

**NorthWestern Energy
Transmission Service
Study Procedures
Manual**

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Study Delay Procedures

In the event that NorthWestern Energy is unable to complete the required study within such time period, it shall so notify the Eligible Customer and provide an estimated completion date along with an explanation of the reasons why additional time is required to complete the required studies. NorthWestern will send a delay letter or email to the Eligible Customer explaining the reason for delay and the estimated time for completion in the event that a study is delayed.

Study Metrics

NorthWestern Energy is required to aggregate all System Impact Studies and Facilities Studies for transmission service that it completes during the quarter for non-affiliates in order to determine if NorthWestern Energy processes more than 20 percent of non-affiliates' studies outside of the 60-day due diligence deadlines in the pro forma Open Access Transmission Tariff for two consecutive quarters. NorthWestern tracks all System Impact and Facilities Studies for both generation interconnection and transmission service. The results of the tracking data for transmission service will be evaluated quarterly to determine if the required deadlines have been met. NorthWestern will post the quarterly performance metrics within 15 days of the end of the quarter on the OASIS site for three calendar years.

NorthWestern Energy is required to post the following set of performance metrics on a quarterly basis:

- ❖ Process time from initial service request to offer of System Impact Study Agreement pursuant to sections 17.5, 19.1 and 32.1 of the pro forma Open Access Transmission Tariff
 - Number of new System Impact Study Agreements delivered to transmission customers
 - Number of new System Impact Study Agreements delivered to the transmission customer more than 30 days after the transmission customer submitted its request
 - Average time (days) from request submittal to change in request status
 - Average time (days) from request submittal to delivery of System Impact Study agreement
 - Number of new System Impact Study Agreements executed
- ❖ System Impact Study processing time pursuant to sections 19.3 and 32.3 of the pro forma Open Access Transmission Tariff
 - Number of System Impact Studies completed
 - Number of System Impact Studies completed more than 60 days after receipt of executed System Impact Study Agreement
 - Average time (days) from receipt of executed System Impact Study Agreement to date when completed System Impact Study made available to the transmission customer
 - Average cost of System Impact Studies completed during the period
- ❖ Service requests withdrawn from System Impact Study queue
 - Number of requests withdrawn from the System Impact Study queue

- Number of System Impact Studies withdrawn more than 60 days after receipt of executed System Impact Study Agreement
- Average time (days) from receipt of executed System Impact Study Agreement to date when request was withdrawn from the System Impact Study queue
- ❖ For all System Impact Studies completed more than 60 days after receipt of executed System Impact Study Agreement, average number of days study was delayed due to transmission customer's actions (e.g., delays in providing needed data)
- ❖ Process time from completed System Impact Study to offer of Facilities Study pursuant to sections 19.4 and 32.4 of the pro forma Open Access Transmission Tariff
 - Number of new Facilities Study Agreements delivered to transmission customers
 - Number of new Facilities Study Agreements delivered to transmission customers more than 30 days after the completion of the System Impact Study
 - Average time (days) from completion of System Impact Study to delivery of Facilities Study Agreement
 - Number of new Facilities Study Agreements executed
- ❖ Facilities Study processing time pursuant to sections 19.4 and 32.4
 - Number of Facilities Studies completed
 - Number of Facilities Studies completed more than 60 days after receipt of executed Facilities Study Agreement
 - Average time (days) from receipt of executed Facilities Study Agreement to date when completed Facilities Study made available to the transmission customer
 - Average cost of Facilities Studies completed during the period
 - Average cost of recommended upgrades for Facilities Studies completed during the period
- ❖ Service requests withdrawn from Facilities Study queue
 - Number of requests withdrawn from the Facilities Study queue
 - Number of Facilities Studies withdrawn more than 60 days after receipt of executed Facilities Study Agreement
 - Average time (days) from receipt of executed Facilities Study Agreement to date when request was withdrawn from the Facilities Study queue
- ❖ For all Facilities Studies completed more than 60 days after receipt of executed Facilities Study Agreement, average number of days study was delayed due to transmission customer's actions (e.g., delays in providing needed data)

If NorthWestern fails to comply with the requirement for processing non-affiliates' studies within the 60-day deadlines, it will follow the procedures for failing metrics as provided by the Federal Energy Regulatory Commission.

