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BEFORE THE ARIZONA CORPORATION COMMISSION

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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 **INITIAL POST-HEARING BRIEF**

Trico Electric Cooperative, Inc. ("Trico" or "the Cooperative"), submits its Initial Post-Hearing Brief in this matter.

RESPECTFULLY SUBMITTED this 5th day of October, 2016.

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TRICO ELECTRIC COOPERATIVE, INC.

INITIAL POST-HEARING BRIEF

October 5, 2016

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Overview.

Trico Electric Cooperative, Inc. ("Trico") filed this rate case to address rapidly increasing inequities as to who pays for cost of the grid used by all of its Members. These inequities are primarily the result of an escalating cost-shift associated with the explosive growth of rooftop distributed generation ("DG") in Trico's service area. Under Trico's current rate structure, the fixed costs of building, maintaining and financing the electric grid are recovered through the Cooperative's volumetric energy rate. When Trico Members both offset their energy usage with DG and sell excess energy generated by their DG systems at the full retail energy rate, it has effect of shifting those fixed grid costs to Trico's non-DG Members. At the start of the test year in this docket (January 1, 2014), approximately one percent of Trico's Members had DG systems. As of the date of the hearing, **over four percent** of Trico's members had rooftop DG.[1] Given the current rate of growth of DG deployment, the DG penetration could exceed five percent by the time of a decision in this docket. The cost shift at the time of the hearing was approaching $2 million per year (or almost $40 million over 20 years – which translates into a cost shift of almost $1,000 per Member over those 20 twenty years).[2]

Trico has been attempting to address the issues related to exponential increases in DG deployment since February 2015. However, at that time, several parties insisted that Trico address the issue in a rate case. Now, some solar advocates assert Trico should wait until a second phase of this rate case before any relief can be granted. Given its particular circumstances, Trico cannot wait. Trico needs immediate relief to avoid irreversible long-term adverse impacts to its non-DG Members.

Trico's Member-elected Board of Directors has a fiduciary duty to balance the interests of its Members as a whole and to ensure that Trico's rates are fair and equitable to *all* of its Members. Although Trico supports renewable resources, including the sustainable growth of DG in its service area, Trico's current rate design and net metering is placing undue burdens on its

[1] Tr. (Nitido) at 96.
[2] Tr. (Nitido) at 96-97.

non-DG members and is not sustainable in the long run. Currently, DG Members are avoiding paying, on average, almost $90 per month in fixed costs of service.[3] Other non-DG Members ultimately will pay for those avoided costs – even though the DG Members are connected to and rely upon Trico's grid for safe and reliable electric service. Trico believed that its rate proposals were a proactive and necessary step that would lead to more equitable and sustainable rates for its Members. These proposals sought to modify Trico's rate design to: (i) recover fixed grid costs associated with existing distributed generation within Trico's service territory by increasing the fixed monthly customer charge and decreasing the volumetric energy rate for all members; (ii) better match fixed cost recovery by customer class to the cost of service for that class; and (iii) reduce (but not eliminate) the fixed cost-shift and resultant subsidies to members who install rooftop solar or other DG.

Trico and Commission Utilities Division Staff ("Staff") have entered into a Settlement Agreement (docketed July 8, 2016) ("Settlement") that partially mitigates the cost shift associated with rooftop DG and introduces a gradual approach to achieving more equitable rates and fixed cost recovery. The Settlement provides significant benefits for Trico and its Members, including:

- A modest revenue increase for Trico and a modest bill impact (less than 2%) for the average Trico Member
- A class revenue allocation that moves rates to levels that more closely reflect the class cost of service.
- A rate design that will recover costs in a manner that better reflects how Trico incurs its costs of service.
- Introduction of a demand-rate component at $0.00 per kW for residential and small commercial Members that works in concert with an extensive Member education program and allows for an extended period of time for education and study regarding demand rates without any bill impacts to Members.

[3] E.g., Tr. (Nitido) at 97; Ex. Trico-6 (Testimony of David Hedrick in Support of Settlement Agreement submitted July 29, 2016 ("Hedrick Testimony") at 13.

- Freezing of the current net metering tariff and adoption of a new DG Energy Export Tariff applicable to new Members who submit an interconnection application for distributed renewable energy generation ("DG") starting June 1, 2016, which mitigates the lost-fixed costs and a portion of the cost-shift problems for Trico while still providing a significant subsidy for new DG Members.
- Grandfathering of the current net metering tariff for Members who had submitted DG interconnection applications on or before May 31, 2016, so they would remain on the current net metering tariff.

Many of the elements of the Settlement are uncontested. However, the rate design and net metering provisions of the Settlement are being challenged primarily by EFCA, the trade organization of the largest vendor of rooftop solar in Trico's service territory, who has a direct pecuniary interest in continuing the DG subsidies paid by Trico Members. In effect, the vendor is seeking to substitute the opinion of its outside consultant based on generic cost data from other jurisdictions (not the vendor's actual cost data), for the judgment of Trico's Member-elected Board based on their fiduciary responsibility and knowledge of Trico's Members and service territory, in order to perpetuate the rapidly increasing cost shift and related inequities in Trico's service area. Contrary to the solar interests' assertions, the Settlement provides a balanced, forward-looking approach to addressing the current issues facing Trico as well as the rapidly changing electric service landscape.

For example, in the judgment of Trico's Member Board, (and ACC Staff), demand rates present an important tool that could potentially contribute to a long-term resolution of the cost-shift associated with the current incentives paid by Trico Members for DG. To that end, the Trico Board determined that introduction of the demand rate element contained in the Settlement provides several substantial benefits. First, it provides Trico with an important tool to effectively study and educate its Members before an actual demand charge would be imposed. Demand information would be included in Trico's billing system and would be available for Member review prior to the next Trico rate case, which is the earliest time an actual demand charge may be

imposed. Second, having a demand rate element in its tariff allows Trico to include demand information on a Member bill in a manner that reflects how demand charges may ultimately be assessed. Third, the demand rate element permits Trico to accurately collect, track and analyze Member demand, which will allow Trico to determine what is the best way to structure future demand charges, if at all. It is difficult to understand the opposition of a solar vendor to such an assessment, absent a financial motive.

Finally, the Settlement provides fair and reasonable compensation for excess DG energy that is exported to the Trico grid. The proposed Energy Export Rate of 7.7 cents provides new DG Members with compensation that reflects the **existing** fixed costs of transmission and generation - not some much smaller speculative future benefit – as well as the avoided variable cost of generation. Due to Trico's comparability higher rates, the export rate (when combined with the retail offset for DG energy used onsite) will still provide Trico Members with a shorter payback period than currently exists across the road in TEP's service area under full retail net metering. It is therefore difficult to difficult to understand opposition to the proposal from solar vendors doing business in TEP's service territory, particularly when the vendors have not provided their own cost data in the record. In any case, the Settlement would provide a benefit that is higher than what the solar interests assert is the typical lease rate.

Trico believes that the Settlement with Staff balances the respective interests in the case and presents a proactive, creative and comprehensive agreement that addresses the critical issues facing Trico in a fair and equitable manner. The Settlement is in the public interest and should be approved.

Discussion

A. Background.

Trico is non-profit rural electric cooperative. It serves approximately 39,000 Members located within the "rural ring" around metropolitan Tucson. It provides distribution services only.[4] Trico is run by a seven-Member Board of Directors. Trico's Members elect the Board of Directors – who are also Members. Thus, Trico, as a Member-owned and Member-governed cooperative, is substantially different than an investor-owned utility. The Member-customers have a direct say in how the cooperative is run. Essentially, Trico is governed by a board of consumer advocates.[5] Trico has a fiduciary duty to ensure just and reasonable rate for all its Members. As Mr. Vincent Nitido indicated, his role is to manage Trico's operations for the benefit of all of its Members. This is also the case for each of the seven-elected Members who serve on the Board of Directors; all are charged with operating Trico for the benefit of its membership as a whole.[6]

Trico owns no generation except for a 1.750 megawatt (MW) diesel generator used for backup purposes, and a 0.227 MW solar facility used for its SunWatts Sun Farm community solar program. The SunWatts Sun Farm program is part of Trico's robust renewable energy plan that has exceeded the Commission's renewable energy standard for distributed renewable energy generation ("DG"). In fact, Trico has won several awards for its renewable energy programs.[7] It has done so with a small staff.

Trico has a relatively high cost of service per Member-customer, compared to Arizona's investor-owned utilities. This is because it serves a predominantly rural, largely residential (95%) customer base across a large service territory.[8] As Mr. Nitido explained, the mission of electric cooperatives continues to be to provide reliable power at an affordable cost to areas that cannot be

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[4] Ex. Trico-5 (Reply Testimony of Vincent Nitido in Support of Settlement Agreement submitted August 15, 2016 ("Nitido Reply")) at 2.

[5] Ex. Trico-5 (Nitido Reply) at 4-5.

[6] Ex. Trico-1 (Application) – Direct Testimony of Vincent Nitido at 1-2.

[7] See Ex. Trico-1 (Application) – Direct Testimony of Vin Nitido at 5, 10; Tr. (Nitido) at 104-05.

[8] Ex. Trico-4 (Testimony of Vincent Nitido In Support of Settlement Agreement submitted July 29, 2016 ("Nitido Testimony")) at 2.

served economically by investor-owned utilities. In fact, while Tucson Electric Power Company ("TEP") and Arizona Public Service Company ("APS") serve between 60 and 100 customers per mile of distribution line, Trico serves approximately 10 Member-customers per mile of distribution line.[9] In other words, Trico's customer density is low compared to investor-owned utilities in the state. This results in significantly higher investment per customer and higher fixed customer costs.[10]

1. Trico is facing a critical problem that needs to be addressed now.

a. Rooftop DG is growing rapidly in Trico's service area.

