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Memorandum

TO: Public Service Commission

FROM: Division of Public Utilities
Chris Parker, Director
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Artie Powell, Manager
Bob Davis, Utility Analyst
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DATE: February 20, 2015

SUBJECT: **14-035-114** In the Matter of the Investigation of the Costs and Benefits of PacifiCorp's Net Metering Program

REPLY COMMENTS from DPU

Background

Nine parties, including PacifiCorp (“Company”) and the Division of Public Utilities (“Division”), collectively filed over 200 pages of initial comments pertaining to this matter. This is in addition to the numerous comments sent to the Public Service Commission of Utah (“Commission”) by various individuals and private entities over several months. Each of the parties expressed their interests in the matter and how they believe discussions should proceed in the development of the analytical framework requested by the Commission. To respond specifically to each comment would be too voluminous. However, there is enough disparity between the parties on several key issues that warrant comments before proceeding in

this matter. These disparities are highlighted by responses to the four main items requested by the Commission.

Discussion

First, parties disagree about the scope of this docket. The Division believes that Docket 14-035-114 was initiated by the Commission at the conclusion of Docket 13-035-184 to address the Company's request for a \$4.65 monthly fixed charge to recover costs associated with residential net metering. The Division understands that this net metering includes all residential generation sources, but because Photo Voltaic ("PV") makes up the majority of the current and foreseeable future residential net metering, PV is likely the primary focus.

The Commission asked the Company to prepare a study to determine the load characteristics of residential net metered customers versus non-net metered residential customers. The Company presented the study's design plan to interested parties during the November 5, 2014 technical conference. The Company followed the Commission's request to study residential net metering, specifically roof-top solar, and designed the study around that criterion.

Using data and/or studies from non-residential net metered customers and/or the whole universe of renewable net metering across the Company's system will distort and prolong the outcome of this proceeding. Utah residential customers have both unique load and generation profiles from those of other Utah customer classes as well as other residential classes in other areas served by the Company. For example, irradiance levels throughout the year in Utah may differ significantly from those of other geographical areas.

While the Division is open to a general discussion of the costs and benefits of net metering, ultimately, this proceeding is about the allocation of costs to a specific class of ratepayers and designing an efficient rate structure to allow for a reasonable opportunity for cost recovery. Cross subsidization between classes of net metering customers should not be an implicit objective or outcome from this proceeding. This proceeding should be about rate design and cost of service for Utah residential customers, not the costs and benefits associated with

system-wide renewable distributed generation in its whole. If the Commission wishes otherwise, it should clearly indicate its intent to do so in order to avoid confusion.

Second, except for the Company and Office of Consumer Service (“OCS”)¹, the consensus of the parties is that the Demand Side Management (“DSM”) cost-benefit tests² may work, with modifications, to address the differences between DSM and Distributed Generation (“DG”). Some parties state in their comments that not all of the DSM cost benefit tests should be used, or at least used in their current form and inputs. These parties felt that some of the tests are irrelevant and would cause confusion in determining the costs and benefits associated with net metering in general, not just residential roof-top solar PV.

The Division is interested in the DSM tests’ usefulness as a beginning point. However, coming to an agreement on the actual tests and their associated inputs to be used in the framework, will be difficult. All the parties have different views of what the tests can and can’t provide in the context of an analytical framework. Wholly apart from the question of the value presented by each test, the parties will also vary on how to evaluate each test’s components. The Division believes these disparities will and should be the main topics of discussion in the upcoming technical conferences.

Third, parties differ about whether all the customer-side generation should be included in the costs and benefits analysis or just the excess generation.³ Net metering customers are currently compensated for generation at the retail rate on a monthly basis. For the portion of the customer’s generation that is used to offset usage, the customer is compensated at the concurrent month’s prevailing rates and equates to a revenue loss to the Company. Any excess generation is booked as kWh and carried over month to month.⁴ This booked excess generation can be used to

¹ The Company and OCS do not agree that the DSM tests are applicable to DG in this docket. Because the energy is simply provided from another source, those costs and benefits can be measured directly. In most cases, the Company believes that the DSM tests are not consistent with the language and intent of the NEM Statute 54-15-105.1.

² See October 2001 “California Standard Practice Manual-Economic Analysis of Demand-Side Programs and Projects”

³ See Utah Code Annotated 54-15-102 (2) (b) “Customer-generated electricity” means electricity that: exceeds the electricity the customer needs for the customer’s own use; and ...

