

Request for Proposals

NorthWestern Energy

Benefits and Costs of Net Energy Metering in
NorthWestern's Montana Service Territory

Issued: August 16, 2017

Proposals Due: September 8, 2017

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1. Introduction

1.1 COMPANY INFORMATION

NorthWestern Corporation d/b/a NorthWestern Energy (“NorthWestern”) provides electricity, natural gas, and related services in the Upper Midwest and Northwest regions of the United States, serving approximately 709,600 customers in Montana, South Dakota, and Nebraska. More information about NorthWestern is available on the company’s website: www.northwesternenergy.com.

2. Purpose and Description of Services

2.1 BACKGROUND

In April 2017, the Montana Legislature passed House Bill 219 (“HB 219”), which was signed by the Governor of Montana on May 3, 2017. HB 219 amends net metering provisions found in Title 69, Chapter 8, to require NorthWestern to conduct a study of the costs and benefits of customer-generators before April 1, 2018 (referred to hereafter as the “Study”). A copy of HB 219 can be located at the following website: <http://leg.mt.gov/bills/2017/billpdf/HB0219.pdf>.

NorthWestern is required to submit the Study to the Montana Public Service Commission (“MPSC”) for use in making decisions about whether customer-generators should be served under separate rate classifications. The MPSC issued a Notice of Commission Action in Docket D2017.6.49 that established the minimum information requirements for the Study. A copy of this Notice of Commission Action can be found at the following website: <http://psc.mt.gov/Docs/ElectronicDocuments/pdfFiles/D2017649NCA.pdf>.

NorthWestern’s current net energy metering (“NEM”) policy includes Interconnection Standards and a Tariff that are applicable to any residential, commercial, industrial, and irrigation customer who uses a solar, hydropower, or wind turbine electric generation facility, or a hybrid consisting of any combination of these renewable energy sources, with a nameplate capacity of not more than 50 kilowatts (“kW”), that are located on the customer’s premises, are connected and operate in parallel with NorthWestern’s distribution systems, and are intended primarily to offset part or all of the customer’s requirements for electricity. Under the current NEM tariff, any excess electricity generated by the customer is credited at the full retail rate, with a yearly true-up. Additional information about NorthWestern’s current NEM Interconnection Standards and Tariff can be found at the following website: <http://northwesternenergy.com/docs/default-source/documents/e-programs/e-netmeteringagreement.pdf>.

2.2 OBJECTIVE

NorthWestern issues this Request for Proposals (“RFP”) seeking firm, fixed price proposals from qualified vendors (each a “Respondent” and collectively “Respondents”) to perform economic analysis and evaluation of solar photovoltaic (“PV”) NEM benefits and costs, specifically focusing on utility system benefits of solar PV net metering resources and costs to provide service to customer-generators located in NorthWestern’s Montana electric service territory.

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Selected Respondent must provide a written Study consistent with the Study Components noted in Section 2.3 below and the Detailed Scope of Study attached as Appendix A including any data needed to support completion of the Study. **The final Study must be completed and delivered to NorthWestern no later than March 15, 2018.**

NorthWestern’s Representative for this RFP is June Pusich-Lester, phone number: 406-497-2329; email address: june.pusich-lester@northwestern.com.

2.3 STUDY COMPONENTS

Respondents must provide NEM benefit-cost analyses as outlined in Appendix A to include the following components and scenarios:

- The Study must be performed from multiple perspectives, i.e., NorthWestern, current participating NEM customers, and non-participating customers.
- The Study must include distributed solar PV generation for two customer classes, residential and general service.
- The Study must consider a range of outcomes that could occur based on sensitivities to the underlying benefit-cost component assumptions and must include the following four predefined Study scenarios:
 1. A “business-as-usual” case;
 2. A case where resources are potentially sited at higher value locations on the distribution grid (without assuming any change to NorthWestern’s current net metered policy);
 3. A bookend case showing a lower value of net metered systems due to changes in various assumptions; and
 4. A bookend case showing a higher value of net metered systems due to changes in various assumptions.

3. RFP Schedule Requirements

3.1 RFP SCHEDULE SUMMARY

A basic outline for the RFP process is provided in Table 1. The dates and times contained in the table are subject to change by NorthWestern. Any change will be communicated to Respondents by email.