The primary reason Trico made this filing is not to address revenue deficiency; rather, it was to address the systemic problems with current rate design and net metering resulting in an increasing cost shift and lost-fixed cost recovery.[11] While these are not problems unique to Trico, they are more pronounced for Trico. Trico must address these issues due to the unprecedented and disproportionately large flood of applications for residential rooftop DG interconnections.[12] The number of DG applications Trico has received in recent years has skyrocketed:

- 551 interconnected systems at the start of 2014;
- 1,262 systems as of February 28, 2015 (an increase of 771 – including 114 applications in December 2014, 74 in January 2015, and 174 in February 2015);
- 1,621 systems as of May 31, 2016 (an increase of 359);
- Approximately 1,700 DG Members as of July 2016; this represents *over four percent* of Trico's total membership.[13]

To put this in context, prior to 2014, Trico received about 10 residential solar DG applications each month or about 120 for the year. Trico had a record year in 2013, with 160

[9] Ex. Trico-1 (Application) – Direct Testimony of Vincent Nitido at 6-7.

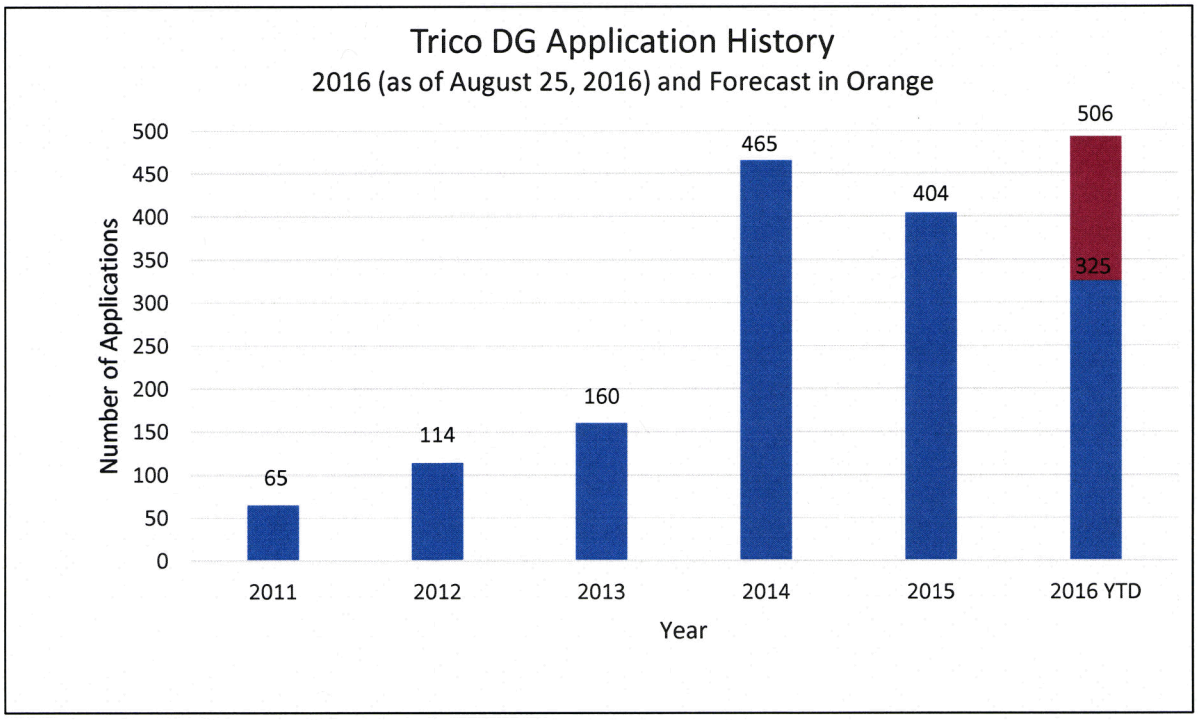
[10] Ex. Trico-6 (Hedrick Testimony) at 5.

[11] See Ex. Trico-1 (Application) – Direct Testimony of Vincent Nitido at 8, 10, 12-13.

[12] Ex. Trico-5 (Nitido Reply) at 3.

[13] See Ex. Trico-1 (Application) – Direct Testimony of Vincent Nitido at 11; Ex. Trico-4 (Nitido Testimony) at 3; Ex. Trico-5 (Nitido Reply) at 7, 15.

applications which was its highest since the inception of the Trico renewable program in 2005.[14] Starting in about the middle of 2014, Trico saw a dramatic increase in residential solar DG applications, which has continued with applications three to five times more per month than Trico has ever experienced.[15] Ironically Trico's up-front incentives had reduced over the same time from an average of $15,000 upfront per DG Member to zero by the start of 2014.[16] The chart below provides the actual history of residential solar DG applications by year with the forecast for the end of 2016 (in red) based on the average monthly applications received in 2016 at the time of the hearing.[17]



The dramatic increase in applications began in July of 2014 with 59 applications received. In December of 2014, Trico received 114 applications, which corresponds to an entire year of

[14] Ex. Trico-4 (Nitido Testimony) at 3.

[15] See Ex. Trico-4 (Nitido Testimony) at 3.

[16] See Ex. S-1 (Trico Response to STF 10.4).

[17] See Ex. S-1 (Trico Response to STF 10.4); Ex. Trico-4 (Nitido Testimony) at 3; Ex. Trico-1 (Application) – Direct Testimony of Karen Cathers at 14-15.

applications in a single month.[18] Trico ended the year with 465 applications for 2014 (almost three times more than 2013 or a 300% increase).[19] In order to address the escalating cost shifts occurring as a result of this increase, on February 26, 2015, Trico filed with the Commission an application to modify its Net Metering Tariff.[20] Trico provided notice to its Members and the solar contractors, doing business in Trico's service area, that Trico's application requested Commission approval to grandfather current Net Metering Members on the existing Net Metering Tariff for those with applications received as of February 28, 2015.[21] In two days following the notice, Trico received 99 applications.[22] Starting in March of 2015, Solar City (Trico's largest solar contractor for leased systems) stopped doing business in Trico's service area and correspondingly Trico's applications returned to a more normal level of about 10-15 per month.[23] Even with the Solar City reduction in 2015, Trico ended the year with 404 applications, which is over 2.5 times what Trico received in 2013.[24] In December of 2015, Solar City began doing business again in Trico's service area and applications increased to four times the normal level.[25] This increased level of applications has continued throughout 2016 and Trico is on track for another record year for solar DG applications (506 applications for 2016 if applications continue at the current rate).

Trico's total DG Members now exceed 1,800, which corresponds to over 4.5% of Trico's approximately 40,000 Members, and continues to increase. If Trico does not add another residential DG Member in its service area, it will still exceed the 2025 residential DG requirement in the Commissions REST rules for investor owned utilities even though cooperatives such as

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[18] Ex. Trico-4 (Nitido Direct) at 3.

[19] Ex. S-1 ((Trico Response to STF 12.4).

[20] See Docket No. E-01461A-15-0057.

[21] See Application (Docket No. E—01461A-15-0057) at 7.

[22] Ex. Trico-5 (Nitido Reply) at 14; Ex. Trico-1 (Application) – Direct Testimony of Karen Cathers at 14-15.

[23] Ex. Trico-5 (Nitido Reply) at 14.

[24] See Ex. S-1 (Trico Response to STF 10.4).

[25] Ex. Trico-5 (Nitido Reply) at 14.

Trico are not subject to those requirements. In fact, Trico is currently exceeding the 2016 REST total requirements for investor owned utilities with DG alone (without any utility scale).[26]

b. The Cost Shift to non-DG Members is growing rapidly.

The cumulative impact of this rapid increase in DG system interconnections was not anticipated after Trico's last rate case in 2009.[27] Consequently, non-DG Members are subsidizing DG Members at $89.91 per month in fixed grid costs – resulting in an annual subsidy of $1.749 million as of May 31, 2016 and $35 million over the life of the current interconnection agreements.[28] Those numbers are not static and they will grow if not addressed.[29] Mr. Nitido discussed during the evidentiary hearing how half of the lost-fixed costs due to DG, the distribution costs, are not recovered – while the lost generation and transmission costs are shifted to non-DG Members through Trico's Wholesale Power Cost Adjustor ("WPCA").[30] The unrecovered fixed distribution costs reduce Trico's margins and lowers allocation to Member capital accounts.[31] Even so, Trico's chief concern is with the cost shift.[32] That cost shift is continuing to escalate at an alarming rate, and is not sustainable under Trico's current rate design and net metering tariff. Even at this point, Trico will be locking in a cost shift to non-DG Members of almost $2 million per year for the next 20 years due to grandfathering.[33]

Importantly, Trico must continue to provide the same level and quality of service to DG Members after they install rooftop solar systems. Trico incurs the same grid costs to serve these Members; in fact, Trico has already incurred these costs. But the current rate design and net metering tariff prevent Trico from recovering these grid costs from DG Members. As the number of DG Members increases, the amount of the lost-fixed costs and costs shifted to non-DG

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[26] Tr. (Nitido) at 103-04.

[27] Decision No. 71230 (August 6, 2009) (using a test-year ending December 31, 2007).

[28] Ex. Trico-4 (Nitido Testimony) at 3; Ex. Trico-5 (Nitido Reply) at 9-10.

[29] Tr. (Nitido) at 96-97.

[30] Tr. (Nitido) at 101-02; see also Ex. Trico-1 (Application) – Direct Testimony of Karen Cathers at 16.

[31] Tr. (Nitido) at 144-45.

[32] Tr. (Nitido) at 283.

[33] Ex. Trico-5 (Nitido Reply) at 7.

Members will grow.[34] Unlike energy efficiency, DG is an intermittent resource, and does not reduce peak demand or the need for facilities to meet that peak. DG also puts stress on Trico's distribution system. For example, Trico has had to upgrade transformer sizes to accommodate DG systems.[35] Trico's Member-elected Board of Directors believes that partially reducing the net metering subsidy to DG Members on a going forward basis is a fair and equitable step toward mitigating the cost shift inherent in the current rate, while continuing to support the growth of solar resources in the Cooperative's service territory.

