing	Staff-Proposed
Customer Charge	\$19.00	\$19.00
Demand Charge First 2 kW (minimum of 2 kW)	\$0.00	\$2.00
Demand Charge Over 2 kW	\$0.00	\$2.50
On-Peak Energy Charge (per kWh)	\$0.19320	\$0.19180
Off-Peak Energy Charge (per kWh)	\$0.07320	\$0.07170
Monthly Bill Impact for an Average Residential TOU Customer		\$9.87

General Service

Q. Please describe the GS 1 Rate Schedule?

A. GS 1 service in Trico's territory is available for single and three phase service for more than one residence from a single metering point. GS 1 service is typically used for business, professional and any considerable amount of electricity used for other than domestic purposes. GS 1 customers have a monthly demand of less than 10 kW and all service is supplied at one point of delivery.

1 **Q. What changes did Trico propose for the GS 1 Rate Schedule?**

2 A. For the GS 1 Rate Schedule – Single Phase customers, Trico’s original application proposed
3 increasing the customer charge from \$18.00 to \$23.00 per month. The existing energy charge
4 was originally proposed to go from \$0.1335 per kWh to \$0.1337 per kWh.

5
6 For the GS 1 Rate Schedule – Three Phase customers, Trico’s original application proposed
7 increasing the customer charge from \$26.00 to \$31.00 per month. The existing energy charge
8 was originally proposed to go from \$0.1335 per kWh to \$0.1337 per kWh.

9
10 The May 4th Amendment modified the rates for the GS 1 Service Rate Schedule. The
11 modified rates still incorporate raising the customer charge from \$18.00 to \$23.00 per month
12 for single phase customers and from \$26.00 to \$31.00 per month for three phase customers.
13 A minimum demand charge has been added assessing \$2.00 per kW for the first 2 kW per
14 month. Any kW demand over the 2 kW level would be shown on the customer’s bill but
15 would be charged a rate of \$0.00 per kW to allow the customer time to familiarize themselves
16 with kW billing. The energy charge is proposed to decrease from \$0.1335 per kWh to
17 \$0.12669 per kWh.

18
19 **Q. What are the GS 1 Rate Schedule customer costs?**

20 A. Table 8 details the total GS 1 fixed costs as can be found on Schedule G-6.0.

21

22

Table 8: Trico’s Total GS 1 Fixed Costs

Trico’s Fixed Costs Categories	\$
Purchased Power Costs	\$26.67
Distribution (Wires) Costs	\$24.69
Customer Costs	\$38.54
TOTAL GS 1 FIXED COSTS	\$89.90

23

1 **Q. Does Staff support the changes to the GS 1 Rate Schedule proposed by Trico?**

2 A. Staff supports changes to the rates for the GS 1 rate schedule, but has modified the rates.

3 .

4 • Staff supports implementation of both rate structures proposed by Trico (in its
5 original application and its May 4th Amendment) as alternatives for the GS 1 class of
6 customers. Staff believes offering a three-part rate is another rate design option that
7 is available to allow companies to recover fixed costs. Staff proposes offering GS 1
8 customers the choice between a three-part rate which incorporates a demand charge
9 and a two-part rate which incorporates an increase in the monthly customer charge
10 and a higher energy charge. Possible alternatives to offer GS 1 customers can be seen
11 in Exhibit RSP-2. Staff assumed an average monthly demand for the GS 1 rate
12 schedule of 5 kW. Staff realizes that this is merely a starting point for the creation of
13 a demand rate and recommends the Company adjust the rates in its rebuttal testimony
14 if it does not agree with Staff's assumptions.

15

16 • Staff supports the implementation of a three-part rate which includes no change to
17 the customer charge, a minimum demand charge for the first 2 kW and a meaningful
18 demand charge for any kW demand over 2 kW. At the same time, the energy charge
19 would be reduced. Staff also supports offering a two-part rate to GS 1 customers
20 which incorporates a higher customer charge.

21

22 As indicated on Exhibit RSP-3 (and in Trico's application on Schedule H-4.2), the estimated
23 bill impact of the two rate options is: (1) under the two-part rate, an increase for the average
24 usage GS 1 Single Phase customer using 570 kWh is \$5.07 per month which represents a 5.39
25 percent increase and the increase for the average usage GS 1 Three Phase customer using 871
26 kWh is \$5.11 per month which represents a 3.59 percent increase, and (2) under the three-

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part rate, an increase for the average usage GS 1 Single Phase customer using 570 kWh is \$5.07 per month which represents a 5.39 percent increase while the increase for the average usage GS 1 Three Phase customer using 871 kWh is \$5.08 per month which represents a 3.57 percent increase.

As can be seen in Table 9 below, under the two-part rate option, Staff is proposing the GS 1 Single Phase customer charge go from \$18.00 to \$23.00 and the GS 1 Three Phase customer charge go from \$26.00 to \$31.00. At the same time, Staff's proposed energy charge for GS 1 Single Phase and Three Phase customers would go from \$0.13350 to \$0.13370. These rates mirror what Trico proposed in its application for the GS 1 rate schedule.

Table 9: GS 1 Service Two-Part Rates

	Existing	Staff-Proposed
Customer Charge Single Phase	\$18.00	\$23.00
Customer Charge Three Phase	\$26.00	\$31.00
Energy Charge (per kWh)	\$0.13350	\$0.13370

As can be seen in Table 10 below, under the three-part rate option, Staff is proposing the GS 1 Single Phase customer charge remain at \$18.00 and the GS 1 Three Phase customer charge would remain at \$26.00. For the first 2 kW, the minimum charge will be \$2.00 per kW. For any kW over 2 kW, the proposed rate is \$2.50 per kW. At the same time, Staff's proposed energy charge for GS 1 customers would go from \$0.13350 per kWh to \$0.12230 per kWh for Single Phase customers and from \$0.13350 per kWh to \$0.12620 per kWh for Three Phase customers.

Table 10: GS 1 Service Three-Part Rates

	Existing	Staff-Proposed
Customer Charge Single Phase	\$18.00	\$18.00
Customer Charge Three Phase	\$26.00	\$26.00
Demand Charge First 2 kW (per kW) (minimum of 2 kW)	\$0.00	\$2.00
Demand Charge Over 2 kW (per kW)	\$0.00	\$2.50
Energy Charge (per kWh) Single Phase	\$0.13350	\$0.12230
Energy Charge (per kWh) Three Phase	\$0.13350	\$0.12620

1
2
3 **Q. Please describe the GS 2 Rate Schedule?**

4 A. GS 2 service in Trico's territory is available to single phase and three phase service regularly
5 used for business, professional, and any considerable amount of electricity used for other
6 than domestic purposes. GS 2 monthly billing demand is greater than 10 kW but less than
7 200 kW and has an average monthly load factor of 30 percent or less based on twelve months
8 of actual consumption. All service is delivered at a single location.

9
10 **Q. What changes did Trico propose to the GS 2 Rate Schedule?**

11 A. Trico is proposing to increase the customer charge for the GS 2 rate schedule from \$18.00 to
12 \$23.00 for Single Phase customers and from \$26.00 to \$31.00 for Three Phase customers.

