# DEPARTMENT OF PUBLIC SERVICE REGULATION BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MONTANA

IN THE MATTER OF NorthWestern Energy's Application for Authority to Increase Retail Electric Utility Service Rates and For Approval of Electric Service Schedules and Rules and Allocated Cost of Service and Rate Design REGULATORY DIVISION

Docket No. D2018.2.12

# MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY'S POST-HEARING BRIEF

#### I. Introduction

The Montana Department of Environmental Quality ("DEQ") has largely focused its discovery and testimony in this docket on issues related to NorthWestern Energy's ("NWE") compliance with § 69-8-210(2), MCA.¹ NWE currently fulfills the statutory requirement to offer a "certified environmentally preferred" power purchasing option with its E+ Green product, established under NWE's Electric Green Power Service tariff. Hearing Exhibit ("Ex.") DEQ-1, Exhibit DJL-2. DEQ entered into a settlement stipulation (Ex. NWE-3) with NWE, the Montana Consumer Counsel ("MCC"), and Walmart, which outlines a process and timeline for reviewing E+ Green. The Commission should find the agreement to review this power purchasing option in the public interest and approve it.

<sup>&</sup>lt;sup>1</sup> Section 69-8-210(2), MCA: "Notwithstanding any service options that the commission may require, a public utility shall offer its customers the option of purchasing a product composed of or supporting power from certified environmentally preferred resources that include but are not limited to wind, solar, geothermal, and biomass, subject to review and approval by the commission. The commission shall ensure that these resources have been certified as meeting industry-accepted standards."

While DEQ has refrained from offering expert testimony on other issues, DEQ clearly established in their petition for intervention in this docket that it is their intent to ensure that "the decisions resulting from these proceedings result in equitable access to energy efficiency and renewable energy." DEQ Petition for General Intervention, p. 2, filed Oct. 2, 2018. DEQ counsel further established DEQ's intent to address issues outside of E+ Green in his opening statement during the hearing, explaining that the responsibilities of DEQ's Energy Office "include analyzing energy policy, such as the policy issues that have been arising in this case. Those policies include energy efficiency and demand-side management, net metering, [and] fixed-cost recovery mechanisms." Hearing Transcript ("Tr.") p. 2053:6-12. To that end, this reply brief addresses two contested issues of relevance to DEQ's intent established in its petition for intervention, but that DEQ did not address in testimony: 1) NWE's proposal for a separate net metering customer class, and 2) NWE's acquisition of cost-effective energy efficiency resources.

The Commission should reject NWE's proposal for a new residential net metering rate class on the basis that: 1) NWE failed to meet the minimum information requirements in the statutorily ordered study of net metering costs and benefits and that, therefore, the utility's grounds for justifying a new rate class is insufficient; 2) NWE's proposed three-part residential net metering rate structure is inappropriate for residential customers and NWE has not demonstrated their ability to adequately support customer understanding of the rate, which includes a mandatory non-coincident peak demand charge; and, 3) the proposed net metering tariff will unjustifiably discourage investment in net metering systems, counter to the intent of the Montana Legislature. Finally, DEQ encourages the Commission to recognize the value of cost-effective energy efficiency resources to NWE customers, and to support NWE's cost recovery for cost-effective energy efficiency resources.

## II. The Green Tariff Stipulation Warrants Approval by the Commission

NWE's E+ Green tariff was originally approved by the Commission in Docket D2002.7.81, Interim Order No. 6448 in (October 16, 2002) and approved again by the Commission, with minimal changes, in Docket D2009.9.129, Final Order No. 7046h (December 7, 2010). The tariff provides all customer classes with the option of purchasing renewable energy credits representing the environmental benefits associated with renewable energy projects.

As detailed in DEQ witness Dan Lloyd's direct testimony, customer enrollment in E+Green is significantly below what was projected by NWE when the tariff was originally established in Docket D2002.7.81. Ex. DEQ-1, p. 3-4. Furthermore, the pricing for the product has resulted in NWE over-collecting revenue for its E+ Green program costs in four of the last five years. *Id.*, p. 4. In their original filing, NWE described the tariff as an "initial product offering for 2002-2003" and stated their intention to "continue its research over the next six months" and use that information to "contribute to future program design and products offerings that will be presented as soon as available." No new programs or product designs were presented to the Commission by NWE or other stakeholders and the docket was closed due to inactivity in 2006. *Id.*, pp. 5-6.