Procedures for Failing Metrics

The Federal Energy Regulatory Commission requires NorthWestern Energy to submit a notification filing with the Commission in the event NorthWestern Energy processes more than 20 percent of non-affiliates' studies outside of the 60-day due diligence deadlines in the pro forma Open Access Transmission Tariff for two consecutive quarters. This filing must be filed within 30 days of the end of the second quarter during which NorthWestern Energy processes more than 20 percent of non-affiliates' studies outside of the 60-day due diligence deadlines in the pro forma Open Access Transmission

Tariff. For the purposes of calculating this notification trigger, NorthWestern Energy is required to aggregate all System Impact Studies and Facilities Studies that it completes during the quarter for non-affiliates. NorthWestern Energy may explain in its notification filing that it believes there are extenuating circumstances that prevented it from meeting the deadlines in the pro forma Open Access Transmission Tariff. Starting the quarter following a notification filing, NorthWestern Energy will be required to post: (1) the average, across completed System Impact Studies, of the employee-hours expended per completed System Impact Study; (2) the average, across completed Facilities Studies, of employee hours expended per completed Facilities Study; (3) the number of employees devoted to processing System Impact Studies; and (4) the number of employees devoted to processing Facilities Studies. NorthWestern Energy is not required to post these additional performance metrics separately for affiliates' and non-affiliates' requests for transmission service and for short-term and long-term transmission service. For example, if NorthWestern Energy completes 4 non-affiliates' System Impact Studies during the quarter with 2 completed more than 60 days after the System Impact Study Agreement was executed and completes 2 non-affiliates' Facilities Studies during the quarter with none completed more than 60 days after the Facilities Study Agreement was executed, then NorthWestern Energy will be deemed to have completed 2 out of 6 (33 percent) studies outside of the deadlines in the pro forma Open Access Transmission Tariff.

NorthWestern Energy is required to aggregate studies associated with requests for short-term and long-term transmission service when calculating these failing metrics. NorthWestern Energy is not required to post the failing metrics if the Commission concludes that delays in completing studies are due to extenuating circumstances. However, NorthWestern Energy is required to post the failing metrics while the Commission considers NorthWestern Energy's notification filing arguing that extenuating circumstances prevented it from processing request studies on a timely basis. NorthWestern Energy will be required to post the failing performance metrics approximately two months after the provider makes its notification filing. The Commission will have this time to evaluate NorthWestern Energy's contention that it was unable to complete request studies due to extenuating circumstances. As a result, NorthWestern Energy with legitimate extenuating circumstances typically will not have to post any failing metrics.

Study Costs and Revenues

Include in a separate transmission operating expense account or sub account, costs properly chargeable to expense that are incurred to perform any System Impact Studies or Facilities Studies which NorthWestern Energy conducts to determine if NorthWestern Energy must construct new transmission facilities or upgrades necessary for NorthWestern Energy's own uses, including making Third-Party Sales under the Tariff; and include in a separate operating revenue account or sub account the revenues received for System Impact Studies or Facilities Studies performed for transmission service when such amounts are separately stated and identified in the Transmission Customer's billing under the Tariff.

In performing the System Impact Study, NorthWestern Energy shall rely, to the extent reasonably practicable, on existing transmission planning studies. The Eligible Customer will not be assessed a charge for such existing studies; however, the Eligible Customer will be responsible for charges associated with any modifications to existing planning studies that are reasonably necessary to evaluate the impact of the Eligible Customer's request for service on the Transmission System.

If in response to multiple Eligible Customers requesting service in relation to the same competitive solicitation, a single System Impact Study is sufficient for NorthWestern Energy to accommodate the requests for service, the costs of that study shall be pro-rated among the Eligible Customers pursuant to "NorthWestern Energy's Interconnection Cost Allocation and Refund Methodology" business practice.