13
14 **Q. What are the GS 2 Rate Schedule Customer Costs?**

15 A. Table 11 details the total GS 2 fixed costs as can be found on Schedule G-6.0.

16
17 Table 11: Trico's Total GS 2 Fixed Costs

Trico's Fixed Costs Categories	\$
Purchased Power Costs	\$307.72
Distribution (Wires) Costs	\$172.03
Customer Costs	\$85.07
TOTAL GS 2 FIXED COSTS	\$564.82

1 **Q. Does Staff support the changes to the GS 2 Rate Schedule proposed by Trico?**

2 A. Yes. Staff supports Trico's proposed changes to the rates for the GS 2 Rate Schedule as can
3 be found in Schedule H-3.0 of Trico's application.
4

5 **Q. Please describe the GS 3 Rate Schedule?**

6 A. GS 3 service in Trico's territory is available to single phase and three phase service regularly
7 used for business, professional, and any considerable amount of electricity used for other
8 than domestic purposes. GS 3 monthly billing demand is between 10 kW and 11,999 kW and
9 all service is delivered at a single location.
10

11 **Q. What changes did Trico propose to the GS 3 Rate Schedule?**

12 A. Trico is proposing to increase the customer charge for the GS 3 rate schedule from \$18.00 to
13 \$23.00 for Single Phase customers and from \$26.00 to \$31.00 for Three Phase customers.
14 Trico is also proposing to increase the demand charge from \$16.65 per billing kW to \$18.00
15 per billing kW.
16

17 **Q. What are the GS 3 Rate Schedule Customer Costs?**

18 A. Table 12 details the total GS 3 fixed costs as can be found on Schedule G-6.0.
19

Table 12: Trico's Total GS 3 Fixed Costs

Trico's Fixed Costs Categories	\$
Purchased Power Costs	\$1,159.46
Distribution (Wires) Costs	\$542.65
Customer Costs	\$162.91
TOTAL GS 3 FIXED COSTS	\$1,865.02

20
21 **Q. Does Staff support the changes to the GS 3 Rate Schedule proposed by Trico?**

22 A. Yes. Staff supports Trico's proposed changes to the rates for the GS 3 Rate Schedule as can
23 be found in Schedule H-3.0 of Trico's application.

1 **Q. Please describe the GS TOU Rate Schedule?**

2 A. GS TOU service in Trico's territory is available for single and three phase service for any
3 customer who would otherwise be eligible for service under GS 1, GS 2, or GS 3 rate
4 schedules. All service is supplied at one point of delivery. GS TOU customers' rates vary for
5 coincident peak kW and non-coincident peak kW.

6
7 **Q. What changes did Trico propose to the GS TOU Rate Schedule?**

8 A. Trico is proposing to increase the customer charge for the GS TOU rate schedule from
9 \$24.00 to \$29.00 for Single Phase customers and from \$32.00 to \$37.00 for Three Phase
10 customers.

11
12 **Q. What are the GS TOU Rate Schedule Customer Costs?**

13 A. Table 13 details the total GS TOU fixed costs as can be found on Schedule G-6.0.

14
15 Table 13: Trico's Total GS TOU Fixed Costs

Trico's Fixed Costs Categories	\$
Purchased Power Costs	\$552.38
Distribution (Wires) Costs	\$252.71
Customer Costs	\$50.75
TOTAL GS TOU FIXED COSTS	\$855.84

16
17 **Q. Does Staff support the changes to the GS TOU Rate Schedule proposed by Trico?**

18 A. Yes. Staff supports Trico's proposed changes to the rates for the GS TOU Rate Schedule as
19 can be found in Schedule H-3.0 of Trico's application.

20
21 **Q. Please describe the GS 4 Rate Schedule?**

22 A. GS 4 service in Trico's territory is available for single and three phase service for all electric
23 service used for commercial, business, professional, and industrial peak loads in excess of
24 2,000 kW but not to exceed 9,999 kW supplied at one point of delivery and measured

1 through one meter. GS 4 customers may take delivery at multiple delivery points with one
2 primary metering point at the Company's discretion.

3

4 **Q. Did Trico propose any changes to the GS 4 Rate Schedule?**

5 A. No.

6

7 **Q. What are the GS 4 Rate Schedule Customer Costs?**

8 A. Table 14 details the total GS 4 fixed costs as can be found on Schedule G-6.0.

9

10

Table 14: Trico's Total GS 4 Fixed Costs

Trico's Fixed Costs Categories	\$
Purchased Power Costs	\$41,198.55
Distribution (Wires) Costs	\$22,851.87
Customer Costs	\$1,762.91
TOTAL GS 4 FIXED COSTS	\$65,813.33

11

12 *Water Pumping*

13 **Q. Please describe the Water Pumping Service Rate Schedule?**

14 A. Water Pumping service in Trico's territory is available to all electric pump installations that
15 are furnishing water to Customers on a commercial basis prior to the effective date of the
16 tariff. All water pumping customers connected after the effective date would be placed on
17 the applicable General Service tariff. All service is supplied at one point of delivery.

18

19 **Q. What changes did Trico propose to the Water Pumping Service Rate Schedule?**

20 A. Trico is proposing to increase the customer charge for the Water Pumping Service rate
21 schedule from \$18.00 to \$23.00 for Single Phase customers and from \$26.00 to \$31.00 for
22 Three Phase customers.

23

1 **Q. What are the Water Pumping Service Rate Schedule Customer Costs?**

2 A. Table 15 details the total Water Pumping Service fixed costs as can be found on Schedule G-
3 6.0.

4
5 Table 15: Trico's Total Water Pumping Fixed Costs

Trico's Fixed Costs Categories	\$
Purchased Power Costs	\$342.29
Distribution (Wires) Costs	\$190.83
Customer Costs	\$96.82
TOTAL WATER PUMPING FIXED COSTS	\$629.94

6
7 **Q. Does Staff support the changes to the Water Pumping Service Rate Schedule**
8 **proposed by Trico?**

9 A. Yes. Staff supports Trico's proposed changes to the rates for the Water Pumping Service
10 Rate Schedule as can be found in Schedule H-3.0 of Trico's application.

11
12 *Irrigation*

13 **Q. Please describe the Irrigation Service Rate Schedule?**

14 A. Irrigation service in Trico's territory is available for single and three phase irrigation pumping
15 installations of 10 horsepower ("HP") or larger. This rate schedule is only applicable to farm
16 use. All service is supplied at one point of delivery.

17
18 **Q. What changes did Trico propose to the Irrigation Service Rate Schedule?**

19 A. Trico is proposing to increase the customer charge for the Irrigation service rate schedule
20 from \$18.00 to \$23.00 for Single Phase customers and from \$26.00 to \$31.00 for Three Phase
21 customers. Trico is also proposing to increase the energy charge from \$0.124573 to
22 \$0.142000 per kWh.

23

1 **Q. What are the Irrigation Service Rate Schedule Customer Costs?**

2 A. Table 16 details the total Irrigation fixed costs as can be found on Schedule G-6.0.

3

4

Table 16: Trico's Total Irrigation Fixed Costs

Trico's Fixed Costs Categories	\$
Purchased Power Costs	\$323.50
Distribution (Wires) Costs	\$187.95
Customer Costs	\$131.24
TOTAL IRRIGATION FIXED COSTS	\$642.69

5

6 **Q. Does Staff support the changes to the Irrigation Service Rate Schedule proposed by**
7 **Trico?**

8 A. Yes. Staff supports Trico's proposed changes to the rates for the Irrigation Service Rate
9 Schedule as can be found in Schedule H-3.0 of Trico's application.

10

11 *Time of Day Pumping*

12 **Q. Please describe the Time of Day Pumping Rate Schedule?**

13 A. Time of Day Pumping service in Trico's territory is available to all water pumping
14 installations of 10 HP or larger. All service is supplied at one point of delivery. Time of Day
15 Pumping customers are subject to on-peak and off-peak energy and demand charges.

16

17 **Q. What changes did Trico propose to the Time of Day Pumping Rate Schedule?**

18 A. Trico is proposing to increase the customer charge for the Time of Day Pumping rate
19 schedule from \$18.00 to \$23.00 for Single Phase customers and from \$26.00 to \$31.00 for
20 Three Phase customers. Trico is also proposing to decrease the on-peak demand charge from
21 \$18.16 per billing kW to \$16.00 per billing kW. The Company is adding a non-coincident
22 peak demand charge of \$1.75 per billing kW. The on-peak energy charge is decreasing from

1 \$0.126900 to \$0.061500 per kWh while the off-peak energy charge is decreasing from
2 \$0.061900 to \$0.061500 per kWh.

