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APPENDIX A

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Application of Pacific Gas and Electric
Company To Revise Its Electrical Marginal
Costs, Revenue Allocation, and Rate
Design.

Application No. 16-06-013
(Filed June 30, 2016)

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**JOINT EXHIBIT OF PACIFIC GAS AND ELECTRIC COMPANY, THE OFFICE OF
RATEPAYER ADVOCATES AND THE UTILITY REFORM NETWORK ON
CERTAIN MARGINAL COST ISSUES IN A.16-06-013 (PG&E's 2017 GRC PHASE II)**

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Dated: February 9, 2018

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

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JOINT EXHIBIT OF PACIFIC GAS AND ELECTRIC COMPANY, THE OFFICE OF RATEPAYER ADVOCATES AND THE UTILITY REFORM NETWORK ON CERTAIN MARGINAL COST ISSUES IN A.16-06-013 (PG&E's 2017 GRC PHASE II)

I. INTRODUCTION

As set forth in the Twelfth Settlement Status Report filed on December 15, 2017 in A.16-06-016 in Pacific Gas and Electric Company's (PG&E) 2017 General Rate Case (GRC) Phase II, one of the categories of issues that had not been settled by the time of that status report was certain types of marginal costs and factors that would be necessary as inputs for potential future use in calculating a residential fixed charge once this issue is litigated in the 2018 Rate Design Window (RDW) proceeding (A.17-12-011). Specifically, in the Marginal Cost and Revenue Allocation Settlement (MC/RA Settlement) filed in A.16-06-013 on October 26, 2017, the MC/RA Settling Parties acknowledged that they had reached an impasse and had not been able to agree either on the actual marginal cost values or on which categories of marginal costs (and related factors) need to be litigated in this proceeding for purposes of inputs for calculating a potential future residential fixed charge (and/or minimum bill), to be decided in the investor-owned utilities' 2018 RDW proceedings.

In the course of preparing for rebuttal testimony on unresolved issues, which was served on January 25, 2018, PG&E prepared a comparison of its positions with those of the Office of Ratepayer Advocates (ORA), and The Utility Reform Network (TURN) (collectively the Joint Parties). That comparison revealed numerous marginal cost issues on which these parties were already in accord, as well as others on which they were not so far apart that an agreement might be possible to minimize, if not obviate, the need for rebuttal testimony and the streamlining of the evidentiary hearings in this proceeding, which are set to begin the week of February 12, 2018 and, if necessary, continue February 26 – March 2, 2018. PG&E, ORA, and TURN held telephone conference calls on January 10, 16 and 24, 2018, during which an agreement in principle was reached that resolves all but one marginal cost issue relating to a potential future residential fixed charge (and/or minimum bill amount). Given the limited time before rebuttal testimony and hearings, the Joint Parties' stipulation on such marginal cost issues is being memorialized and served on all parties in the form of this Joint Exhibit per Rule 12.7 of the Commission's Rules of Practice and Procedure. The Joint Parties respectfully request that this Joint Exhibit be made part of the evidentiary record for consideration in the CPUC's decision in this proceeding, and that the CPUC find these compromise recommendations to be reasonable in light of the record as a whole, consistent with law, and in the public interest.

II. JOINT STIPULATION

A. Parties Stipulating

The parties sponsoring this Joint Exhibit are PG&E, ORA, and TURN (Joint Parties). The Joint Parties sponsoring this stipulation have taken different positions in this proceeding regarding the marginal costs needed to calculate a potential future fixed charge (and/or minimum bill amount). In order to avoid the need to litigate these issues during evidentiary hearings in this proceeding, while at the same time preserving the parties' different positions on whether the Commission ultimately should adopt a residential fixed charge (and/or minimum bill amount) -- which is at issue in PG&E's 2018 RDW proceeding, A.17-12-011 -- the Joint Parties now agree to various compromises to resolve their differences and will support the following positions

during hearings and in briefs and comments supporting a CPUC decision adopting the following terms:

B. Terms of Stipulation

The Joint Parties agree to the various input values described below for purposes of calculating the residential fixed charge (and/or minimum bill amount) as described below. The Joint Parties further agree that the stipulated compromise marginal cost outcomes set forth in this Joint Exhibit shall not be precedential for any other marginal cost proposals or proceedings other than this 2017 PG&E GRC Phase II (A.16-06-013) and PG&E's 2018 RDW proceeding (A.17-12-011).

