

STATE OF IOWA
BEFORE THE IOWA UTILITIES BOARD

FILED WITH
Executive Secretary
April 07, 2015
IOWA UTILITIES BOARD

IN RE:)
)
DISTRIBUTED GENERATION) **DOCKET NO. NOI-2014-0001**
)
) **REPLY COMMENTS**
) **ON PROPOSED INTERCONNECTION**
) **RULE CHANGES**
)

The Environmental Law & Policy Center (ELPC), Iowa Environmental Council (IEC) and Interstate Renewable Energy Council (IREC) submit the following reply comments in response to the March 12, 2015 Board Order Soliciting Reply Comments on Proposed Rule Changes Regarding Certain Interconnection Issues.

On February 16, 2015, ELPC, IEC and IREC submitted joint proposed rule changes in this docket. IPL had submitted its own proposed rule changes, and MidAmerican concurred with IPL's changes and offered some additional language changes for consideration. Following the Board's March 12, 2015 Order, ELPC and IEC consulted with MidAmerican and IPL about potential areas of agreement on the proposed interconnection rule language. ELPC, IEC, MidAmerican, and IPL submitted separate joint comments highlighting areas of agreement, and we incorporate those comments here by reference.

Interconnection Fees. The Board Order specifically requests the parties comment on the proposals/data to adjust interconnection fees. We believe that the interconnection fees should enable a utility to recover its reasonable costs. Utilities should be expected to manage the process

in an efficient manner to keep costs down including developing administrative efficiencies and avoiding unnecessary testing costs. We have separately made proposals to implement best practices that will help lower utility costs and increase the efficiency of the interconnection process, including agreed to changes such as pre-application and supplemental review, and administrative efficiencies such as online filing and a more robust interconnection website.

The 2014 Freeing the Grid report notes that “[a]pplication fees should bear some reasonable relation to the complexity of the request, with an appreciation that generators 1 MW or less are unlikely to present any undue challenges to efficiently processing and reviewing the requests in an expedited manner.”¹ IREC’s Model Rules recommend a Level 1 interconnection fee of \$100.² Other states such as California have made a policy decision to have \$0 interconnection fees for net-metered facilities. The 2014 Freeing the Grid report notes “[s]everal states currently waive fees for smaller generators, or create an application fee structure that accounts for the lower cost of reviewing smaller generators, as compared to the maximum size allowed under an expedited process.”³ The Freeing the Grid scoring for interconnection costs rewards states that waive fees for net metered customers and limit fees for small inverter based systems.

In addition, as the utilities become more experienced with distributed generation, they should become more efficient at managing the interconnection process and costs should come down. States with significantly higher penetration levels report significantly lower interconnection costs. For example, Southern California Edison tracked costs between November 2013 and August 2014 for net-metered interconnections. Attached as Exhibit A. They reported

¹ IREC and VoteSolar, Freeing the Grid, p.24 (2014) *available at* <http://www.slideshare.net/VoteSolar/ftg-2014-finalreport>.

² IREC Model Interconnection Procedures, p.9 (2013).

³ IREC and VoteSolar, Freeing the Grid, p.24 (2014).

application processing and administration costs of \$880,533 for almost 39,000 new applications, over 5,000 resubmitted applications with corrections and/or additional documents, and almost 35,000 final inspections. They reported \$522,312 in in-office review distribution engineering costs for 31,866 projects, and just under \$44,000 for inspection and commissioning of 760 projects. This comes out to under \$17 per project for the engineering review and about \$58 for inspection and commissioning per project. While there is no indication that Iowa's solar market will be comparable to the number of installations that Southern California Edison has, we think the Southern California Edison experience demonstrates that Iowa utilities can do significantly more to reduce the costs of the interconnection process. The Board should have the Iowa utilities demonstrate what steps they have taken to actively reduce costs before making changes to interconnection fees based on the reported costs.

IPL has provided information from a Six-Sigma review of their process. MidAmerican did not provide any interconnection cost information. At this time, we think that the appropriate course of action would be to have the utilities implement additional best practices such as pre-application, supplemental review, and the recommended website and online filing changes; gain experience with additional interconnections while continuing to track the costs and then re-evaluate the issue with additional data based on more substantive experience.