3
4 **Q. What are the Time of Day Pumping Rate Schedule Customer Costs?**

5 A. Table 17 details the total Time of Day Pumping fixed costs as can be found on Schedule G-
6 6.0.

7
8 Table 17: Trico's Total Time of Day Pumping Fixed Costs

Trico's Fixed Costs Categories	\$
Purchased Power Costs	\$1,416.90
Distribution (Wires) Costs	\$691.36
Customer Costs	\$174.11
TOTAL TIME OF DAY PUMPING FIXED COSTS	\$2,282.37

9
10 **Q. Does Staff support the changes to the Time of Day Pumping Rate Schedule proposed**
11 **by Trico?**

12 A. Yes. Staff supports Trico's proposed changes to the rates for the Time of Day Pumping Rate
13 Schedule as can be found in Schedule H-3.0 of Trico's application.

14
15 *Interruptible*

16 **Q. Please describe the Interruptible Service Commercial and Industrial Rate Schedule?**

17 A. Interruptible Service for Commercial and Industrial customers in Trico's territory is available
18 for single and three phase service for any General Service customer with loads in excess of 10
19 kW and an average monthly load factor greater than 30 percent on an annualized basis.
20 Interruptible service customers are subject to interruption from Trico at any time.
21 Interruptible service customers should not override the interruption more than twice in a
22 calendar year.

23

1 **Q. Please describe the Interruptible Service Irrigation and Water Pumping Rate**
2 **Schedule?**

3 A. Interruptible Service for Irrigation and Water Pumping customers in Trico's territory is
4 available for single and three phase service for any General Service Irrigation and Water
5 Pumping customer with loads in excess of 10 kW and an average monthly load factor greater
6 than 30 percent on an annualized basis. Interruptible service customers are subject to
7 interruption from Trico at any time. Interruptible service customers should not override the
8 interruption more than twice in a calendar year.

9
10 **Q. What changes did Trico propose to the Interruptible rate schedules for Commercial,**
11 **Industrial, Irrigation and Water Pumping customers?**

12 A. Trico has proposed combining the Interruptible customers onto one tariff: the Interruptible
13 Service Schedule IS1. Trico has also proposed freezing this new tariff so that new customers
14 would not be able to go onto this tariff. Trico has indicated that the approved interruptible
15 tariffs are ineffective and are labor intensive administratively. Trico has proposed migrating
16 all twelve customers on these tariffs to other rate schedules prior to the next rate case.

17
18 **Q. Did Trico propose any rate changes to the newly combined Interruptible Rate**
19 **Schedule?**

20 A. Trico is proposing to add a non-coincident peak demand charge of \$1.75 per billing kW and
21 decrease the coincident peak demand charge from \$29.50 to \$19.50 per billing kW. Trico is
22 also proposing to increase the energy charge from \$0.084200 per kWh to \$0.087500 per kWh.

23
24 **Q. What are the Interruptible Rate Schedule Customer Costs?**

25 A. Table 18 details the total Interruptible fixed costs as can be found on Schedule G-6.0.
26

Table 18: Trico's Total Interruptible Fixed Costs

Trico's Fixed Costs Categories	\$
Purchased Power Costs	\$2,172.41
Distribution (Wires) Costs	\$1,017.43
Customer Costs	\$206.92
TOTAL INTERRUPTIBLE FIXED COSTS	\$3,396.76

1
2
3 **Q. Does Staff agree with the changes Trico has proposed for the Interruptible rate**
4 **schedules for commercial, industrial, irrigation and water pumping customers?**

5 A. Yes. After further discovery into the activity within these two interruptible schedules, Staff
6 agrees that the rate schedules are ineffective and are not serving the purpose for which they
7 were designed. Staff recommends that Trico notify all twelve customers of the merging of
8 the existing rate schedules into the new interruptible rate schedule.

9
10 *Security and Street Lighting*

11 **Q. What are the Lighting class (both Security and Street) customer costs?**

12 A. Table 19 below details the total lighting fixed costs from Schedule G-6.0 in Trico's
13 application.

14 Table 19: Trico's Total Lighting Fixed Costs

Trico's Fixed Costs Categories	\$
Purchased Power Costs	\$85.80
Distribution (Wires) Costs	\$44.53
Customer Costs	\$975.87
TOTAL LIGHTING FIXED COSTS	\$1,106.20

15
16 **Q. Does Staff support the changes to the Security (Outdoor) Lighting Rate Schedule**
17 **proposed by Trico?**

18 A. Staff supports Trico's proposed changes to the rates for the Security (Outdoor) Lighting
19 Service rate schedule as can be seen on Schedule H-3.0 of Trico's application.
20

1 **Q. Does Staff support the changes to the Street Lighting Rate Schedule proposed by**
2 **Trico?**

3 A. Staff supports Trico's proposed changes to the rates for the Security Lighting Service rate
4 schedule as can be seen on Schedule H-3.0 of Trico's application.

5
6 *Other Tariffs*

7 **Q. Did Trico propose any changes to its Qualified Cogeneration and Small Power**
8 **Production Facilities (Schedule COGEN-1) tariff?**

9 A. No. Trico did not propose any changes to its COGEN-1 tariff.

10
11 **Q. Did Trico propose any changes to its Cogeneration Qualifying Facilities (Schedule**
12 **QF-1)?**

13 A. No. Trico did not propose any changes to its QF-1 tariff.

14
15 **Q. Did Trico propose any changes to its Schedule of Special Charges (Schedule SC)?**

16 A. Yes. Trico proposed one change to the Schedule SC. Trico proposed to change the language
17 detailing charges for return trips to inspect installations for DG interconnections. Trico does
18 not currently charge for the first trip or return trips to inspect installations for DG
19 interconnections. Trico is proposing to be able to charge the customer for return trips to
20 inspect installations for DG interconnections. The \$50.00 charge would be the same as what
21 is detailed in Schedule SC currently for return trips for service calls. Staff does not believe the
22 minimal amount of revenue which may be collected from these return trips are material
23 enough to affect the revenue requirement.

24

1 **Q. Does Staff agree with the change Trico is proposing to its Schedule of Special**
2 **Charges (Schedule SC)?**

3 A. Yes. Over the past six months, roughly 5 percent of the inspection trips were return trips.
4 The reasons for return trips varied from inverter malfunctions and incorrect wiring to bent
5 meter socket jaws. Staff believes the customer should be responsible for the return trip fee if
6 the reason for the return trip is the responsibility of the customer or DG installer. Staff
7 recommends that Trico add language to its Interconnection Applications for both leased and
8 owned DG systems that details that a customer will be responsible for the return trip fee if a
9 return trip is necessary during inspection of installation facilities for DG interconnection if
10 the return trip is due to a customer or DG installer issue.

11
12 **Q. Did Trico propose any new tariffs?**

13 A. Yes. Trico proposed a new SunWatts Sun Farm Monthly Participation Tariff (Schedule
14 RESFM).

15
16 **Q. Describe the new SunWatts Sun Farm Monthly Participation Tariff.**

17 A. Trico's SunWatts Sun Farm is located adjacent to the Trico headquarters building. The
18 Company currently offers a program as part of its Renewable Energy Standard and Tariff
19 program. The current program allows customers to purchase the output of PV panels from
20 the SunWatts Sun Farm in 1/4, 1/2, and full panel increments. The full cost is billed as a one-
21 time up-front charge. The customer receives a credit for the energy output of the panel
22 which is estimated to be 432 kWh per year per panel in accordance with the customer's rate
23 schedule and the net metering tariff.

24
25 Trico has proposed the new SunWatts Sun Farm Monthly Participation Tariff to allow for
26 customers to participate in the program who may not be able to purchase the output of the

1 panels as an up-front cost. The program is also beneficial to those customers who are renters
2 and may not be able to install PV on their property. The new tariff offers customers the
3 opportunity to purchase panel output via a monthly charge rather than an up-front cost.