Based on these facts, Mr. Lloyd testified that the Commission should convene stakeholders to evaluate interest in a program to replace or supplement E+ Green and to develop the details of a replacement tariff. *Id.*, p. 13. Secondly, Mr. Lloyd testified that the Commission should require NWE to develop and file a proposal to replace or supplement E+ Green within 120 days of the conclusion of the rate case. *Id.*, p. 13-14. Walmart witness Steve W. Chriss similarly testified the "Commission should require NorthWestern, in collaboration with interested parties, to develop and submit for filing within 120 days of an order in this docket for

a new renewable product offered to commercial and industrial customers." Ex. WMT-1, p. 22:4-6.

NWE witness Bobbie Schroeppel argued in rebuttal testimony that "NorthWestern desires to offer customers renewable energy options but takes exception to the short 120-day timeline recommended by DEQ and Walmart." Ex. NWE-5, p. 4:10-12. MCC witness Dr. David Dismukes agreed with DEQ "that the parameters of the Company's existing E+ Green program are problematic." Ex. MCC-5, p. 87:7-8. Dr. Dismukes further testified that "it is unlikely this workshop process could be completed within 120 days." *Id.*, p. 88:12-13.

DEQ entered into a stipulation and settlement agreement with NWE, the MCC, and Walmart that resolved the issues raised surrounding NWE's E+ Green Tariff. Ex. NWE-3. In summary, based on the issuance of a Final Order from the Commission approving the stipulation, NWE agrees to the following:

- Within 30 days, "to initiate a process to review its E+ green program and consider options for a new renewable energy product tariff";
- 2) Within 90 days, "to make a progress report on the status of the initiated process with the Commission in a docket separate" from the current docket; and,
- 3) No later than 180 days, "to make a filing to either modify its existing E+ green tariff, propose a new renewable energy product tariff, or explain to the Commission why NorthWestern believes no change is necessary".

## Ex. NWE-3, pp. 1-2

The stipulation addresses the contested issues DEQ identified through discovery and detailed in Mr. Lloyd's direct testimony while at the same time addressing the concerns from NWE and MCC on the timing of a new filing. The stipulation does *not* include a request for

Commission approval of a new or revised tariff, nor does it require that NWE or other parties file a tariff at the conclusion of the program review. The Commission will have the opportunity to review and ultimately approve or deny any proposal that is brought forth through the review and stakeholder process detailed in the stipulation. The Commission should find that this stipulation, which proposes a reasonably time-constrained process to review and consider improvements to an optional power purchasing product, is in the public interest and should approve it.

# III.NWE's Proposal to Create a Separate Rate Class for Net Metering Customers and to Establish a Non-Coincident Peak Demand Charge for New Net Metering Residential Customers is Not in the Public Interest

NWE has proposed a separate rate class for new residential net metering customers, and has proposed that they be served with a three-part rate that includes a fixed monthly service charge, volumetric charge, and a demand charge, based on the highest demand over an hour for each billing month. Ex. NWE-38. However, NWE's evidence for creating a separate net metering rate class is based on analysis that did not meet minimum information requirements established by the Commission, the proposed rate structure is incompatible with residential customers, and the net effect of depressing investment in rooftop solar and other forms of net metering systems runs counter to the Legislature's interest in promoting net metering. See § 69-8-601, MCA.

# A. Cost Benefit Study did not meet Commission's Minimum Information Requirements

Montana statute establishes the basis by which the Commission can create a new classification of service for net metering customers. § 69-8-611, MCA. Montana law allows the Commission to establish minimum information requirements for inclusion in a net metering cost-benefit study conducted by a public utility. § 69-8-610, MCA. On August 9, 2017, the Commission issued an Order establishing minimum information requirements for the net

metering cost-benefit study. Final Order, D2017.6.49. In that Order, the Commission directed NWE to use a specific methodology for calculating avoided energy costs, saying that "NWE **must** use the Commission's approved method for estimating avoided energy costs for purposes of setting the standard rates in NWE's QF-1 tariff." Final Order, D2017.6.49, Aug. 9, 2017, (emphasis added).

