

Service Date: June 16, 2017

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

IN THE MATTER OF Establishing Minimum) REGULATORY DIVISION
Information Requirements for NorthWestern)
Energy's Study of the Costs and Benefits of) DOCKET NO. D2017.6.49
Customer Generators

NOTICE OF OPPORTUNITY TO COMMENT

In April 2017, the Montana Legislature passed House Bill 219 (“HB 219”), which was signed by the Governor on May 3, 2017. HB 219 amends net metering provisions found in Title 69, Chapter 8, to require NorthWestern Energy (“NWE”) to conduct a study on the costs and benefits of customer-generators before April 1, 2018. NWE must submit the study to the Public Service Commission (“PSC”) as part of a general rate application. The PSC must evaluate NWE's study and make findings regarding whether customer-generators should be classified separately from other customers for rate design purposes. PSC findings must relate to the system benefits of net metering and the costs of serving customer-generators. Consistent with its findings, the PSC is authorized to establish new service classifications and sub-classifications for customer-generators, establish rates for customer-generators, or establish a net billing approach whereby a customer-generator’s energy production is metered separately from the customer’s energy consumption and the value of energy production offsets the price of the energy consumption in the billing process. The Commission is authorized to establish the minimum information to be included in NWE’s study of costs and benefits.

The PSC regulates investor-owned electric utilities in Montana. The scope of the PSC’s regulation includes enforcing utility obligations pertaining to net metering, long-term resource planning and procurement, and adjudicating rate applications from utilities that assign cost responsibility to various customer rate classes.

On May 11, 2017, the Commission decided to establish minimum information requirements for NWE's study and authorized hiring a consultant to assist the Commission in that task. On May 15, 2017, the Commission issued a limited solicitation pursuant to Mont. Code

Ann. § 18-4-305 and Admin. R. Mont. 2.5.603. On May 25, 2017, the Commission received four bids in response to its solicitation. The Commission hired Plugged In Strategies to assist with the process of developing minimum study requirements. In order to allow NWE sufficient time to address the requirements in the study, the Commission will endeavor to establish any minimum information requirements by the end of July 2017, giving NWE eight months to conduct a cost-benefit study that addresses the Commission's requirements.

Based on a review of benefit-cost studies performed by public utility regulators and other entities in the United States, the Commission has identified the following benefit and cost categories for potential inclusion in a set of minimum information requirements:

1. Benefits

Benefit	Description
Avoided Energy Costs	All avoided fuel, variable operation and maintenance, and emission allowance costs and any wheeling charges associated with the marginal unit
Avoided Capacity Costs	Deferred or displaced generation capacity costs, including costs for resources needed to maintain capacity reserve requirements
Avoided Transmission and Distribution Capacity Costs	The cost of deferred or displaced transmission and distribution resources needed to serve load pockets, distant generating resources, or elsewhere
Avoided System Losses	The avoided cost of energy lost over the transmission and distribution lines used to deliver energy and capacity from centralized generation resources to load
Avoided RPS Compliance Costs	Avoided costs for compliance with Montana's renewable energy standards
Avoided Environmental Compliance Costs	Avoided costs associated with marginal unit compliance with various existing and commonly expected environmental regulations, including potential CO2 regulations
Market Price Suppression Effects (Fuel Hedging)	Price effect caused by the addition of new supply on energy and capacity markets
Avoided Risk (e.g., reduced price volatility)	Reduction in risk associated with price volatility and/or project development risk
Avoided Grid Support Services Costs	Reduced or deferred costs for grid support (aka ancillary) services including voltage control and reactive supply
Avoided Outages Costs	Reduced costs associated with avoided power interruptions attributed to the ability of net metered systems to operate during outages. For example, Value of Lost Load

Non-Energy Benefits	Includes a wide range of benefits not associated with energy delivery such as increased customer satisfaction and fewer service complaints
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2. Costs

Cost	Description
Reduced Revenue	Lost utility revenue associated with reduced sales due to net metering
Administrative Costs	Costs incurred to administer net metering, including, for example, marketing, advertising, evaluation, market research, and basic administration
Interconnection	Costs incurred to interconnect customer-generators (can apply to both utility and NEM)
Integration	Costs incurred to incorporate customer generation into the grid
Production, Transmission and distribution cost shifts	Costs associated with providing production, transmission and distribution services to customer-generators that exceed revenue from customer-generators under existing rate structures

A list of sources relied upon to develop these potential benefit and cost categories is included in Attachment 1 of this Notice.