4
5 Customers may purchase panel output up to but not to exceed the minimum monthly kWh
6 energy usage in the last twelve month period. The solar energy can be purchased in blocks of
7 432 kWh per year or 36 kWh per month. Trico will apply the energy charge to the customer's
8 monthly bill for a term of 20 years or until the customer cancels their participation. As can
9 be seen in the proposed tariff sheet included in Trico's application as Exhibit KC-3 to Karen
10 Cather's direct testimony, the energy rates applicable to the panel output varies by rate
11 schedule and is subject to change as rates may change in future rate cases.

12
13 Staff reviewed the structure of the proposed program and the supporting workpapers
14 detailing the pricing of the program. Staff believes the program is meeting a need that has
15 not been addressed up to this point within Trico's service territory. The program makes use
16 of existing panels and allows an audience to utilize solar that has not been able to previously.
17 Staff believes the pricing of the program is reasonable. Staff recommends the approval of the
18 SunWatts Sun Farm Monthly Participation Tariff as proposed by Trico in its application.
19 Staff also recommends that reporting of the revenue and expenses associated with this
20 program along with the reporting of the Renewable Energy Credits ("RECs") be
21 incorporated into the annual reporting process currently in place for the REST plan filings.

22
23 **CONCLUSIONS AND RECOMMENDATIONS**

24 **Q. Based upon your testimony, what are Staff's conclusions and recommendations**
25 **regarding its COSS, revenue allocation, and rate design?**

26 **A. Staff's conclusions and recommendations are as follows:**

1 *Conclusions*

2 Based on Staff's review of Trico's COSS, revenue allocation and rate design proposals, Staff
3 concludes as follows:

4
5 A. Staff concludes that Trico has performed the COSS consistent with methodologies
6 generally accepted in the industry, and developed the allocation factors appropriately.

7
8 B. Staff further concludes that the application of the COSS model is acceptable.
9

10 C. Staff also concludes that the overall revenue allocation developed by Trico is
11 reasonable but Staff modified the allocations slightly to account for changes in billing
12 determinants for the residential customers.
13

14 D. Staff's review of the rate design proposals submitted by Trico concludes:
15

16 1. The Residential Service Rate Schedule, Residential Time-of-Use Rate
17 Schedule, and General Service 1 Rate Schedule rate design proposal from the
18 Trico amendment docketed May 4, 2016, is a step in the direction of more
19 closely recovering costs. Implementing the rate design proposal from May 4,
20 2016 as *mandatory* for Residential, Residential Time of Use and General Service
21 1 is *not* just, fair and reasonable.

22
23 2. The General Service 2 Rate Schedule, General Service 3 Rate Schedule,
24 General Service Time-of-Use Rate Schedule, General Service 4 Rate Schedule,
25 Water Pumping Rate Schedule, Irrigation Service Rate Schedule, Time of Day
26 Pumping Rate Schedule, Security (Outdoor) Lighting Rate Schedule, and

1 Street Lighting Rate Schedule rate design proposals are just, fair and
2 reasonable.

3
4 3. The Interruptible Commercial and Industrial Rate Schedule should be
5 combined with the Interruptible Pumping Rate Schedule into the creation of
6 the Interruptible Service Rate Schedule.

7
8 4. The rate design proposal to combine the two existing interruptible schedules
9 into the new Interruptible Service Rate Schedule is just, fair and reasonable.

10
11 5. The new Interruptible Service Rate Schedule should be frozen not allowing
12 any new customers to sign up for this rate schedule.

13
14 E. Staff concludes that the proposed change to the Schedule of Special Charges
15 (Schedule SC) incorporating language to charge customers for return visits to inspect
16 the installation of DG interconnections is just, fair and reasonable.

17
18 F. Staff concludes that the proposal to offer a new tariff designated as the SunWatts Sun
19 Farm Monthly Participation Tariff (Schedule RESFM) is providing the opportunity
20 for a segment of customers to take part in solar benefits who may have not been able
21 to previously.

22
23 *Recommendations*

24 Based on aforementioned conclusions, Staff recommends:

25
26 A. Based on the aforementioned conclusions, Staff recommends that the Commission
27 accept Trico's COSS.

28

- 1 B. Staff also recommends the Commission accept the revenue allocation specified by
2 Staff on page 6 of this testimony.
- 3
- 4 C. Staff recommends that the rates proposed by Trico for the General Service 2 Rate
5 Schedule, General Service 3 Rate Schedule, General Service Time-of-Use Rate
6 Schedule, General Service 4 Rate Schedule, Water Pumping Rate Schedule, Irrigation
7 Service Rate Schedule, Time of Day Pumping Rate Schedule, Security (Outdoor)
8 Lighting Rate Schedule, and Street Lighting Rate Schedule be approved.
- 9
- 10 D. Staff recommends that Trico offer both a two-part rate alternative and a three-part
11 rate alternative for the Residential Rate Schedule, Residential Time-of-Use Rate
12 Schedule, and the General Service 1 Rate Schedule.
- 13
- 14 E. Staff recommends that Trico implement an in-depth customer education program to
15 familiarize Residential and General Service customers with demand charges and kW
16 measurements.
- 17
- 18 F. Staff recommends approval of the Staff-proposed rates found in Exhibit RSP-2 and
19 detailed in this testimony for the Residential Rate Schedule, Residential Time-of-Use
20 Rate Schedule, and the General Service 1 Rate Schedule.
- 21
- 22 G. Staff recommends the combination of the Interruptible Commercial and Industrial
23 Rate Schedule with the Interruptible Irrigation and Water Pumping Rate Schedule
24 into one new Interruptible Service Rate Schedule.
- 25

- 1 H. Staff recommends that the new Interruptible Service Rate Schedule be frozen so no
2 new customers can be added to the rate schedule.
3
- 4 I. Staff recommends that the rates proposed by Trico for the new Interruptible Service
5 Rate Schedule be approved.
6
- 7 J. Staff recommends Trico notify in writing customers currently on the Interruptible
8 Commercial and Industrial Rate Schedule of the change to the new Interruptible
9 Service Rate Schedule. These customers should be informed of the timing and the
10 implications of the transition.
11
- 12 K. Staff recommends Trico notify in writing customers currently on the Interruptible
13 Irrigation and Water Pumping Rate Schedule of the change to the new Interruptible
14 Service Rate Schedule. These customers should be informed of the timing and the
15 implications of the transition.
16
- 17 L. Staff recommends that Trico's proposal to revise the language in the Schedule SC to
18 allow for charges associated with return trips to inspect installations of DG
19 interconnections if the return trip is due to a customer or DG installer issue be
20 approved.
21
- 22 M. Staff recommends that Trico modify its Interconnection Agreements for leased and
23 owned systems to incorporate language that customers may be charged a return trip
24 fee for a return trip to inspect installations of DG interconnections if the return trip is
25 due to a customer or DG installer issue.
26

1 N. Staff recommends that the proposed SunWatts Sun Farm Monthly Participation
2 Tariff be approved.

3
4 O. Staff recommends that reporting of the revenue and expenses associated with the new
5 SunWatts Sun Farm Monthly Participation Tariff along with the reporting of the
6 RECs be incorporated into the reporting process currently in place for the Renewable
7 Energy Standards and Tariff annual plan filings for Trico.