NWE disregarded the Commission requirement to use the publicly available qualifying facility ("QF") avoided cost methodology, also referred to as the "proxy method," and instead used the proprietary PowerSimm modelling service. Ex. NWE-41, p. 11:9-10. NWE did not make PowerSimm licenses available to intervenors in this docket (Ex. Vote Solar and the Montana Renewable Energy Association ("VS/MREA")-1, p. 56:7-8) and thus the calculation of avoided energy costs, the largest component of NWE's net metering cost-benefit analysis, was done without the opportunity for public oversight or transparency. When intervenors applied the proxy method to the available data, the outcome of their analysis showed a higher value for customer generators than NWE's PowerSimm calculation. Id. p. 59:15. NWE's consultants found an avoided energy cost value of \$0.029/kWh to \$0.032/kWh (Ex. NWE-41, p. 14), while VS/MREA calculated values of \$0.0495/kWh to \$0.0611/kWh using the Commission's approved methodology. Ex. VS/MREA-1, p. 59:11-14. These divergent results highlight the problem that NWE has introduced by using an avoided energy cost method not approved by the Commission. Consequently, the Commission should not rely on this analysis to justify creating a separate rate class for residential net metering customers and should direct NWE to closely follow requirements established by the Commission in any subsequent analysis of net metering costs and benefits.

# B. A demand charge for residential net metering customers is not appropriate, nor has NorthWestern demonstrated their ability to provide necessary customer education

While demand charges for commercial and industrial customers are standard for utilities across the country, they are, as MCC points out, a rarity for residential customers. Ex. MCC-4A, p. 23. As MCC witness Dr. Dismukes testified, a demand charge applied to all residential customers would "lead to widespread confusion." *Id.*, p. 26. The debate over whether a demand charge is appropriate for residential net metering customers has largely hinged around assertions by NWE and MCC that net metering customers are, by the nature of their interest in renewable energy, more "engaged" and "sophisticated" energy consumers than other residential customers, and therefore able to understand and accommodate a demand charge in their billing structure. Ex. NWE-5, p. 15, and Ex. MCC-4A, p. 26. However, this assertion does not hold up to the evidence presented by VS/MREA witness Madeline Yozwiak who concludes that NWE's mandatory demand charge proposal is, "largely without precedent, imposes a charge that many residential customers have found confusing, difficult, and hard to respond to." Ex. VS/MREa-2, p. 28.

NWE has presented several examples of demand charges implemented by other utilities as support for their proposal, however these examples fail to justify levying a mandatory demand charge on residential customers. For example, the demand charge offered by Arizona Public Service ("APS"), which NWE witness Dr. Ahmad Faruqui highlights as a case study supporting NWE's demand charge proposal, is actually a *voluntary* demand charge option. Furthermore, APS "proactively identified customers whose usage patterns meant they would save on the three-part rate, without modifying their usage, and marketed the tariff to them." Ex. VS/MREA-2, p. 24. Unfortunately, NWE does not have the utility meter data necessary to provide a similar analysis to prospective net metering customers.

NWE's standard residential meters do not currently track the monthly demand peaks that new net metering customers would be billed for. Nor has NWE proposed an adequate plan to provide that information to customers. As a result, a prospective residential net metering customer has no utility billing or meter data available to assess the potential bill impacts of investing in a net metered system under the proposed demand charge. Even the most sophisticated customer cannot understand bill impacts of demand charges if NorthWestern does not provide the customer with their individual monthly demand via their utility bill or another means. DEQ appreciates NWE's stated goal of providing excellent customer education on the subject of demand charges, which Bobbi Schroeppel, Vice President of Customer Care, Communications, and Human Resources for NWE, summarizes as follows: "this is the goal of such a program—to provide excellent customer service. We hope to reach that goal through customer education related to future NEM customers." Ex. NWE-5, p. 15. However, NWE's minimal plans for customer education presented in this docket do not give DEQ confidence in the outcome of this educational program, namely because the meter data necessary for customers to evaluate the potential impact of a demand charge on their utility bill do not exist.