1. Marginal Distribution Capacity Cost

The Joint Parties agree to use the Marginal Distribution Capacity Cost (MDCC) values as calculated by PG&E and included in a pending settlement agreement in this proceeding entitled "Settlement Agreement in Phase II of Pacific Gas and Electric Company's 2017 General Rate Case on Marginal Cost And Revenue Allocation Issues" (MC/RA Settlement). This MC/RA Settlement is provided as Appendix A to PG&E's Motion for Adoption of Settlement Agreement on Marginal Cost and Revenue Allocation in Phase II of Pacific Gas and Electric Company's 2017 General Rate Case, filed on October 26, 2017. The MDCC values to which the Joint Parties stipulate are provided in Attachment 1 to the MC/RA settlement agreement, in Table 4 and Table 5 at pages 2 through 7.

Prior to reaching an agreement, the Joint Parties differed on two MDCC issues:

- Whether MDCC values should be calculated using the Discounted Total Investment Method (DTIM) as proposed by PG&E or the National Economic Research Associates (NERA) regression method as proposed by ORA and supported by TURN; and
- Whether the forecast planning capacity inputs to the MDCC calculations should be based on a 1-in-10 weather scenario as proposed by PG&E, or an "average

weather” scenario as proposed by ORA and supported by TURN.

By agreeing to the MDCC values provided in Attachment 1 to the pending MC/RA Settlement, the Joint Parties are effectively resolving their differences on those two issues by compromise, without agreeing to any of the Joint Parties’ individual MDCC calculation methodologies or positions on the forecast planning capacity inputs to the MDCC calculations.

The Joint Parties further agree that these MDCC values will not include any adjustment to the secondary voltage MDCC component otherwise to move approximately 34 percent of the meter costs from Marginal Customer Access Costs (MCAC) to MDCC, as was proposed by ORA.

While any party may cite the MDCC values identified in this stipulation for the purpose of proposing changes to the residential minimum bill amount or assessing the reasonableness of the proposed E-DER-A pilot rate, the Joint Parties do not agree as to whether the MDCC should be reasonably included for either purpose.

2. Marginal Customer Access Cost Input Issues

The Joint Parties note that, pursuant to D.17-09-035, the methodology for determining the marginal customer access cost (MCAC) for use in developing any potential residential fixed charge (and/or minimum bill) will be determined in the investor-owned utilities’ respective 2018 RDW proceedings.^{1/} While the Joint Parties were not able to reach agreement for all inputs needed to calculate PG&E’s residential fixed charge under the four marginal cost methodologies in PG&E’s 2018 RDW,^{2/} the Joint Parties did reach agreement resolving all but one of the marginal customer access cost input issues, leaving only one area of difference in positions that

^{1/} Support for this stipulation by TURN and ORA does not constitute any endorsement of either a fixed customer charge or an increase in the current minimum bill.

^{2/} In D.17-09-035, Ordering Paragraph 1 at p. 60, the Commission directed PG&E, SCE, and SDG&E to show a range of customer charge results applying four MCAC methodologies: rental method, new customer only method, and the two adjusted rental methods where two adjusted rental methods were presented by Energy Division in a workshop held in the fixed charge track of this GRC Phase II proceeding.

still requires litigation. The values set forth below for input to the MCAC calculation shall be used for the purposes of calculating a residential fixed charge and/or minimum bill amount or for determining rates in the proposed E-DER-A pilot rate. The Joint Parties agree that each party retains the discretion to use these input values as they see fit in the 2018 RDW proceeding. The Joint Parties agree to the following MCAC inputs:

- the underlying new connection cost dataset;
- the residential new connection rate necessary for the new customer only (NCO) method's MCAC calculation;
- the financial factors and loading factors necessary for the NCO method and rental method MCAC calculations, subject to change when the ramifications of the recently-passed federal "Tax Cuts and Jobs Act of 2017" are more fully understood; and
- the revenue cycle services (RCS) cost inputs with the exception of the RCS meter service cost input.

