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BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Investigation of the Costs and Benefits of PacifiCorp's Net Metering Program	**Docket No. 14-035-114** **COMMENTS RESPONDING TO COMMISSION REQUEST RELATED TO APPROPRIATE COSTS AND BENEFITS TEST EQUATIONS AND METRICS TO EVALUATE NET METERING PROGRAM**

Pursuant to the Notices of Comment Period and Scheduling Conference ("Notice"), issued by the Public Service Commission of Utah ("Commission") November 21, 2014 in Docket No. 14-035-114, PacifiCorp, d.b.a. Rocky Mountain Power ("Rocky Mountain Power" or "Company") hereby files its comments ("Comments"), in response to the Commission's request for parties' comments on using traditional costs and benefits test equations and metrics used to evaluate utility-sponsored demand side management ("DSM") programs to examine the costs and benefits of Company's net metering program, and other related issues. In support of the Comments, the Company states as follows.

BACKGROUND

In response to issues raised by parties and reiterated in the Commission's order on net metering ("NEM") in the Company's 2014 general rate case, Docket No. 13-035-184, the Commission opened Docket No. 14-035-114 to examine the costs and benefits of the Company's NEM program. As part of this docket, the Commission requested comments and reply comments from interested parties regarding the Company's load research study. In response, several parties filed comments on December 5, 2014, and the Company filed reply comments on December 19, 2014. The Commission next invited comments by interested parties on the following specific questions:

- Whether the traditional costs and benefits test equations (e.g., the utility cost test, the total resource cost test, the ratepayer impact measure test, and the participant test) and metrics (e.g., benefit to cost ratio) used to evaluate utility-sponsored demand side management programs can and should be applied to examining the costs and benefits of PacifiCorp's net metering program.
- What is the applicability of some or all of these tests, or description of any other type of analysis, for examining the costs and benefits of PacifiCorp's net metering program? (The Commission requested that parties consider the consistency of any proposed analysis with the statutory definition or requirements of the net metering program.)
- Whether the types of analyses to be used will vary depending on whether the analysis examines residential or non-residential net metered customers.

In regard to the Commission's first question, the Company will explain in detail in Section I.A. below why it is not appropriate to use the traditional costs and benefits test equations and metrics used to evaluate utility-sponsored DSM programs to examine the costs and benefits of the Company's NEM program.[1]

[1] These traditional tests include the following:

Second, with the exception of certain components of the ratepayer impact test ("RIM"), and the utility cost test ("UCT"), not one of these tests, including the total resource cost test ("TRC") and participant cost test ("PCT"), is applicable to an evaluation of the costs and benefits of the NEM program as contemplated in the NEM law as they don't fully consider the perspective of the Company's non-NEM customers, an explicit requirement under Utah Code Ann. § 54-15-105.1. To evaluate NEM consistent with the NEM statute, the test methodology used must incorporate, at a minimum, the benefits of distributed generation ("DG") based on avoided costs and the costs or rate impacts to other customers.

As to the Commission's third question, the types of analyses used to evaluate the NEM program would be largely the same for residential and non-residential NEM customers. However, at this time the Company does not anticipate proposing a separate tariff for its non-residential NEM customers because, unlike the residential rate structure, non-residential rate structures, to a large extent, are designed to better reflect how costs are incurred, for instance with demand or time-based charges. In the future, however, the Company may propose rate modifications to move the current non-residential rate components closer to cost of service and to change the credit options for excess generation on Schedule 135 for large non-residential customers based on an analysis of costs and benefits.

(1) Total Resource Cost Test examines the program benefits and costs from a total system perspective. Benefits include avoided supply costs; costs include those incurred by the Company and program participants;
(2) Utility Cost Test examines program benefits and costs from the Company's perspective. Benefits include the avoided costs for electricity that is instead generated by the photovoltaic ("PV") systems, while costs include administrative and incentives costs;
(3) Ratepayer Impact Test examines program benefits from the perspective of utility customers and measures whether rates will increase as a result of the program and includes program costs (administrative and incentives) as well as lost revenues, and benefits include avoided energy costs; and
(4) Participant Cost Test examines benefits from a program participant perspective. Costs include any measure costs incurred by participants, and benefits are bill reductions due to installing the PV system and any incentives paid to participants.

ARGUMENT

I. THE TRADITIONAL COSTS AND BENEFITS TESTS USED FOR DSM PROGRAMS SHOULD NOT BE USED TO EVALUATE THE COSTS AND BENEFITS OF THE NET METERING PROGRAM.

A. The Costs and Benefits of Distributed Generation, a Supply Option, Can Be Directly Compared to the Costs and Benefits of Electricity Supplied by the Company; Therefore, It Is Not Necessary to Rely on Traditional Costs and Benefits DSM Tests to Evaluate the NEM Program.

