DWESTERN Energy <u>Original</u> CancelingRevisedSheet No. <u>R-1</u>

~Rule No. 17

INTERCONNECTION PROCEDURES FOR SMALL GENERATOR FACILITIES OTHER THAN QUALIFYING FACILITIES

Section 1. Applicability:

Nort

W7

This tariff governs the Interconnection of Small Generator Facilities in Montana other than Qualifying Facilities, with an electric Nameplate Capacity of ten megawatts (MW) or less, to the Electric Distribution System of NorthWestern Energy (also referred to as "NorthWestern" and "utility" in these procedures) in the state of Montana. This tariff does not apply to Small Generator Facilities that are considered to be Qualifying Facilities or subject to the Interconnection requirements of the Federal Energy Regulatory Commission.

This tariff pertains to Small Generator Facilities installed and interconnected to NorthWestern's system that satisfy the following criteria:

- 1. The Small Generator Facility must be sited on the utility Customer's premises;
- 2. The Applicant must be in Good Standing with the utility;
- 3. The proposed Small Generator Facility's point of Interconnection may not be on a transmission line;
- 4. The power produced from the Small Generator Facility must be contained on the Electric Distribution System and not flow onto the transmission system; and
- 5. The power Exported by an Interconnection Customer can only be sold to NorthWestern, with the exception of a net metering Customer.

Section 2. Definitions:

The terminology used in these procedures has the following meanings, except where the context clearly indicates otherwise:

- 2.1 <u>Applicant</u> means a person or entity that has filed an Interconnection Request for a Small Generator Facility, other than a Qualifying Facility, to NorthWestern's Electric Distribution System. An Applicant may include a third party who owns and operates a Small Generator Facility under agreement with a Customer or leases a Small Generator Facility to a Customer.
- 2.2 <u>Commission</u> means the Montana Public Service Commission,
- 2.3 <u>Customer</u> means any entity connected to the utility system for the purpose of receiving electric power from NorthWestern's system.
- 2.4 <u>Customer-Generator</u> means a Customer that generates electricity on the Customer's side of the meter, other than a Qualifying Facility.

(continued)

Docket No.: 2016.09.066 (D2016.9.66), Order No. 7621a Commission Approved: April 29, 2019 Tariff Letter No.: 356-E Agenda No.: 19-04-29 Effective for services rendered and after October 1, 2019

Earce \mathbf{S} y Canceling Revised Sheet No. <u>R-17.2</u>	Energy Ca	<u>Original</u> inceling		Sheet No. Sheet No.	<u>R-17.2</u> <u>R-17.2</u>
--	-----------	-----------------------------	--	------------------------	--------------------------------

Rule No. 17

INTERCONNECTION PROCEDURES FOR SMALL GENERATOR FACILITIES OTHER THAN QUALIFYING FACILITIES

- 2.5 <u>Electric Distribution Company</u> means an electric utility that distributes electricity to end users within Montana and is subject to regulation by the Montana Public Service Commission.
- 2.6 <u>Electric Distribution System</u> (i) means the infrastructure constructed and maintained by an Electric Distribution Company, and (ii) Electric Distribution System has the same meaning as the term Area EPS, as defined in the current version of IEEE Standard 1547.
- 2.7 <u>Export</u> means power flows past the point of Interconnection onto NorthWestern's Electric Distribution System.
- 2.8 <u>Good Standing means a Customer's account is not in arrears.</u>

NVZ

Nort

- 2.9 <u>IEEE</u> means the Institute of Electrical and Electronics Engineers.
- 2.10 <u>IEEE Standards</u> means the standards published by the Institute of Electrical and Electronics Engineers.
- 2.11 <u>Interconnect</u> means to connect a utility Customer's Small Generator Facility to NorthWestern's Electric Distribution System.
- 2.12 <u>Interconnection</u> is the result of connecting a utility Customer's Small Generator Facility to the Electric Distribution Company's Electric Distribution System.
- 2.13 <u>Interconnection Customer</u> means any entity, including NorthWestern, that proposes to interconnect its Small Generator Facility with NorthWestern's System.
- 2.14 <u>Interconnection Request</u> means the Customer's request, in accordance with the Tariff, to interconnect a new Small Generator Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Small Generator Facility that is interconnected with NorthWestern's Electric Distribution System.
- 2.15 <u>Line Section</u> means the portion of a Radial Distribution Circuit to which an Applicant seeks to Interconnect and is bounded by automatic sectionalizing devices or the end of a distribution line,
- 2.16 <u>Material Modification</u> means those modifications that have a material impact on the cost or timing of any Interconnection request with a later queue priority date.
- 2.17 <u>Nameplate Capacity</u> means the maximum rated generating output of the Small Generator Facility, , , under specific conditions designated by the original equipment manufacturer and for the purposes Cr

(continued)

Docket No.: 2016.09.066 (D2016.9.66), Order No. 7621a Commission Approved: April 29, 2019 Tariff Letter No.: 356-E Agenda No.: 19-04-29 Effective for services rendered and after October 1, 2019

NorthWestern Original Revised Sheet No. <u>R-17.3</u> Energy Canceling Revised Sheet No. R-17.3

Rule No. 17

INTERCONNECTION PROCEDURES FOR SMALL GENERATOR FACILITIES OTHER THAN **QUALIFYING FACILITIES**

of these procedures; the Nameplate Capacity of the Facility is the sum of the Alternating Current (AC) output ratings of the inverters or generating units to which the Small Generator Facility is connected.