The Joint Parties could not reach agreement on whether meter operation and maintenance (O&M) costs should be captured via the RCS meter cost for purposes of MCAC calculations using both the NCO method and rental method, as proposed by PG&E, versus whether they should instead be captured via a loaded lifetime meter O&M approach for NCO MCAC calculations, as proposed by ORA and TURN (see Section 6, below, Remaining Item for Litigation). Further details about the Joint Parties' stipulations for the MCAC inputs needed in PG&E's 2018 RDW are provided below.

a. Underlying New Connection Cost Dataset

The Joint Parties agree to use the underlying new connection cost dataset proposed by PG&E in this proceeding, as modified by PG&E and presented to ORA through confidential data request responses –ORA_014-Q01 Supplement 01 (dated October 19, 2017) and ORA_042-Q01

(dated October 19, 2017) – submitted by PG&E to ORA pursuant to Pub. Util. Code Section 583. Table 1, below, presents the agreed mean (average) costs of the final line transformer (FLT), service, and meter equipment from PG&E’s modified data set that has recently been agreed to in consultation with ORA, which, pursuant to D.17-09-011, will be used to determine the minimum observed FLT and service equipment costs in PG&E’s 2018 RDW proceeding (A.17-12-011). The Joint Parties agree and confirm that the full costs of the residential meter should be used as the marginal cost input for PG&E’s 2018 RDW, rather than removing approximately 34 percent of the meter costs as had originally been proposed in this proceeding by ORA and supported by TURN, as this issue was already decided by the Commission in D.17-09-035, at page 22.

b. Financial Factors

The Joint Parties agree to use the PVRR Factors, Real Economic Carrying Charge (RECC) factors, and ARM 1 and ARM 2 factors (collectively, “the financial factors”) calculated under PG&E’s financial factors model (provided as electronic workpapers to this Joint Exhibit). The underlying key data inputs to that financial factors model include data from PG&E’s depreciation study presented in PG&E’s 2017 GRC Phase I application, A.15-09-001, and the escalation indices also presented in PG&E’s 2017 GRC Phase I application, supplemented with an additional forecast for the out-years using the IHS Global Insights Power Planner. Because the Joint Parties recognize that these financial factors were calculated using both the federal tax rate and PG&E’s adopted cost of capital that were in place at the time PG&E served its GRC Phase II application on June 30, 2016, the Joint Parties further agree that these financial factors should be revised using PG&E’s financial factors model to address and reflect very recent changes to the federal corporate tax rate and other tax-related parameters from the recently-passed new federal “Tax Cuts and Jobs Act of 2017”), no later than 60-days after the end of the 2017 PG&E Phase II evidentiary hearings on these issues, so that they will be available for consideration in PG&E’s 2018 RDW proceeding. At the time of such update, PG&E shall also update its marginal cost models to reflect the most current, modified cost of capital. Until such

an update occurs, the financial factors to which the Joint Parties agree to use are summarized below in Table 2.

c. Loading Factors

The Joint Parties agree to use loading factors calculated using PG&E's loading factors model (provided as electronic workpapers to this Joint Exhibit). These loading factors are necessary for calculating MCAC under each of the four alternative methodologies that the Commission directed be presented in the investor-owned utilities (IOUs') proposals in their 2018 RDW proceedings, for the Commission's consideration in deciding whether or what potential future residential fixed charge (and/or minimum bill) should be adopted in the IOUs' 2018 RDW proceedings. A summary of the loading factor values as currently calculated by PG&E's model and as are necessary for calculating MCAC under the four prescribed methodologies is presented in Table 3, below. The Joint Parties further agree that at such time PG&E revises the calculation of the financial factors to incorporate the 2017 "Tax Cuts and Jobs Act" federal corporate income tax rate and PG&E's latest adopted costs of capital, PG&E will revise its calculations of its loading factors to incorporate impacts of the revised financial factors. In particular, the loading factors for general plant, cash working capital, and materials and supplies use RECC factors calculated in PG&E's financial factors model, and, therefore, these particular loading factors will need to be revised consistent with revised financial factors.