In addition, the Commission identified several questions relevant to benefit-cost studies that may be appropriate to address in the minimum information requirements:

- What, if any, assumptions regarding the adoption rate of solar or other net metering technologies should the Commission specify?
- What, if any, time frame for calculating benefits and costs should the Commission specify (e.g., 10 years, 20 years, etc.)?
- What, if any, assumptions regarding utility rates should the Commission specify (e.g., rate of increase, changes in rate design (time-of-use, other))?
- What, if any, methodology for cost-effectiveness tests should the Commission specify (e.g., standard practice manual or the Cost Benefit Framework developed by the Electric Power Research Institute)?
- What cost-effectiveness perspective(s) should the Commission require be evaluated (e.g., societal, utility/program administrator, ratepayer, participant)?
- Should the Commission specify the generating resource avoided by net-metered systems? If so, what generating unit should be used?

- Should the Commission specify a particular locational attribute that counts as either a benefit or cost adder/subtractor?
- What, if any, other compensation approaches in addition to net metering should be assessed in the study NorthWestern is required to conduct?

The Commission invites interested persons to submit written comments addressing the potential benefit and cost elements and study questions identified above **no later than July 7, 2017**, either by mail or hand delivery to the Commission at 1701 Prospect Avenue, Helena, MT, 59620, or by email to psc_utilitycomment@mt.gov. You may download and use the optional comment form at <http://psc.mt.gov> (go to “Comment on Proceedings”). A copy of HB 219 is available for inspection at the Commission's business offices and also on the Montana Legislature's [website](#).

The Commission directs NorthWestern Energy to provide information by the comment deadline on the scale and scope of data it has collected, or intends to collect, regarding variations in the usage profiles of customer-generators compared to other customers in the same rate class. This information should include the number of customers, by customer class, for whom discrete load profile data are available and the time period for which the data has been, or will be, collected.

The Commission's jurisdiction over this matter is provided at Title 69, MCA. The substantive and procedural law applicable is Title 69, MCA, ARM Title 38, Ch. 2 (PSC procedural rules), and any prior orders of the Commission which may bear on the issues presented.

BY THE MONTANA PUBLIC SERVICE COMMISSION

BRAD JOHNSON, Chairman
TRAVIS KAVULLA, Vice Chairman
ROGER KOOPMAN, Commissioner
BOB LAKE, Commissioner
TONY O'DONNELL, Commissioner

ATTACHMENT 1

List of Sources on Benefit and Cost Categories

“A Regulator’s Guidebook: Calculating the Benefits and Costs of Distributed Solar Generation,” Interstate Renewable Energy Council, Inc. (October 2013)

http://www.irecusa.org/wp-content/uploads/2013/10/IREC_Rabago_Regulators-Guidebook-to-Assessing-Benefits-and-Costs-of-DSG.pdf

Arizona Corporation Commission, Decision No. 75859, “In the Matter of the Commission’s Investigation of Value and Cost of Distributed Generation,” Docket No. E-00000J-14-0023 (January 3, 2017)

<http://docket.images.azcc.gov/0000176114.pdf>

California Net Energy Metering Ratepayer Impacts Evaluation, prepared for California Public Utilities Commission (October 28, 2013)

<http://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=4292>

California Public Utilities Commission, Decision 16-01-044, “Order Instituting Rulemaking to Develop a Successor to Existing Net Energy Metering Tariffs Pursuant to Public Utilities Code Section 2827.1, and to Address Other Issues Related to Net Energy Metering,” Docket No. R.14-07-002 (February 5, 2016)

