

TSR Study and Expansion Process

BPA Transmission Business Practice

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Version **23**

This Business Practice describes the Bonneville Power Administration Transmission Services' (BPAT) Transmission Service Request Study and Expansion Process (TSEP).

~~NOTE: Section F (Project Construction) and Section H (Financial Security Related to Construction of Network Plans of Service) of this Business Practice remain under development. BPAT will update these sections pending additional coordination with stakeholders.~~

For more information, visit the [BPA Transmission Business Practices page](#) or submit questions to techforum@bpa.gov.

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A. Overview

1. TSEP is a recurring process under which BPAT responds to eligible requests for transmission service on the BPA Network. In TSEP, BPAT processes and studies transmission service requests (TSRs) collectively unless a Customer requests an individual study for a specific TSR. TSEP consists of five phases: Pre-Study, the Cluster Study, Preliminary Engineering, Environmental Review, and Project Construction.

The Cluster Study allows BPAT to aggregate TSRs to assess the collective system impacts and to identify the Plan(s) of Service¹ to meet the demand. In addition, studying the TSRs collectively allows Customers to share the study costs. Under TSEP, BPAT conducts Cluster Studies on a regular basis in accordance with sections 19.10 and 32.6 of the OATT to help ensure consistent processing of eligible TSRs.

Following a Cluster Study, if the Customer chooses to proceed with further evaluation of the Plan(s) of Service, BPAT will perform Preliminary Engineering and Environmental

Review, as necessary. Based on the outcome of the study and review of the TSRs, and based on Customers' decisions whether to proceed, BPA will determine whether to proceed with the Plan(s) of Service to provide service.

B. Cluster Study Procedures

1. Notice of a Cluster Study
 - a. BPAT will post notice on OASIS prior to conducting a Cluster Study.
 - b. The notice will describe:
 - i. The eligibility of TSRs for the Cluster Study;
 - ii. The timing and process for conducting the Cluster Study;
 - iii. The reasons for the Cluster Study;
 - iv. The deadline for submittal of TSRs eligible for the Cluster Study;
 - v. The deadline for Customers with TSRs eligible for the Cluster Study to submit a PTP or NT Data Exhibit for each TSR; and
 - vi. The date upon which BPAT intends to commence the Cluster Study.
 - c. BPAT will provide advance notification of its intent to conduct a Cluster Study prior to posting notice on OASIS.
2. Data Exhibit Submittal
 - a. A Customer must submit a completed PTP Data Exhibit or NT Data Exhibit for each TSR by the deadline in the notice of the Cluster Study posted on OASIS.
 - b. The data exhibit should be submitted to txrequests@bpa.gov with a copy to the Customer's Transmission Services Account Executive.
 - c. Once BPAT receives the data exhibit, the exhibit(s) will be reviewed to ensure that it is complete and contains all the information necessary to evaluate the impact of the TSR in the Cluster Study. BPAT will notify the Customer once the information has been reviewed and validated.
 - d. If the data exhibit does not provide sufficient information for BPAT to evaluate the impact of the TSR in the Cluster Study, BPAT will contact the Customer to attempt to resolve any incomplete data.
 - e. If the Customer does not submit a completed data exhibit by the deadline in the notice of the Cluster Study posted on OASIS, or is unable to provide sufficient information for BPAT to validate the data exhibit, BPAT will notify the Customer, the Customer's TSR will be removed from the queue, and the Customer's deposit provided pursuant to section 17.3 or 29.2 of the BPA OATT will be returned within 30 calendar days, without interest, or the release of escrow funds authorized.
3. Cluster Study Agreement and Procedures
 - a. BPAT will offer a Cluster Study agreement for each eligible TSR with a validated data exhibit.