- 2.18 Nationally Recognized Testing Laboratory or NRTL means a testing laboratory that is recognized by the United States Occupational Safety and Health Administration to test and certify Interconnection equipment pursuant to the relevant codes and standards.
- Radial Distribution Circuit means a circuit configuration in which independent feeders branch out 2.19 radially from a common source of supply. From the standpoint of a utility system, the area that is described is between the generating source or intervening substations and the Customer's electric service entrance equipment. In a radial distribution system, power flows in one direction from the utility to the load.
- 2.20Small Generator Facility means an energy resource(s) for the production and/or storage of electricity that has an aggregate Nameplate Capacity that is less than or equal to 10 MW and is designed to operate in parallel with the Electric Distribution System.

Section 3. Request for Interconnection

3.1 Interconnection Request

An Applicant who wants to Interconnect, make a capacity change, or change the status of a proposed or operating Small Generator Facility must submit a Small Generator Facility Interconnection Request (Interconnection Request) to NorthWestern, together with any required processing fee or deposit.

3.2 **Queue** Position

The Interconnection Request shall be date and time stamped upon receipt. The date and time stamp applied to the Interconnection Request at the time of its original submission shall be accepted as the qualifying date and time stamp for the purpose of any timetable in these procedures. Within 5 business days of receiving the Interconnection Request, the Applicant shall be notified of receipt of the Interconnection Request. If the Interconnection Request is incomplete, within 5 business days, a written list detailing all required information to complete the Interconnection Request will be provided to the Applicant. The Applicant will have 10 business days after receipt of the notice to submit the listed information. If the Applicant does not provide either the listed information or a request for an extension of time within the deadline, the Interconnection Request will be deemed withdrawn. An Interconnection Request will be deemed complete upon submission of all required information to NorthWestern.

(continued) Docket No.: 2016.09.066 (D2016.9.66), Order No. 7621a Effective for services rende Commission Approved: April 29, 2019 after October 1, 2019 Tariff Letter No.: 356-E Agenda No.: 19-04-29

NorthWestern Energy

Original Revised Sheet No. <u>R-17.4</u> Canceling Revised Sheet No. **R-17.4**

Rule No. 17

INTERCONNECTION PROCEDURES FOR SMALL GENERATOR FACILITIES OTHER THAN **QUALIFYING FACILITIES**

3.3 **Request Fee**

NorthWestern shall require a non-refundable Interconnection Request processing fee for each Interconnection Request. The amount of the fee is dependent upon the review level requested in the Interconnection Request and is intended to cover reasonable costs for processing, minor studying, and evaluation of the Interconnection Request. Any Interconnection Request requiring a detailed study and engineering evaluation may incur costs that are not covered by the Interconnection Request fee. Before any costs above the Interconnection Request fee are assessed, the Applicant must authorize NorthWestern to continue by executing appropriate study agreements and assuming responsibility for the additional costs, or the Interconnection Request will be considered withdrawn and the original Interconnection Request fee forfeited.

The non-refundable Interconnection Request fees are as follows:

Level 1 - \$200 Interconnection Request fee

Level 2 - \$500 Interconnection Request fee

Level 3 - \$200 Interconnection Request fee

Level 4 - \$1,000 deposit - applied towards actual study costs

If an Interconnection Request fails to receive approval at one review level, the Applicant must make a subsequent Interconnection Request for the same Small Generator Facility at a different level within 10 business days in order to preserve the queue position. If the Applicant submits such an updated Interconnection Request within 10 business days, the original Interconnection Request fee and any other fees paid in conjunction with the original Interconnection Request will be applied to the fees for the updated Interconnection Request. By mutual agreement, the review process can move directly to the appropriate level without filing a separate updated formal Interconnection Request.

3.4 Modification of the Interconnection Request

The Applicant, or Interconnection Customer if applicable, shall submit to North Western, in writing, modifications to any information provided in the Interconnection Request. NorthWestern will review the modification request and determine if the requested change constitutes a Material Modification. A response will be provided to the Applicant, or Interconnection Customer if applicable, within 10 business days. If NorthWestern determines that the requested change constitutes a Material Modification, then NorthWestern may require that a new Interconnection Request be submitted. Applicants relinquish their queue position for changes deemed as Material Modifications.

> (continued) Effective for services render after October 1, 2019 1111 Weller! Administrative Assistant

Docket No.: 2016.09.066 (D2016.9.66), Order No. 7621a Commission Approved: April 29, 2019 Tariff Letter No.: 356-E Agenda No.: 19-04-29

Energy Canceling	<u>Driginal</u> Revised Revised	Sheet No. Sheet No.	<u>R-17.5</u> <u>R-17.5</u>	
------------------	------------------------------------	------------------------	--------------------------------	--

Rule No. 17

INTERCONNECTION PROCEDURES FOR SMALL GENERATOR FACILITIES OTHER THAN QUALIFYING FACILITIES

3.5 Aggregating Multiple Generators

If the Interconnection Request is for a Small Generator Facility that includes multiple Small Generator Facilities at a site for which the Applicant seeks a single point of Interconnection, the Interconnection Request shall be evaluated for the purpose of the Interconnection on the basis of the aggregate electric Nameplate Capacity of the multiple Small Generator Facilities,

3.6 <u>Site Control Documentation</u>

Documentation of site control must be available. If the Applicant is not currently a Customer of NorthWestern, site control documentation must be provided with the Interconnection Request. Site control may be demonstrated through ownership of, a leasehold interest in, or an option or other right to develop a site for the purpose of constructing the Small Generator Facility. Site control may be documented by a property tax bill, deed, lease agreement, or other legally binding contract.