d. New Customer Only Marginal Customer Access Cost New Connection Rate

One of the four alternative methodologies the Commission will evaluate in the IOUs' 2018 RDWs, as it considers any potential residential fixed charge (and/or minimum bill) in the IOUs' 2018 RDW proceedings, is the New Customer Only (NCO) methodology for developing MCAC. The Joint Parties agree that, if the CPUC decides to adopt the NCO methodology, it should use, as a cost data input, the residential new connection rate calculated using PG&E's MCAC model (which, as noted above, is provided as electronic workpapers to this Joint

Exhibit). That residential new connection rate is 0.65 percent. Because PG&E can calculate residential MCAC independent of the non-residential MCAC, the Joint Parties do not need to agree to any particular non-residential new connection rates here; therefore, the Joint Parties make no such agreement as to non-residential new connection rates to calculate non-residential MCAC values under the NCO method.

e. Residential Marginal Revenue Cycle Service Costs

The Joint Parties agree to certain, but not all, residential marginal RCS costs necessary for calculating a residential fixed charge proposal under the four prescribed methodologies in PG&E's 2018 RDW. The RCS Credit and Collections costs are excluded from a residential fixed charge by D.17-09-035, such that the Joint Parties need not make any agreement to this RCS cost category for purposes of an input to a residential fixed charge in PG&E's 2018 RDW. The Joint Parties do agree to the RCS Account Setup Costs as calculated by PG&E, and the Joint Parties do agree to the RCS Meter Reading Costs as calculated by PG&E, but with exclusion of approximately \$2.5 million of meter reading costs for electric SmartMeter opt-out-related meter reading costs as was proposed by TURN. The \$2.5 million is the cost of the SmartMeter opt-out-related meter reading costs allocated to electric customers, less the electric SmartMeter opt-out fees. The total impact of this adjustment proposed by TURN to which the Joint Parties agree is approximately \$0.59 per customer per year for the final RCS meter reading cost input for MCAC calculations.

A summary of the RCS costs to which the Joint Parties agree is presented in Table 4, below.

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TABLE 1
MCAC MEAN CONNECTION EQUIPMENT COSTS FROM
PG&E'S REVISED DATASET

Line No.	Residential Mean Connection Equipment Costs ^(a)	Final Line		
		Transformers	Services	Meters
1	PG&E Cost Responsibility as Capped by Allowances	\$ 318	\$ 730	\$ 201
2	Before Capping By Allowances	\$ 318	\$ 1,093	\$ 201
<p>^(a) These values are the mean equipment values; the fixed charge calculations will use the mean meter cost and some measure of minimum observed costs for final line transformers and services using the same new connection cost dataset from which these mean cost values are taken. The methodology for determining the minimum observed final line transformer and service costs is an issue in PG&E's 2018 RDW. A.17-12-011.</p>				

TABLE 2
MCAC FINANCIAL FACTORS INPUTS

Line No.	Financial Factors	Final Line		
		Transformers	Services	Meters
1	Present Value of Revenue Requirements Factors (PVRR)	1.4466	1.4425	1.4366
2	Real Economic Carrying Charge (RECC) Factors	7.62%	6.44%	9.84%
3	ARM 1 Factors ^(a)	50.88%	35.25%	76.12%
4	ARM 2 Factors ^(b)	46.29%	25.48%	75.18%
<p>^(a) ARM 1 Factor is ratio of Ratebase to Replacement Cost New</p> <p>^(b) ARM 2 Factor is ratio of Replacement Cost New Less Depreciation to Replacement Cost New</p>				