8
9 **Q. Does this conclude your direct rate design testimony?**

10 A. Yes, it does.

TRICO ELECTRIC COOPERATIVE, INC.
STAFF REVISED ADJUSTED TEST YEAR TOTAL REVENUE
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2014
E-01461A-15-0363

	<u>Billing Units</u>	<u>Existing Rate</u>	<u>Adjusted TY Revenue</u>
1. RESIDENTIAL			
Consumers (12 month sum)	454,052	\$ 15.00	\$ 6,810,780
kWh	385,170,505	\$ 0.12160	\$ 46,836,733
Net Metering Credits			\$ (27,938)
Subtotal			\$ 53,619,575
PCA Revenue			\$ (355,823)
Total			\$ 53,263,752
2. RESIDENTIAL TOU			
Consumers (12 month sum)	33,520	\$ 19.00	\$ 636,880
On-Peak kWh	10,257,451	\$ 0.19320	\$ 1,981,740
Off-Peak kWh	25,192,421	\$ 0.07320	\$ 1,844,085
Subtotal	35,449,872		\$ 4,462,705
PCA Revenue			\$ (33,937)
Total			\$ 4,428,768
3. GENERAL SERVICE (1)			
<u>Single Phase</u>			
Consumers (12 month sum)	16,397	\$ 18.00	\$ 295,146
kWh	9,355,588	\$ 0.13350	\$ 1,248,971
Subtotal			\$ 1,544,117
PCA Revenue			\$ 10,575
Total			\$ 1,554,692
<u>Three Phase</u>			
Consumers (12 month sum)	1,465	\$ 26.00	\$ 38,090
kWh	1,276,535	\$ 0.13350	\$ 170,417
Minimum Bill			
Subtotal			\$ 208,507
PCA Revenue			\$ 1,081
Total			\$ 209,588
Total Base			\$ 1,752,624
Total PCA			\$ 11,656
Total			\$ 1,764,280

TRICO ELECTRIC COOPERATIVE, INC.
STAFF REVISED ADJUSTED TEST YEAR TOTAL REVENUE
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2014
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	<u>Billing Units</u>	<u>Existing Rate</u>	<u>Adjusted TY Revenue</u>
4. GENERAL SERVICE (2)			
<u>Single Phase</u>			
Consumers (12 month sum)	1,174	\$ 18.00	\$ 21,132
First 10 kW/mo	10,522	\$ -	\$ -
Excess kW/mo	7,988	\$ 4.50	\$ 35,944
kWh	2,630,469	\$ 0.13800	\$ 363,005
Subtotal			\$ 420,081
PCA Revenue			\$ 2,987
Total			\$ 423,068
<u>Three Phase</u>			
Consumers (12 month sum)	1,836	\$ 26.00	\$ 47,736
First 10 kW/mo	16,933	\$ -	\$ -
Excess kW/mo	47,271	\$ 4.50	\$ 212,719
kWh	8,157,808	\$ 0.13800	\$ 1,125,778
Minimum Bill			
Subtotal			\$ 1,386,233
PCA Revenue			\$ 5,561
Total			\$ 1,391,794
Total Base			\$ 1,806,314
Total PCA			\$ 8,548
Total			\$ 1,814,862
5. GENERAL SERVICE (3)			
<u>Single Phase</u>			
Consumers (12 month sum)	1,405	\$ 18.00	\$ 25,290
Billing kW	24,980	\$ 16.65	\$ 415,925
kWh	8,879,750	\$ 0.08300	\$ 737,019
Minimum Bill			
Subtotal			\$ 1,178,234
PCA Revenue			\$ 5,436
Total			\$ 1,183,670
<u>Three Phase</u>			
Consumers (12 month sum)	3,625	\$ 26.00	\$ 94,250
Billing kW	295,946	\$ 16.65	\$ 4,927,494
kWh	104,685,742	\$ 0.08300	\$ 8,688,917
Minimum Bill			
Subtotal			\$ 13,710,661
PCA Revenue			\$ 73,302
Total			\$ 13,783,963
Total Base			\$ 14,888,895
Total PCA			\$ 78,738
Total			\$ 14,967,633

TRICO ELECTRIC COOPERATIVE, INC.
STAFF REVISED ADJUSTED TEST YEAR TOTAL REVENUE
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2014
E-01461A-15-0363

	<u>Billing Units</u>	<u>Existing Rate</u>	<u>Adjusted TY Revenue</u>
6. GENERAL SERVICE TOU			
Consumers-1Ph (12 month sum)	60	\$ 24.00	\$ 1,440
Consumers-3Ph (12 month sum)	72	\$ 32.00	\$ 2,304
NCP Billing kW	4,649	\$ 5.95	\$ 27,664
CP Billing kW	1,843	\$ 29.50	\$ 54,369
kWh	1,296,284	\$ 0.063750	\$ 82,638
Subtotal			\$ 168,415
PCA Revenue			\$ 2,120
Total			\$ 170,535
7. GENERAL SERVICE (4)			
Consumers (12 month sum)	60	\$ 500.00	\$ 30,000
Secondary Meters (12 month sum)	456	\$ 40.00	\$ 18,240
Facilities Charge			\$ 422,282
NCP Billing kW-Transmission	20,400	\$ 0.21	\$ 4,284
NCP Billing kW-Distribution Sub	25,125	\$ 1.75	\$ 43,968
NCP Billing kW-Distribution Pri	176,974	\$ 7.19	\$ 1,272,444
NCP Billing kW-Distribution Sec		\$ 7.70	\$ -
P.F. Adjust.-Transmission	4,152	\$ 0.21	\$ 872
P.F. Adjust.-Distribution Sub	4,555	\$ 1.75	\$ 7,971
P.F. Adjust.-Distribution Pri	2,827	\$ 7.19	\$ 20,326
P.F. Adjust.-Distribution Sec		\$ 7.70	\$ -
kWh	101,693,786	\$ -	\$ -
Wholesale Power Cost			\$ 5,419,450
Subtotal			\$ 7,239,836
PCA Revenue			\$ -
Total			\$ 7,239,836
8. WATER PUMPING			
<u>Single Phase</u>			
Consumers (12 month sum)	132	\$ 18.00	\$ 2,376
kWh	186,573	\$ 0.13260	\$ 24,740
Subtotal			\$ 27,116
PCA Revenue			\$ 464
Total			\$ 27,580
<u>Three Phase</u>			
Consumers (12 month sum)	571	\$ 26.00	\$ 14,846
kWh	3,143,032	\$ 0.13260	\$ 416,766
Minimum Bill			
Subtotal			\$ 431,612
PCA Revenue			\$ 3,758
Total			\$ 435,370
Total Base			\$ 458,728
Total PCA			\$ 4,222
Total			\$ 462,950

TRICO ELECTRIC COOPERATIVE, INC.
STAFF REVISED ADJUSTED TEST YEAR TOTAL REVENUE
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2014
E-01461A-15-0363

	<u>Billing Units</u>	<u>Existing Rate</u>	<u>Adjusted TY Revenue</u>
9. IRRIGATION			
<u>Single Phase</u>			
Consumers (12 month sum)		\$ 18.00	\$ -
kWh		\$ 0.124573	\$ -
Minimum Bill			\$ -
Subtotal			\$ -
PCA Revenue			\$ -
Total			\$ -
<u>Three Phase</u>			
Consumers (12 month sum)	132	\$ 26.00	\$ 3,432
kWh	261,544	\$ 0.124573	\$ 32,581
Minimum Bill			\$ 1,602
Subtotal			\$ 37,615
PCA Revenue			\$ 601
Total			\$ 38,217
Total Base			\$ 37,615
Total PCA			\$ 601
Total			\$ 38,217
10. TIME OF DAY - PUMPING			
<u>Single Phase</u>			
Consumers (12 month sum)	24	\$ 18.00	\$ 432
Billing kW - On Peak	4	\$ 18.16	\$ 74
kWh-On Peak	34	\$ 0.12690	\$ 4
kWh-Off Peak	353,742	\$ 0.06190	\$ 21,897
Subtotal	353,776		\$ 22,407
PCA Revenue			\$ 261
Total			\$ 22,668
<u>Three Phase</u>			
Consumers (12 month sum)	327	\$ 26.00	\$ 8,502
Billing kW - On Peak	12,751	\$ 18.16	\$ 231,567
kWh-On Peak	234,052	\$ 0.12690	\$ 29,701
kWh-Off Peak	5,137,193	\$ 0.06190	\$ 317,992
Minimum Bill	5,371,245		\$ 4,808
Subtotal			\$ 592,570
PCA Revenue			\$ 3,620
Total			\$ 596,190
Total Base			\$ 614,977
Total PCA			\$ 3,881
Total			\$ 618,859