- b. The Cluster Study Agreement will describe the scope of the Cluster Study and will include BPAT's good faith estimate of the Cluster Study costs and require the Customer to advance fund its share of the estimated study costs on a MW-share basis.
 - c. The Customer must sign and return the Cluster Study Agreement and advance fund its full share of the Cluster Study costs within 15 calendar days of receipt of the Cluster Study Agreement. Failure to sign and return the Cluster Study Agreement or to advance fund the estimated study costs by the timeline specified will cause the Customer's TSR(s) to be removed from the queue and the Customer's deposit provided pursuant to section 17.3 or 29.2 will be returned, within 30 calendar days without interest, or the release of escrow funds authorized.
 - d. Prior to completion of the Cluster Study, a Customer that has signed a Cluster Study Agreement may opt out of a Cluster Study by withdrawing its TSR(s) on OASIS. A Customer that withdraws its TSR(s) on OASIS after signing a Cluster Study Agreement but prior to the completion of the Cluster Study will remain liable for its percentage share of the study costs and will be liable for any costs of re-study or analysis that result from the Customer opting out. No further consideration will be provided to TSRs withdrawn on OASIS.
 - e. BPAT will use due diligence to complete the Cluster Study within 120 calendar days following the commencement of the Cluster Study. If BPAT requires additional time to complete the study, BPAT will notify the Cluster Study participants and provide an estimated time needed to complete the Cluster Study along with an explanation of the reasons that additional time is required.
 - f. The results of the Cluster Study will include the following:
 - i. Any Plan(s) of Service required to provide service to the Customer's TSR(s);
 - ii. A good faith estimate of the Customer's share of the cost of any required Plan(s) of Service (based on participation in the cluster study);
 - iii. A good faith estimate of the time required to complete the Plan(s) of Service and initiate the requested service; and;
 - iv. A good faith estimate of the cost of Direct Assignment Facilities to be charged to the Customer.
 - v. If applicable, results of BPAT's study of Conditional Firm including the number of hours per year and/or the System Conditions during which conditional curtailment may occur.
 - g. Following completion of the Cluster Study, BPAT will determine actual study costs. If the aggregate amount of advance funding differs from the actual study costs, BPAT will return excess funds to, or request additional funds from, the Customer such that the Customer will have paid for its actual MW-share of Cluster Study costs.
4. Initial Economic Analysis
- a. Within approximately 60 calendar days following the completion of the Cluster Study, BPAT will complete an initial economic analysis of any transmission Plan(s) of Service identified by the Cluster Study. The economic analysis is

intended to aid in the Customer's decision whether to continue supporting the completion of transmission Plan(s) of Service identified as required to enable the requested transmission service. BPAT will share these results, including informational, non-binding guidance on potential rate impacts. Such informational guidance will be based on potential subscription and cost information available at that time.

5. Partial Service and Conditional Firm Transmission Service

- a. BPAT will not make offers for Partial Service or CFS ~~for~~ ~~TSRs~~ ~~that are studied~~ ~~participating~~ in the Cluster Study ~~after~~ ~~during the time between the~~ Cluster Study TSR submission deadline until the results of the Cluster Study are published.

C. Individual Study Procedures

1. Process for Requesting an Individual Study

- a. BPAT encourages Customers to contact their Transmission Services Account Executive prior to requesting that a TSR be studied individually rather than in a Cluster Study, to discuss the procedures, data exhibit requirements, and potential benefits and/or risks in electing to have its TSR(s) studied through an Individual Study rather than a Cluster Study.
- b. After BPAT notifies the Customer that a System Impact Study (SIS) is needed to evaluate the impact of the TSR and that BPAT will perform a Cluster Study for the TSR, the Customer may request in writing for a TSR to be studied individually pursuant to section 19.1 or 32.6 of the OATT.
- c. The Customer must make this written request prior to the posting on OASIS of the notice of the Cluster Study in which the Customer's TSR(s) would otherwise be studied. BPAT will provide advance notification of its intent to conduct a Cluster Study prior to posting notice on OASIS.
- d. A written request to be studied individually must be sent to the Customer's Transmission Services Account Executive and to txrequests@bpa.gov, and it must identify the TSR(s) to be studied individually.

2. Data Exhibit Submittal

- a. For each TSR that a Customer requests to be studied individually, the Customer must submit a completed [PTP Data Exhibit or NT Data Exhibit](#) prior to the posting of the OASIS notice for the Cluster Study in which the Customer's TSR(s) would otherwise be studied.
- b. The data exhibit should be submitted to the Customer's Transmission Services Account Executive.
- c. Once BPAT receives the data exhibit, it will follow the procedures in section B.2 to review and validate the exhibit and to attempt to resolve any deficiency.
- d. If a Customer does not submit a completed data exhibit by the deadline, or is unable to provide sufficient information for BPAT to validate the data exhibit, BPAT will notify the Customer, the Customer's TSR will be removed from the queue, and the Customer's deposit provided pursuant to section 17.3 or 29.2 will

be returned within 30 calendar days, without interest, or the release of escrow funds authorized.