Table 1. RFP Schedule

ITEM	DATE	TIME (Mountain Standard)
RFP Issued	August 16, 2017	N/A
Notice of Intent to Submit a Proposal	August 23, 2017	5:00 pm
Respondent Questions Due	August 25, 2017	5:00 pm
Anticipated Responses to Questions	August 30, 2017	N/A
Proposals Due	September 8, 2017	5:00 pm

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Short List Selection	September 15, 2017	5:00 pm
Short List Presentations – Butte	September 29, 2017	8:00 am - 5:00 pm
Anticipated Respondent Selection and Commencement of Negotiations	October 2, 2017	N/A
Anticipated Execution of Contracts	October 13, 2017	N/A

3.2 NOTICE OF INTENT

Respondents who desire to participate in this RFP process must deliver email notice of their intent to submit a proposal to NorthWestern’s Representative on or before the date set forth in Table 1.

3.3 RESPONDENTS QUESTIONS

Respondents shall deliver any questions by email to NorthWestern’s Representative on or before the date set forth in Table 1. NorthWestern will evaluate all questions and issue a clarification/answer to all Respondents in this RFP.

3.4 PROPOSAL SUBMISSION

Proposals must be submitted to NorthWestern’s Representative in electronic format (PDF) via email. **The complete electronic proposals must be delivered to NorthWestern prior to the deadline of September 8, 2017, at 5:00 p.m. Mountain Standard Time.**

Proposals that do not contain all information as required by Attachment 1 or meet the basic proposal requirements shall be deemed non-responsive and will not be considered by NorthWestern.

4. Proposal Requirements

NorthWestern requires comprehensive responses to every item identified below, and to facilitate review of the responses, Respondents shall follow the described proposal format. The intent of the format requirements is to expedite NorthWestern’s review and evaluation of proposals. The format requirements are not intended to constrain Respondents with regard to content, but to assure that the specific requirements set forth in this RFP are addressed in a uniform manner for subsequent review and evaluation. The items listed in Attachment 1 include, but are not limited to, those outlined below. Additional information may be appended to the proposal in clearly marked paragraphs.

Proposals must be valid for a period of 60 calendar days from the date of the submittal.

4.1 COVER LETTER

The cover letter must contain an Executive Summary of three pages or less, which gives a brief, concise summation of the response. The Executive Summary must include a concise summary of the Respondent’s implementation plan and commitment to meet the deadline set forth in the RFP. The cover letter must be signed by a duly authorized representative of the Respondent. The position held by

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the signatory must be included, and upon request Respondent shall provide evidence of the authority of the individual signing the cover letter and the contractual documents. The cover letter must also include contact information of the Respondent, including an email address for purposes of correspondence regarding this RFP.

4.2 EXPERIENCE AND TEAM

The proposal must contain a description of the qualifications and experience of Respondent within the previous 60 months in delivering studies of similar size and scope. Please also describe the experience and qualifications of all key personnel assigned to the Respondent's team. In general, a Respondent should have the following knowledge and skills:

- Expert knowledge of solar PV programs and a strong understanding of their impacts, benefits and costs;
- Expert knowledge of different benefit-cost and cost-effectiveness evaluation data collection methods and approaches, including those listed in Appendix A, and a working knowledge of the benefit-cost evaluation literature;
- Strong understanding of sampling methods and approaches and the ability to identify potential biases in a sampling approach and to develop control strategies for mitigating levels of bias and improving the reliability of evaluation results; and
- High level of past experience in conducting benefit-cost evaluations of NEM and in reporting the results of these studies in clear, concise reports.

Respondents shall provide references for at least three clients for which it has previously completed similar benefit-cost studies. These references shall include the clients' organization information including: name, location, and customer count; and a primary contact's information including: name, address, email, and phone number. The references and client contact information will be one of the evaluated items in the Respondent's proposal. For the three clients identified, please provide a copy of the study completed showing similar analysis. If any, describe the general relevant firm experience in providing benefit-cost study services to public utilities similar in function, size, complexity and type of service territory as NorthWestern in Montana.

4.3 PROPOSED STUDY

Proposals must indicate the methodology to be used and exhibit a clear understanding of the scope of the Study, including a detailed plan for the Study. NorthWestern will be providing certain information to the selected Respondent, but for the purposes of this RFP Respondent must provide a list of data requirements of NorthWestern and a list of assumptions to be used by Respondent for its analysis.