Confidentiality. MidAmerican and IPL both propose including FERC SGIP language on confidentiality. ELPC, IEC and IREC think that it would be appropriate to add the confidentiality language as a reasonable protection for interconnection customers. We think that the language fits better as an addition to 45.4 as proposed by MidAmerican rather than including all of the language in the definitions as proposed by IPL.

Site Control. ELPC, IEC and IREC agree with the FERC SGIP site control language that IPL proposed to add to 45.5(6) and think that incorporation of the additional site control language is preferable to our proposed addition. We do not agree with IPL's proposed deletion of the introductory clause "When an applicant is not currently a customer of the utility at the proposed site." While we do not think removing the introductory clause will impact the effect of the site control language, it has the potential to create confusion about the scope of the language. Site control language addresses third-party ownership situations such as leases or third-party power purchase agreements. The introductory language makes it clear that this requirement addresses third party ownership. Removing the language will not change the fact that the interconnection rules address third party ownership situations, but it will make Iowa's interconnection rules less transparent and could create unnecessary confusion.

Additional Testing and Inspection. MidAmerican and IPL proposed slightly different language on additional testing and inspection. IPL has proposed a new section on Supplemental Facility Testing. We generally think that before additional testing requirements are imposed, it is a good practice for the utility to demonstrate the need for the new requirements (i.e. have there been enough failures to justify the need for the tests?). IPL made this recommendation without supporting the need for additional testing. IPL's recommendation was based on IREC's Model Rules. However, IPL made a significant change to the model rules and made the supplemental facility testing a requirement rather than discretionary on the part of the utility. (IREC Rules: "Once an interconnection has been approved under these procedures, a Utility shall not require an Interconnection Customer to test its Generating Facility except that the Utility may require any manufacturer recommended testing and . . ." (emphasis added) compared to IPL Proposed Rules: "Once an interconnection has been approved under this rule, the utility shall not require

an Applicant to test its facility except for the following...”). By eliminating the discretionary ‘may,’ IPL’s proposed language could result in requirements for annual testing for Levels 2 and 3 and periodic testing for Level 4. We think that if the Board finds additional testing is warranted, it is appropriate to adopt IREC’s Model Rule without this modification and to maintain the discretion for the utility to determine if supplemental testing is necessary. If, based on experience or other factors, the utility determines that supplemental testing is not necessary, it should not require a rule change for the utility to eliminate that unnecessary test. Providing the utility discretion gives the rules flexibility to adequately address a changing market and a utility’s increasing familiarity with distributed generation.

Similarly, MidAmerican proposed clarifying changes to 45.6(2) to better reflect IEEE Standard 1547 related to periodic and limited witness tests that a utility may conduct. MidAmerican also proposed additional language in 45.3(4) to be more specific regarding periodic testing. MidAmerican’s proposed language is similar to IREC’s Model Rules but slightly more stringent and broader in application. MidAmerican’s language also takes discretionary testing and makes it mandatory. As noted above, we generally think that before additional testing requirements are imposed, it is a good practice for the utility to demonstrate the need for the new requirements (i.e. have there been enough failures to justify the need for the tests?). MidAmerican has not made that demonstration here. The language that MidAmerican has proposed is similar to expanded periodic testing requirements in other states. If the Board thinks that additional clarification and specification of Iowa’s testing and inspection is necessary, we recommend making the testing discretionary on the part of the utility for the same reasons we mentioned relative to IPL’s proposed language, but otherwise have no objection to MidAmerican’s proposed language.

476.6A Notification Requirements. MidAmerican proposed revisions to Iowa Code § 476.6A notification requirements. ELPC, IEC, and IREC believe that the changes that MidAmerican proposes are reasonable. We do not think that it is necessary or appropriate to add a penalty for noncompliance for the notification requirements as IPL suggests.

Dated this 7th day of April, 2015.