Section 4. Review Procedures:

4.1 Interconnection Levels

NorthWestern shall review Interconnection Requests using one or more of the following review procedures:

- 4.1.1 NorthWestern shall use Level 1 procedures for evaluation of all Interconnection Requests to connect Small Generation Facilities if:
 - (i) The Small Generator Facility has an aggregate Nameplate Capacity of up to 50 kilowatts (kW) alternating current (AC); and
 - (ii) The Customer Interconnection equipment proposed for the Small Generator Facility is certified and meets applicable technical standards.
- 4.1.2 NorthWestern shall use Level 2 procedures for evaluating Interconnection Requests if:
 - (i) The Small Generator Facility has a Nameplate Capacity of 2 MW or less; and
 - (ii) The Interconnection equipment proposed for the Small Generator Facility is certified; or
 - (iii) The Small Generator Facility was reviewed under Level 1 review procedures but not approved and the Applicant has submitted a new Interconnection Request for consideration.
- 4.1.3 NorthWestern shall use Level 3 review procedures for evaluating Interconnection and Requests where power will not be Exported.

(continued)

Docket No.: 2016.09.066 (D2016.9.66), Order No. 7621a Commission Approved: April 29, 2019 Tariff Letter No.: 356-E Agenda No.: 19-04-29 Effective for services rendered on after October 1, 2019

NorthWestern Energy

OriginalRevisedSheet No.R-17.6CancelingRevisedSheet No.R-17.6

Rule No. 17

INTERCONNECTION PROCEDURES FOR SMALL GENERATOR FACILITIES OTHER THAN QUALIFYING FACILITIES

- 4.1.4 NorthWestern shall use the Level 4 study procedures for evaluating Interconnection Requests if:
 - (i) The Interconnection Request was not approved under a Level 1, Level 2, or Level 3 expedited review and the Applicant has submitted an Interconnection Request for consideration under a Level 4 study review; or
 - (ii) The Interconnection Request does not meet the oriteria for expedited review under Level 1, Level 2, or Level 3 review procedures.

4.2 <u>Technical Standards</u>

Unless otherwise provided in these procedures, the technical standard to be used in evaluating all Interconnection Requests shall be the current version of IEEE 1547.

Section 5. Level 1 Expedited Review:

NorthWestern shall use the Level 1 Interconnection review procedures for requests that meet the criteria in 4.1.1.

- 5.1 Level 1 Procedures
 - 5.1.1 Upon notification to the Applicant of a complete Interconnection Request, NorthWestern shall assign a Line Section queue position if there is more than one Interconnection Request pending for the same Line Section. The Line Section queue position of the Interconnection Request shall be used to determine the potential adverse system impact of the Small Generator Facility based on the relevant screening criteria. NorthWestern shall notify the Applicant about other higher Line Section queue Applicants and/or Interconnection Customers on the same Line Section for which Interconnection is sought.
 - 5.1.2 NorthWestern shall, within 15 business days after verification of a complete Interconnection Request, verify that the Small Generator Facility can be Interconnected safely and reliably using Level 1 screens.

5.2 Level 1 Screens

5.2.1 For Interconnection of a proposed Small Generator Facility to a radial distribution Line Section, the aggregated generation on the Line Section, including the proposed Small Generator Facility on the Line Section, may not exceed:

(continued)

Docket No.: 2016.09.066 (D2016.9.66), Order No. 7621a Commission Approved: April 29, 2019 Tariff Letter No.: 356-E Agenda No.: 19-04-29 Effective for services rendered and after October 1, 2019 Supplication of the services rendered and Montana Administrative Assistant

	LLLCINC	IAMIT				
NorthWestern Energy	Canceling	<u>1st</u> Original	Revised Revised	Sheet No. Sheet No.	<u>R-17.7</u> <u>R-17.7</u>	

Rule No. 17

INTERCONNECTION PROCEDURES FOR SMALL GENERATOR FACILITIES OTHER THAN OUALIFYING FACILITIES

- (i) 15% of the Line Section annual peak load as most recently measured at the substation; or
- (ii) The annual minimum load of the Line Section.
- 5.2.2 When a proposed Small Generator Facility is to be Interconnected on a single-phase shared secondary Line Section, the aggregate generation capacity on the shared secondary line, including the proposed Small Generator Facility, may not exceed 20 kilovolt-amps (kVA).
- 5.2.3 When a proposed Small Generator Facility is single-phase and is to be Interconnected on a center tap neutral of a 240 volt service, its addition may not create an imbalance between the two sides of the 240 volt service of more than 20% of the nameplate rating of the service transformer.
- 5.2.4 The generator cannot exceed the capacity of the Customer's existing electrical service.
- 5.2.5 Construction of facilities by NorthWestern on its own system is not required to accommodate the Small Generator Facility.
- 5.2.6 If the proposed Interconnection passes the screens and is approved for Interconnection under the Level 1 review, the Interconnection Request shall be approved and NorthWestern will provide an Interconnection Agreement to the Applicant within 5 business days after the determination.
- 5.2.7 If NorthWestern determines that the Interconnection Request fails one or more of the Level 1 screening criteria but determines that the Small Generator Facility can be Interconnected safely and reliably with no NorthWestern system upgrades required, the Interconnection Request shall be approved and NorthWestern will provide an Interconnection Agreement to the Applicant within 5 days after the determination.
- 5.2.8 If the proposed Interconnection fails the screens and is not approved for Interconnection under the Level 1 review, NorthWestern shall provide the Applicant a letter explaining its reasons for denying the Interconnection Request. The Applicant may submit a new Interconnection Request for consideration under a Level 2, Level 3, or Level 4 Interconnection review; however, the Line Section queue position assigned to the Level 1 Interconnection Request shall be retained provided the request is made within 10 business days after notification that the current Interconnection Request has not been approved.