⁴ See RMP P.S.C.U. No. 50 135.3 (2) (A)

offset the customer's usage when the customer's system is not producing enough to meet their needs. These credits, if unused, expire at the end of the annualized billing period.⁵

As a result of the existing tariff structure, where distribution and other fixed costs are included in the volumetric electric rates, the Company may not be wholly compensated for the costs associated with administering the residential net metering program. This ultimately could cause a shift in costs to non-net metered residential customers. The Company needs a mechanism to recover the costs associated with the credited generation created by the net metering program that is also structured to account for the benefits the generation provides as well. The Commission should define what portion of the customer-side generation is to be considered in the costs and benefits analysis-all generation production or just the excess production.

Fourth, some of the parties suggest using current studies, data and methods used in other states, as well as requesting the Company to enlist third party consultants to perform new studies. Some of the studies and data referenced by the parties may be of value in this proceeding. For example, it may be necessary to use studies and data from other states along with the studies performed by the Company to fill in gaps where pertinent data is missing. However, caution is in order as some of the suggested studies may be too cumbersome, fundamentally flawed⁶, time constrained or costly for this proceeding and not directly related to this matter.

Through the proposed technical conferences the parties and Commission can determine what studies and data are valuable and pertinent to this specific matter. The ensuing analytical framework should be in a simple form, consisting of inputs and processes where the data is obtainable, supportable, quantifiable and timely. Parties are capable of retaining the experts they feel necessary to help them in informing the Commission. There should not be undue burden shifted on the Company to supply studies and data, resulting in costs to be borne by customers of all classes.

Fifth, given the low levels of residential roof-top solar or other residential generation source penetration within the system, data may not provide as much concrete information about

⁵ See Utah Code Annotated 54-15-104

⁶ For example, the January 2010 Synapse "Co-Benefits of Energy Efficiency and Renewable Energy in Utah" report, sponsored in part by the DPU, was deeply flawed; as a result, the DPU has not used, and will not use it in this or any other proceeding.

theoretical costs and benefits as any party would like. Nevertheless, this does not require using the Company's entire system or third party studies to determine costs and benefits of the residential net metering program. The Commission may exercise its discretion and rely on the available quantum and quality of evidence it receives to make a determination, assuming specific proposals are supported by sufficient evidence. In other words, some components that might be included as costs or benefits under the Commission's ultimately chosen analytical framework or method may not be immediately supportable by existing evidence. This should not stop the Commission from including the costs and benefits that are immediately supportable. Over time there will likely be additional evidence that could be included in rate designs in future dockets. Ultimately, the end result of this docket should be an analytical framework that will determine how the costs and benefits of the residential net metering program are to be valued, allocated and recovered in the next general rate case.

Sixth, some of the parties suggest that externalities should be considered within the analytical framework as part of this docket. The Division concurs with the Office of Consumer Services ("OCS") that the task of valuing externalities is great in scope and should be considered, if at all, outside of this docket. The valuations of the numerous components of externalities are complex, lengthy and result in highly debatable outcomes that vary widely in range of values. The Commission should indicate as soon as possible whether it intends to include such valuations in its determination of compensation under Section 54-15-105.1. If so, the Commission should consider creating a separate proceeding to allow for the broader scope such an undertaking would require.

Conclusion

This docket should address the net metering program for residential customers only. The Division is unpersuaded by comments otherwise. This docket ought to also determine the analytical framework and proper inputs to model relevant costs and benefits of residential net metering systems and customers to the Company. The model will have to protect the other residential rate payers from a downward spiral associated with rates that do not collect enough fixed costs from those customers causing the costs, particularly as the pace of solar installations accelerates. It must also properly compensate net metered customers for their generation without unfairly or unduly impacting other rate payers. Externalities should not be included in the design

of the analytical framework in this docket. Should the Commission believe the valuation of externalities is required by Section 54-15-105.1, it should indicate so and open a separate docket to allow comprehensive treatment of the topic and consideration of its wider implications.

In short, this docket should result in identification of the relevant costs and benefits of residential net metering systems, attempt to accurately measure them, and establish a rate structure (if not actual rates) that generally efficiently and effectively collects fixed costs through fixed charges or by other methods. At the same time, it should fairly compensate net metering customers for the benefits their systems bring to the Company's system and other customers. These benefits might not encompass all the value of the system to society generally or to the system owner outside of the Company's ability to avoid costs.

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