<http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M158/K181/158181678.pdf>

“Distributed Energy Resources Rate Design and Compensation: A Manual Prepared by the NARUC Staff Subcommittee on Rate Design,” National Association of Regulatory Utility Commissioners (November 2016)

<http://pubs.naruc.org/pub/19FDF48B-AA57-5160-DBA1-BE2E9C2F7EA0>

Maine Distributed Solar Valuation Study, prepared for Maine Public Utilities Commission, Clean Power Research, LLC, et al. (March 1, 2015)

<http://www.nrcm.org/wp-content/uploads/2015/03/MPUCValueofSolarReport.pdf>

“Methods for Analyzing the Benefits and Costs of Distributed Photovoltaic Generation to the U.S. Electric Utility System,” National Renewable Energy Laboratory, Technical Report NREL/TP-6A20-62447 (September 2014)

<http://www.nrel.gov/docs/fy14osti/62447.pdf>

Minnesota Value of Solar: Methodology, Minnesota Department of Commerce (April 2014)

<http://mn.gov/commerce-stat/pdfs/vos-methodology.pdf>

Net Metering in Mississippi: Costs, Benefits, and Policy Considerations, prepared for Public Service Commission of Mississippi, Synapse (September 19, 2014)

<http://www.synapse-energy.com/sites/default/files/Net%20Metering%20in%20Mississippi.pdf>

Nevada Net Energy Metering Impacts Evaluation, prepare for State of Nevada Public Utilities Commission, Energy and Environmental Economics (July 2014)
http://puc.nv.gov/uploadedFiles/pucnv.gov/Content/About/Media_Outreach/Announcements/Announcements/E3%20PUCN%20NEM%20Report%202014.pdf?pdf=Net-Metering-Study

New York Public Service Commission, Order on Net Energy Metering Transition, Phase One of Value of Distributed Energy Resources, and Related Matters, “In the Matter of the Value of Distributed Energy Resources,” Case 15-E-0751, et al. (March 9, 2017)
<http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={5B69628E-2928-44A9-B83E-65CEA7326428}>

“Primer on Rate Design for Residential Distributed Generation,” Edison Electric Institute (February 2016)
<http://www.eei.org/issuesandpolicy/generation/NetMetering/Documents/2016%20Feb%20NARUC%20Primer%20on%20Rate%20Design.pdf>

“Principles for the Evolution of Net Energy Metering and Rate Design,” Solar Energy Industries Association, *et al.* (May 31, 2017)
http://www.seia.org/sites/default/files/NEM%20Future%20Principles_Final_6-7-17.pdf

Public Service Commission of South Carolina, Order No. 2015-194, Petition of the Office of Regulatory Staff to Establish Generic Proceeding Pursuant to the Distributed Energy Resource Program Act, Act No. 236 of 2014, Ratification No. 241, Senate Bill No. 1189, Docket No. 2014-246-E (March 20, 2015)
<https://dms.psc.sc.gov/attachments/order/29CF4369-155D-141F-23B1536C046AEBC5>

Public Utilities Commission of Nevada, ORDER, Application of Nevada Power Company d/b/a NV Energy for approval of a cost-of-service study and net metering tariffs, Docket No. 15-07041 (December 23, 2015)
http://pucweb1.state.nv.us/PDF/AxImages/DOCKETS_2015_THRU_PRESENT/2015-7/8412.pdf

Public Service Commission of Utah, ORDER, “In the Matter of the Investigation of the Costs and Benefits of Pacificorp’s Net Metering Program,” Docket No. 14-035-114 (November 10, 2015)
<https://pscdocs.utah.gov/electric/14docs/14035114/270449%2014035114o.pdf>

Vermont Public Service Department, “Evaluation of Net Metering in Vermont Conducted Pursuant to Act 99 of 2014” (November 7, 2014)
http://publicservice.vermont.gov/sites/dps/files/documents/Renewable_Energy/Net_Metering/Act%2099%20NM%20Study%20Revised%20v1.pdf