BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding Policies, Procedures and Rules for the California Solar Initiative, the Self-Generation Incentive Program and Other Distributed Generation Issues.	Rulemaking 12-11-005 (Filed November 8, 2012)

RESPONSE OF THE CALIFORNIA FARM BUREAU FEDERATION TO REPLY COMMENT DOCUMENTATION REGARDING ESTABLISHMENT OF A NET ENERGY METERING TRANSITION PERIOD PURSUANT TO ASSEMBLY BILL 327

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I. INTRODUCTION

Pursuant to the direction of Administrative Law Judge MacDonald, the California Farm Bureau Federation ("Farm Bureau")[1] submits this response to the documentation submitted in Reply Comments filed and served on December 23, 2013. This response addresses the analysis, data and supporting documentation submitted by Pacific Gas & Electric Company, San Diego Gas & Electric Company and Southern California Edison. As was clear in Farm Bureau's initial Comments and Reply Comments, our position is that the Commission has the ability to, and should, utilize the standard of the expected life of the system for establishment of a transition period.

What the utilities' documentation and analyses demonstrate is the inequities and difficulties associated with attempting to determine a payback period that is suitable for all types of customers throughout the state. The one unifying element for all generation systems which fall within net metering is the expected life of the system, as Governor Brown recognized in his signing message for AB 327. A single period for the expected life of the system is workable for all types of generation, including wind, biomass, hydroelectric as well as solar. Like many parties, Farm Bureau recommended a 30 year measure for the expected life of the system to commence at the time of interconnection.[2] As noted in its previous filings, Farm Bureau's focus is on how the transition period impacts its member electric ratepayers who utilize NEM as part of their

[1] The California Farm Bureau Federation is California's largest farm organization with approximately 78,000 agricultural and associate members in 53 county Farm Bureaus. California farmers and ranchers sell $44.7 billion in agricultural products annually. Farm Bureau's members expect to pay in excess of $850 million for their electric service.

[2] Many parties, including Farm Bureau, recommending a 30 year system life concurred the period would commence with interconnection, not at 2017 as PG&E suggested in the table on page 8 of their Reply Comments.

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agricultural operations, which may encompass both agricultural and commercial schedules.

Even though Farm Bureau does not agree that a payback period approach is the correct one, we address the inconsistencies and gaps in information contained in the utilities' documentation in order to reinforce the importance of utilizing a system life approach. Consistent with the ALJ's direction, the comments here focus on the documentation and data provided by the utilities, as Farm Bureau has previously supported its case for the system life approach and the Commission's authority to use that approach. That the utilities are strongly advocating for a 2023 end date for NEM 1.0 is abundantly clear, but such advocacy does not comport with the analysis presented. Even with the extensive resources at their fingertips, the utilities' attempts to funnel all customers into a single timeframe to assume a payback period fall short. By its very terms, a single payback period for the diversity of customers taking NEM service in the State would prove unreasonable.

II. 2023 IS TOO EARLY TO ASSURE PAYBACK FOR CUSTOMERS

2023 is too early to achieve a reasonable payback even for the limited commercial customers used in the utilities' analysis. For example, SCE small and large C/I customers and SDG&E AL-TOU customers of all vintages would require several years beyond their 2023 target to assure payback.[3] The discrepancy between the utilities' 2023 target and an actual payback is dismissed by the assumption that commercial customers should have anticipated the risk of tariff changes and taken them

[3] SDG&E Reply Comments Appendix A, last page; SCE Reply Comments, Appendix A, Table 4.

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into account when making a net metering investment.[4] Under such logic, of course, no one would likely make an investment, if the dramatic change that the utilities' propose could occur at any time. While the utilities contend customers with more minimal benefits are impacted less by change and therefore should care less about change; in fact, they care more. Such customers likely depended on small returns, and decisions to invest were dependent on an estimation of the life of the system. Furthermore, the Commission does not generally expect all commercial customers to be sophisticated in the manner the utilities propose when it comes to energy regulation. For example, for dynamic pricing purposes small commercial customers were treated more like residential customers than large C/I customers. Even if customers are sophisticated, such sophistication does not equate to an assumption that programs aggressively promoted by the State would be abruptly changed.

Furthermore, the reason that there is a longer payback period for C/I customers is that they derive less benefit from net metering (due to higher demand and fixed charges). Indeed, the E3 NEM study[5] shows that non-residential NEM customers continue to pay more than their cost-of-service even with net metering. Setting the NEM sunset date for C/I customers based on a generic payback period paradoxically punishes C/I customers for the limited benefits from NEM. In other words, not only do they face a longer payback period for their solar investment due to rate design, they also may miss out on achieving full payback if the NEM 1.0 sunset date is set according to an inappropriate payback schedule. This is patently unfair and could have a chilling

[4] SCE Reply Comments, page 12; SDG&E Reply, page 12.
[5] California Net Energy Metering Ratepayer Impacts Evaluation dated October 28, 2013, Table 5, page 10.

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effect on C/I investments in other areas, such as demand response and energy efficiency.