TABLE 3
MCAC LOADING FACTORS INPUTS

Line No.	Marginal Cost Loading Factors	
1	Final Line Transformer O&M Expense	0.09%
2	Services O&M Expense	0.37%
3	Meter O&M Expense	1.65%
4	A&G Expense	26.17%
5	General Plant	3.92%
6	Materials & Supplies	0.75%
7	Cash Working Capital	1.38%
8	Franchise Fees & Uncollectibles (FF&U) Factor	1.0113
9	Calculated NCO Loaded Lifetime O&M Factor - FLT	4.56%
10	Calculated NCO Loaded Lifetime O&M Factor - Services	20.66%
11	Calculated NCO Loaded Lifetime O&M Factor - Meters ^(a)	32.28%
<p>^(a) Use of a loaded lifetime O&M factor for meters is a contested issue.</p>		

TABLE 4
MCAC MARGINAL RCS COST INPUTS

Line No.	Residential Marginal RCS Costs (\$/Customer-Year)	Account Setup	Billing and Payments	Meter Reading	Meter Services ^(a)
1	2014 Base Year Values	\$ 7.81	\$ 13.61	\$ 3.77	\$ 10.62
2	As Used in MCAC Final Calculations in 2017 Test Year Dollars	\$ 8.59	\$ 14.98	\$ 4.15	\$ 11.69
^(a) Use of Marginal RCS for Meter Services is a contested issue.					

Should the issue of a potential future residential fixed charge (and/or minimum bill) not be finally decided until after the filing of PG&E's 2020 GRC Phase II, the Joint Parties also agree that the values in these tables shall be subject to being updated to reflect then-current marginal cost data.

3. Distribution Peak Cost Allocation Factors

The Joint Parties agree that the Distribution Peak Cost Allocation Factor (PCAF) Analysis as proposed by PG&E (see Exhibit PG&E 9, Chapter 10, dated December 2, 2016, as updated for use in revenue allocation in Exhibit PG&E 14, dated November 2, 2017) and used to develop marginal cost revenue for the residential class are reasonable. While any party may cite the PCAF values and the marginal cost revenue derived therefrom for the purpose of proposing changes to the residential minimum bill amount or assessing the reasonableness of the proposed E-DER-A pilot rate, the Joint Parties do not agree as to whether the PCAF values and the marginal cost revenue derived therefrom should be reasonably included for either purpose. The Joint Parties are effectively resolving their differences on this issue by compromise, without agreeing to any of the Joint Parties' individual methodologies or positions on the Peak Cost Allocation Factor Analysis.

4. Final Line Transformer Loads

The Joint Parties agree that the Final Line Transformer (FLT) Loads as proposed by PG&E (see Exhibit PG&E 9, Chapter 11, dated December 2, 2016, as updated for use in revenue

allocation in Exhibit PG&E 14, dated November 2, 2017) and used to develop marginal cost revenue for the residential class are reasonable. While any party may cite the FLT values and the marginal cost revenue derived therefrom for the purpose of proposing changes to the residential minimum bill amount or assessing the reasonableness of the proposed E-DER-A pilot rate, the Joint Parties do not agree as to whether the FLT values and the marginal cost revenue derived therefrom should be reasonably included for either purpose. The Joint Parties are effectively resolving their differences on this issue by compromise, without agreeing to any of the Joint Parties' individual methodologies or positions on the Final Line Transformer Loads Distribution Peak Cost Allocation Factor Analysis.