Staff acknowledges the problems that Trico is facing regarding lost-fixed cost recovery and the cost shift to non-DG Members. As Staff witness Terri Ford stated in pre-filed testimony that "the recent escalation in the number of applications to interconnect rooftop solar DG under Trico's net metering tariff has resulted in significant erosion of the Cooperative's ability to recover the fixed costs of providing electric service to its members, and the inequities among its Members in the payment of those fixed costs."[36]

2. The Settlement begins to address the DG issue.

The Settlement represents a balancing of many interests in addressing the DG issues. The Settlement introduces a new DG Energy Export Tariff that will *only* apply to those DG Members who submit DG interconnection applications after May 31, 2016, and *only after* the effective date of a Commission decision in this case. Both the grandfathering date and the new DG Export Energy Tariff are necessary to reduce the cost-shift now. The export credit for excess energy of $0.0770 per kWh is still significantly higher than Trico's avoided cost, and is the equivalent of Trico's power supply portion (including transmission) of the energy charge for the first tier of the proposed residential rate schedule. All energy consumed on-site by a DG Member from the DG system will continue to be offset at the full retail rate. The export credit (when combined with the retail offset for DG energy used onsite) provides Trico Members with a shorter payback period that currently exists across the road in TEP's service area under full retail net metering. It will

[34] Ex. Trico-1 (Application) – Direct Testimony of Vincent Nitido at 16-18.

[35] Tr. (Cathers) at 747-48.

[36] See Ex. S-19 (Ford Direct Testimony) at 14.

also provide a benefit that is higher than what EFCA asserts is the typical lease rate.[37] Further, Staff's analysis shows that DG is still a worthwhile investment for Members under the terms of the Settlement.[38]

The Settlement also introduces the concept of a demand rate in order to assess the potential of demand rates to address the cost shifts inherent in the current rate design, thereby encouraging further development of renewable resources, demand side management and energy efficiency technologies. Because the demand rate component will be set at $0.00 per kW, there is no economic impact to Trico Members. But the demand rate component will allow Trico to collect demand information from Members and provide Members with information regarding demand rates and how to utilize them to minimize electric bills. That measure will be in concert with an extensive education program, as well as additional demand-reduction programs. The increased basic service charge set forth in the Settlement is more reflective of the fixed customer costs necessary to serve those Members.

B. The Settlement Agreement.

The Settlement includes the following provisions:

- A modest revenue increase which includes the inclusion of direct assignment facilities acquired from Arizona Electric Power Cooperative (AEPCO) in rate base.
- A class revenue allocation that moves rates to levels that more closely reflect class cost.
- An update of Trico's base cost of power and amendment of its Wholesale Power Cost Adjuster (WPCA) (and adoption of a related plan of administration) to provide for the

[37] See Ex. EFCA-10 (Direct Rate Design Testimony of William Monsen) at 15; Tr. (Monsen) at 852-53.

[38] See Ex. S-13 (Liu Settlement Testimony) at 9-10; Tr. (Liu) at 643-46 (indicating that Staff's analysis is based on reasonable assumptions including the costs of DG installation in and around Trico's service territory.)

collection of fixed DG costs related to generation and transmission from non-DG Members.

- A rate design that will recover costs in a manner that better reflects how Trico incurs its costs of service.
- Introduction of a demand-rate component at $0.00 per kW for residential and small commercial Members that works in concert with a study program and an extensive Member education program which allows for an extended period of time for education regarding demand rates without any bill impacts to Members.
- An aggressive Member education program designed to better inform them of their electricity usage and technology options available to Members, so that they can better control their costs and usage, including access to Trico's SmartHub® application.
- Freezing of the current net metering tariff and adoption of a new DG Energy Export Tariff applicable to new Members who submit an interconnection application for distributed renewable energy generation ("DG") starting June 1, 2016, which mitigates the lost-fixed costs and cost-shift problems for Trico.
- Grandfathering of the current net metering tariff for Members who had submitted DG interconnection applications on or before May 31, 2016, so they would remain on the current net metering tariff.
- Additional demand-reduction programs for the benefit of Trico Members.
- Agreement that Trico's next rate case will reflect a test year no earlier than the 12-month period ending June 30, 2018.
- A modification of Trico's Rules, Regulations and Line Extension Policy to provide a modest allowance for line extensions.

Several of the Settlement provisions are not contested, including the revenue requirement, the acquisition and inclusion of direct assignment facilities AEPCO in rate base, the modified Line Extension Policy and the reset of the WPCA (and related adoption of a WPCA Plan of Administration).

The contested provisions of the Settlement revolved primarily around rate design and net metering issues. However, these provisions of the Settlement provide a fair, equitable and gradual way to address the critical issues that Trico faces. The rate design and net metering provisions begin to mitigate both the subsidies to DG Members and the related cost shift to non-DG Members. The rate design also begins the process of educating Members about demand rates. Ultimately, demand rates may provide Trico with an important tool to address the evolving electric service landscape and it is necessary to begin the education and analysis now.

1. Overview of Uncontested Settlement Provisions.

a. Revenue Requirement.

Article II of the Settlement indicates that Trico will receive a $2,282,076 revenue increase (approximately 2.61% over adjusted 2014 test-year revenues). This reflects a total revenue requirement of $89,762,812 from $87,480,736.[39] The Settlement revenue increase reflects an increase in rate case expense over the amount originally requested – from $150,000 to $450,000[40] – amortized over three years. This increase in expense results from the extensive discovery and four days of evidentiary hearings in this matter.[41] Staff verified that Trico had incurred $400,000 in invoices through June 30, 2016 and that an additional $50,000 in actual rate expense is likely.[42]

The Settlement reflects a Fair Value Rate Base ("FVRB") of $175,076,536, which includes direct assignment facilities ("DAFs") that Trico has agreed to purchase from AEPCO.[43] The costs relating to the DAFs were directly assigned by AEPCO to Trico because they are utilized to provide service only to Trico.[44] Those costs were previously recovered by Trico through the WPCA. Accordingly, there is a corresponding adjustment to remove costs from the WPCA once the facilities are acquired by Trico.[45] This includes acquisition of all or part of eight transmission

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[39] See Ex. Trico-3 (Settlement) at Section 2.1; Ex. Trico-6 (Hedrick Testimony) at 2.
[40] Ex. Trico-3 (Settlement) at Section 2.2.
[41] Ex Trico-5 (Nitido Reply) at 26.
[42] Ex. S-8 (Paladino Settlement Reply Testimony) at 5.
[43] Ex. Trico-3 (Settlement) at Section 2.3.
[44] See Ex. Trico-1 (Application) – Direct Testimony of Vincent Nitido at 4-6, and Karen Cathers at 2, 5-6.
[45] See Ex. Trico-1 (Application) – Direct Testimony of Vincent Nitido at 4-6, and Karen Cathers at 2, 5-6.

substation delivery point facilities with a total approximate net book value equaling $7,825,000 as of January 1, 2017. Trico will recover carrying costs through base rates at an approximate cost of $7,824,000, resulting in a net reduction of $163,418 in operating expenses – due to lower interest rates and margin requirements, as compared to those included in the existing lease arrangements with AEPCO.[46]

b. Base Power Rate and WPCA.

Article IV of the Settlement incorporates Trico's new base cost of power of $0.081711 per kWh, which is being reset to (1) include the current cost for wholesale power and transmission in Trico's base rates; (2) incorporate the small reduction in rates due to the DAFs acquisition; and (3) reflect recovery of the total adjusted purchased power cost. Trico is also adopting a plan of administration for its WPCA.[47] The plan of administration includes **recovery of** the cost of excess energy procured by Trico under the Net Metering and DG Energy Export Tariffs, in order to provide Trico with a recovery mechanism for a portion of the DG Energy associated fixed costs, similar to the lost fixed cost recovery adjustors utilized by the investor owned utilities in the state.

c. Rules and Regulations/Line Extension Policy.

The Settlement also modifies Trico's revised Rules and Regulations and Line Extension Policy. This includes reinstating a line extension allowance up to $1,500, plus the cost of special equipment (transformer and meter that averages approximately $500).[48] Mr. Nitido described why restoration of an allowance was appropriate for Trico, given that conditions are different than what existed in 2008, when the previous allowance was terminated. Given the slower growth in recent years, a modest allowance is appropriate.[49] These new connections benefit Trico and its Members.[50] New Members that hook up will be paying utility rates and contribute to the carrying costs of the line extension as well as the existing and new system grid related costs.[51] The

[46] See Ex. Trico-1 (Application) – Direct Testimony of Vincent Nitido at 4-6, and Karen Cathers at 2.
[47] Ex. Trico-3 (Settlement) at Sections 4.1, 4.2, 4.3 and Attachment B.
[48] See Ex. Trico-3 (Settlement) at Section 13.4, and Attachment D.
[49] Ex. Trico-1 (Application) – Direct Testimony of Vincent Nitido at 3, 24-25; Tr. (Nitido) at 149.
[50] Ex. Trico-1 (Application) – Direct Testimony of Karen Cathers at 24.
[51] Tr. (Nitido) at 152.

maximum investment supported by the proposed residential rate for the average customer is $2,833, based on the annual proposed distribution wires revenue produced for the average consumption consumer minus the costs of providing service identified in the COS. Based on historical data, Trico's average construction cost for a new residential connect is less than $1,400 per connect.[52] This is considerably lower than the margin Trico receives from the new Member-customer of $2,833. Because it is a fixed dollar amount, the allowance Trico makes does not increase if equipment costs for new extensions go up.[53] The level of allowance was based on a common utility calculation reflective of the average customer based on the life of the load over a certain period in time based on reasonable assumptions.[54] Staff witnesses Ranelle Paladino and Terri Ford agreed that reinstating a modest allowance in the line extension policy benefits Trico and aids in economic development, while also being consistent with Commission rules.[55]

2. Overview of Contested Settlement Provisions.

a. Rate Design.