3. Individual Study Agreements and Procedures

- a. BPAT will tender a SIS agreement for each TSR for which a Customer has timely submitted a written request to be studied individually and has a validated data exhibit. BPAT will tender the SIS Agreement within 30 calendar days of receiving the written request to be studied individually. BPAT will use due diligence in completing the SIS in accordance with the provisions contained in section 19.3, but the timing of completing the SIS will be dependent upon whether a Cluster Study is already in progress. Sections 19.1-19.3 or 32.1-32.3 of the tariff will govern tender and execution of the SIS agreement and completion of the study.
- b. Following completion of the SIS, BPAT will tender agreements for a Facilities Study, Environmental Review, or other study as necessary. Sections 19 or 32 of the tariff will govern tender and execution of these agreements and completion of the studies.

D. Option to Study a TSR for Conditional Firm Service (CFS)

CFS is long-term firm Point-To-Point transmission service that is subject to conditional curtailment, either on a number of hours or System Conditions basis. CFS offers are made consistent with the Conditional Firm Transmission Business Practice.

1. A PTP Customer may request that BPAT study CFS for the TSR(s) that the Customer elects to include in an individual System Impact Study or Cluster Study, by making the appropriate elections in the Study Agreement.

a. Customer may elect for BPAT to study CFS for the number of hours per year and/or the System Conditions during which curtailment may occur. Customer may accept a CFS offer of either (1) number of hours per year or (2) System Conditions, but not both for a single TSR.

b. Where a Customer requests that BPAT study CFS for the number of hours per year during which curtailment may occur, the Customer may also identify a maximum number of curtailable hours per year it is willing to accept (Limit). In such cases, BPAT will not make offers for CFS following the completion of the study if the identified number of hours per year exceeds the Customer's identified acceptable Limit.

2. If a customer does not request BPAT to study conditional curtailment options in the Study Agreement, then the TSR(s) will not be eligible for CFS study at a later time.

D.E. Preliminary Engineering

In the Preliminary Engineering phase, BPAT planners work with staff from internal organizations such as environmental compliance, design, real property, customer service, and maintenance/operations to refine the Plan(s) of Service identified in the Cluster Study to a more detailed cost estimate and schedule.

1. Preliminary Engineering Agreement and Procedures

- a. BPAT will offer a Preliminary Engineering Agreement to Customers with eligible TSRs following the Cluster Study.
 - b. The Preliminary Engineering Agreement will describe the scope of the preliminary engineering work and will include BPAT's good faith estimate of the preliminary engineering costs and require the Customer to advance fund its full share of the estimated preliminary engineering costs on a MW-share basis, by Plan of Service required.
 - c. The Customer must sign and return the Preliminary Engineering Agreement and advance fund its full share of the estimated preliminary engineering costs within 30 calendar days of receipt of the Preliminary Engineering Agreement. Failure to sign and return the agreement or to advance fund the estimated costs by the deadline will cause the Customer's TSR(s) to be removed from the queue and the Customer's deposit provided pursuant to section 17.3 or 29.2 will be returned, without interest, or the release of escrow funds authorized.
 - d. A Customer that withdraws its TSR(s) on OASIS after signing a Preliminary Engineering Agreement but prior to the completion of the preliminary engineering work will remain liable for its full percentage share of the preliminary engineering costs. No further consideration will be provided to TSRs withdrawn on OASIS.
 - e. BPAT may seek additional funding as necessary from Customers to complete the required preliminary engineering work. Following completion of the preliminary engineering work, if the aggregate amount of advance funding exceeds the actual costs, BPAT will return excess funds to the Customer such that the Customer will have paid for its actual MW-share of preliminary engineering costs.
2. Preliminary Engineering Results and Updated Economic Analysis
- a. Once BPAT has updated its cost estimate for the Plan(s) of Service based on the preliminary engineering and validation work, BPAT will provide notification to the Customer and share the preliminary engineering results.
 - b. Within approximately 90 calendar days following the notification of preliminary engineering results, BPAT will complete an updated economic analysis for the Plan of Service. The economic analysis is intended to aid in the Customer's decision whether to continue supporting the completion of transmission Plan(s) of Service identified as required to enable the requested transmission service. BPAT will share these results, including informational, non-binding guidance on potential rate impacts. Such informational guidance will be based on updated potential subscription and cost information available at that time.