5. Equal Percent of Marginal Cost

The Joint Parties agree that the marginal residential customer access cost of each parties choosing and the agreed upon loads and distribution marginal capacity costs set forth above can be used to determine the residential marginal cost revenue. The EPMC Scaling Factor for the residential class may then be determined for use in rate design by dividing the allocation of distribution revenue to the residential class (before it is reduced for the CARE discount) by the residential marginal cost revenue. The revenue that will be used for the residential class for purposes of determining the numerator of the EPMC Scaling Factor will be determined in the 2018 RDW proceeding. The Joint Parties recognize that the EPMC Scaling Factor calculated only on the basis of the residential class as described herein provides only an approximation of a traditionally calculated EPMC Scaling Factor^{3/} using data for all classes. With recognition that the calculation described herein produces only an approximation, the Joint Parties stipulate that the EPMC Scaling Factor calculated only on the basis of the residential class provides a reasonable proxy for use in place of a traditionally calculated EPMC Scaling Factor. While any

^{3/} Traditionally, a distribution EPMC Scaling Factor is calculated using (1) for the numerator the total distribution revenue requirement (that is, without a reduction for the CARE discount), and (2) for the denominator the sum of the class-level distribution marginal costs revenue (MCR) values.

party may cite the EPMC Scaling Factor described in this stipulation for the purpose of proposing changes to the residential minimum bill amount or assessing the reasonableness of the proposed E-DER-A pilot rate, the Joint Parties do not agree as to whether the EPMC Scaling Factor should be reasonably included for either purpose.

6. Remaining Item for Litigation

The Joint Parties were unable to reach agreement on the issue of MCAC inputs regarding (1) using a loaded lifetime meter O&M cost in MCAC calculated under the NCO method as proposed by ORA and TURN (and including meter O&M via loading factors in MCAC calculated under the rental method, as would be consistent with ORA's and TURN's NCO MCAC proposals) while excluding the RCS meter services costs from MCAC, or (2) including the meter O&M in MCAC by way of the RCS Metering Services cost category as proposed by PG&E while not including a loaded lifetime meter O&M cost in NCO method MCAC or meter O&M loadings in rental method MCAC.

7. Miscellaneous Terms

Nothing in the stipulations reflected in this Joint Exhibit prejudices or requires the undersigned parties to change their positions regarding whether the Commission should or should not ultimately adopt a future residential fixed charge (and/or minimum bill) in PG&E's 2018 RDW proceeding. The agreements set forth in this Joint Exhibit represent a negotiated compromise among the Joint Parties respective litigation positions, solely as to the matters described, and the Joint Parties have assented to the terms of this Joint Exhibit only to arrive at the agreement embodied herein. The Joint Parties agree that the stipulated compromises contained in this Joint Exhibit, taken as a whole, are reasonable in light of the record in this proceeding, consistent with the law, and in the public interest. Nothing contained in this Joint Exhibit should be considered an admission of, acceptance of, agreement to, or endorsement of any disputed fact, principle, or position previously presented in this proceeding on these matters by any of the Joint Parties.

The Joint Parties agree that their respective witnesses adopt the stipulations presented in this Joint Exhibit as modifying any conflicting portions of their prior testimony, and that each Joint Party shall request and actively support Commission approval of the matters stipulated to herein in PG&E's 2017 GRC Phase II, as well as to support these same stipulated outcomes in PG&E's 2018 RDW and any other relevant CPUC and other regulatory and judicial proceedings relating to the purposes identified in D.17-09-035. Active support shall include written and/or oral testimony (if testimony is required), briefing (if briefing is required), comments and reply comments on the proposed decision, advocacy to Commissioners and their advisors as needed, and other appropriate means as needed to obtain the requested approval.

PG&E has been authorized to serve this Joint Exhibit, on behalf of the Joint Parties, to notice it to the GRC Phase II service list prior to hearings. PG&E is also authorized to offer the stipulations contained herein into evidence through its witness in PG&E's 2017 GRC Phase II proceeding, and witnesses from the other stipulating parties (ORA and TURN) may also address it during hearings. PG&E is further authorized to present this Joint Stipulation in its pending 2018 RDW proceeding.

The Joint Parties hereby recommend adoption of the stipulated outcomes on all of the matters agreed to by the Joint Parties as reflected herein.