It is expected that Respondent will use its own team and resources to complete the Study. If, however, additional support is needed from NorthWestern, Respondent should indicate this in its proposal. See Appendix A for more information about the data requirements, including information NorthWestern will provide, and assumptions needed to perform the Study.

4.4 PRICING

Respondents shall submit their proposals detailing costs using the format as illustrated in the Pricing Sheets in Attachment 2. In the Pricing Sheets, Respondents shall identify all costs for performing the

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scope of work indicated in Appendix A. Respondents may add rows to the Pricing Sheets, if necessary, and provide more detail for NorthWestern’s evaluation purposes. Upon request by Respondent in its proposal, progress payments may be made based on reported achievement of tasks established in the Study Plan and Schedule. However, final payment will not be made until NorthWestern accepts the service deliverables.

4.5 STUDY PLAN AND SCHEDULE

Respondent shall develop a detailed schedule including tasks to meet all Study scope of work requirements documented in Section 2.3 and Appendix A with reasonable time included for review by NorthWestern and other audiences of NorthWestern’s choosing. The schedule must be coordinated with NorthWestern’s representative following award of the contract. Proposals must identify any concerns with the final Study being completed and delivered to NorthWestern **no later than March 15, 2018**.

4.6 EXCEPTIONS

Respondents shall provide a list of exceptions to the scope of work set forth in Appendix A and a brief description of the exception.

4.7 SUBCONTRACTORS

Any portion of the services performed by subcontractors other than the Respondent must be clearly defined. Respondents must prepare and submit, as part of its proposal, a list of anticipated subcontractors for the services. Any changes or additions to the list of subcontractors before or after the award of the services must be approved by NorthWestern.

4.8 CONSULTING SERVICES AGREEMENT

NorthWestern anticipates entering into a consulting agreement with the successful Respondent similar to the contract attached to this RFP as Attachment 3. NorthWestern will not allow the successful bidder to perform any of the services contemplated by this RFP under an existing master agreement with NorthWestern. No oral understanding or agreement shall be binding on either party. Respondents must submit detailed exceptions and clarifications to the commercial terms and conditions governing the services as part of the proposal. Respondents must also specifically identify any objections to the insurance requirements of the draft agreement attached as Attachment 3. Respondents may either attach a redlined version of the draft agreement to its proposal or specifically identify any exceptions and clarifications. Commercial terms and conditions are subject to negotiation and mutual agreement. If Respondents fail to detail any exceptions or clarifications to the contract attached to this RFP in its proposal, Respondent waives its right to later request changes to the agreement if it is selected as the winning Respondent.

4.9 CONFLICT OF INTEREST

Respondent must disclose all conflicts of interest or potential conflicts of interest that it or any of its team members may have either with NorthWestern or any other group that could be impacted by conclusions in the Study. For purposes of this RFP, “conflict of interest” includes a financial and/or commercial interest that may impair the ability of the individual or firm to deliver fair unbiased work to

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NorthWestern. When evaluating the proposals, NorthWestern will consider the presence or absence of any conflicts, including the weight, if any, to assign to such matters.

5. Evaluation Criteria

NorthWestern’s objective is to evaluate and select the proposal that best meets the functional and business requirements of NorthWestern and the Study. NorthWestern reserves the right to exercise reasonable judgment in evaluating proposals and may modify the criteria noted below at its discretion. NorthWestern expects to employ a decision framework, for the short-list and final Respondent selection, based primarily on the following:

1. Knowledge and Comprehension (35%)
 - Matches proposal format included in Attachment 1.
 - The Respondent’s demonstrated ability to perform work outlined in Appendix A and meet the deadline set forth in the RFP.
 - Demonstrated understanding of NEM in NorthWestern Energy’s Montana Electric Service Territory.
 - A clear explanation of the logic behind the proposed approach.
2. Cost (30%)
 - Cost of the work to be performed as specified in the proposal.
3. Experience (35%)
 - Demonstrated subject-matter experience (Utility or energy industry, desirable).
 - Demonstrated experience of Respondent’s team members and/or key personnel in completing similar benefit-cost studies comprehensively, on time, and in compliance with that study’s scope of work.
 - The Respondent’s demonstrated ability (through examples) to provide clear, concise written reports that reflect extremely high-quality work product.
 - Qualifications of key personnel assigned to the Respondent’s team.
 - Disclosed conflicts, if any.