E.F. Environmental Review

As a federal agency, BPA must comply with federal environmental laws, including, but not limited to the National Environmental Policy Act, Endangered Species Act, Clean Water Act and National Historic Preservation Act. As necessary, BPAT will conduct environmental review of a proposed Plan of Service in accordance with these statutes.

1. BPAT will offer an Environmental Review Agreement to Customers with eligible TSRs following the Preliminary Engineering phase.
2. The Environmental Review Agreement will describe the scope of the environmental review activities and will include BPAT's good faith estimate of the environmental review

costs and require the Customer to advance fund its full share of the estimated environmental review costs on a MW-share basis, by Plan of Service required.

3. The Customer must sign and return the Environmental Review Agreement and advance fund its full share of the estimated environmental review costs within 30 calendar days of receipt of the Environmental Review Agreement. Failure to sign and return the agreement or to advance fund the estimated costs by the deadline will cause the Customer's TSR(s) to be removed from the queue and the Customer's deposit provided pursuant to section 17.3 or 29.2 will be returned, without interest, or the release of escrow funds authorized.
4. A Customer that withdraws its TSR(s) on OASIS after signing an Environmental Review Agreement but prior to the completion of the environmental review will remain liable for its full percentage share of the environmental review costs. No further consideration will be provided to TSRs withdrawn on OASIS.
5. BPAT may seek additional funding as necessary from Customers to complete the required environmental review work. Upon completion of the environmental review activities, if the aggregate amount of advance funding exceeds the actual costs, BPAT will return excess funds to the Customer such that the Customer will have paid for its actual MW-share of costs.
6. Following completion of the environmental review, BPAT will notify Customers with Environmental Review Agreements of the outcome.

~~F. Project Construction~~

~~1. Under Development~~

G. Impacts to Third-Party Transmission Systems

When a study identifies a potential impact or a requirement to upgrade facilities on another Transmission Provider's transmission system, BPAT reserves the right, pursuant to section 21 of its tariff, to coordinate the upgrades on its transmission system with those on the impacted third-party Transmission Provider's system. BPAT also reserves the right to not provide the requested transmission service unless and until all of the Plans of Service necessary to mitigate the impacts of the TSRs are in place. Further, if the Customer fails to meet the requirement on the third-party Transmission Provider's transmission system within specified timelines, BPAT will deem the TSR to be withdrawn and remove it from the queue.

The procedures below outline how BPAT, the impacted third-party Transmission Provider(s), and the Customer requesting transmission service will coordinate on mitigating impacts of the TSRs for service on the BPAT transmission network. The purpose of these procedures is to ensure timely progress on addressing the impacts to the third party Transmission Provider's system to enable BPAT to coordinate any Plans of Service on its system or to provide the requested service.

1. Applicability
 - a. These guidelines apply when BPAT has completed a study of a TSR and determined that the request has impacts on a third-party Transmission Provider's system that require coordination with the third-party Transmission Provider.

Examples include, but are not limited to, scheduling requirements or upgrades required on an adjacent Transmission Provider's system.