Section VI of the Settlement sets forth the proposed rate design. The standard non-TOU residential rate design will be a three-part rate design and include: (1) a $24.00 per month basic service charge; (2) a 24 hour, 7 days a week, Member peak demand-rate component (set at $0.00 per kW) with no minimum demand; and (3) an energy charge.[56] The residential energy charge per-kWh is designed to be a two-tier inverted block rate: (1) $0.112930 per kWh for the first 800 kWh per month; and (2) $0.122930 per kWh for each kWh over 800.[57] By comparison, Trico was originally proposing a first-tier per-kWh rate of $0.117800 and a second-tier per-kWh rate of $0.127800, with a $20.00 basic service charge.[58]

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[52] Ex. Trico-1 (Application) – Direct Testimony of David Hedrick at 24-25 (and Ex. DWH-9 thereto).
[53] Tr. (Cathers) at 750-51.
[54] Tr. (Hedrick) at 381-82.
[55] See Tr. (Paladino) at 532; Tr. (Ford) at 694-95.
[56] See Ex. Trico-3 (Settlement) at Section 6.2.
[57] See Ex Trico-3 (Settlement) at Attachment C, page 1.
[58] See Ex. Trico-1 (Application) at Schedule H-3.0, page 1 of 4.

The Settlement also sets forth basic service charges for small-commercial customers at $27.00 (single phase) and $35.00 (three phase) with a single per-kWh energy rate of $0.126820 per kWh.[59] By comparison, Trico originally proposed an energy rate of $0.133700 per kWh with basic service charges of $23.00 (single phase) and $31.00 (three phase).[60]

Rate changes for other customer classes are included in the Settlement at Attachment C, including that the two interruptible rate schedules will be combined into one interruptible rate schedule and frozen.[61]

DG and non-DG Members will be served under the **same** rate design. There is no DG-specific rate design. Moreover, DG Members will not be grandfathered on any existing rate tariff.

b. Net Metering.

Article VIII of the Settlement establishes a new DG Energy Export Tariff to apply as a rider only to DG customers who submit interconnection applications after May 31, 2016, starting *only after* the effective date of the Commission decision in this docket. For those "new DG Members" the export rate for energy generated from their systems and deliver back to Trico (i.e., the "excess energy") will be set at $0.0770 per kWh; and all excess energy from a new DG Member will be credited to the Member at that value. The cost of the excess energy will be recovered through Trico's WPCA in accordance with its plan of administration. There will be no netting or banking of kWh during the month; rather, credits resulting from the export rate will carry forward to the following month if greater than the Member's monthly bill.[62]

Moreover, Article VII of the Settlement freezes the existing Net Metering Tariff, so that it will be unavailable to Members whose DG application was received after May 31, 2016.

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[59] See Ex. Trico-3 (Settlement) at Sections 6.4 and 6.5, and Attachment C, page 7.

[60] See Ex. Trico-1 (Application) at Schedule H-3.0, page 1 of 4.

[61] See Ex. Trico-3 (Settlement) at Sections 6.7, 6.8.

[62] See Ex. Trico-3 (Settlement) at Sections 8.1 through 8.4.

To the extent a waiver of the Net Metering Rules is needed, the Settlement provides that Staff will support Trico's request for such a waiver.[63]

c. Grandfathering.

Article VII indicates that Trico will freeze the current net metering tariff, so that it will be unavailable to Members who submit DG interconnection applications after May 31, 2016, and that the new DG Export Energy Tariff will apply upon the effective date of a Commission decision in this case.[64]

Article IX of the Settlement provides that all Trico DG Members who apply for interconnection on or before May 31, 2016 will be grandfathered on the current net metering tariff – at least until the Commission issues a decision in Trico's next rate case. The expectation is that grandfathering will continue for these customers for the remaining term of the DG Member's interconnection agreement, or for 20 years, whichever is shorter. Grandfathering applies only to the same service location with the same DG system.[65] Grandfathering also applies only with respect to the current net metering tariff, and Staff and Trico agree to not support further grandfathering of existing net metering tariffs for DG interconnection applications received after May 31, 2016.[66] As Staff witness Eric Van Epps explained during the evidentiary hearing, Staff and Trico wanted to avoid creating tranches of different export credits for excess energy from DG going forward, while understanding that such a decision is ultimately up to the Commission.[67]

d. Freezing the current Time-of-Use rate.

Section 6.3 of the Settlement provides that Trico will freeze the Rate Schedule RS2TOU to prevent any additional residential Members from being added to that rate schedule. Trico will

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[63] Ex. Trico-3 (Settlement) at Section 7.3.

[64] Ex. Trico-3 (Settlement) at Sections 7.1 and 7.2.

[65] Ex. Trico-3 (Settlement) at Section 9.1; see also Ex. Trico-5 (Nitido Reply) at 15 (recognizing that neither Trico nor Staff can bind future Commissions through the Settlement).

[66] Ex. Trico-3 (Settlement) at Sections 9.2 and 9.3.

[67] Tr. (Van Epps) at 572, 588-89.

provide notice to its Members that it will propose to eliminate this rate schedule in its next rate case.[68]

e. Return trip fee for residential DG inspections.

Section 13.3 of the Settlement provides that Trico will revise its interconnection agreement for leased and owned systems – incorporating language that Members may be charged a return trip fee for a return trip to inspect installations of DG interconnections, where the return trip is due to a Member or installer issue.[69]

C. The Settlement has a modest bill impact, yet establishes a path to adopt important rate elements that will allow more equitable rates over time.

1. The bill impact is modest.

The Settlement addresses the problems Trico is incurring with the rapid growth of DG installations in its service territory, while resulting in modest rate impacts for the average-and-median-use Member. Specifically, a residential Member using an average of 837 kWh will experience an increase of $2.05, approximately 1.75-percent increase over current rates – from $116.84 to $118.89; a residential Member using the median amount of 750 kWh will experience an increase of $2.45, approximately 2.31-percent increase over current rates from $106.25 to $108.70. This equates to an increase of less than 0.25 percent over the past seven years, since the last Trico rate decision in 2009.[70]

2. The Settlement does not have disproportionate impacts on low-income Members.

While Trico does not have or maintain data relating to the income of its members, the Cooperative does coordinate with its low-income members to obtain bill payment assistance through the Low Income Home Energy Assistance Program (LIHEAP), a Federally-funded program or other community assistance related programs (including the Pascua Yaqui Social

[68] Ex. Trico-3 (Settlement) at Section 6.3.

[69] Ex. Trico-3 (Settlement) at Section 13.3.

[70] See Ex. Trico-3 (Settlement) at Section 3.1; Ex. Trico-4 (Nitido Testimony) at 12.

Services) that help low-income individuals and households with their home energy bills.[71] During the 2014 test year, 675 Trico members received payment assistance. The average monthly kWh usage for those 675 members in 2014 was 973 kWh, which is higher than the average residential usage of 837 kWh per month.[72] The net impact to the monthly bill of the members who received payment assistance would be approximately $2.26, or 1.65 percent, which is a *smaller* percentage increase as compared to the system average for all residential members of $2.05, or 1.75 percent.[73] Thus, because low-income members in Trico's service area on average use more energy than the average residential member, the overall impact of the Settlement Agreement on their monthly bill is lower on a percentage basis.

3. The monthly customer charge is reasonable and results in more equitable fixed cost recovery.

The basic service charge or customer charge represents a portion of the direct access average cost to serve a residential Member.[74] Based on the cost of service study ("COSS") that Trico conducted and that Staff supported (and that no other party contested), the customer component of expense associated with the distribution wires for the Residential class is $31.83 per month.[75] This includes distribution customer costs ($17.20), metering ($5.23), meter reading ($0.98), customer records ($6.33), customer service ($1.27), and revenue related ($0.82).[76] These are fixed operating and customer costs that do not vary with power consumption, and reflect the cost of having the service available before any energy is actually sold to the Member.[77] Still, Trico's proposed increase in the customer charge seeks only to recover approximately 75% of these fixed costs.

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[71] Ex. Trico-4 (Nitido Testimony) at 12-13.

[72] Ex. Trico-4 (Nitido Testimony) at 13.

[73] Ex. Trico-4 (Nitido Testimony) at 13.

[74] Ex. Trico-5 (Nitido Reply) at 8.

[75] Ex. Trico-6 (Hedrick Testimony) at 4; Ex. Trico-1 (Application) at Schedule G-6.0, page 1.

[76] Ex. Trico-7 (Reply Testimony of David Hedrick in Support of Settlement Agreement submitted August 15, 2016 ("Hedrick Reply")) at 8-9.

[77] Ex. Trico-6 (Hedrick Testimony) at 5; Trico-7 (Hedrick Reply) at 9.

The increase in the customer charge is offset by lowering the energy rate and providing the two-tier inverted block energy charge with decreased rates from what Trico originally proposed.[78] The overall rate design addresses more than just recovery of fixed costs from DG Members – it reduces financial disincentives to promote energy efficiency, demand-side management and energy-saving technologies.[79] While it is true that lower-use Members will incur a greater impact, the two-tier energy rate also serves to mitigate the impact to low-use Members.[80] The resulting rate design is a more equitable means of recovering fixed customer costs from low-use customers and helps to reduce the lost and shifted fixed costs caused by DG Members, as well as to address fixed-cost recovery issues with seasonal and vacant homes.[81] So the proposal does not single out DG Members, and the customer charge is still considerably lower than customer component of expense identified in the COSS. The $24.00 residential customer charge is in line with monthly customer charges for other electric cooperatives serving rural areas.[82]

Staff's position corroborates that the COSS used acceptable methods to functionalize, classify and allocate costs – and that the $31.83 accurately reflects fixed monthly customer costs to provide service to residential Members. In fact, Staff indicated that the COSS also illustrated that total residential fixed costs per month are $100.64.[83] Trico's COSS uses the same program and methodology that the Commission and Staff found appropriate in several prior rate cases for cooperatives.[84] Staff agrees that the $24.00 residential customer cost is supported by the COSS.[85] And as illustrated above, the rate impacts to the average-and-median usage residential Member is modest.