(continued)

Docket No.: 2019.10.078, Order No. 7722 Commission Approved: March 3, 2020 Tariff Letter No.: 364-E Agenda No.: 20-3-3

Effective for services rendered on or after August 1, 2020 ende ()2 borne

estern		<u>1st</u>	Revised	Sheet No.	<u>R-17.8</u>	
Energy	Canceling	Original	Revised	Sheet No.	<u>R-17.8</u>	

Rule No. 17

INTERCONNECTION PROCEDURES FOR SMALL GENERATOR FACILITIES OTHER THAN OUALIFYING FACILITIES

5.3 Level 1 Interconnection Agreement

NorthWe

- 5.3.1 Within 5 business days of notification that the Interconnection Request has passed the screens and is eligible for Interconnection under the Level 1 Expedited Review, NorthWestern shall provide the Applicant with an Interconnection Agreement.
- 5.3.2 The Applicant shall sign and return the Interconnection Agreement to NorthWestern within 30 business days after receipt of the agreement. If the Interconnection Agreement has not been executed and returned to NorthWestern within 30 business days, the Interconnection Request shall be withdrawn and the queue position shall be forfeited.
- 5.3.3 If NorthWestern is unable to meet any of the Level 1 timelines, NorthWestern shall notify the Applicant of the reason for the delay and an expected timeline for meeting the milestone. NorthWestern shall make reasonable efforts to meet all timelines provided in this tariff.

Section 6. Level 2 Expedited Review:

NorthWestern shall use the Level 2 Interconnection review procedures for requests that meet the criteria in 4.1.2.

- 6.1 Level 2 Procedures
 - 6.1.1 Upon notification to the Applicant of a complete Interconnection Request, NorthWestern shall assign a Line Section queue position if there is more than one Interconnection Request pending for the same Line Section. The Line Section queue position of the Interconnection Request shall be used to determine the potential adverse system impact of the Small Generator Facility based on the relevant screening criteria. NorthWestern shall notify the Applicant about other higher Line Section queue Applicants and/or Interconnection Customers on the same Line Section for which Interconnection is sought.
 - 6.1.2 NorthWestern shall, within 20 business days after verification of a complete Interconnection Request:
 - (i) Evaluate the Interconnection Request using the Level 2 review criteria;
 - (ii) Review the Applicant's analysis, if provided by Applicant, using Level 2 criteria; and
 - Provide the Applicant with NorthWestern's evaluation, including a comparison of the results of its own analyses with those of Applicant, if applicable. (continued)

Docket No.: 2019.10.078, Order No. 7722 Commission Approved: March 3, 2020 Tariff Letter No.: 364-E Agenda No.: 20-3-3

Effective for services rendered on or after August 1, 2020 Or borne ende

NorthWestern Energy	Canceling	<u>Original</u>	Revised Revised	Sheet No. Sheet No.	<u>R-17,9</u> R-17,9
	-				<u> </u>

Rule No. 17

INTERCONNECTION PROCEDURES FOR SMALL GENERATOR FACILITIES OTHER THAN **QUALIFYING FACILITIES**

6.2 Level 2 Screens

- For Interconnection of a proposed Small Generator Facility to a Radial Distribution 6.2.1 Circuit, the aggregated generation on the circuit, including the proposed Small Generator Facility, may not exceed:
 - (i) 15% of the Line Section annual peak load as most recently measured at the substation; or
 - (ii) The annual minimum load of the Line Section.
- 6.2.2 The proposed Small Generator Facility, in aggregation with other generation on the distribution circuit, may not contribute more than 10% to the distribution circuit's maximum fault current at the point on the primary line nearest the point of Interconnection
- 6.2.3 The proposed Small Generator Facility, in aggregate with other generation on the distribution circuit, may not cause any distribution protective devices and equipment (including substation breakers, fuse cutouts, and line reclosers), or other Customer equipment on the Electric Distribution System to be exposed to fault currents exceeding 90% of the short circuit interrupting capability including X/R effects.
- 6.2.4 When a Small Generator Facility is to be connected to 3-phase, three wire primary NorthWestern distribution lines, a 3-phase or single-phase generator will be connected. phase-to-phase.
- 6.2.5 When a Small Generator Facility is to be connected to 3-phase, four wire primary NorthWestern distribution lines, a 3-phase or single phase generator will be connected line-to-neutral and will be effectively grounded.
- When the proposed Small Generator Facility is to be Interconnected on single-phase 6.2.6 shared secondary line, the aggregate generation capacity on the shared secondary line, including the proposed Small Generator Facility, shall not exceed 20 kVA.
- 6.2.7 When a proposed Small Generator Facility is single-phase and is to be Interconnected on a center tap neutral of a 240 volt service, its addition may not create an imbalance between the two sides of the 240 volt service of more than 20% of the nameplate rating of the service transformer.

CE(continued) Docket No.: 2016.09.066 (D2016.9.66), Order No. 7621a Effective for services rendered Commission Approved: April 29, 2019 after October 1, 2019 Tariff Letter No.: 356-E 111 ischula A.

Agenda No.: 19-04-29

EnergyOriginalRevisedSheet No.R-17.10CancelingRevisedSheet No.R-17.10	INOrthWestern Energy	Canceling	<u>Original</u>	<u> </u>		/	
---	-------------------------	-----------	-----------------	----------	--	---	--

Rule No. 17

INTERCONNECTION PROCEDURES FOR SMALL GENERATOR FACILITIES OTHER THAN QUALIFYING FACILITIES

- 6.2.8 A Small Generator Facility, in aggregate with other generation Interconnected to the distribution side of a substation transformer feeding the circuit where the Small Generator Facility proposes to Interconnect, may not exceed 10 MW in an area where there are known or posted transient stability limitations to generating units located in the general electrical vicinity (for example, three or four distribution busses from the point of Interconnection).
- 6.2.9 The generator cannot exceed the capacity of the Customer's existing electrical service.
- 6.2.10 Construction of facilities by NorthWestern on its own system is not required to accommodate the Small Generator Facility.