Study Report Availability

As soon as a study is completed, NorthWestern Energy will provide the report to the customer and add this report to an OASIS posted listing of all System Impact Studies, Facilities Studies, and studies performed for the transmission provider's own network resources and affiliated transmission customers. These studies will be made available upon request for up to five years.

System Impact Study

Definition

An assessment by NorthWestern Energy of (i) the adequacy of the Transmission System to accommodate a request for either Firm Point-To-Point Transmission Service or Network Integration Transmission Service and (ii) whether any additional costs may be incurred in order to provide transmission service.

Need for System Impact Study

After receiving a request for service, NorthWestern Energy shall determine on a non-discriminatory basis whether a System Impact Study is needed. A description of NorthWestern Energy's methodology for completing a System Impact Study is provided in Attachment D of NorthWestern Energy's Open Access Transmission Tariff.

Methodology for Completing a System Impact Study

Upon receipt of a request for service pursuant to the applicable terms and conditions of NorthWestern Energy's Tariff, NorthWestern Energy will complete a System Impact Study associated with the requested transmission service, if in accordance with the Tariff terms, NorthWestern Energy determines that such a study is needed. The study procedure will use Good Utility Practice and the engineering and operating principles, standards, guidelines, and criteria of NorthWestern Energy, the WECC, the Western Regional Transmission Association (WRTA) and Northwest Regional Transmission Association (NRTA), both of which NorthWestern Energy is a member, NERC, or any similar organization that may exist in the future of which NorthWestern Energy is then a member.

NorthWestern Energy shall use its sole discretion as to the scope, details and methods used to perform the Study. If necessary, a meeting between NorthWestern Energy and applicant shall be held as soon as practical after execution of the Service Agreement to: (a) review the application and any known issue that could affect the scope of the study; and (b) develop a scope of study. The location of the meeting shall be at NorthWestern Energy's offices unless the parties mutually agree to another location.

Factors to be considered in determining the capacity availability on NorthWestern Energy's Transmission system will include but not be limited to:

1. Steady state power flow study results;
2. Stability study results;
3. WECC, WRTA, NRTA, NERC, and NorthWestern Energy's system design criteria;
4. Transmission capacity of the existing system;
5. Transmission capacity of the system after the request is added;
6. Reliability requirements of NorthWestern Energy and applicant;
7. Type and terms of the service requested;
8. Capacity needed to meet current and 10-year forecasted load of Native Load Customers and Network Customers' loads; and
9. Capacity needed to meet contractual obligations that are expected before the requested transmission service begins.

System Impact Study Agreement

The System Impact Study Agreement will clearly specify NorthWestern Energy's estimate of the actual cost, and time for completion of the System Impact Study.

System Impact Study Procedures

Upon receipt of an executed System Impact Study Agreement, NorthWestern Energy will use due diligence to complete the required System Impact Study within a sixty (60) day period. The System Impact Study shall identify (1) any system constraints, identified with specificity by transmission element or flowgate, (2) redispatch options (when requested by a Transmission Customer) including an estimate of the cost of redispatch, (3) conditional curtailment options (when requested by a Transmission Customer) including the number of hours per year and the System Conditions during which conditional curtailment may occur, and (4) additional Direct Assignment Facilities or Network Upgrades required to provide the requested service. For customers requesting

the study of redispatch options, the System Impact Study shall (1) identify all resources located within NorthWestern Energy's Control Area that can significantly contribute toward relieving the system constraint and (2) provide a measurement of each resource's impact on the system constraint. If NorthWestern Energy possesses information indicating that any resource outside its Control Area could relieve the constraint, it shall identify each such resource in the System Impact Study. In the event that NorthWestern Energy is unable to complete the required System Impact Study within such time period, it shall so notify the Eligible Customer and provide an estimated completion date along with an explanation of the reasons why additional time is required to complete the required studies. A copy of the completed System Impact Study and related work papers shall be made available to the Eligible Customer as soon as the System Impact Study is complete. NorthWestern Energy will use the same due diligence in completing the System Impact Study for an Eligible Customer as it uses when completing studies for itself. NorthWestern Energy shall notify the Eligible Customer immediately upon completion of the System Impact Study if the Transmission System will be adequate to accommodate all or part of a request for service or that no costs are likely to be incurred for new transmission facilities or upgrades. In order for a request to remain a Completed Application, within fifteen (15) days of completion of the System Impact Study the Eligible Customer must execute a Service Agreement or request the filing of an unexecuted Service Agreement pursuant to Section 15.3 of NorthWestern Energy's Open Access Transmission Tariff, or the Application shall be deemed terminated and withdrawn.