Respectfully submitted,

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September 19, 2014

**ADVICE 3103-E
(U 338-E)**

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA
ENERGY DIVISION

SUBJECT: Information-Only Advice Letter
Southern California Edison Company's Report on Net Energy
Metering Interconnection Costs

PURPOSE

Pursuant to California Public Utilities Commission (Commission or CPUC) Resolution E-4610 and Decision (D.)14-05-033, Southern California Edison Company (SCE) respectfully submits this information-only Advice Letter (AL) to report on the costs of interconnection for all Net Energy Metering (NEM) customers.

BACKGROUND AND DISCUSSION

On September 20, 2013, the Commission issued Resolution E-4610, in which the Commission concluded that allowing eligible NEM customer-generators to aggregate their load from multiple meters would not result in an increase in the expected revenue obligations of customers who are not eligible customer-generators. The Commission based its conclusion on the 2010 NEM Cost Effectiveness Evaluation completed by Energy and Environmental Economic, Inc. (E3).¹ To balance the interests of both participating and non-participating customers, the Commission stated that more data inputs were needed to inform any future policy changes related to the interconnection cost exemptions granted to NEM customers. As such, the Commission ordered the

¹ The Commission hired E3 to perform an analysis of the costs and benefits of NEM in compliance with Public Utilities Code Section 2827, which requires the CPUC to "...submit a report to the Governor and the Legislature on the costs and benefits of net energy metering..." The analysis follows the cost-benefit methodology for the evaluation of distributed generation adopted by the Commission in D.09-08-026. E3's analysis was based on the available photovoltaic installations participating in the NEM tariffs through 2008.

investor-owned utilities (IOUs)² to immediately begin tracking interconnection cost data based on the actual interconnection costs for all NEM customers and report the information by September 19, 2014.³

On May 23, 2014, the Commission issued D.14-05-033 and allowed qualifying energy storage devices paired with NEM-eligible generation facilities (NEM-paired storage systems) to be exempt from interconnection application fees, supplemental review fees, distribution upgrade costs, and standby charges. Due to the limited data available on the costs and impacts of interconnecting energy storage or NEM-paired storage systems to the grid, the Commission ordered the IOUs to:

1. Record data on the interconnection application fee waivers, supplemental review waivers, distribution cost upgrade waivers, and standby charge waivers resulting from interconnecting NEM-paired storage systems beginning with the currently pending storage interconnection requests;⁴
2. Augment the reporting requirement directed by Resolution E-4610 with the fee waivers mentioned above;⁵
3. File a Tier 2 Advice Letter detailing the cost categories being tracked pursuant to Resolution E-4610;⁶ and
4. Submit the report to the Commission and serve the report on the service list of R.12-11-005 or its successor proceeding by September 19, 2014, and update the report by June 30, 2015.⁷

Thus, to comply with Item 3 above, SCE, on behalf of itself, PG&E and SDG&E, filed Advice 3062-E et al. and:

1. Provided a list of the cost categories currently being tracked related to the interconnection of eligible NEM generating facilities under each IOU's NEM tariffs;⁸
2. Provided a list of the waived fees associated with interconnecting NEM-paired storage systems; and

² The IOUs include SCE, Pacific Gas and Electric Company (PG&E) and San Diego Gas & Electric Company (SDG&E).

³ Because Resolution E-4610 required the IOUs to "immediately" begin tracking interconnection costs for all NEM customers, the IOUs identified November 2013 as the start date in their respective ALs to allow time to set up internal tracking processes. These ALs were subsequently approved by the Commission.

⁴ D.14-05-033, OP 14 at p. 41.

⁵ *Id.* OP 16 at p. 42.

⁶ *Id.* OP 15 at p. 41.

⁷ *Id.* OP 16 at p. 42.

⁸ SCE's currently available NEM tariffs include: Schedules NEM, MASH-VNM, NEM-V, and FC-NEM. PG&E's current available NEM tariffs include: Schedules NEM (including NEMA and NEMMT), NEMFC, NEMV and NEMVMASH. SDG&E's currently available NEM tariffs include: Schedules NEM, NEM-FC, NEM-V, and VNM-A.

3. Requested to include in the report the interconnections costs to be refunded to customers with NEM-paired storage systems.