6.3 Level 2 Interconnection Agreement

- 6.3.1 When NorthWestern determines that the Interconnection Request passes the Level 2 screening criteria, or fails one or more of the Level 2 screening criteria but determines that the Small Generator Facility can be Interconnected safely and reliably, it shall provide the Applicant a standard Small Generator Facility Interconnection Agreement within 5 business days after the determination.
- 6.3.2 Within 5 business days of notification that the Applicant has passed all of the screens and is eligible for Interconnection under the Level 2 Expedited Review, NorthWestern shall provide the Applicant with an Interconnection agreement.
- 6.3.3 If the Applicant has failed to meet one or more of the screens under the Level 2 Expedited Review but can still be Interconnected by making minor modifications, NorthWestern shall notify the Applicant and offer to perform additional reviews to determine what modifications to the Electric Distribution System would enable the Interconnection to be made consistent with safety, reliability, and power quality criteria. The Applicant shall first provide NorthWestern with a \$1,000 deposit for the additional review. Applicants are responsible for actual costs associated with the study. Any unspent balance of deposits collected will be returned to the Applicant. NorthWestern shall invoice the Applicant for study costs that exceed deposit amounts collected. Within 30 business days, NorthWestern will provide a study report to the Applicant that identifies the modifications required, along with an estimated cost of the modifications. NorthWestern shall make the necessary modifications only if the Applicant agrees to pay for them.

(continued) Docket No.: 2016.09.066 (D2016.9.66), Order No. 7621a Effective for services render Commission Approved: April 29, 2019 after October 1, 2019 Tariff Letter No.: 356-E Agenda No.: 19-04-29 Administrative Assistant

NorthWestern [*] Energy	Canceling	<u>Original</u>	Revised Revised	Sheet No. Sheet No.	<u>R-17.11</u> <u>R-17.11</u>	
	÷				, <u> </u>	

Rule No. 17

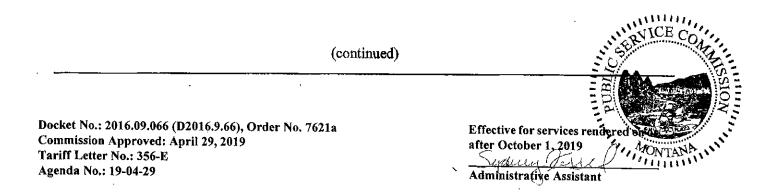
INTERCONNECTION PROCEDURES FOR SMALL GENERATOR FACILITIES OTHER THAN QUALIFYING FACILITIES

- 6.3.4 Within 20 business days of providing the Applicant with the Facilities Report, NorthWestern shall provide the Applicant with a draft Interconnection agreement. This draft will include a proposed milestone schedule.
- 6.3.5 An Applicant shall have 30 business days after receipt of an Interconnection agreement to sign and return the agreement. When an Applicant does not sign the agreement within 30 business days, the Interconnection Request shall be deemed withdrawn.
- 6.3.6 If the Small Generator Facility is not approved under a Level 2 review, NorthWestern shall provide the Applicant a letter explaining its reasons for denying the Interconnection Request. The Applicant may submit a new Interconnection Request for consideration under a Level 3 or Level 4 Interconnection review; however, the Line Section queue position assigned to the Level 2 Interconnection Request shall be retained provided the request is made within 10 business days after notification that the current Interconnection Request has not been approved.
- 6.3.7 If NorthWestern is unable to meet any of the Level 2 timelines, NorthWestern shall notify the Applicant of the reason for the delay and an expected timeline for meeting the milestone. NorthWestern shall make reasonable efforts to meet all timelines provided in this tariff.

Section 7. Level 3 Expedited Review:

NorthWestern shall use the Level 3 Interconnection review procedures for requests that meet the criteria in 4.1.3.

- 7.1 Level 3 Procedures
 - 7.1.1 Upon notification to the Applicant of a complete Interconnection Request, NorthWestern shall assign a Line Section queue position if there is more than one Interconnection Request pending for the same Line Section. The Line Section queue position of the Interconnection Request shall be used to determine the potential adverse system impact of the Small Generator Facility based on the relevant screening criteria. NorthWestern shall notify the Applicant about other higher Line Section queue Applicants and/or Interconnection Customers on the same Line Section for which Interconnection is sought.



	orthWestern [*] Energy	Canceling	<u>Original</u>	Revised Revised	Sheet No. Sheet No.	<u>R-17.12</u> <u>R-17.12</u>
--	------------------------------------	-----------	-----------------	--------------------	------------------------	----------------------------------

Rule No, 17

INTERCONNECTION PROCEDURES FOR SMALL GENERATOR FACILITIES OTHER THAN QUALIFYING FACILITIES

7.1.2 NorthWestern shall, within 20 business days after verification of a complete Interconnection Request, verify that the Small Generator Facility can be Interconnected safely and reliably using Level 3 screens.

7.2 Level 3 Screens

- 7.2.1 For Interconnection Requests to a Radial Distribution Circuit, the following criteria must be satisfied:
 - (i) The aggregated total of the Nameplate Capacity of all of the generators on the circuit, including the proposed Small Generator Facility, is 10 MW or less;
 - (ii) The Small Generator Facility will use reverse power relays or other protection functions that prevent power flow onto the Electric Distribution System;
 - (iii) The Small Generator Facility is not served by a shared transformer; and
 - (iv) No construction of facilities by NorthWestern on its own system shall be required to accommodate the Small Generator Facility.
- 7.2.2 NorthWestern shall evaluate the Interconnection Request under the screens included in the Level 2 expedited review.
- 7.2.3 For Interconnection of a proposed Small Generator Facility to a Radial Distribution Circuit, the aggregated generation on the circuit, including the proposed Small Generator Facility, may not exceed:
 - (i) 15% of the Line Section annual peak load as most recently measured at the substation; or
 - (ii) The annual minimum load of the Line Section.
- 7.2.4 The proposed Small Generator Facility, in aggregation with other generation on the distribution circuit, may not contribute more than 10% to the distribution circuit's maximum fault current at the point on the primary line nearest the point of Interconnection.
- 7.2.5 The proposed Small Generator Facility, in aggregate with other generation on the distribution circuit, may not cause any distribution protective devices and equipment (including substation breakers, fuse cutouts, and line reclosers), or other Customer equipment on the Electric Distribution System to be exposed to fault currents exceeding, 90% of the short circuit interrupting capability including X/R effects.