III. DIFFERENCES AMONG UTILITY ANALYSES ARE SIGNIFICANT AND RAISE CONCERNS ABOUT THE USE OF A PAYBACK PERIOD STANDARD FOR THE TRANSITION

The differences between the utility analyses are significant, with PG&E showing 8-13 years for payback and SCE showing 14-21 years for payback.[6] This may be the result of different rate structures, but it also reflects different assumptions in their analyses. These large differences should give pause in applying an overly restrictive payback end-date, as variations in assumptions can shift the payback period by five or more years for the average customer. Furthermore, there are variations among customers within these samples. Fig. 4.3, PG&E's Appendix A, shows, for example, that while the average payback period for a 2011 install is just over 10 years, about 5% of customers have payback periods of more than 15 years. Relying on the average payback periods would therefore strand investments for some customers, even if the utility analyses are accurate.

Interestingly, the utilities profess to be analyzing the data in a conservative manner in a couple of ways. First, the demand reduction from solar facilities is not included. However, such a reduction is a small one, estimated at about 3% of demand and not determinative.[7] Secondly, it is contended they do not account for NEM 2.0. Since the parameters of NEM 2.0 are unknown, it is inappropriate to include any affects from it. However, in fact, SDG&E utilizes a presumption about possible ranges of return

[6] PG&E Reply Appendix A, Table 1; SCE Reply Appendix A, Table 4.
[7] SCE Reply, Appendix A, footnote 48.

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from NEM 2.0 in their hypothetical payback.[8] These minor effects do not compensate for the loss of nearly 10 years in the payback calculation.

IV. UNDERLYING DATA AND ASSUMPTIONS RAISE CONCERNS IN ALL THREE OF THE UTILITIES' DOCUMENTATION

Although no work papers accompanied the utilities' appendices, so a full assessment is not possible, the following concerns are indicative of elements which demonstrate the inequities of relying on a uniform payback period.

- It's not clear whether agricultural customers were included in any of the utilities' analyses and, if so, whether results for agricultural customers would be consistent with other C/I results. For example, the analyses in PG&E's Appendix A infer a complete review of commercial customers' records.[9] However, Table 9 of the E3 NEM study[10] shows that in PGE&'s service territory as of the end of 2011, there were a total of 4,237 NEM generators, whereas PG&E's Appendix A only analyzes 1,367 systems.

- SCE's analysis excluded sample points for which the solar database was missing cost or capacity data.[11] For Small C/I customers, this included about 40% of NEM installations. It is unknown whether the remaining data are representative of the Small C/I class or whether excluding 40% of data points has skewed the results. Nor is it clear whether that missing information accounts for the approximately 4,000 systems not included in the analysis for

[8] SDG&E Reply, pages 12-13.
[9] Appendix A, page 34.
[10] Page 25.
[11] SCE Reply, Footnote 40, page 3.

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commercial customers, as Table 9 of the E3 Study reflects 5,004 systems as of the end of 2011, while only 1,072 systems were represented in the Appendix A information.

- A key input into the analysis is the solar generation curve used to translate solar PV capacity into kWh by time-of-day. The actual curve will differ by customer location, shading, solar equipment, and PV orientation. The utilities did not extensively discuss the curves that they used; but appear to have used only average generation curves.[12] PG&E does assume average assumptions as applied to all facilities.[13] Such simplifications can make large differences in the payback calculations, since if payback periods for some customers are longer than the averages shown and the variation was not accounted for, the actual distributions of payback periods are broader than those shown in Fig. 4.3 of Appendix A to PG&E's Reply. Relying on average paybacks negatively impact even more customers' investments. It would be unfair to punish a customer for making an investment with a longer payback period; the customer is already benefiting less than other customers on a monthly basis. To strand the customer's investment would be doubly unfair. The average generation curves used may also result in an underestimate of average payback times, if the assumptions used in generating the curves are more optimistic than demonstrated by actual systems.

[12] SCE Reply, Appendix A, page 4; SDG&E, page 11.
[13] PG&E Reply, Appendix A, page 39.

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- The utilities disagree on other basic inputs. For example, SCE assumes a much higher retail rate escalation and half the PV degradation rate than PG&E and SDG&E. Yet, surprisingly they all seem to come to the same point of justifying a payback period that ends for everyone, no matter how situated, in 2023.

V. CONCLUSION

Farm Bureau appreciates the Commission's expeditious analysis of the various considerations that will determine a fair transition period for current NEM customers. Although the utilities have thrown out extensive data points about payback periods into the discussion, the Commission has only been encouraged to "consider" a reasonable payback period in determining a proper course for the transition from NEM 1.0 to NEM 2.0. Such a standard is not mandated. Even with the limited detail available for assessment of the utilities' documentation, a critical review of the analyses, data and documentation reinforces the proposition by many that a singular presumed date of payback for NEM cannot be substantiated. The ability to critically assess the information is further hampered by the utilities' reliance on proprietary information in some cases.[14] As Governor Brown recognized, the expected life of the system is a valid measure and one appropriately used. By the determination to clearly end NEM 1.0, the Legislature provided a balance between NEM customers and non-NEM customers. As a result, the question before the Commission is the fair treatment of

[14] SCE Reply, Appendix A, page 1.

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NEM customers who install systems under the 5% program cap. As others advocate, the life of the system estimated at 30 years provides a recognized measure.

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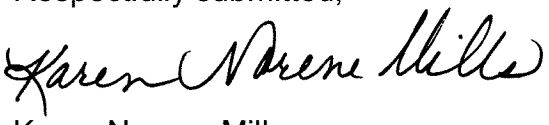
Respectfully submitted,



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