In the course of this docket NWE has not demonstrated their ability to adequately educate residential customers about how demand charges work, or how to manage monthly demand and the associated costs. For example, the bucket analogy used by NWE in their opening brief in an attempt to explain electrical peak demand (NWE opening brief, p. 29) mixes metaphors by confusing the amount of water in a bucket (i.e., a volumetric measure more similar to the kilowatt hour charge on a customer's bill) with the high-water mark on a stream or river (i.e., a peak-flow measure, more comparable to a demand peak on a customer's bill). The vehicular traffic video introduced by NWE during cross examination of VS-MREA witness Andrew

Valainis (Tr. p. 1943:14), similarly failed to demonstrate NWE's specific plans to educate utility customers about the substance of the utility's proposed net metering demand charge or how customers manage demand charges.

In their opening brief, NWE points to two electricity providers that levy residential demand charges, one investor owned utility, Westar Energy in Kansas, and one rural electric cooperative, Flathead Electric Cooperative in Montana, as support for their argument that "the Commission would not be covering new ground" by approving a mandatory demand charge for net metering customers. NWE Opening Brief, p. 30. However, NWE fails to acknowledge critical elements of these examples: 1) Westar's demand charge is the *only* mandatory residential demand charge approved for a regulated, investor-owned utility and it is currently being challenged in court (Ex. VS/MREA-2, p. 20-21.), whereas Flathead Electric is not a regulated utility, like NWE; 2) the rates in these examples are significantly lower than the rate proposed by NWE (approximately \$5.00/kW and \$0.26/kW respectively, relative to NWE's proposal of \$7.69/kW); and, 3) unlike NWE's proposed demand charge, both of the examples they give employ time-varying or seasonal charges designed to reflect the higher cost of serving electrical loads at times of peak utility load. This apples-to-oranges comparison by NWE does not put to rest the significant and legitimate concerns with applying a mandatory, non-coincident demand charge, as NWE has proposed, to residential customers.

Taken together, the misalignment of demand charges with residential customers, the absence of adequate historical meter data, and the lack of a comprehensive, detailed plan to provide accurate customer education raises significant concerns about NWE's ability to implement this tariff in a manner that is just and reasonable for future net metering customers. It

would not be in the public interest for the Commission to approve a rate structure that precludes an individual's ability to manage or reduce their utility bill.

# C. NWE's proposed net metering tariff is inconsistent with the intent of the Montana Legislature

Finally, it is clear from the evidence in this case that NWE's proposed rate structure for residential net metering will significantly dampen private investment in distributed solar technology. Ex. VS/MREA-4 p. 9. Such an outcome would run contrary to the Legislature's statutory findings regarding net metering, which state:

69-8-601. Legislative findings. The legislature finds that it is in the public interest to promote net metering because it:

- (1) encourages private investment in renewable energy resources;
- (2) stimulates Montana's economic growth; and
- (3) enhances the continued diversification of the energy resources used in Montana.

§ 69-8-601, MCA.

DEQ does not advocate that the Commission should promote net metering at all costs. However, a Commission ruling to approve NWE's proposed separate rate class and mandatory demand charge, when the basis of the cost benefit analysis was inconsistent with the Commission's requirements, and when NWE has failed to demonstrate its ability to provide meaningful education and customer support for this new rate structure would create an unjustified disincentive to invest in net metering systems, is a violation of the Legislature's findings and directive.

DEQ supports a regular re-evaluation of the costs and benefits of net metering, consistent with the Legislature and Commission's guidance, as interest in customer-sited generation grows.

Retail-rate net metering is a rudimentary approach to balancing the costs to serve customer generators with the benefits they provide to the utility system, but in this docket NWE has not

credibly demonstrated that this system should be replaced, nor has NWE proposed a compelling alternative rate structure that would be appropriate for residential customers.