(continued)

Docket No.: 2016.09.066 (D2016.9.66), Order No. 7621a Commission Approved: April 29, 2019 Tariff Letter No.: 356-E Agenda No.: 19-04-29 Effective for services rendered open after October 1, 2019 MONTANE Administrative Assistant

NorthWestern Energy

Original Revised Sheet No. Canceling Revised Sheet No.

R-17,13 <u>R-17.13</u>

Rule No. 17

INTERCONNECTION PROCEDURES FOR SMALL GENERATOR FACILITIES OTHER THAN **QUALIFYING FACILITIES**

- When a Customer-Generator facility is to be connected to 3-phase, three wire primary 7.2.6 NorthWestern distribution lines, a 3-phase or single-phase generator will be connected phase-to-phase.
- When a Customer-Generator facility is to be connected to 3-phase, four wire primary 7.2.7 NorthWestern distribution lines, a 3-phase or single phase generator will be connected line-to-neutral and will be effectively grounded.
- 7.2.8 When the proposed Small Generator Facility is to be Interconnected on single-phase shared secondary line, the aggregate generation capacity on the shared secondary line, including the proposed Small Generator Facility, shall not exceed 20 kVA.
- 7.2.9 When a proposed Small Generator Facility is single-phase and is to be Interconnected on a center tap neutral of a 240 volt service, its addition may not create an imbalance between the two sides of the 240 volt service of more than 20% of the nameplate rating of the service transformer.
- 7.2.10 A Small Generator Facility, in aggregate with other generation Interconnected to the distribution side of a substation transformer feeding the circuit where the Small Generator Facility proposes to Interconnect, may not exceed 10 MW in an area where there are known or posted transient stability limitations to generating units located in the general electrical vicinity (for example, three or four distribution busses from the point of Interconnection).
- The generator cannot exceed the capacity of the Customer's existing electrical service. 7.2.11
- 7.2.12 Construction of facilities by NorthWestern on its own system is not required to accommodate the Small Generator Facility.

7.3 Level 3 Interconnection Agreement

- Within 5 business days of notification that the Interconnection Request has passed all of 7.3.1 the screens and is eligible for Interconnection under the Level 3 Expedited Review, NorthWestern shall provide the Applicant with an Interconnection agreement.
- . If the Small Generator Facility is not approved under a Level 3 review, the Applicant 7.3.2 may submit a new Interconnection Request for consideration under the Level 4 procedures without sacrificing the original Line Section queue position provided the ,,,

(continued)

Docket No.: 2016.09.066 (D2016.9.66), Order No. 7621a Commission Approved: April 29, 2019 Tariff Letter No.: 356-E Agenda No.: 19-04-29

Effective for services render after October 1, 2019 MONT 1211 induced tes Administrative Assistant

ICE CO

NorthWestern Original Revised Sheet No. R-17.14 Energy Canceling Revised Sheet No. R-17.14

Rule No. 17

INTERCONNECTION PROCEDURES FOR SMALL GENERATOR FACILITIES OTHER THAN **QUALIFYING FACILITIES**

> revised Interconnection Request is submitted within 10 business days of notice that the current request has not been approved.

7.3.3 If NorthWestern is unable to meet any of the Level 3 timelines, NorthWestern shall notify the Applicant of the reason for the delay and an expected timeline for meeting the milestone. NorthWestern shall make reasonable efforts to meet all timelines in this tariff.

Section 8. Level 4 Expedited Review:

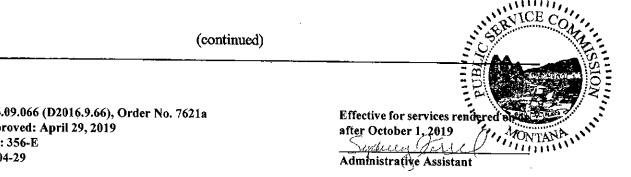
NorthWestern shall use the Level 4 Interconnection review procedures for requests that meet the criteria in 4.1.4.

8.1 Level 4 Procedures

Upon notification to the Applicant of a complete Interconnection Request, NorthWestern 8.1.1 shall assign a Line Section queue position if there is more than one Interconnection Request pending for the same Line Section. The Line Section queue position of the Interconnection Request shall be used to determine the potential adverse system impact of the Small Generator Facility based on the relevant screening criteria. NorthWestern shall notify the Applicant about other higher Line Section queued Applicants and/or Interconnection Customers on the same Line Section for which Interconnection is sought. Any required Interconnection studies shall not begin until NorthWestern has completed its review of all other Interconnection Requests that have a higher Line Section queue position.

8.2 Level 4 Scoping Meeting

- By mutual agreement of the parties, the scoping meeting and/or the Interconnection 8.2.1 Feasibility Study may be waived.
- 8.2.2 If necessary, a scoping meeting will be scheduled within 10 business days after NorthWestern has notified the Applicant that the Interconnection Request is deemed complete, or the Applicant has requested that its Interconnection Request proceed after failing the requirements of a Level 1 review, a Level 2 review, or Level 3 review. The purpose of the meeting must be to review the Interconnection Request, existing studies relevant to the Interconnection Request, and the results of the Level 1, Level 2, or Level 3 screening criteria.