On August 1, 2014, the Energy Division issued a disposition letter approving Advice 3062-E et al. with an effective date of July 23, 2014.

Therefore, SCE's NEM interconnection cost tracking report is included as Attachment A and attached hereto.

Table 4 in Attachment A, however, is not complete. Concurrent with this advice filing, SCE is sending a letter to the Commission's Executive Director, Paul Clanon, requesting an extension of four weeks, until Friday, October 17, 2014, to provide data for Table 4. SCE collected and inputted some, but not all, of the data that is necessary to populate Table 4. To provide the best data possible to the Commission, SCE must gather additional data and further evaluate already collected data.

TIER DESIGNATION

Pursuant to General Order (GO) 96-B, Energy Industry Rule 5.1, this AL is submitted with a Tier 1 designation.

NOTICE

In accordance with GO 96-B Section 6.2, this information-only filing is not subject to protest.

In accordance with Section 4 of GO 96-B, Ordering Paragraph 4 of Resolution E-4610 and Ordering Paragraph 16 of D.14-05-033, SCE is serving copies of this advice filing to the interested parties shown on the attached service lists for GO 96-B, R.12-11-005 and R.14-07-002. Address change requests to the GO 96-B service list should be directed by electronic mail to AdviceTariffManager@sce.com or at (626) 302-2930. For changes to all other service lists, please contact the Commission's Process Office at (415) 703-2021 or by electronic mail at Process_Office@cpuc.ca.gov.

Further, in accordance with Public Utilities Code Section 491, notice to the public is hereby given by filing and keeping the advice filing at SCE's corporate headquarters. To view other SCE ALs filed with the Commission, log on to SCE's web site at <https://www.sce.com/wps/portal/home/regulatory/advice-letters>.

ADVICE 3103-E
(U 338-E)

- 4 -

For questions, please contact Shiela Linao at (626) 302-4506 or by electronic mail at shiela.linao@sce.com.

Southern California Edison Company

/s/ Megan Scott-Kakures

Megan Scott-Kakures

MSK:sl:sq
Enclosures

ATTACHMENT A

REPORT OF SOUTHERN CALIFORNIA EDISON COMPANY REGARDING NET ENERGY METERING INTERCONNECTION COSTS PURSUANT TO RESOLUTION E-4610 AND DECISION 14-05-033

I. NEM Interconnection Costs

Pursuant to the California Public Utilities Commission’s (Commission) order in Resolution E-4610, Tables 1 through 4 below show the costs related to the interconnection of eligible Net Energy Metering (NEM) generating facilities under SCE’s NEM tariffs, namely, Schedules NEM, MASH-VNM, NEM-V, and FC NEM. The amounts shown represent the actual NEM interconnection costs tracked and recorded from November 2013 through August 31, 2014.

Table 1 NEM Application Processing and Administration Costs	
Category	Total Costs
Application Processing and Administration	\$880,533
Notes: <ul style="list-style-type: none"> • Includes application processing (e.g., validating and approving single line diagram, interconnection agreement, electrical inspection clearance from governmental agency having jurisdiction, and other required documents), and back office tasks (e.g., initial billing setup), inquiry calls and emails, and permit-to-operate (PTO) mailer. • The total cost is based on processing and administering: <ul style="list-style-type: none"> 38,901 new applications (i.e. applications from customers or contractors) 6,669 new construction batch projects(i.e. applications from new tract home developers) 5,169 resubmitted applications with corrections and/or additional documents 34,746 final inspections 29,440 PTO • Management and administration time is included in the cost. 	

Table 2 Distribution Engineering Costs		
Category	Number of Projects	Total Costs
In-Office Review	31,866	\$522,312
Notes: <ul style="list-style-type: none"> • Includes technical analysis, studies, and screens consistent with Rule 21 (e.g., voltage rise, 15 percent penetration, transformer loading). • Management and administration time are included in the cost. 		