Appendix B

Proceeding: A.16-06-013
Exhibit No. ORA-3
Date: February 14, 2018
Witness: _____



**OFFICE OF RATEPAYER ADVOCATES
CALIFORNIA PUBLIC UTILITIES COMMISSION**

Additional Information on Contested Marginal Cost Issue

Additional Information on Contested Marginal Cost Issue

The following additional information and stipulations relate to the remaining contested Distribution Marginal Cost issues in A.16-06-013 relating to a potential future fixed charge (and/or minimum bill amount, namely: whether meter Operation and Maintenance (O&M) costs should be calculated on a loaded lifetime basis (as proposed in ORA's testimony), or on an annual marginal cost basis through Revenue Cycle Services (RCS) meter services costs (as proposed by PG&E).

1. ORA Stipulation

ORA concedes to PG&E's contention that the RCS estimate of the cost of meter services of \$15.84¹ per year is more accurate than the \$0.40 cent per year figure that is added to the capital costs used in the NCO calculations. As PG&E's rebuttal explains, it accounts for a number of class-specific differences in the meter services,² whereas, ORA's \$0.40 figure is based on a percentage loader that is uniformly applied to all classes.

ORA, however, believes that a lifetime O&M adder could be developed—using the RCS estimate of \$15.84 per year as a base—that could be applied to the capital costs in the NCO calculation. Doing so would be more consistent with how O&M costs are treated for transformers and services, as described in ORA's opening testimony.³ The resulting adder

¹ On an annual basis, in dollars per customer per year, this includes meter services of \$11.69 (PG&E Rebuttal, Table 1-4), meter reading of \$4.15 (PG&E Rebuttal, Table 1-4), which is inclusive of a TURN adjustment to meter reading expense of \$0.59 (PG&E Rebuttal, p. 1-19, l. 10), to which PG&E has agreed in its rebuttal.

² In its rebuttal testimony, at p. 1-21 (l. 27) to p. 1-22 (l. 11), PG&E states: "RCS meter services activities for meter O&M include activities for field turn-ons/turn-offs such as for non-payment; field meter tests in response to CPUC complaints, customer complaints, or unusual usage; field verification of meter badge number, model type and other information by PG&E technicians; field repairs or replacements of meter-related hardware; field removal of meters from defunct service points; and shop sorting and handling of electric meters removed from the field. Additionally, PG&E has differing meter testing requirements for various classes. For example, the meters of the largest customers who generally have more complex meters are required to be tested twice a year; the meters of the next largest customers are required to be tested once a year; and the meters of residential customers are tested using a sampling program. Differing meter testing requirements drive differing meter testing costs among classes. In addition, customers that do not have assigned customer account managers call PG&E call centers to inquire about metering services (which is meter O&M expense), while customers with assigned customer account managers are not causing call center costs related to metering services. Meter services activities do differ by customer class and can occur at any time during the year."

³ See ORA's Opening Testimony, p. 5-19 (l.8) to p. 5.20 (l.14).

would be \$1.49 per year rather than \$0.40 per year. The development of this modified RCS figure is discussed below.

But first, it would be helpful to describe how the \$0.40 figure was derived. Annual O&M figures for 2012, 2013, and 2014 from FERC Form 1 are divided by the corresponding distribution plant figures for the same years, which results in a value of 1.65%.⁴ This percentage is further loaded for A&G, general plant, M&S and other financial factors, leading to a scaled up number of 2.24%.⁵ This scaled up percentage is then multiplied by an NPV factor of 14.44,⁶ which represents the net present value of O&M over the 20-year life of a meter, yielding a lifetime O&M loader of 32.28%.⁷ This lifetime O&M loader is then multiplied by the meter connection costs of \$190⁸ and by the residential new connection rate of 0.65%⁹ per year, resulting in \$0.40 per year.¹⁰

A similar process could be followed starting with the \$15.84 per year RCS meter services figure. Since it already is a dollar figure rather than a percentage, it does not have to be multiplied by the meter capital costs to produce a dollar figure. But it does have to be converted to a lifetime amount and adjusted by the new connection rate. The lifetime meter services cost would be \$15.84 per year times the NPV factor of 14.44, yielding \$228.73 over a 20-year period. This would then be multiplied by the new connection rate of 0.65%, producing \$1.49.¹¹ With this adjustment, ORA would reduce RCS expense by \$15.84 per year, or \$1.32 per month.