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[78] Ex. Trico-5 (Nitido Reply) at 8.

[79] Ex. Trico-4 (Nitido Testimony) at 7.

[80] Tr. (Nitido) at 171; Tr. (Cathers) at 468-69.

[81] Ex. Trico-6 (Hedrick Testimony) at 5, 9; Tr. (Hedrick) at 327.

[82] Ex. Trico-6 (Hedrick Testimony) at 5-6; Tr. (Nitido) at 287-88 (approximately $24.33 for Mid-Carolina Electric Cooperative); Tr. (Hedrick) at 438.

[83] See Ex. S-8 (Paladino Settlement Reply Testimony) at 2.

[84] Ex. Trico-1 (Application) – Direct Testimony of Rebecca Payne at 9.

[85] Ex. S-19 (Ford Direct Testimony) at 16.

4. The $0.00 demand charge, combined with education and outreach, will ultimately provide an important tool for Trico to address the rapidly evolving electric service landscape.

Demand rates can provide an important element in more equitable rate design. Demand rates can better match fixed costs to fixed cost recovery and help ensure that those who are using the grid are also paying a more fair share of the cost of the grid. Trico understands that adopting an actual demand charge requires thorough customer education and study. Trico believes it is critical to begin the data collection and demand rate education process *now* in order to better position itself to take advantage of changes in electric industry, including utilization of demand side management and energy efficiency technologies. The Settlement provides a proactive and creative approach to achieve that goal.

The Settlement provides that standard rates will include a 24 hour 7 days a week peak demand-rate component of $0.00 per kW with no minimum demand. This demand-rate component is coupled with a Member Education Program that will inform Members about: (1) the nature and operation of demand rates; (2) how Members can use demand rates to reduce monthly bills; and (3) tools available from Trico and third parties to help Members to manage demand (including Trico's SmartHub® application). Education materials will highlight technology solutions that could be used to minimize demand charges and monthly bills. Each Member's bill will include the Member's peak demand as well as the date and time of the Member's peak demand for the billing period.[86]

In addition, the demand rate component will allow Trico to: (i) accurately collect data through its billing database; (ii) evaluate customer usage and demand profile; and (iii) evaluate potential demand rate impacts, including studying the impact of billing demand on a 15-minute interval versus a 60-minute interval, and also. Any demand rate proposed for residential and small commercial Members in the next rate case cannot exceed $2.00 per kW, and will reflect a portion

[86] Ex. Trico-3 (Settlement) at Sections 10.1 through 10.4.

of distribution-demand fixed-cost component of Trico's cost of service.[87] The Settlement also puts the onus on Trico to collect and analyze the data and to implement a successful education program before any demand charge is actually implemented.[88]

a. Origins of the demand-rate component.

On May 4, 2016, Trico filed its Amendment to its original Application, [89] after observing developments and publicly-available filings in various Commission proceedings regarding rate design, net metering, and distributed generation.[90] Based on this review, Trico's Member Board of Directors saw the need to begin to educate Members about demand charges and three-part rates. Trico understands that the purpose of demand rates is to provide an equitable recovery of fixed distribution demand costs from all customers, while also providing opportunities for Members to manage load, minimize peak demand and lower monthly bills, as well as promote new technologies.[91] The Trico Board believes demand charges are the most accurate means to allocate fixed costs of building, maintaining and financing the electric grid.[92] Trico also recognized, however, that simply implementing a full-fledged demand charge without adequate study and Member education would be contrary to the Commission's direction and could potentially cause unnecessary confusion for Members.[93] Accordingly, Trico initially proposed a limited demand charge, and eventually settled on a demand-rate component of $0.00 per kW, which provides time for Member education and to collect demand data that could be utilized to develop an appropriate demand rate in the future.

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[87] Ex. Trico-3 (Settlement) at Sections 12.2 and 12.3.
[88] Ex. Trico-3 (Settlement) at Section 12.4.
[89] Admitted as Ex. Trico-2.
[90] Ex. Trico-5 (Nitido Reply Testimony) at 18-19.
[91] Ex. Trico-6 (Hedrick Testimony) at 8.
[92] Ex. Trico-5 (Nitido Reply) at 21; Tr. (Hedrick) at 328-29.
[93] See Ex. Trico-5 (Nitido Reply) at 21-22; Tr. (Nitido) at 204.

b. The $0.00 per kW demand-rate component in the Settlement is well-designed based on the particulars of Trico's system.

The $0.00-per kW demand-rate component for residential and small-commercial customers in the Settlement is based on Members use of the Trico distribution system facilities, and corresponds to their highest monthly demand (that is, the size of distribution facilities need to serve a Member's peak demand).[94] Specifically, Trico will use the 24/7 non-coincident peak (NCP) demand and the maximum demand reading for any 15-minute interval in the monthly billing period. As Ms. Karen Cathers explained during the evidentiary hearing, using the NCP demand for distribution is designed to reduce stress on the distribution system in local areas and to maintain a higher load factor (ideally the same load every hour – 24 hours a day and 7 days of week) and to reduce peaks that put more stress on the local distribution system.[95] The 15-minute interval is the same interval used for Trico's other demand-billed customers, indicative of the peak demand in a month.[96] In addition, as part of the Settlement, Trico has agreed to include in its application in its next general rate case to provide: (a) a study of the impact of billing demand on a 15-minute interval versus a 60-minute interval; and (b) an evaluation of customer usage and demand profile.[97]

The demand-rate component is not a time-differentiated demand rate, as it is not designed as a means of reducing Trico's overall system (generation and transmission) peak. Trico's wholesale (generation and transmission) capacity costs are fixed and do not vary based on time of consumption.[98] So utilizing a time-based or coincident system peak billing demand as the billing unit would not provide corresponding cost reduction for Trico, even if Members could avoid fixed demand charges.[99] Basing a demand-rate component on maximum NCP demand in a monthly

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[94] Ex. Trico-5 (Nitido Reply) at 24; Ex. Trico-7 (Hedrick Reply) at 6; Tr. (Hedrick) at 329.

[95] Tr. (Cathers) at 741-42.

[96] Ex. Trico-7 (Hedrick Reply) at 4; Tr. (Nitido) at 227-28; Tr. (Hedrick) at 396.

[97] Ex. Trico-3 (Settlement), Section 12.3.

[98] Ex. Trico-7 (Hedrick Reply) at 6.

[99] See May 4, 2016 Testimony of David Hedrick at 4; Tr. (Hedrick) at 400 (stating that the price signals Trico has do not lend themselves to a time-differentiated demand rate).

billing period is appropriate for Trico residential and small-commercial customers – as it has been appropriate for larger commercial and other non-residential customers for decades by Trico and other utilities.[100]

c. The demand-rate component in the Settlement provides many benefits while resulting in no economic impact to residential and small-commercial Members.

Including a $0.00 demand-rate component with actual demand information on Member bills will provide a number of benefits. It gives Trico the opportunity to accurately collect and analyze Member data over an extended period and to conduct simultaneous outreach and education, without unanticipated adverse impacts to Trico Members.[101] Including the demand-rate component on Member bills directly assists in the education effort and provides Trico time to ensure that the billing systems are in place to effect the billing of demand to each Member. Having the demand information in the billing system further facilitates Trico's ability to analyze demand data for rate design and Member education.[102] Trico anticipates that it will ultimately use the collected data to provide billing comparisons to Members enabling them to assess the impact of future demand rate proposals.[103] The demand-rate component on Member bills will provide Members with monthly demand data, including maximum demand reading for the month and the date and time it occurred.[104]

Since all of Trico's current software and billing system is essentially its database for the entire Cooperative, incorporating the demand data into that system is the most efficient and cost effective method to collect and utilize the data, and it will have the additional benefit of providing Trico's customer service representatives with access to demand data for answering Member

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[100] Ex. Trico-6 (Hedrick Testimony) at 3-4; Trico-7 (Hedrick Reply) at 4; Tr. (Nitido) at 107 (demand is focusing on the individual member and not the system peak).

[101] Ex. Trico-5 (Nitido Reply) at 21; Tr. (Hedrick) at 364.

[102] Ex. Trico-5 (Nitido Reply) at 19-20.

[103] Ex. Trico-5 (Nitido Replay) at 20.

[104] Ex. Trico-7 (Hedrick Reply) at 4; see also Tr. (Nitido) at 214-15 (explaining why putting a demand-rate component on the bill is better than a separate bill insert, for example).

questions. Members will also have access to demand information through SmartHub®.[105] SmartHub® is the software application Trico utilizes to provide web based access to Members to view and download their interval energy and demand usage data, which is updated daily.[106] Members can access data via a computer or mobile device.[107]

Ultimately, the billing demand data will be used to design a demand rate to provide for partial recovery of demand-related costs of providing service in Trico's next rate case (to reflect a portion of the distribution system demand costs in Trico's cost of service) if the analysis shows that a demand rate is appropriate.[108] Even so, any demand rate charge resulting from Trico's next general rate case cannot exceed $2.00 per kW according to the Settlement and must be fully known, measurable and vetted through the rate case process.[109]

Finally, Trico must use a test-year ending no earlier than June 30, 2018 for the next rate case.[110] Based on the typical timeframe to put together and process a rate case, it is likely that the next rate case for Trico could not conclude before January 1, 2020.[111] This gives Trico *at least* three years to implement its robust education program and conduct analysis.

d. The Settlement recognizes that customer education about demand rates is crucial.