6. Additional Provisions

6.1 NO BINDING COMMITMENT

This RFP is not an offer by NorthWestern to engage in services provided by any Respondent. NorthWestern is not bound to enter into negotiations or execute a definitive agreement with any Respondent as a result of this RFP. No binding commitment on the part of NorthWestern to any Respondent exists unless and until the parties execute definitive agreements effective in accordance with their terms.

6.2 CONFIDENTIALITY AND NONDISCLOSURE

NorthWestern will maintain the confidentiality of any proprietary and confidential information contained in a proposal, provided that such information is clearly marked as “Confidential Information” at the time of initial disclosure. If appropriately marked, NorthWestern will maintain the confidentiality

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of such information. However, NorthWestern, as a public utility, is subject to regulation by the MPSC as well as several other regulatory commissions and may be required to submit information, including RFP data and/or documents, as part of a regulatory proceeding. To the extent a Respondent desires a protective order for any information required to be filed with a public service commission, the Respondent is solely responsible for preparing and requesting any such protective order. NorthWestern shall notify Respondents of any pending disclosure, but is not obligated to participate in any protective order process.

6.3 OWNERSHIP AND RETURN OF PROPOSALS

All materials submitted as part of this RFP shall become the property of NorthWestern and will not be returned.

6.4 COST OF RESPONDING

A response to this RFP will be prepared at the sole cost and expense of Respondent and with the express understanding that there will be no claims whatsoever for reimbursement from NorthWestern.

Appendix A. Detailed Scope of Study

STUDY REQUIREMENTS

This Study will support rate design for NorthWestern’s NEM customers. The National Association of Regulatory Utility Commissioners has developed a manual titled Distributed Energy Resources Rate Design and Compensation¹, and NorthWestern desires an analysis generally patterned after the Value of Resource methodology described in that document.

NorthWestern has identified the following needs to be addressed for each of the Study Components in Section 2.3:

Analysis 1. Determine the benefits of utility services that may occur from solar PV systems. Analyze the benefits identified in the Benefit Categories in Table 2 and provide input values to the cost effectiveness tests required in Analysis 3.

Analysis 2. Determine the costs of utility services that may occur from solar PV systems. Analyze the costs identified in the Cost Categories in Table 3 and provide input values to the cost effectiveness tests required in Analysis 3.

Analysis 3. As defined in the California Public Utilities Commission California Standard Practice Manual), determine Utility/Program Administrator Cost Test and Ratepayer Impact Measurement Test values using the information in Analyses 1, Analysis 2, and the additional Study Requirements noted below.

Table 2. Benefit Categories

Benefit Categories ²	Description
Avoided Energy Costs*	All avoided fuel, variable operation and maintenance, and emission allowance costs and any wheeling charges associated with the marginal unit reflecting the seasonal variability of the NEM resource. NorthWestern must use the MPSC’s approved method for estimating avoided energy costs for purposes of setting the standard rates in NorthWestern’s Qualifying Facilities (“QF-1”) tariff, subject to the required carbon dioxide (“CO2”) scenarios. NorthWestern’s Study must evaluate two scenarios: one that includes potential CO2 regulations and one that excludes potential CO2 regulations. NorthWestern must hold technical discussions, as necessary, with the Electric Technical Advisory Committee (“ETAC”) regarding how to incorporate potential CO2 regulations.

¹ National Association of Regulatory Utility Commissioners. Staff Subcommittee on Rate Design, (n.d.). *Distributed Energy Resources Rate Design and Compensation: A Manual Prepared by the NARUC Staff Subcommittee on Rate Design*.

² NorthWestern intends to supply the selected Respondent with information relevant to each benefit and cost category identified in Tables 2 and 3, with input from the selected Respondent.