Docket No.: 2016.09.066 (D2016.9.66), Order No. 7621a Commission Approved: April 29, 2019 Tariff Letter No.: 356-E Agenda No.: 19-04-29

Energy Canceling	<u>)riginal</u> I I		Sheet No. Sheet No.	<u>R-17.15</u> <u>R-17.15</u>
------------------	------------------------	--	------------------------	----------------------------------

Rule No. 17

INTERCONNECTION PROCEDURES FOR SMALL GENERATOR FACILITIES OTHER THAN QUALIFYING FACILITIES

8.3 Level 4 Feasibility Study

- 8.3.1 If the parties agree at a scoping meeting that an Interconnection Feasibility Study shall be performed, NorthWestern shall provide to the Applicant, no later than 5 business days after the scoping meeting, an Interconnection Feasibility Study Agreement. The Feasibility Study Agreement must be returned to NorthWestern within 15 business days. The Feasibility Study Agreement will outline the scope of the Interconnection Feasibility Study. The \$1,000 deposit provided with the Level 4 Interconnection Request will be applied towards the Feasibility Study. Applicants are responsible for actual costs associated with the Feasibility Study. Any unspent balance of deposits collected will be returned to the Applicant or NorthWestern shall invoice the Applicant for study costs that exceed deposit amounts collected within 15 business days after the date when the Interconnection Feasibility Study has been provided to the customer.
- 8.3.2 The Interconnection Feasibility Study, which will be completed and the report issued within 30 business days, shall preliminarily evaluate the feasibility of the proposed Interconnection. The Feasibility Study will provide a list of facilities necessary to accommodate Interconnection and a non-binding good faith estimate of cost responsibility and a non-binding good faith estimated time to construct.
- 8.3.3 A meeting will be scheduled within 10 business days after the Interconnection Feasibility Study report is issued to discuss the results of the Feasibility Study.

8.4 Level 4 System Impact Study

- 8.4.1 If the parties agree at a scoping meeting that an Interconnection Feasibility Study is not required, NorthWestern shall provide to the Applicant, no later than 5 business days after the scoping meeting, an Interconnection System Impact Study Agreement, including an outline of the scope of study. The System Impact Study Agreement must be returned to NorthWestern within 30 business days.
- 8.4.2 If a Feasibility Study is completed, NorthWestern shall provide an Interconnection System Impact Study Agreement to the Applicant no later than 5 business days after the Feasibility Study results meeting. The System Impact Study Agreement must be returned to NorthWestern, along with a deposit of \$5,000, within 30 business days. Applicants are responsible for actual costs associated with the System Impact Study. Any unspent balance of deposits collected will be returned to the Applicant or NorthWestern shall invoice the Applicant for study costs that exceed deposit amounts collected within 1611

CE (continued) Docket No.: 2016.09.066 (D2016.9.66), Order No. 7621a Effective for services render Commission Approved: April 29, 2019 after October 1, 2019 Tariff Letter No.: 356-E Agenda No.: 19-04-29 Administrative Assistant

NorthWestern Energy	Canceling	<u>Original</u>	Revised Revised	Sheet No. Sheet No.	<u>R-17.16</u> <u>R-17.16</u>	
						-

Rule No. 17

INTERCONNECTION PROCEDURES FOR SMALL GENERATOR FACILITIES OTHER THAN QUALIFYING FACILITIES

business days after the date when the Interconnection System Impact Study has been provided to the customer.

- 8.4.3 The Interconnection System Impact Study will be completed and the report provided within 45 business days after receipt of the signed System Impact Study Agreement and deposit. The Interconnection System Impact Study shall evaluate the impact of the proposed Interconnection on both the safety and reliability of NorthWestern's Electric Distribution System. The study shall identify and detail the system impacts that result when a Small Generator Facility is Interconnected without project or system modifications, focusing on the adverse system impacts identified in the Interconnection Feasibility Study, or potential impacts including those identified in the scoping meeting. The study shall consider all generating facilities that, on the date the Interconnection System Impact Study is commenced, are directly Interconnected with NorthWestern's system, have a pending higher Line Section queue position to Interconnect to the system, or have a signed a standard Small Generator Facility Interconnection Agreement. NorthWestern shall provide the Applicant with a report that demonstrates the impact of the proposed new generation to NorthWestern's Electric Distribution System.
- 8.4.4 The System Impact Study shall include any necessary elements from among the following:
 - (i) A load flow study;
 - (ii) Identification of affected systems;
 - (iii) An analysis of equipment interrupting ratings;
 - (iv) A protection coordination study;
 - (v) Voltage drop and flicker studies;
 - (vi) Protection and set point coordination studies;
 - (vii) Grounding reviews; and
 - (viii) Impact on system operation.
- 8.4.5 A System Impact Study shall consider any necessary criteria from among the following:
 - (i) A short circuit analysis;
 - (ii) A stability analysis;
 - (iii) Alternatives for mitigating adverse system impacts on affected systems. NICE Co. (continued)

Docket No.: 2016.09.066 (D2016.9.66), Order No. 7621a Commission Approved: April 29, 2019 Tariff Letter No.: 356-E Agenda No.: 19-04-29 Effective for services rendered and after October 1, 2019

NorthWestern Energy	Canceling	<u>Original</u>	Revised Revised	Sheet No. Sheet No.	<u>R-17.17</u> <u>R-17.17</u>	

Rule No. 17

INTERCONNECTION PROCEDURES FOR SMALL GENERATOR FACILITIES OTHER THAN QUALIFYING FACILITIES

- (iv) Protection and set point coordination studies; and
- (v) Grounding reviews.
- 8.4.6 The final System Impact Study must provide the following:
 - (i) The underlying assumptions of the study;
 - (ii) The results of the analyses;
 - (iii) A list of any potential impediments to providing the requested Interconnection service;
 - (iv) Required distribution upgrades; and
 - (v) A nonbinding good faith estimate of cost and time to construct any required distribution upgrades.
- 8.4.7 A results meeting will be scheduled within 10 business days of issuance of the System Impact Study.