The Settlement is designed to start the process of acclimating residential and small-commercial customers about how demand charges will affect them *before* customers incur any economic impact of actual charges. The demand-rate component essentially will illustrate to Members what their respective demands would be. Further, providing a tariff that describes how the demand rate would work is in concert with the education program Trico will develop.[112] A

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[105] Tr. (Cathers) at 742-43.
[106] Tr. (Cathers) at 744-45.
[107] Tr. (Cathers) at 461-62.
[108] Ex. Trico-7 (Hedrick Reply) at 4-5.
[109] See Ex. Trico-4 (Nitido Testimony) at 8; and Ex. Trico-5 (Nitido Reply) at 19.
[110] See Ex. Trico-3 (Settlement Agreement) at Sections 12.1 and 12.2.
[111] Ex. Trico-5 (Nitido Reply) at 19; Tr. (Nitido) at 226.
[112] Tr. (Nitido) at 201; Tr. (Hedrick) at 404.

tariff, in addition to being necessary in order to put such a component on a Member's bill, is a useful tool to further educate Members about the demand rate.[113] Staff supports the $0.00 per kW on Member bills as a means to provide more information to Members, as well as a means to collect demand information from Members, and sees benefits to the corresponding tariff for the demand-rate component.[114]

Trico recognizes that an extensive and thorough Member education program is critical to the success of a demand rate. This is why the demand-rate component is structured to allow for Member education about the demand rate – before there is any further implementation of a demand charge above $0.00 per kW. This will include demonstrating how demand rates work and what Members can do to take full advantage of the rate design.[115] Customers can then be empowered to take steps to reduce demand billing under a three-part rate.[116] Including the component in Trico's billing system facilitates the collection and analysis of Member demand information *in conjunction with* an extensive and well-planned education plan.[117] Trico must also propose two demand-reduction programs in its next Energy Efficiency Implementation Plan ("EEIP") due June 1, 2017, which can work in concert with the education program to provide further ammunition to Trico Members to reduce bills.[118] In short, this is the beginning of a process of having demand rates, if deemed appropriate, to recover fixed demand related costs from all customers.[119]

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[113] See A.A.C. R14-2-210(D)(1); Tr. (Cathers) at 759.

[114] Tr. (Paladino) at 498-99; 524. It should be noted that a $0.00 bill line item is not unprecedented - for example Trico's WPCA has been and will be set at zero. Tr. (Cathers) at 767.

[115] Ex. Trico-6 (Hedrick Testimony) at 7.

[116] Ex. Trico-7 (Hedrick Testimony) at 6.

[117] Ex. Trico-5 (Nitido Reply) at 20.

[118] Ex. Trico-3 (Settlement) at Section 11.1; Tr. (Paladino) at 510.

[119] Ex. Trico-6 (Hedrick Testimony) at 8.

e. The $0.00 per kW demand charge is a reasonable component of Trico's Member education program, and Trico has the technological capability to implement and monitor demand.

EFCA has directly opposed the implementation of the $0.00 demand charge set forth in the Settlement, alleging that such a charge would be confusing to Trico Members, and that Trico lacks the technical capability to effectively measure and monitor demand usage. Again, the trade association of the largest rooftop solar vendor in Trico's service territory appears to be protecting its own pecuniary interest in maintaining the status quo by challenging the determination of Trico's Member-elected Board of Directors. Trico's Directors, who themselves are Trico Members, have determined it to be in the best interest of the Cooperative and its Members to examine whether demand rates are an equitable and effective means of addressing the fixed cost shift associated with DG and other energy reduction technologies under the current rate structure. EFCA argues that determination should be set aside, and that because of the possibility of confusion, even a $0.00 demand charge should not be included on Member bills until an extensive education program has been implemented. Yet that is exactly the purpose for the $0.00 demand charge – to assist in the education of Trico Members without economic ramification – prior to adopting actual demand charges, if and when the Board of Directors determines it to be in the best interest of its Membership to do so.

The Settlement provides the best platform to minimize confusion by getting demand information on Member bills, through establishing a tariff that describes the demand-rate component, and complementing those efforts with an extensive Member education program.[120] As Mr. Nitido indicated during the evidentiary hearing, the demand-rate component "helps Members to understand demand rates, what they do, and how their behavior impacts them."[121] Further, and as Ms. Ford for Staff testified "a lot of education will allow customers – low-income, low usage, high income, high usage – will give them better ability, better information about the electricity

[120] Tr. (Nitido) at 196-97.
[121] Tr. (Nitido) at 195.

they use, about the cost components, and how they can manage those."[122] The Settlement provisions regarding implementing a demand-rate component of $0.00 per kW are a just and reasonable means to gradually introduce the concept to Trico's Members. Given the level of DG penetration in Trico's service territory, The Cooperative does not have the luxury of waiting before starting the process of education.

EFCA's assertion that Trico lacks the technical capability to implement even a $0.00 demand charge is equally flawed. As Mr. Nitido noted in pre-filed testimony, 97% of Trico's 46,086 active meters are currently capable of measuring and recording demand. Some are now currently recording demand. Mr. Nitido testified that, with some additional configuration of Trico's billing software, Trico can capture demand data to provide to its Members and to utilize for analysis.[123] It will take about six months of the effective date of a Commission decision in this case to replace the approximately 1,350 meters not capable of recording demand, and to make the necessary modifications to its billing software.[124] Any argument that Trico lacks the technical capability to implement the demand-rate component is therefore not accurate. Trico will have the metering to capture the required NCP demand data for all its Members.[125]

EFCA also has asserted that, while the majority of Trico's meters provide one daily 15 minute peak demand reading, Trico Members cannot successfully assess their demand usage without accessing and analyzing the approximately 3,000 15-minute demand intervals each month. That assertion lacks foundation and ignores the reality of how consumers monitor their electric usage. As Mr. Hedrick testified, customers can and do understand that the first step they can take to reducing monthly peak demand is to stagger the use of major energy-consuming devices – including air conditioning, dishwashers and clothes dryers.[126] Staff also believes that interval data

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[122] Tr. (Ford) at 678.

[123] Ex. Trico-5 (Nitido Reply) at 22.

[124] See Ex. Trico-3 (Settlement) at Section 6.6 (allowing for Trico to update its billing system and metering).

[125] Ex. Trico-7 (Hedrick Reply) at 4.

[126] Ex. Trico-7 (Hedrick Reply) at 5; Tr. (Hedrick) at 397.

is not required for customers to understand how to manage demand and smooth out usage.[127] Moreover, although customers can use timers to stagger usage or employ new technologies such as battery storage equipment to assist with demand and energy management,[128] expensive technologies are not needed for customers (including low-income customers) to effectively reduce peak demand.[129] Trico recognizes that its education program must include information on tools for *all* Members to utilize demand charges to reduce monthly bills. Trico is able to provide interval data on about 30 % of its meters (through SmartHub®).[130]

Furthermore, contrary to EFCA's assertion, an optional demand rate or pilot program would not provide Trico a complete a set of data on all Trico Members and would not provide a realistic and total view of the entire Trico service territory.[131] Trico would not get all of the data needed to evaluate whether a demand rate is appropriate and what that rate should look like.[132]

Finally, while it is not proposing to implement actual demand charges in this rate case, Trico notes that other cooperatives have implemented residential demand charges successfully in their service territories after an extensive Member education program.[133]

D. The new DG Export Energy Tariff establishes an appropriate value for excess energy exported from DG systems in Trico's service territory.

Net metering shifts the costs of building, maintaining and financing the electric grid from DG to non-DG Members – even though DG Members continue to depend on the grid for safe and

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[127] Tr. (Ford) at 682-84.

[128] Ex. Trico-5 (Nitido Reply) at 23.

[129] Tr. (Nitido) at 235.

[130] Ex. Trico-5 (Nitido Reply) at 23; Tr. (Nitido) at 265 (a third of Trico's meters can provide full interval data); see also Tr. (Cathers) at 461 (explaining that those customers with meters containing interval data can download that data through the SmartHub® application). The Settlement also requires Trico to propose at least two demand reduction programs in its next Energy Efficiency Implementation Plan (EEIP) and to highlight technologies such as programmable thermostats and load controllers to minimize demand charges and monthly bills. Ex. Trico-3 (Settlement) at Sections 10.4 and 11.1.

[131] Tr. (Nitido) at 223.

[132] Tr. (Hedrick) at 401-02.

[133] Tr. (Nitido) at 285-86.

reliable electric service. That issue is exacerbated in relatively higher cost service areas such as Trico's, because DG customers avoid a greater amount of fixed costs through net metering, compared to lower cost service territories such as TEP's, for example. In an effort to partially mitigate the cost shift issue, the Settlement has adopted a new DG Export Energy Tariff that compensates the excess energy exported from DG systems at the rate of $0.0770 per kWh rather than at the retail energy rate.

1. There is a strong factual basis for valuing exported excess energy from DG at $0.0770 per kWh under the new DG Export Energy Tariff.