TRICO ELECTRIC COOPERATIVE, INC.
STAFF REVISED ADJUSTED TEST YEAR TOTAL REVENUE
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2014
E-01461A-15-0363

	<u>Billing Units</u>	<u>Existing Rate</u>	<u>Adjusted TY Revenue</u>
11. INTERRUPTIBLE COMMERCIAL			
Consumers - 1Ph (12 month sum)	26	\$ 36.00	\$ 936
Consumers - 3Ph (12 month sum)	-	\$ 45.00	-
CP Billing kW	863	\$ 29.50	\$ 25,472
kWh	3,573,369	\$ 0.08420	\$ 300,878
Subtotal			\$ 327,286
PCA Revenue			\$ 3,424
Total			\$ 330,710
12. INTERRUPTIBLE PUMPING			
Consumers - 1Ph (12 month sum)	-	\$ 36.00	-
Consumers - 3Ph (12 month sum)	212	\$ 45.00	\$ 9,540
CP Billing kW	3,795	\$ 29.50	\$ 111,954
kWh	7,331,315	\$ 0.08420	\$ 617,297
Minimum Bill			\$ 62,623
Subtotal			\$ 801,414
PCA Revenue			\$ 10,591
Total			\$ 812,005
13. LIGHTING			
<u>Outdoor Lighting</u>			
Security Lights	8,129	\$ 11.48	\$ 93,321
150 Watt HPS	12	\$ 11.31	\$ 136
250 Watt HPS	60	\$ 11.96	\$ 718
400 Watt HPS	132	\$ 12.15	\$ 1,604
55 Watt LPS	55	\$ 10.91	\$ 600
90 Watt LPS	444	\$ 10.91	\$ 4,844
135 Watt LPS	96	\$ 11.31	\$ 1,086
100 Watt HPS	36	\$ 10.98	\$ 395
Additional Poles	1,157	\$ 10.43	\$ 12,068
Subtotal			\$ 114,772

TRICO ELECTRIC COOPERATIVE, INC.
STAFF REVISED ADJUSTED TEST YEAR TOTAL REVENUE
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2014
E-01461A-15-0363

	<u>Billing Units</u>	<u>Existing Rate</u>	<u>Adjusted TY Revenue</u>
<u>Street Lighting</u>			
150 Watt HPS		\$ 10.30	\$ -
250 Watt HPS		\$ 10.30	\$ -
400 Watt HPS		\$ 17.00	\$ -
55 Watt LPS		\$ 7.30	\$ -
90 Watt LPS	600	\$ 11.75	\$ 7,050
135 Watt LPS	1,176	\$ 10.30	\$ 12,113
180 Watt LPS		\$ 12.62	\$ -
100 Watt HPS		\$ 10.30	\$ -
Wood Pole		\$ 1.32	\$ -
28' Metal Pole	600	\$ 3.48	\$ 2,088
20' - 30' Metal Pole	1,176	\$ 4.15	\$ 4,880
30' - 40' Metal Pole		\$ 4.15	\$ -
Subtotal			\$ 26,131
Base Revenue			\$ 140,903
PCA Revenue			\$ 1,143
Total			\$ 142,046
kWh Sold	539,888		
14. SALE FOR RESALE (SUPPLEMENTAL WHEELING)			
Base Revenue			\$ 132,075
PCA Revenue			\$ 17,242
Total	1,725,231		\$ 149,317
15. TOTAL			
Total Base Revenue	681,082,312		\$ 86,451,362
Total PCA Revenue			\$ (247,593)
Fuel Bank			\$ -
Other Revenue			\$ 1,621,097
Total Revenue			\$ 87,824,867

TRICO ELECTRIC COOPERATIVE, INC.
STAFF PROPOSED RATES AND PROOF OF REVENUE
E-01461A-15-0363

Billing Units	Staff-Proposed Two-Part Rate		% Increase	Staff-Proposed Three-Part Rate		% Increase
	Revenue	Rate		Revenue	Rate	
1. RESIDENTIAL						
Consumers	\$ 454,052	20.00	\$ 9,081,040	15.00	\$ 6,810,780	
First 2 kW (Min of 2 kW)	908,104			2.00	1,816,208	
Over 2 kW*	1,362,156			2.50	3,405,390	
First 800 kWh/Mo.	258,064,238	0.11632	30,018,032	0.10866	28,039,970	
Excess kWh	127,106,267	0.12631	16,054,920	0.11866	15,081,794	
Net Metering Credits			(27,938)		(27,938)	
Subtotal	385,170,505		55,126,054		55,126,204	
PCA						
Total			55,126,054		55,126,204	3.50%
2. RESIDENTIAL - TOU						
Consumers	\$ 33,520	24.00	\$ 804,480	19.00	\$ 636,880	
First 2 kW (Min of 2 kW)	67,040			2.00	134,080	
Over 2 kW	100,560			2.50	251,400	
kWh - On Peak	10,257,451	0.19790	2,029,950	0.19180	1,967,379	
kWh - Off Peak	25,192,421	0.07790	1,962,490	0.07170	1,806,297	
Subtotal	35,449,872		4,796,920		4,796,036	
PCA						
Total			4,796,920		4,796,036	8.29%
3. GENERAL SERVICE (1)						
Single Phase						
Consumers	\$ 16,397	23.00	\$ 377,131	18.00	\$ 295,146	
First 2 kW (Min of 2 kW)	32,794			2.00	65,588	
Over 2 kW	49,191			2.50	122,978	
kWh	9,355,588	0.13370	1,250,842	0.12230	1,144,188	
Subtotal			1,627,973		1,627,900	
PCA						
Total			1,627,973		1,627,900	
Three Phase						
Consumers	\$ 1,465	31.00	\$ 45,415	26.00	\$ 38,090	
First 2 kW (Min of 2 kW)	2,930			2.00	5,860	
Over 2 kW	4,395			2.50	10,988	
kWh	1,276,535	0.13370	170,673	0.12620	161,099	
Subtotal			216,088		216,037	
PCA						
Total			216,088		216,037	
Subtotal	10,632,123		1,844,061		1,843,937	
Total PCA Revenue						
Total Revenue			1,844,061		1,843,937	4.51%

TRICO ELECTRIC COOPERATIVE, INC.
STAFF PROPOSED RATES AND PROOF OF REVENUE
E-01461A-15-0363

	Billing Units	Staff/Trico Proposed Rates	Revenue	% Increase
4. GENERAL SERVICE (2)				
Single Phase				
Consumers	1,174	23.00	\$ 27,002	
First 10 kW per month	10,522	-	\$ -	
Excess kW per month	7,988	4.50	\$ 35,944	
kWh	2,630,469	0.14640	\$ 385,101	
Subtotal			\$ 448,047	
PCA			\$ -	
Total			\$ 448,047	
Three Phase				
Consumers	1,836	31.00	\$ 56,916	
First 10 kW per month	16,933	-	\$ -	
Excess kW per month	47,271	4.50	\$ 212,719	
kWh	8,157,808	0.14640	\$ 1,194,303	
Subtotal			\$ 1,463,938	
PCA			\$ -	
Total			\$ 1,463,938	
Subtotal	10,788,277		\$ 1,911,985	
Total PCA Revenue			\$ -	
Total Revenue			\$ 1,911,985	5.35%
5. GENERAL SERVICE (3)				
Single Phase				
Consumers	1,405	23.00	\$ 32,315	
Billing kW	24,980	18.00	\$ 449,648	
kWh	8,879,750	0.07490	\$ 665,093	
Subtotal			\$ 1,147,056	
PCA			\$ -	
Total			\$ 1,147,056	
Three Phase				
Consumers	3,625	31.00	\$ 112,375	
Billing kW	295,946	18.00	\$ 5,327,020	
kWh	104,685,742	0.07490	\$ 7,840,962	
Subtotal			\$ 13,280,357	
PCA			\$ -	
Total			\$ 13,280,357	
Subtotal	113,565,492		\$ 14,427,413	
Total PCA Revenue			\$ -	
Total Revenue			\$ 14,427,413	-3.61%
6. GENERAL SERVICE TOU				
Consumers 1 PH	60	29.00	\$ 1,740	
Consumers 3 PH	72	37.00	\$ 2,664	
NCP Billing kW	4,649	5.95	\$ 27,664	
CP Billing kW	1,843	29.50	\$ 54,369	
kWh	1,296,284	0.06600	\$ 85,555	
Subtotal			\$ 171,992	
PCA			\$ -	
Total			\$ 171,992	0.85%