Because DG is a supply option, i.e., the substitution of electricity supplied by the customer rather than by the utility, the costs and benefits of such a supply alternative/option *can* be directly compared to the costs and benefits of the electricity supplied by the Company.[2] In addition, DSM measures, in many cases, are evaluated based on *estimated* changes in consumption or demand requirements of products multiplied by expected use. They are then applied to *estimated* populations of participants for the life of the measure. These estimated unused kWh's are given a value and combined with participant bill savings, program costs, in some cases externalities, and utility avoided costs to enable a reasonable estimation of their cost effectiveness. This indirect comparison of estimates is unnecessary for DG because the costs and benefits of DG can be measured and valued directly. Furthermore, the NEM statute, Utah Code Ann. § 54-15-105.1, contemplates NEM costs and benefits to be quantified to determine a just and reasonable rate or charge for NEM, as more fully explained in Section I.C. below.

Finally, DSM measures provide actual reductions in energy usage. This is not true of DG which is simply the substitution of generation by customers for generation by the utility. With

[2] "Net metering" is technically a billing mechanism that allows electric customers to self-supply some of their usage and receive a kWh credit for any electricity generated by their DG systems that exceeds their needs at any given time. Since NEM uses the current rate structure, which was not designed for partial requirements service, to provide an incentive for DG, the examination of the costs and benefits of DG is necessary before determining if the current rate structure or incentive for NEM is appropriate or causing an uneconomic shift of costs to other customers.

DG, less electricity is not required to meet customers' needs, rather the same amount of electricity is required but it is just supplied by different resources. Based on these facts, by evaluating DG's cost effectiveness the same as one would evaluate DSM's cost effectiveness, an assumption would have to be made that customer generation is preferable to utility generation. This would be an inappropriate assumption, particularly where utilities could easily build the same type of generation (at perhaps a lower cost) than is being provided by the customer. Thus it is neither necessary nor efficient to evaluate DG using traditional costs and benefits DSM tests because information exists to make a direct comparison of DG with the Company's supply of electricity.

B. The Costs of DG Should Be Evaluated Based on the Costs NEM Customers Impose on the System (Supported by Customer-Specific Data), and the Benefits of DG Should Be Evaluated Based on Avoided Costs Which Have Been Thoroughly Analyzed and Vetted by this Commission in Recent Avoided Cost Dockets.

The costs and benefits of DG should be evaluated consistent with quantifiable costs incurred by the Company in providing services to NEM customers and based on the Company's avoided costs which have been analyzed exhaustively in recent avoided cost dockets. The Commission's order in Docket No. 09-035-27 ("2009 Order") concurred with the recommendation to evaluate "small-scale renewable resources, such as solar photovoltaic ("PV") projects, on a similar basis as energy efficiency and load management" except to the extent "other economic tests are available."[3] The use of DSM tests to evaluate residential solar PV was clearly a placeholder until other more appropriate economic tests became available. Since 2009, there have been two dockets in this State dedicated to analyzing and evaluating the value that solar resources add to the Company's system and, by extension, to the Company's customers.

[3] *In the Matter of the Proposed Revisions to the Utah Demand Side Resource Program Performance Standards,* Docket No. 09-035-27, Order, p. 15 (October 7, 2009).

In 2013, in Docket No. 12-035-100, this Commission thoroughly evaluated and determined the value to the Company's system of solar resources from large qualifying facilities ("QFs"). More recently, in Docket No. 14-035-55, parties participated in rigorous and exhaustive debate regarding the value to the Company's system of solar resources from smaller QFs. In those dockets, the Commission determined the price for solar at which the Company, and ultimately its customers, remain indifferent. This ratepayer indifference standard is consistent with the Company's interpretation of the current NEM statute which requires that the Company's other customers are held indifferent with respect to the costs incurred to provide services to NEM customers, as more fully discussed below. The ratepayer indifference standard merely assures that utilities, and by extension their non-NEM customers, are not forced to buy excess generation at a price exceeding the costs the utility is able to avoid. Otherwise, NEM customers are unfairly benefitting at the expense of other customers who subsidize customers with self-generators. This is of particular concern for the Company's low-income customers. There is no difference between the output generated from rooftop solar resources and solar resources from small QFs (those that qualify for automatic pricing for output generated from zero kW to 100 kW). They both generate electricity from the sun. There should be no preferential treatment given to small roof-top solar DG over small QFs, in particular at the expense of other non-NEM customers.

C. Because the NEM Statute Requires the Commission to Determine a Just and Reasonable Charge or Credit In Light of the Costs and Benefits of Net Metering to Both the Company *and All of Its Customers*, the TRC and PCT Fail to Meet the Requirements of the NEM Statute; and Only Certain Components of the RIM and UCT Tests Take Into Account the Standard in the NEM Statute.

The TRC and PCT, as designed for evaluation of DSM programs, are inappropriate to determine the costs and benefits of NEM in accordance with both the language and intent of the

NEM statute. Only certain components of the UCT and the RIM tests take into account the requirement of the NEM statute that impacts on non-NEM customers must be considered.