The $0.0770 per kWh value is the equivalent of Trico's power supply portion of the energy charge for the first tier of the standard residential (RS1) rate schedule.[134] In other words, 7.7 cents "is the fixed and variable components of the generation and the fixed transmission cost associated with the first 800-block tier of the energy rate in [Trico's] proposal" as Mr. Nitido testified during the evidentiary hearing.[135] Ms. Cathers provided further evidence that the export excess energy credit in the new DG Energy Export Tariff gives full credit for **existing** generation and transmission costs, as derived from the COSS.[136]

Staff and Trico believe this to be an appropriate value to credit exported excess energy for Settlement purposes – since the residential customer uses an average of 837 kWh per month, while the median customer has 750-kWh monthly consumption. Thus, the power supply component for the first tier is representative of the residential customer's average use.[137] By setting the DG Energy Export credit to the power supply cost of the COS standard residential rate, Trico will still be able to recover its distribution wires-related costs associated with the DG excess energy.[138] And because it will include the purchase of exported DG power, the WPCA will allow the Cooperative to recover the fixed costs related to generation and transmission, albeit while shifting

[134] Ex. Trico-4 (Nitido Testimony) at 9; Ex. S-19 (Ford Settlement Testimony) at 17.
[135] Tr. (Nitido) at 180.
[136] Tr. (Cathers) at 792-93.
[137] See Ex. Trico-6 (Hedrick Testimony) at 12.
[138] See Ex. Trico-4 (Nitido Direct) at 9; Tr. (Cathers) at 459-60.

those costs to non-DG Members in a manner similar to the lost fixed cost recovery adjustors that the Arizona investor owned utilities have implemented.[139]

The $0.0770 per kWh DG Export Energy credit also results in a blended average energy credit (i.e. the credits for on-site energy usage and the exported energy combined) from base rates to a DG Member of $0.091417 per kWh, which is higher than the current TEP full net-metering retail credit of $0.091311 per kWh. It is also higher than the $0.09 per-kWh solar lease rate EFCA witness Monsen assumed in his analysis.[140] Staff concluded this was a reasonable value for exported excess energy for a Trico DG Member.[141]

Staff supports the new DG Export Energy Tariff because it recognizes that DG Members have the same responsibility as non-DG Members to pay for the infrastructure that allows them 24-hour a day access to reliable power; and the excess energy credit value for exported energy allows DG customers to be credited for excess energy at a rate equal to Trico's wholesale power supply cost.[142]

The Settlement and the new DG Export Energy Tariff constitute an important first step toward mitigating the lost-fixed cost and cost-shift problems, but does not eliminate them.[143] DG Members retain a full retail rate offset for that energy used on-site that is generated from the DG system.[144] Therefore, the 7.7-cent credit represents, in the opinion of Trico's Board of Directors, a proper balancing of the respective Member interests regarding the value for exported excess energy from DG systems.

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[139] See Ex. Trico-4 (Nitido Direct) at 9; Tr. (Cathers) at 459-60.

[140] Ex. Trico-5 (Nitido Reply) at 12.

[141] Ex. S-19 (Ford Settlement Testimony) at 15.

[142] Ex. S-12 (Van Epps Settlement Testimony) at 4.

[143] See Tr. (Hedrick) at 422 (explaining that because the export value is higher than the value of the energy, there is still an additional lost-fixed cost created).

[144] Ex. Trico-5 (Nitido Reply) at 23; Tr. (Van Epps) at 546.

2. Arguments against adopting the export excess energy credit ignore the substantial evidence supporting the credit and the current circumstances facing Trico.

EFCA opposes the new DG Export Energy Tariff, asserting that there is insufficient evidence in this proceeding regarding the value of their product to Trico, and that the compensation for exported DG should only be adjusted (if at all) by an additional proceeding following the conclusion of the "Value of Solar" proceeding.[145] However, for a number of reasons, it is imperative that the DG Energy Export Tariff should be approved now. As explained above and supported by the record, the new tariff and the 7.7-cent value as the export excess energy credit clearly provide sufficient incentive to continue the development of DG in Trico's service territory, where DG levels already exceed the Arizona targets for DG in 2025.[146]

As demonstrated during the evidentiary hearing, the value of DG solar is limited for Trico, compared to a vertically-integrated utility. As Mr. Nitido explained, DG solar is not a capacity product and cannot replace the baseload needs that Trico has, and that it obtains, through its relationships with TEP and AEPCO.[147]

Contrary to EFCA's assertion, the $0.0770 per kWh Export Energy credit does not simply represent the cost of "brown wholesale energy." Rather, it includes all of the variable and fixed costs of the generation and all of the fixed costs of the transmission system as set forth in Trico's COS for this case.[148] It is significantly above the avoided cost for Trico, since the only costs Trico actually avoids with DG are the variable generation related costs or the fuel component.[149] In fact, the DG Energy Export credit includes a full credit for the losses associated with the transmission, even though there is no benefit in loss reductions with DG solar for the Trico distribution system

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[145] The formal caption of the "Value of Solar" proceeding in Docket No. E-00000J-14-0023 is *In the matter of the Commission's Investigation of Value and Cost of Distribution Generation.*

[146] See Tr. (Nitido) at 104 (6% of energy in Trico is generated by DG).

[147] Tr. (Nitido) at 177, 184-85.

[148] Ex. Trico-5 (Nitido Reply) at 12; Ex. Trico-7 (Hedrick Reply) at 8; Tr. (Cathers) at 794.

[149] Tr. (Hedrick) at 376.

since any DG excess energy exported must use the distribution system for delivery and go through at least two voltage transformations where most of the losses occur.[150]

Finally, and most important, as the evidence presented clearly demonstrates, Trico is facing a rapidly escalating problem with lost-fixed grid costs associated with DG, resulting in a shift of those costs to non-DG Members in an amount which already exceeds $1.5 million per year for the next 20 years. That shift is continuing to grow. Trico currently has no lost-fixed cost recovery mechanism ("LFCR") to reduce the lost-fixed costs that it incurs. Over four percent of Trico's total members have DG, but at the current rate of DG applications, that number will grow to seven-to-eight percent in the next 12-to-18 months.[151] That is a significantly different circumstance than the recent UNS Electric rate decision (Decision No. 75697), cited by EFCA to justify its position to maintain net metering as is. In the UNS Electric decision, the Commission determined that "because solar DG represents such a small percentage of [UNS Electric's] current customers" deferring a decision on DG would not present an unreasonable burden to UNSE.[152] As the record in the UNS Electric case indicates, DG penetration in the UNS Electric service territory is currently approximately two percent. By contrast, DG penetration in Trico's service territory is over four percent and growing rapidly. Simply put, the problem Trico faces is more substantial than what currently faces UNS Electric. Staff recognizes these differences in its support of the Settlement.[153] Nevertheless, the Settlement provides that this matter will be held open for 18 months from the effective date of a Commission decision approving the Settlement, to allow for possible modification of the export rate, after a methodology or methodologies has been determined in the "Value of Solar" docket.[154]

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[150] Tr. (Hedrick) at 390; Tr. (Cathers) at 790-91.

[151] See Ex. Trico-5 (Nitido Reply) at 7, 15; Tr. (Ford) at 668.

[152] Decision No. 75897 at 117-19.

[153] Tr. (Van Epps) at 552; Tr. (Ford) at 662-63.

[154] See Ex. Trico-3 (Settlement) at Section 8.6; Ex. Trico-4 (Nitido Testimony) at 10.

The bottom line is Trico faces an immediate and significant issue concerning lost-fixed cost recovery and the cost shift. That issue must be addressed immediately to avoid adverse long-term and irreversible consequences for Trico and its Members.

E. The grandfathering cutoff date of May 31, 2016 is fair and appropriate.

The Settlement also establishes a grandfathering cutoff date of May 31, 2016, which is 15 months later than Trico's original application proposed. Since March 1, 2015, Trico Members seeking to interconnect DG systems have been notified of and acknowledged Trico's intent to seek a modification of the net metering tariff.[155] It is critical that a grandfathering date be applied to applications submitted prior to a decision in this case. Solar vendors in Trico's service territory have demonstrated the capability of flooding the Cooperative with applications for DG interconnections in a very short time. On February 26, 2015 Trico provided notice of its intent to seek a modification of its net metering tariff with respect to applications received after February 28, 2015. In the next two days, Trico received 99 applications, mostly from SolarCity, EFCA's only member in Trico's service territory.[156] Establishing a May 31, 2016 grandfathering cutoff date will avoid a similar or greater flood of applications.

1. The May 31, 2016 grandfathering cutoff date in Trico's case is necessary to address the substantial problems Trico is facing.

Establishing a grandfathering cutoff date before the Commission decision will avoid another flood of applications for DG interconnection, which would exacerbate the lost-fixed cost recovery and cost-shift problems Trico is facing. As Mr. Nitido stated in pre-filed testimony, immediate relief is needed to "stop the bleeding now."[157] At the same time, establishing the May 31, 2016 grandfathering cutoff date allows approximately 1,621 DG Members to remain on the

[155] See Ex. Trico-1 (Application) – Nitido Testimony at 20; Ex. Trico-5 (Nitido Reply) at 17

[156] Ex. Trico-5 (Nitido Reply) at 14-15.

[157] Ex. Trico-5 (Nitido Reply) at 17.

current net metering tariff after the effective date of the decision in this docket, and acknowledges the value and commitment of early adopters of renewable energy.[158]

2. The grandfathering cutoff date in the Settlement is 15 months after the original proposed cutoff date that prospective DG Members received notice of.

Trico agreed to a grandfathering date fifteen months after its original proposal – which will allow an additional 359 DG Members to remain on Trico's current net metering tariff (increasing the total from 1,262 to 1,621 grandfathered DG Members).[159] All DG Members who submitted interconnection applications after February 28, 2015, received notice through, among other things, an acknowledgment of receipt of notice that they *could* be subject to a new tariff applicable to exported excess energy.[160] Under the Settlement, however, DG Members who submitted applications before June 1, 2016 will remain on the current net metering tariff. The expectation that all such DG Members that remain on the current net metering tariff remain grandfathered, as set forth in the Settlement, will provide sufficient time for customers to recover their investment in DG systems.[161] And as Staff witness Yue Liu's analysis shows, DG remains an attractive investment under the terms and conditions of the Settlement for new DG Members.[162]

3. Trico's situation warrants a grandfathering date preceding the effective date of the Commission decision despite the Commission's decision in the recent UNS Electric rate case.

While the recent UNS Electric rate decision – Decision No. 75697 – states that the grandfathering date should not generally precede the date of the relevant Commission Decision, the Commission also recognized that each rate case is unique and may warrant different results.[163] This is such a case. As noted above, Trico is facing a significantly higher level of DG interconnection applications than UNS Electric, and the problem is escalating. Trico has no

[158] See Ex. S-19 (Ford Settlement Testimony) at 15, 17.
[159] Ex. Trico-5 (Nitido Reply) at 15.
[160] Ex. Trico-5 (Nitido Reply) at 15.
[161] Ex. Trico-6 (Hedrick Testimony) at 11.
[162] See Ex. S-13 (Liu Settlement Testimony) at 9-10.
[163] Decision No. 75697 at 119.

investors to bear the impact of the lost fixed cost recovery associated with DG - those costs must be shifted to non-DG members. Given that Trico already exceeds the State's 2025 DG targets for investor-owned utilities, Trico's Board of Member Directors believes it is equitable and appropriate to implement a grandfathering cutoff date of May 1, 2016, within the framework of the Settlement that balances the interests of DG Members and non-DG Members.