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Benefit Categories (continued)	Description
Avoided Capacity Costs*	Deferred or displaced generation capacity costs, including costs for resources needed to maintain capacity reserve requirements. As part of its assessment of these values, NorthWestern must perform an Effective Load Carrying Capability or similar assessment of the capacity contribution of solar PV customer-generators. NorthWestern must hold technical discussions with ETAC regarding methodology, data needs, and other related matters.
Avoided Transmission and Distribution Capacity Costs*	The cost of deferred or displaced transmission and distribution (“T&D”) resources needed to serve load pockets, distant generating resources, or elsewhere. Absent detailed marginal cost information, the Study must use the regression method developed by National Economic Research Associates. NorthWestern must hold technical discussions with ETAC regarding methodology, data needs, and other related matters.
Avoided System Losses	The marginal cost of energy lost over the transmission and distribution lines to get from centralized generation resources to load reflecting the seasonal variability of the NEM resource.
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. NorthWestern’s Study must evaluate two scenarios: one that includes potential CO2 regulations and one that excludes potential CO2 regulations. NorthWestern must hold technical discussions, as necessary, with ETAC regarding how to incorporate 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. This category may be considered in tandem with the “market price suppression effects” category.

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Benefit Categories (continued)	Description
Avoided Grid Support Services Costs	Reduced or deferred costs for grid support (aka ancillary) services including voltage control and reactive supply. The assessment of this avoided cost category must incorporate the potential for advanced inverter functionality based on anticipated changes to the standards and requirements in IEEE 1547 and UL 1741, as referenced in Mont. Admin. R. 38.5.8405.
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. The assessment of this avoided cost category must incorporate the potential for advanced inverter functionality based on anticipated changes to the standards and requirements in IEEE 1547 and UL 1741, as referenced in Mont. Admin. R. 38.5.8405.
Non-Energy Benefits*	Includes a wide range of utility system benefits not associated with energy delivery such as increased customer satisfaction and fewer service complaints. NorthWestern must consult ETAC on this category.

*Consultation with ETAC will be coordinated by NorthWestern but may require engagement by selected Respondent.

Table 3. Cost Categories

Cost Categories³	Descriptions
Reduced Revenue*	Lost utility revenue associated with reduced sales due to net metering. This category is a proxy for the ongoing cost to provide a customer-generator distribution, transmission, and supply services not otherwise accounted for in other categories. NorthWestern must consult with ETAC on plausible assumptions for the annual rate of change in: 1) retail T&D rates; and 2) Production rates. Assumptions for these two rate categories must be determined and justified separately. NorthWestern should not assume for purposes of the Study that fixed costs associated with utility assets a customer-generator substitutes for are necessarily costs of a customer-generator, even if they result in reduced revenue.
Administrative Costs	Costs incurred to administer net metering, including, for example, marketing, advertising, evaluation, market research, and basic administration.

³See footnote 2.

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Cost Categories (continued)	Description
Interconnection	Costs incurred to interconnect customer-generators (can apply to both utility and NEM).
Integration	Costs incurred to incorporate customer generation into the grid.

*Consultation with ETAC will be coordinated by NorthWestern but may require engagement by selected Respondent.

ADDITIONAL STUDY REQUIREMENTS

NorthWestern has identified the following additional needs to be addressed in this Study.

Locational attributes

The Study must address locational attributes of customer-generators.

Adoption Rate of Solar

The Study must review a range of plausible solar adoption rates to be provided by NorthWestern.

Economic Study Period

In evaluating the value of a distributed solar PV resource, the economic Study period is set at 25 years, with results provided on a net present value basis.

DELIVERABLES

NorthWestern requires that the NEM Study contain the following deliverables:

- Develop a Draft written NEM Study report that includes assumptions, methodologies, analyses, and results for each of the Study Components included in Section 2.3. The draft report will be submitted to NorthWestern and other audiences of NorthWestern’s choosing for review, questions, and comments.
- The selected Respondent will review, answer questions, and incorporate the comments it believes to be appropriate based on its knowledge and experience of similar benefit-cost NEM studies in order to provide a Final written NEM Study report. The Final NEM Study report is due to NorthWestern no later than **March 15, 2018**. The Final NEM Study report should contain recommendations for how such a study may be improved in the future, including identifying changes to the evaluation approach that can be expected to improve the reliability of the results.
- Supporting data used to determine Study outputs used to complete the Study.

REGULATORY SUPPORT

As required by law, the Study will be filed with the MPSC by April 1, 2018. As such, NorthWestern may require regulatory support including testimony submitted by the consultant presenting the report, and explaining and supporting its work. NorthWestern will compensate the selected Respondent on a time and material basis for this work.