Notably, the omission of time-varying rate options or components in NWE's filing, for all residential customers, not just residential net metered customers, was a missed opportunity that might have more equitably addressed NWE's concerns with net metering while better aligning electricity pricing with the time-varying cost to deliver that service. "Time-varying rates, also known as time-of-use rates, can provide a useful tool to improve the link between cost causation and customer rates, while avoiding many of the issues with customer acceptability that are present with residential demand charges." VS/MREA-1, p. 140. Understandably, NWE was not prepared to implement a time-varying rate as the utility does not yet have advanced metering infrastructure in place, and its evaluation of the necessary infrastructure and metering investments is "in process" and "not yet finalized and available." NWE response to DEQ-004(c). DEQ would welcome a proposal for time-varying rate options or components in NWE's next rate case.

At this time, the Commission should find that NWE's proposal for a separate residential net metering rate class and three-part rate structure is not in the public interest and should reject the proposal.

# IV. The Commission Should Support Mechanisms that Align Customer and Utility Interests in Acquisition of all Cost-Effective Demand Side Management (DSM) Options

The Montana Legislature has rightly prioritized the acquisition of cost-effective demand-side resources, including energy efficiency, by requiring public utilities to "conduct an efficient electricity supply resource planning and procurement process that evaluates the full range of cost-effective electricity supply and demand-side management options." § 69-8-419, MCA.

Similarly, Commission rules require the utility to "optimize the acquisition of cost-effective demand-side resources over its planning horizon." ARM § 38.5.8203. Demand-side management includes utility programs that promote energy efficiency and conservation, and more broadly, customer control of energy usage on the customer's premises (i.e., demand side) of the meter. Ex. NWE-54, p. 3. Montana's statutory definition of "electricity supply resource" includes "customer load management and energy conservation programs." § 69-8-103, MCA. Energy efficiency by definition, uses less energy to perform the same function, or the same amount of work.

As noted by NWE, energy efficiency and other demand-side management resources reduce the need for the utility to purchase or build electricity supply resources by reducing customer energy usage through efficiency gains. Ex. NWE-54, p. 3. According to NWE's President and CEO, Bob Rowe, cost-effective energy efficiency is inherently NWE's cheapest resource. Tr. p. 159:19-23. Programs that incentivize customer acquisition of efficient and cost-effective appliances, light bulbs, thermostats, etc., help reduce long-term costs associated with new generation supply resources.

Issues related to DSM in this docket include NWE's proposed capitalization of DSM expenditures, and Human Resource Council District XI and Natural Resources Defense Council's ("HRC/NRDC") proposal for a Fixed Cost Recovery Mechanism (FCRM) or decoupling pilot project. DEQ encourages the Commission to support measures that ensure NWE's acquisition of cost-effective demand side energy efficiency resources and that account for the myriad economic benefits energy efficiency provides to customers and the utility. Examples of programs or mechanisms that could help support prudent energy efficiency acquisition include aspects of the DSM stipulation signed by the NW Energy Coalition and NWE

as part of this docket (Ex. NWE-46) and the pilot Fixed Cost Recovery Mechanism proposed by HRC/NRDC.

Time-varying rates and demand-response programs may also help reduce the need for utility capacity resources, thereby helping reduce long-term generation, transmission, and distribution investment costs to all customers. DEQ is pleased to see NWE's agreement to propose a time-varying rate option in a future rate case within the context of the FCRM pilot (Ex. NWE-48, p. 28), however DEQ recommends that the Commission go a step further and require NWE to submit a residential time varying rate option in its next rate case regardless of whether the Commission approves the FCRM. Such a proposal would be consistent with the Commission's policy on cost allocation and rate design, which encourages the consideration of time-of-use and seasonal pricing options. ARM § 38.5.8211(d)(i) and (ii).

Any DSM mechanism or program approved by the Commission should also establish quantitative commitments for utility acquisition of cost-effective energy efficiency. These targets help ensure that the benefits of energy efficiency are delivered to customers.

Respectfully submitted on this 31st day of July, 2019.

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#### **CERTIFICATE OF MAILING**

This is to certify that on the 31st day July, 2019, I served a true and correct copy of the foregoing *Montana Department of Environmental Quality's Post-Hearing Brief* upon the parties listed below:

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