⁴ This result is in cell K12 of “CALC_MCAC Factors” in PG&E’s main MCAC workpaper. The actual calculation is done in the loaders model spreadsheet for Chapter 13 of PG&E’s opening testimony.

⁵ Cell K25 of “CALC_MCAC Factors” in PG&E’s main MCAC workpaper.

⁶ Cell K28 of “CALC_MCAC Factors” in PG&E’s main MCAC workpaper.

⁷ Cell K30 of “CALC_MCAC Factors” in PG&E’s main MCAC workpaper.

⁸ Cell R32 of “CALC_Loaded_Lifetime_O&M Costs” in PG&E’s main MCAC workpaper. In PG&E rebuttal, it updated this figure to \$201, with which ORA agrees. However, in this description of how the \$0.40 figure was derived, ORA is using the figures on which its Opening Testimony relied.

⁹ Cell E15 of “CALC_New Conn_MCAC” in PG&E’s main MCAC workpaper. PG&E’s rebuttal does not update this figure.

¹⁰ Cell M15 of “CALC_New Conn_MCAC” in PG&E’s main MCAC workpaper. PG&E’s rebuttal does not update this figure.

¹¹ ORA assumes that this does not need to be scaled up to include A&G, general plant, M&S and other financial factors since it does not appear that PG&E scales up its RCS figures to include these factors.

It should be clarified that all the figures used in the RCS calculations and in the original calculation of the lifetime O&M loader are short-run figures that consist of labor costs and exclude capital costs. There are no fixed O&M costs used in these calculations. The FERC Form 1 O&M amounts used to calculate the loader used in the NCO method are for labor and other short-run costs. They do not include any meter replacement costs. Likewise, the RCS figures do not include fixed costs such as meter replacements.

2. PG&E's Limited Supplemental Stipulation

PG&E stipulates that if the CPUC were to adopt the NCO methodology for a potential future fixed charge (and/or minimum bill), it does not object to ORA's above-proposed approach, for producing a residential class-specific adjusted lifetime meter O&M adder under the NCO methodology for MCAC. Thus, if ORA and TURN propose such a residential class-specific lifetime O&M adder for the NCO methodology for MCAC, PG&E will not contest the proposed approach to calculating such a residential class-specific lifetime O&M adder.

However, PG&E does not support the use of the NCO methodology, into which ORA's residential class-specific adjusted lifetime meter O&M adder would be used as an input to MCAC for purposes of capturing meter O&M. The NCO methodology only looks at such costs for new customers, whereas the meter O&M costs relate to all customers every year.

3. Recommendation

Therefore, ORA and PG&E recommend that the CPUC, in this GRC Phase 2, adopt two alternative meter O&M-related marginal cost numbers that can be used in the 2018 RDW as part of its decision on how the NCO method, if preferred, would be implemented:

The first alternative figure would be for ORA's residential class-specific adjusted lifetime meter O&M adder for use in capturing meter O&M under the NCO methodology for MCAC. ORA's figure appears in this document.

The second alternative figure would be PG&E's annual marginal residential RCS meter services cost¹² for use in capturing meter O&M under either the NCO or the Rental Method methodology for MCAC. PG&E's figures appear in the previous Joint Stipulation, Exhibit PG&E-24, in Table 4, as well as in PG&E's rebuttal testimony, Exhibit PG&E-16 Chapter 1.

¹² PG&E's proposal to capture meter O&M under the NCO methodology for MCAC using its marginal residential RCS meter service cost parallels PG&E's proposal to use this same marginal residential RCS meter services cost to capture meter O&M under PG&E's preferred Rental Methodology for MCAC.