TRICO ELECTRIC COOPERATIVE, INC.
STAFF PROPOSED RATES AND PROOF OF REVENUE
E-01461A-15-0363

	Billing Units	Staff/Trico		Revenue	% Increase
		Proposed Rates	Revenue		
7. GENERAL SERVICE (4)					
Consumers	60	\$ 500.00	\$ 30,000		
Secondary Meters	456	\$ 40.00	\$ 18,240		
Facilities Charge			\$ 422,282		
NCP Billing KW-Transmission	20,400	\$ 0.21	\$ 4,284		
NCP Billing KW-Distribution Sub	25,125	\$ 1.75	\$ 43,968		
NCP Billing KW-Distribution Pri	176,974	\$ 7.19	\$ 1,272,444		
NCP Billing KW-Distribution Sec		\$ 7.70	\$ -		
P.F. Adjust-Transmission	4,152	\$ 0.21	\$ 872		
P.F. Adjust-Distribution Sub	4,555	\$ 1.75	\$ 7,971		
P.F. Adjust-Distribution Pri	2,827	\$ 7.19	\$ 20,326		
P.F. Adjust-Distribution Sec		\$ 7.70	\$ -		
KWh	101,693,786	\$ -	\$ -		
Wholesale Power Cost			\$ 5,419,450		
Subtotal			\$ 7,239,837		
PCA Revenue			\$ -		
Total			\$ 7,239,837		0.00%

8. WATER PUMPING

Single Phase					
Consumers	132	\$ 23.00	\$ 3,036		
KWh	186,573	\$ 0.14350	\$ 26,773		
Subtotal			\$ 29,809		
PCA			\$ -		
Total			\$ 29,809		
Three Phase					
Consumers	571	\$ 31.00	\$ 17,701		
KWh	3,143,032	\$ 0.14350	\$ 451,025		
Subtotal			\$ 468,726		
PCA			\$ -		
Total			\$ 468,726		
Subtotal	3,329,605		\$ 498,535		
Total PCA Revenue			\$ -		
Total Revenue			\$ 498,535		7.69%

9. IRRIGATION

Single Phase					
Consumers		\$ 23.00	\$ -		
KWh		\$ 0.14200	\$ -		
Subtotal			\$ -		
PCA			\$ -		
Total			\$ -		
Three Phase					
Consumers	132	\$ 31.00	\$ 4,092		
KWh	261,544	\$ 0.14200	\$ 37,139		
Subtotal			\$ 41,231		
PCA			\$ -		
Total			\$ 41,231		
Subtotal	261,544		\$ 41,231		
Total PCA Revenue			\$ -		
Total Revenue			\$ 41,231		7.89%

TRICO ELECTRIC COOPERATIVE, INC.
STAFF PROPOSED RATES AND PROOF OF REVENUE
E-01461A-15-0363

	Billing Units	Staff/Trico Proposed Rates	Revenue	% Increase
10. TIME OF DAY PUMPING				
Single Phase				
Consumers	24	\$ 23.00	\$ 552	
NCP Billing kW	716	\$ 1.75	\$ 1,253	
Billing kW - On Peak	4	\$ 16.00	\$ 65	
kWh - On Peak	34	\$ 0.06400	\$ 2	
kWh - Off Peak	353,742	\$ 0.06400	\$ 22,639	
Subtotal	353,776		\$ 24,511	
PCA			\$ -	
Total			\$ 24,511	
Three Phase				
Consumers (12-month sum)	327	\$ 31.00	\$ 10,137	
NCP Billing kW	36,165	\$ 1.75	\$ 63,289	
Billing kW - On Peak	12,751	\$ 16.00	\$ 204,024	
kWh - On Peak	234,052	\$ 0.06400	\$ 14,979	
kWh - Off Peak	5,137,193	\$ 0.06400	\$ 328,780	
Subtotal	5,371,245		\$ 621,209	
PCA			\$ -	
Total			\$ 621,209	
Subtotal	5,725,021		\$ 645,720	
Total PCA Revenue			\$ -	
Total Revenue			\$ 645,720	4.34%
11. INTERRUPTIBLE COMMERCIAL				
Consumers 1 PH (12-month sum)	26	\$ 36.00	\$ 936	
Consumers 3 PH (12-month sum)		\$ 45.00	\$ -	
NCP Billing kW	9,592	\$ 1.75	\$ 16,785	
CP Billing kW	863	\$ 19.50	\$ 16,837	
kWh	3,573,369	\$ 0.08750	\$ 312,670	
Subtotal			\$ 347,228	
PCA			\$ -	
Total			\$ 347,228	
12. INTERRUPTIBLE PUMPING				
Consumers 1 PH (12-month sum)		\$ 36.00	\$ -	
Consumers 3 PH (12-month sum)	212	\$ 45.00	\$ 9,540	
NCP Billing kW	23,642	\$ 1.75	\$ 41,374	
CP Billing kW	3,795	\$ 19.50	\$ 74,003	
kWh	7,331,315	\$ 0.08750	\$ 641,490	
Minimum Bill			\$ 62,623	
Subtotal			\$ 829,030	
PCA			\$ -	
Total			\$ 829,030	
Subtotal			\$ 1,176,258	
Total PCA Revenue			\$ -	
Total Revenue			\$ 1,176,258	2.94%

TRICO ELECTRIC COOPERATIVE, INC.
STAFF PROPOSED RATES AND PROOF OF REVENUE
E-01461A-15-0363

	Billing Units	Staff/Trico		Revenue	% Increase
		Proposed Rates	Revenue		
13. LIGHTING					
Outdoor Lighting					
Security Lights				97,520	
150 Watt HPS	53 kWh/Month		12.00	\$	
250 Watt HPS	45 kWh/Month		11.82	\$	142
400 Watt HPS	75 kWh/Month		12.50	\$	750
55 Watt LPS	120 kWh/Month		12.70	\$	1,676
90 Watt LPS	27 kWh/Month		11.40	\$	627
135 Watt LPS	27 kWh/Month		11.40	\$	5,062
180 Watt LPS	45 kWh/Month		11.82	\$	1,135
100 Watt HPS	45 kWh/Month		11.47	\$	413
Additional Poles			10.90	\$	12,611
Subtotal	1,157			\$	119,936
Street Lighting					
150 Watt HPS	45 kWh/Month		10.76	\$	-
250 Watt HPS	75 kWh/Month		10.76	\$	-
400 Watt HPS	120 kWh/Month		17.77	\$	-
55 Watt LPS	27 kWh/Month		7.63	\$	-
90 Watt LPS	27 kWh/Month	600	12.28	\$	7,367
135 Watt LPS	45 kWh/Month	1,176	10.76	\$	12,658
180 Watt LPS	54 kWh/Month		13.19	\$	-
100 Watt LPS	30 kWh/Month		10.76	\$	-
Wood Pole			1.38	\$	-
28' Metal Pole		600	3.64	\$	2,182
20' - 30' Metal Pole		1,176	4.34	\$	5,100
30' - 40' Metal Pole			4.34	\$	-
Subtotal				\$	27,307
Subtotal	539,888			\$	147,243
Total PCA Revenue				\$	147,243
Total Revenue				\$	3.66%
14. SALE FOR RESALE (SUPPLEMENTAL WHEELING)					
Base Revenue				\$	149,317
PCA Revenue				\$	149,317
Total	1,725,231			\$	0.00%
16. TOTAL					
Subtotal	679,357,081			\$	88,176,566
PCA Revenue				\$	-
Total Revenue				\$	88,176,566
Other Revenue				\$	1,621,097
Total Proposed Revenue				\$	89,797,663
					2.25%
16. TOTAL					
Subtotal	679,357,081			\$	88,175,708
PCA Revenue				\$	-
Total Revenue				\$	88,175,708
Other Revenue				\$	1,621,097
Total Proposed Revenue				\$	89,796,805
					2.25%