- b. Per section 16.2, 21, 29.3 and 30.6 of the tariff, the Customer is responsible for making arrangements to assess and mitigate the impacts of their TSRs on third-party transmission systems, including arrangements for studies, scheduling or any necessary engineering, permitting or construction of transmission or distribution facilities on third-party systems.
 - c. The Customer is responsible for complying with the third-party Transmission Provider's procedures and requirements for making the necessary arrangements to mitigate the impacts of their TSR(s) on BPAT's transmission system. BPAT will make reasonable efforts to assist the Customer in making such arrangements, including by providing any information or data required by the third-party Transmission Provider.
2. Identification and Notification of Upgrades on a Third-Party Transmission System
- a. For any TSR that BPAT determines to have impacts on another entity's transmission system, BPAT will notify the Customer in writing of the need to coordinate with the third-party Transmission Provider. BPAT will provide such notice (Third-Party Notice) as soon as practicable following the conclusion of the study. Nothing in these guidelines will preclude BPAT from informing the third-party transmission provider about the impacts or providing a copy of the study results.
 - b. The Third-Party Notice to the Customer will:
 - i. Inform the Customer of its responsibility to make arrangements to address the impacts on the third-party system, including arrangements for scheduling or for any upgrades that may be required;
 - ii. Inform the Customer that BPAT will undertake reasonable efforts to assist the Customer in making such arrangements, and identify the Customer's Transmission Services Account Executive as the primary point of contact for BPAT's participation in the required coordination;
 - iii. If the impact of the request on the third-party transmission system appears to require new infrastructure, identify whether BPAT is aware of an upgrade currently in the third-party Transmission Provider's planning process(es) that would address the impact;
 - iv. Require the Customer to provide a designated representative within 15 calendar days who will be responsible for interacting with BPAT and the third-party Transmission Provider regarding the potential impacts and necessary arrangements. The contact information should include name, title, telephone number, and email address. If the Customer's designated representative changes, the Customer must provide BPAT with updated contact information as soon as possible.
 - v. Identify, as an initial matter, whether the impacts of the TSR on the third-party system are such that the process under section 2.c or 2.d of these guidelines applies.
 - c. If the impact of the request on the third-party system appears to only require the customer to obtain scheduling rights on the third-party system, the Customer must:

H. Financial Security Related to Plan of Service Construction of Network Plans of Service

1. Under Development Pursuant to Section 19 and 32 of the BPA OATT, BPAT will require a Customer that is offered a Service Agreement associated with the completion of an identified Plan of Service to provide BPA with acceptable forms of credit support as listed in BPAT's current Basic Credit Standards, equivalent to its pro rata share of the total costs of the Plan of Service to enable its requested service. The forms of security acceptable to BPA are listed in the Basic Credit Standards posted to BPA's external website.
2. The Customer's pro rata share of cost of the Plan of Service will be calculated as the ratio of Customer's requested MW out of the total requested MW identified to require the same Plan of Service, multiplied by the estimated total costs of the Plan of Service.
3. The Customer will have 30 calendar days following the receipt of the offer of service under the Service Agreement to provide the required executed 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.
4. BPAT reserves the right to require the Customer to increase its financial security support during the construction period in the event the project costs increase, or if Customer's share of the costs to complete the Plan of Service increases. BPAT may also reduce the Customer's financial security support, in the event Customer's share of the costs to complete the Plan of Service decreases.
5. Following completion and energization of the Plan of Service, BPAT will reduce Customers' financial security obligation on an annual basis in accordance with the below methodologies.
 - a. For Point-to-Point Customers, BPAT will reduce the Customer's financial security obligation according to the following calculation:

$$\mathbf{1 / (Total\ Contract\ Duration\ in\ Years) \times Total\ Security\ Provided = Annual\ Security\ Reduction}$$
 - i. This methodology will ensure that Customer's financial security will be reduced over the contract duration period following service commencement, provided the Customer meets its contractual obligations to BPAT.
 - b. For NT Customers, BPAT will return financial security according to one of the below calculations, depending on whether BPAT decides to recover the project costs through an embedded (rolled-in) rate or an incremental transmission rate.
 - i. Under embedded (rolled-in) rate scenarios, BPAT will dispose of held security to NT Customers on an annual basis following project energization in accordance with the below calculation:

$$\mathbf{1 / (Security\ Period\ of\ Five\ Years) \times Total\ Security\ Provided = Annual\ Security\ Reduction}$$
 - ii. Where BPAT determines it will provide service under an incremental transmission rate, BPAT will return financial security to NT Customers according to the following calculation:

1 / (Incremental Rate Amortization Period) * Total Security Provided = Annual Security Reduction

- iii. The Incremental Rate Amortization Period and service commencement date will be established through engagement between BPAT and the NT Customer.

I. OATT Reference(s)

1. Sections 16, 17.2, 17.5, 17.6.1, 17.6.2, 19, 20, 21, 27, 29.3, 30.6, 32

J. Version History

1. 6/22/16 – New Business Practice

¹“Plan of Service” is defined in this business practice as any solution (transmission network upgrades, non-wire alternatives, e.g.) identified as required to provide the requested transmission service.

2. 8/31/19 – Updated with revisions to enable a PTP Customer to request that BPA study its TSR for Conditional Firm Service options within a System Impact or Cluster Study, as well as to define Customer obligations to provide financial security related to Plan of Service construction.