Section 54-15-105.1 of the NEM statute provides that:

> The governing authority shall:
>
> (1) determine, after appropriate notice and opportunity for public comment, whether costs that the electrical corporation or other customers will incur from a net metering program will exceed the benefits of the net metering program, or whether the benefits of the net metering program will exceed the costs; and
>
> (2) determine a just and reasonable charge, credit, or ratemaking structure, including new or existing tariffs, in light of the costs and benefits.

Utah Code Ann. § 54-15-105.1.

When the Commission issued its 2009 Order, it indicated "[s]hould any of the tests fail, the Company and parties may present argument, and we shall consider, whether the program is in the public interest for reasons other than economic efficiency."[4] At the time the Commission made this statement, the current NEM statute was not in place. Section 54-15-105 which preceded Section 54-15-105.1 cited above, was in place at the time and provides:

> (1) An electrical corporation administering a net metering program *may not charge* a customer participating in the program an additional standby, capacity, interconnection, or other fee or charge unless the governing authority after appropriate notice and opportunity for public comment:
>
> (a) determines that:
>
> (i) the electrical corporation will incur direct costs from the interconnection or from administering the net metering program that exceed benefits, as determined by the governing authority resulting from the program, and
>
> (ii) public policy is best served by imposing a reasonable fee or charge on the customer participating in the net metering program

[4] *Id.*, at 15.

> rather than by allocating the fee or charge among the electrical corporation's entire customer base ….

Utah Code Ann. § 54-15-105 (2013) (emphasis added).

It is against this backdrop, and consistent with the old NEM statute, that the Commission made its findings in the 2009 Order. The prior Section 54-15-105 contained a presumption that no additional charge would be imposed on NEM customers, and that a charge could only be imposed if direct costs to the utility of NEM costs exceeded benefits and if public policy were served by the charge being imposed rather than allocating it to all customers. These presumptions were removed by the new NEM statute, indicating a shift in policy on NEM and a legislative intent for NEM customers to pay their share of costs.[5] The current NEM statute does not give the Commission the flexibility to advance a program that fails cost effectiveness under the UCT, TRC, RIM and PTC by allocating the costs among all customers. Instead, the NEM statute would require the Commission to assess any negative net benefits, i.e. costs that arise from the use of the tests, to NEM customers.

In essence the current NEM statute requires, and is limited to, certain components of the RIM and UCT, which incorporate the costs and benefits to both the Company and other customers. The benefits of DG/NEM are similar to the benefits recognized in certain aspects of both the UCT and RIM tests, i.e., the value to the utility of generation at avoided costs, but the costs must also include the lost revenues or costs shifted to other customers that are recognized only in the RIM test. The participant benefits and costs that are included in the TRC and PCT are not consistent

[5] "The challenge is as we expand our solar applications at the residential level, how those customers bear their fair share of the … fixed costs of the grid." Recording of Utah Senate Floor Debates, 2nd Substitute S.B. 208, 60th Leg., 2014 Gen. Sess. (March 5, 2014) (statement of Sen. Bramble), http://utahlegislature.granicus.com/MediaPlayer.php?clip_id=16994&meta_id=499144.

with the NEM statute. As such, the individual tests developed to evaluate utility-sponsored DSM programs are inappropriate for compliance with the current NEM statute.

II. THE TYPES OF ANALYSES TO BE USED WILL PROBABLY NOT VARY DEPENDING ON WHETHER THE ANALYSIS EXAMINES RESIDENTIAL OR NON-RESIDENTIAL NEM CUSTOMERS.

The types of analyses used to evaluate the NEM program would be largely the same for residential and non-residential NEM customers. However, the Company is not proposing to create a separate tariff for its non-residential NEM customers at this time. This notwithstanding, and as the Company has indicated several times in this docket, it is not opposed to additional evaluation of rate structures for Schedules 23, 6, and 8 NEM customers. Currently the majority of NEM customers are residential, and non-residential NEM customers are largely subject to rate structures that include demand charges which better reflect the cost of service than relying on energy charges alone. However, based on the costs and benefits analysis for DG, it may be necessary to make modifications to the credit options available in Schedule 135, Net Metering Service, for excess generation by large non-residential customers to ensure ratepayer indifference.

CONCLUSION

Based on the foregoing, (1) the traditional costs and benefits DSM tests should not be used to evaluate the costs and benefits of the NEM program because they are not consistent with the language and intent of the NEM statute; (2) certain elements of the RIM and UCT tests—namely, the benefits of DG based on avoided costs and the costs or rate impacts to other customers—are necessary components of a methodology for the evaluation of the costs and benefits under the NEM statute; and (3) the types of analyses to be used will probably not vary depending on whether the analysis examines residential or non-residential NEM customers.

DATED this February 6, 2015.

RESPECTFULLY SUBMITTED,
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