Table 3 Metering Installation/Inspection and Commissioning Costs		
Category	Number of Projects	Total Costs
Metering	964	\$92,874
Remote Meter Programming	29,668	\$51,775
Inspection and Commissioning	760	\$43,596
Note: <ul style="list-style-type: none"> • Includes residential and non-residential meter changes, remote meter programming, material, supplies, procurement costs, labor for installation, testing, engineering, and quality assurance necessary for interconnection. 		

Table 4 Facility Upgrade Costs		
Category	Number of Projects	Total Costs
Interconnection Facility	TBD	TBD
Distribution Upgrade	TBD	TBD
Note: <ul style="list-style-type: none"> • Interconnection facility costs are paid for by NEM customers • Distribution upgrade costs are not paid by NEM customers 		

II. Interconnection Fees Waived

Pursuant to the Commission’s order in Decision (D.)14-05-033, Table 5 below shows the waived fees associated with interconnecting qualifying NEM-paired storage systems. The amounts shown represent the waived fees from May 23, 2014 through August 31, 2014.

Table 5 Waived Interconnection Fees for Qualifying NEM-Paired Storage System		
Category	Number of Projects	Total Fees Waived
Interconnection Application	113	\$90,400
Supplemental Review	0	0
Distribution Upgrade	0	0
Standby	0	0
NGOM	3	\$720
Notes: <ul style="list-style-type: none"> • Supplemental review and distribution upgrades are pending as of August 31, 2014. To date, only 3 NGOMs have been installed. Additional NGOMs may be installed at a later date. • Current SCE policy is to not charge Standby for NEM-paired storage system. 		

III. Interconnection Costs Refunded

In Advice 3062-E et al. filed by SCE, on behalf of itself, PG&E and SDG&E, the IOUs requested to track and report the interconnection costs refunded to customers who paid to interconnect qualifying NEM-paired storage systems prior to the issuance of D.14-05-033. The request was approved and as such, Table 6 below shows the interconnection costs refunded by SCE to its customers with qualifying NEM-paired storage system from May 23, 2014 through August 31, 2014.

Table 6		
Refunded Interconnection Costs For Qualifying NEM-Paired Storage System		
Category	Number of Projects	Total Costs Refunded
Interconnection Application	14	\$11,200
NGOM	4	\$7,539
Note:		
• There are 20 customers with pending refunds of interconnection fees in the amount of \$16,000.		

IV. Update to the Report

Pursuant to the Commission's order in D.14-05-033, SCE will provide an update to the NEM interconnection cost report by June 30, 2015.

CALIFORNIA PUBLIC UTILITIES COMMISSION

NOI-2014-0001
 Reply Comments
 7/7/2015
 Exhibit A
 Page 8 of 9

ADVICE LETTER FILING SUMMARY ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No.: Southern California Edison Company (U 338-E)

Utility type:

ELC GAS
 PLC HEAT WATER

Contact Person: Darrah Morgan

Phone #: (626) 302-2086

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EXPLANATION OF UTILITY TYPE

ELC = Electric GAS = Gas
 PLC = Pipeline HEAT = Heat WATER = Water

(Date Filed/ Received Stamp by CPUC)

Advice Letter (AL) #: 3103-E Tier Designation: 1

Subject of AL: Information-Only Advice Letter – Southern California Edison Company’s Report on Net Energy Metering Interconnection Costs

Keywords (choose from CPUC listing): Compliance, Self Generation

AL filing type: Monthly Quarterly Annual One-Time Other

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #:

Resolution E-4610 and Decision 14-05-033

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: _____

Summarize differences between the AL and the prior withdrawn or rejected AL: _____

Confidential treatment requested? Yes No

If yes, specification of confidential information:

Confidential information will be made available to appropriate parties who execute a nondisclosure agreement.

Name and contact information to request nondisclosure agreement/access to confidential information:

Resolution Required? Yes No

Requested effective date: N/A No. of tariff sheets: -0-

Estimated system annual revenue effect (%): _____

Estimated system average rate effect (%): _____

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: None

Service affected and changes proposed¹: _____

Pending advice letters that revise the same tariff sheets: _____

¹ Discuss in AL if more space is needed.

4/7/2015

Exhibit A

Page 9 of 9

All correspondence regarding this AL shall be sent to:

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