Facilities Study

Definition

An engineering study conducted by NorthWestern Energy to determine the required modifications to NorthWestern Energy's Transmission System, including the cost and scheduled completion date for such modifications, that will be required to provide the requested transmission service.

Need for Facilities Study

If a System Impact Study indicates that additions or upgrades to the Transmission System are needed to supply the Eligible Customer's service request, NorthWestern Energy, within thirty (30) days of the completion of the System Impact Study, shall tender to the Eligible Customer a Facilities Study Agreement pursuant to which the Eligible Customer shall agree to reimburse NorthWestern Energy for performing the required Facilities Study.

Facilities Study Agreement

For a service request to remain a Completed Application, after receipt of the Facilities Study Agreement, the Eligible Customer shall execute the Agreement and return it to NorthWestern Energy within fifteen (15) days. If the Eligible Customer elects not to execute the Facilities Study Agreement, its application shall be deemed withdrawn and its

deposit, pursuant to Section 17.3 of NorthWestern Energy's Open Access Transmission Tariff, shall be returned with interest.

Facilities Study Procedures

Upon receipt of an executed Facilities Study Agreement, NorthWestern Energy will use due diligence to complete the required Facilities Study within a sixty (60) day period. If NorthWestern Energy is unable to complete the Facilities Study in the allotted time period, NorthWestern Energy shall notify the Transmission Customer and provide an estimate of the time needed to reach a final determination along with an explanation of the reasons that additional time is required to complete the study. When completed, the Facilities Study will include a good faith estimate of (i) the cost of Direct Assignment Facilities to be charged to the Transmission Customer, (ii) the Transmission Customer's appropriate share of the cost of any required Network Upgrades as determined pursuant to the provisions of Part II of the Tariff, and (iii) the time required to complete such construction and initiate the requested service. The Transmission Customer shall provide NorthWestern Energy with a letter of credit or other reasonable form of security acceptable to NorthWestern Energy equivalent to the costs of new facilities or upgrades consistent with commercial practices as established by the Uniform Commercial Code. The Transmission Customer shall have thirty (30) days to execute a Service Agreement or request the filing of an unexecuted Service Agreement and provide the required letter of credit or other form of security or the request will no longer be a Completed Application and shall be deemed terminated and withdrawn.

Any change in design arising from inability to site or construct facilities as proposed will require development of a revised good faith estimate. New good faith estimates also will be required in the event of new statutory or regulatory requirements that are effective before the completion of construction or other circumstances beyond the control of NorthWestern Energy that significantly affect the final cost of new facilities or upgrades to be charged to the Transmission Customer pursuant to the provisions of Part II of the Tariff.

Clustering

The Transmission Provider may (but is not required to) perform a Cluster Study in which requests for transmission service and/or network resource interconnection service received within a certain period of time – the “Queue Cluster Window” – will be analyzed together. A customer can request a Cluster Study. If Transmission Provider determines that it will perform a Cluster Study, the customers whose requests are being studied cannot opt out of the Cluster Study. As soon as practical after execution of Study Agreement, which will specify the estimated costs, allocate those costs on a pro rata basis, and time for completion, a Cluster Study will commence, be conducted to ensure the efficient implementation of any applicable regional transmission expansion plan, and then be completed within 60 days. As a result of Cluster Study, the Transmission Provider will allocate the cost of common upgrades for clustered requests without regard to queue position, while the costs for customer-specific upgrades will be assigned to the customer request that requires the upgrade.