TRICO ELECTRIC COOPERATIVE, INC.
COMPARISON OF EXISTING AND STAFF PROPOSED TWO-PART RATE
E-01461A-15-0363
RESIDENTIAL BILL IMPACT

kWh Usage	Existing Rate	Proposed Rate	Change		Percent Change
			Rate	Change	
Customer Charge	\$15.00	\$20.00	\$5.00		33.33%
First 800 kWh/Month	\$0.121600	\$0.116320	(\$0.005280)		-4.34%
Next 800 kWh/Month	\$0.121600	\$0.126310	\$0.004710		3.87%
PPCA Factor, per kWh	\$0.000073	\$0.000000	(\$0.000073)		-100.00%
50	\$21.08	\$25.82	\$4.74		22.49%
100	\$27.17	\$31.63	\$4.46		16.42%
300	\$51.50	\$54.90	\$3.40		6.60%
500	\$75.84	\$78.16	\$2.32		3.06%
800	\$112.34	\$113.06	\$0.72		0.64%
1,000	\$136.67	\$138.32	\$1.65		1.21%
3,000	\$380.02	\$390.94	\$10.92		2.87%
5,000	\$623.37	\$643.56	\$20.19		3.24%
837 Average	\$116.84	\$117.73	\$0.89		0.76%
750 Median	\$106.25	\$107.24	\$0.99		0.93%

TRICO ELECTRIC COOPERATIVE, INC.
COMPARISON OF EXISTING RATE AND STAFF ALTERNATE DEMAND RATE
E-01461A-15-0363
RESIDENTIAL BILL IMPACT

<u>kWh Usage</u>	<u>Billing kW</u>	<u>Existing Rate</u>	<u>Alternate Rate</u>	<u>Change</u>	<u>% Change</u>
Customer Charge		\$15.00	\$15.00	\$0.00	0.00%
First 2 kW (Minimum of 2 kW)		\$0.00	\$2.00	\$2.00	0.00%
Excess kW		\$0.00	\$2.50	\$2.50	0.00%
First 800 kWh/Month		\$0.121600	\$0.108660	(\$0.012940)	-10.64%
Next 800 kWh/Month		\$0.121600	\$0.118660	(\$0.002940)	-2.42%
PPCA Factor, per kWh		\$0.000073	\$0.000000	(\$0.000073)	-100.00%
50	2.00	\$21.08	\$31.93	\$10.85	51.47%
100	2.00	\$27.17	\$37.37	\$10.20	37.54%
300	2.00	\$51.50	\$59.10	\$7.60	14.76%
500	2.00	\$75.84	\$80.83	\$4.99	6.58%
800	2.00	\$112.34	\$113.43	\$1.09	0.97%
1,000	2.00	\$136.67	\$137.16	\$0.49	0.36%
3,000	2.00	\$380.02	\$374.48	(\$5.54)	-1.46%
5,000	2.00	\$623.37	\$611.80	(\$11.57)	-1.86%
837 Average	2.00	\$116.84	\$117.82	\$0.98	0.84%
750 Median	2.00	\$106.25	\$108.00	\$1.75	1.65%

TRICO ELECTRIC COOPERATIVE, INC.
COMPARISON OF EXISTING RATE AND STAFF ALTERNATE DEMAND RATE
E-01461A-15-0363
RESIDENTIAL-TOU BILL IMPACT

Usage	Billing kW	On-Peak kWh	Off-Peak kWh	Existing Rate	Proposed Rate	Change	Percent Change
Customer Charge		29%	71%	\$19.00	\$19.00	\$0.00	0.00%
First 2 kW				\$0.00	\$2.00	\$2.00	0.00%
Excess kW				\$0.00	\$2.50	\$2.50	0.00%
Energy Charge, per On-Peak kWh				\$0.193200	\$0.191800	(\$0.001400)	-0.72%
Energy Charge, per Off-Peak kWh				\$0.073200	\$0.071700	(\$0.001500)	-2.05%
PPCA Factor, per kWh				\$0.000073	\$0.000000	(\$0.000073)	-100.00%
50	2	14	36	\$24.34	\$35.77	\$11.43	46.96%
100	2	29	71	\$29.81	\$41.15	\$11.34	38.04%
300	2	87	213	\$51.42	\$62.46	\$11.04	21.47%
500	2	145	355	\$73.04	\$83.76	\$10.72	14.68%
800	2	231	569	\$105.34	\$115.60	\$10.26	9.74%
1,000	2	289	711	\$126.95	\$136.91	\$9.96	7.85%
3,000	2	867	2,133	\$342.86	\$349.73	\$6.87	2.00%
5,000	2	1,445	3,555	\$558.77	\$562.54	\$3.77	0.67%
1,058 Avg	2	306	752	\$133.24	\$143.11	\$9.87	7.41%
698 Median	2	202	496	\$94.38	\$104.81	\$10.43	11.05%

TRICO ELECTRIC COOPERATIVE, INC.
COMPARISON OF EXISTING AND STAFF ALTERNATE DEMAND RATE
E-01461A-15-0363
GENERAL SERVICE 1 BILL IMPACT

Load Factor	Billing kW	kWh Usage	Existing Rate	Proposed Rate	Change	Percent Change
Customer Charge, Single Phase			\$18.00	\$18.00	\$0.00	0.00%
Customer Charge, Three Phase			\$26.00	\$26.00	\$0.00	0.00%
First 2 Billing kW per month			\$0.00	\$2.00	\$2.00	0.00%
Over 2 Billing kW per month			\$0.00	\$2.50	\$2.50	0.00%
Energy Charge, per kWh			\$0.133500	\$0.122300	(\$0.011200)	-8.39%
Energy Charge, per kWh			\$0.133500	\$0.126200	(\$0.007300)	-5.47%
PPCA Factor, per kWh			\$0.000073	\$0.000000	(\$0.000073)	-100.00%
Single Phase						
10.00%	2.0	146	\$37.50	\$47.36	\$9.86	26.29%
20.00%	2.0	292	\$57.00	\$65.21	\$8.21	14.40%
30.00%	2.0	438	\$76.50	\$83.07	\$6.57	8.59%
40.00%	2.0	584	\$96.01	\$100.92	\$4.91	5.11%
50.00%	2.0	730	\$115.51	\$118.78	\$3.27	2.83%
Average	2.00	570	\$94.14	\$99.21	\$5.07	5.39%
Median	2.00	349	\$64.62	\$72.18	\$7.56	11.70%
Three Phase						
10.00%	2.0	146	\$45.50	\$55.93	\$10.43	22.92%
20.00%	2.0	292	\$65.00	\$74.35	\$9.35	14.38%
30.00%	2.0	438	\$84.50	\$92.78	\$8.28	9.80%
40.00%	2.0	584	\$104.01	\$111.20	\$7.19	6.91%
50.00%	2.0	730	\$123.51	\$129.63	\$6.12	4.96%
Average	2.00	871	\$142.34	\$147.42	\$5.08	3.57%
Median	2.00	546	\$98.93	\$106.41	\$7.48	7.56%