8.5. Level 4 Facilities Study

4**1 W**7

NT

- 8.5.1 NorthWestern shall provide to the Applicant, no later than 5 business days after the System Impact Study results meeting, an Interconnection Facilities Study Agreement. The Facilities Study Agreement must be returned to NorthWestern, along with a deposit of \$10,000, within 30 business days. Applicants are responsible for actual costs associated with the Facilities Study. Any unspent balance of deposits collected will be returned to the Applicant or NorthWestern shall invoice the Applicant for study costs that exceed deposit amounts collected within 15 business days after the date when the Interconnection Facilities Study has been provided to the customer.
- 8.5.2 The Interconnection Facilities Study shall specify and estimate the cost of equipment, engineering, procurement, and construction work (including overheads) needed to implement the conclusion of the System Impact Study. A draft Interconnection Facilities Study will be completed and the report provided within 45 business days after receipt of the signed Facilities Study Agreement and deposit and shall identify:
 - (i) The electrical switching configuration of the equipment, including transformer, switchgear, meters, and other station equipment;
 - (ii) The nature and estimated cost of NorthWestern's Interconnection facilities and distribution upgrades necessary to accomplish the Interconnection; and

(continued)

Docket No.: 2016.09.066 (D2016.9.66), Order No. 7621a Commission Approved: April 29, 2019 Tariff Letter No.: 356-E Agenda No.: 19-04-29 Effective for services rendered on the after October 1, 2019

Canceling Revised Sheet No. <u>R-17,18</u>	NorthWestern [®] Energy _{Car}			Sheet No. Sheet No.	
--	--	--	--	------------------------	--

Rule No. 17

INTERCONNECTION PROCEDURES FOR SMALL GENERATOR FACILITIES OTHER THAN QUALIFYING FACILITIES

- (iii) An estimate of the time required to complete the construction and installation of the facilities.
- 8.5.3 A Facilities Study results meeting will be scheduled within 10 business days of issuance of the draft report.
- 8.5.4 The Applicant may, within 20 business days after receipt of the draft report, provide written comments to NorthWestern to include in the final report. NorthWestern shall provide the final Facilities Study report within 15 business days of receiving the Applicant's comments.
- 8.5.5 Within 20 business days of issuing the final Facilities Study report, NorthWestern shall provide the Applicant with a draft standard Small Generator Facility Interconnection Agreement, including a proposed milestone schedule.
- 8.5.6 If NorthWestern is unable to meet any of the Level 4 timelines, NorthWestern shall notify the Applicant of the reason for the delay and an expected timeline for meeting the milestone.
- 8.6 Level 4 Interconnection Agreement
 - 8.6.1 NorthWestern will tender a draft Interconnection Agreement to the Applicant within 20 business days of issuance of the final Facilities Study report. The draft will include a proposed milestone schedule.
 - 8.6.2 NorthWestern and the Applicant shall have 20 business days after receipt of the draft Interconnection Agreement to negotiate a final milestone schedule and additional items.
 - 8.6.3 NorthWestern shall tender the Applicant an executable Interconnection Agreement within 15 business days after negotiations have been completed.
 - 8.6.4 The Applicant shall sign and return the agreement within 20 business days of receiving the final Interconnection Agreement. When an Applicant does not sign the agreement within 20 business days, the Interconnection Request shall be deemed withdrawn.

(continued)	SERVICE CO
Docket No.: 2016.09.066 (D2016.9.66), Order No. 7621a	Effective for services rendered and
Commission Approved: April 29, 2019	after October 1, 2019
Tariff Letter No.: 356-E	MONTANA
Agenda No.: 19-04-29	Administrative Assistant

NorthWestern Energy Canceling Original Revised Sheet No. <u>R-17.19</u> Sheet No. <u>R-17.19</u>

Rule No. 17

INTERCONNECTION PROCEDURES FOR SMALL GENERATORS OTHER THAN QUALIFYING FACILITIES

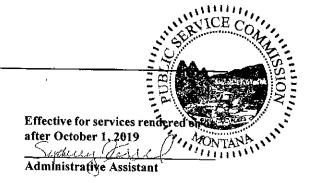
Section 9. Construction of Distribution Upgrades:

9.1 Schedule

9.1.1 NorthWestern and Applicant shall negotiate in good faith a schedule for the construction of distribution upgrades.

9.2 Construction Sequencing

- 9.2.1 In general, the in-service date of the proposed Interconnection project seeking Interconnection to the Electric Distribution System will determine the sequence of construction of network upgrades.
- 9.2.2 In the event that distribution upgrades are identified in the studies that must be added only in the event that higher Line Section queued Interconnection projects not yet Interconnected eventually complete and Interconnect their generation facilities, an Applicant may elect to Interconnect without paying for such upgrades at the time of the Interconnection under the condition that the Applicant shall pay for such upgrades at the time the higher Line Section queued Applicant is ready to Interconnect. If the Applicant does not pay for such upgrades at that time, NorthWestern will require the Applicant to immediately disconnect its generating facility so that the higher Line Section queued Applicant can be accommodated.



Docket No.: 2016.09.066 (D2016.9.66), Order No. 7621a Commission Approved: April 29, 2019 Tariff Letter No.: 356-E Agenda No.: 19-04-29