4. Grandfathering DG Members on the current rate design is not appropriate.

Finally, EFCA has asserted that DG Members should also be grandfathered onto Trico's current rate design. Essentially, EFCA is arguing for a separate rate design for DG Members in this case.[164] There is no justification on the record or in evidence to grandfather DG Members onto a previous rate design. As stated above, Trico is not seeking to implement a separate rate design for DG Members.

The fact remains that grandfathering, which is akin to allowing customers to remain on a frozen tariff no longer available for new customers, is the exception and not the rule. Even so, the Settlement allows for over 1,600 DG Members to remain on the current net metering tariff. Freezing that net metering tariff is a benefit to these Members because, under normal circumstances, *all* of these Members would be on the new DG Export Energy Tariff upon the effective date of the Commission's decision. But no Member should expect rates and rate design to remain unchanged in perpetuity. There is simply no justification to allow DG Members (and not non-DG Members) to be grandfathered on an old rate design, to the detriment of Trico and its non-DG Members.

5. Establishing a grandfathering cutoff date prior to a Commission decision is *not* retroactive ratemaking.

To be clear, the new DG Export Energy Tariff under the Settlement would only apply to new DG Members, and *only after* the effective date of the Commission decision approving the Settlement.[165] New DG Members will remain on the current net metering tariff *until* the effective

[164] Tr. (Monsen) at 873.

[165] Ex. Trico-4 (Nitido Testimony) at 9.

date of the Commission's decision in this case. *After* the effective date, the new DG Members (those who submitted DG interconnection applications after May 31, 2016) will go onto the new DG Export Energy Tariff.[166] Trico will not reach back and try to recover the difference between the retail rate credit under the current net metering tariff and the $0.0770 per kWh excess energy credit between May 31, 2016 and the effective date. Thus, there is no retroactive ratemaking.

F. The Settlement is a fair, equitable and gradual approach to mitigating the DG cost shift.

Under its terms related to rate design and net metering, the Settlement begins to address the lost-fixed cost recovery and cost-shift burdens Trico is presently experiencing. The Settlement will modestly reduce the under-recovery from (and subsidy to) grandfathered DG Members (those that will remain on the current net metering tariff) by $8.19 to $81.72. For new DG Members (those that will be on the new DG Export Energy Tariff upon the effective date of a Commission decision approving the Settlement), the Settlement will reduce the under-recovery (or subsidy) by $28.63 to $60.28.[167] That analysis is based on treating DG Members within the same customer class as non-DG Members;[168] and the Settlement does not create a separate customer class for DG Members. In short, the Settlement will result in meaningful, yet gradual, reductions in lost-fixed cost recovery and related shifted costs caused by new and existing DG Members.[169]

Trico witness Mr. David Hedrick provided pre-filed testimony that discussed how the two-part rate design, which functioned well in the past, no longer is effective because residential and small-commercial DG Members are not homogeneous customer classes anymore. The existing two-part rate structure was not designed to appropriately recover the costs of providing service to Members with DG installed at their premises. Fixed grid costs are not reduced as a result of DG

[166] Ex. Trico-4 (Nitido Testimony) at 10; Ex. Trico-5 (Nitido Reply) at 16-17.

[167] See Ex. Trico-4 (Nitido Testimony) at 13; Ex. Trico-6 (Hedrick Testimony) at Exhibit DWH-S1; Tr. (Hedrick) at 355-56.

[168] Tr. (Hedrick) at 387.

[169] Ex. Trico-6 (Hedrick) at 13-14.

installations, but Trico cannot recover those costs under the historical rate design, particularly after the advent of net metering.[170] Trico continues to provide electricity to DG Members as well as ancillary services to DG systems (including reliability, reserves, frequency and voltage control and redundancy) not reflected in the historical rate design.[171]

While the Settlement ameliorates the lost-fixed cost recovery and cost-shift problems by reducing subsidies, it does not eliminate the subsidies that Trico provides through net metering.[172] The Settlement continues to provide adequate incentive for sustainable growth in distributed renewable resources within Trico's service territory.[173] The new Export Energy credit of $0.0770 per kWh is well above Trico's avoided costs, and reflects Trico's power supply costs (generation and transmission) in the first tier of residential energy charges. It is unlikely that a modest reduction in subsidies as set forth in the Settlement will cause a significant reduction in rooftop solar DG deployment in Trico's service territory below Trico's historically manageable levels of 10-15 per month. The higher cost to serve Trico Members continues to make solar DG a comparatively more attractive investment in Trico's service territory. The average overall credit to DG Members resulting from the Settlement will be at least $0.091417 per kWh, which is higher than TEP's current full net-metering credit of $0.091311 per kWh.

Trico has experienced explosive growth recently in the number of application to interconnect DG – the majority of which are leased systems.[174] Even after providing Members with notice of the possibility of a change to net metering, Trico continued to receive applications for DG interconnections. Indeed, Trico has received about 98 applications from June 1, 2016 through August 25, 2016.[175] The evidence demonstrates that interest in DG remains, even with changes to net metering as set forth in the Settlement, but that the new DG Energy Export Tariff will allow continued DG deployment to be sustainable. And because Trico agreed to move the

[170] Ex. Trico-1 (Application) – Direct Testimony of David Hedrick at 10-11.
[171] Ex. Trico-1 (Application) – Direct Testimony of David Hedrick at 12.
[172] Tr. (Hedrick) at 369.
[173] Ex. Trico-4 (Nitido Testimony) at 17.
[174] Ex. Trico-4 (Nitido Testimony) at 14-15, 17.
[175] Tr. (Cathers) at 802.

grandfathering cutoff date to May 1, 2016 (fifteen months later than the original noticed date of February 28, 2015), an additional 359 DG Members (and a total of 1,621 DG Members) will be grandfathered and remain on the current net-metering tariff under the Settlement.

G. Other Issues.

1. Freezing the existing residential TOU rate.

Trico's long-term wholesale power contracts are based on a single monthly rate that does not differ by time of day or day of the week.[176] This means that when Members on the TOU rate receive an overall reduction in energy costs by reducing peak usage, Trico does not receive the corresponding reduction in its costs.[177] Trico's current wholesale pricing structure from AEPCO, includes a fixed charge that does not vary based on the volume or timing of energy consumed.[178] Because Trico acquires wholesale transmission and generation from third-party providers at fixed prices where Trico does not receive a price signal based on the time of day, there is no corresponding benefit to Trico when Members on the TOU rate reduce usage at peak times.[179] The current TOU rate does not send an accurate price signal.[180] Put simply, under the existing RS2TOU rate schedule Trico Members are paying incentives for behavior that does not provide a corresponding benefit to Trico or its Membership.

Further, the TOU tariff could also work against the incentive to reduce demand and smooth out customer load. The demand-rate component proposed in the Settlement will provide a signal to the residential and small-commercial Members of their use of Trico distribution facilities, corresponding to their highest monthly demand (the size to the distribution facilities needed to serve their peak demand). That highest demand can occur at any time, including off-peak times. So it could result in causing a peak to occur at a time when these Members are trying to shift

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[176] Tr. (Cathers) at 754.
[177] Ex. Trico-5 (Nitido Reply) at 24.
[178] Ex. Trico-6 (Hedrick Testimony) at 10.
[179] Ex. Trico-5 (Nitido Reply) at 4.
[180] Tr. (Nitido) at 299; Tr. (Hedrick) at 426-27.

energy to off-peak hours, under a TOU rate schedule. Essentially, a TOU rate schedule could result in customers to stack usage to off-peak times resulting in a peak that merely shifts, but does not smooth out, or lower their monthly demand.[181] The TOU rate could work against encouraging NCP demand conservation.

Finally, the monthly distribution peaks for Trico often occur during the weekends, making it difficult to develop an effective system TOU rate for residential Members who would typically want to have weekends as off-peak hours.[182] Nevertheless, under the Settlement, those residential Members on the RS2TOU rate schedule will be able to remain on it through the conclusion of Trico's next rate case.

2. Return trip fee.

The addition of a return trip fee is cost-based and appropriate. Notably, Trico charges return trip fees for all its other services – including interruptions caused by the Member when reconnection of service after a meter has been disconnected for nonpayment. Trico does not recover all of its costs with the fee, it is simply utilized to deter repeated unnecessary trips.[183]

H. Conclusion.

Trico requests that the Administrative Law Judge recommend approval of the Settlement as being in the public interest.

The Settlement adopts a modest rate increase with limited impacts on most Trico Members, but begins to mitigate the well-documented lost-fixed cost recovery and related cost-shift problems that are particularly acute for Trico. The Settlement further creates a platform for comprehensive education about demand rates, which will provide Trico with a future means to address the rapidly evolving electric service landscape. The Settlement also sets forth a new export value for excess energy DG systems much more in line with the value of DG, but significantly higher than Trico's avoided cost, while still grandfathering over 1,600 Trico

[181] Ex. Trico-5 (Nitido Reply) at 24-25.

[182] Ex. Trico-5 (Nitido Reply) at 6-7; Tr. (Cathers) at 755.

[183] Ex. Trico-5 (Nitido Reply) at 25.

Members on the current net metering tariff. Finally, the Settlement also provides a mechanism to incorporate the results of the "Value of Solar" docket as appropriate.

The Settlement reflects the judgment of the Member-elected Trico Board in balancing the interests of Trico's Members as a whole, is in the public interest, and should be approved.

RESPECTFULLY SUBMITTED this 5th day of October, 2016.

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