

Large Generator Interconnection

BPA Transmission Business Practice

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Large Generator Interconnection

Version 1112

This Business Ppractice clarifies the processes and procedures that are necessary to comply with Attachment L of the Bonneville Power Administration’s (BPA) Open Access Transmission Tariff (OATT).

BPA Policy Reference

- Open Access Transmission Tariff (OATT): Attachment L

For more information, visit the [Interconnection webpage](#) or submit questions to techforum@bpa.gov.

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A. Deposits and Non-Refundable Application Fee

1. All deposits and the non-refundable application fee required during the processing of an Interconnection Request, Surplus Interconnection Service Request, Repower Request, or Replacement Request must be remitted in accordance with the electronic funds transfer criteria described below:

Electronic Funds Transfer	<p>For instructions to pay the deposit by electronic transfer to BPA Transmission Services' (BPAT), either through FedWire or Automated Clearing House (ACH), contact your <u>Transmission</u> Account Executive.</p> <p>When using FedWire, after "OBI=" include the words "GI Request Deposit,". <u>Also include your proposed Project Name, if it is a new request. For Repower or Replacement Requests, include the Queue number of the Project your request is associated with.</u></p> <p>When using the ACH type of electronic transfer, include the same information in the "memo" field on the transfer.</p> <p>If a bank removes information from the "OBI" or "memo" field, BPAT will not declare an Interconnection Request INVALID.</p> <p><u>For all follow-on payments, include the BPA Contract Number once known.</u></p>
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2. When paying the non-refundable application fee, Interconnection Customer must include the name of Interconnection Customer that made the request, the name listed on the Appendix 1, Item #12, and the words "App Fee".

- 2-3. _____ In limited circumstances, paper checks will be acceptable if ~~a~~-Interconnection Customer demonstrates they are unable to pay electronically. Contact your Transmission Account Executive for instructions.

3-4. _____ Refunds:

- a. A deposit refund will be calculated following completion of the studies under the Standard Large Generator Interconnection Procedures (LGIP) or Withdrawal of the request, whichever occurs earliest.
- b. The entity, whose name is on the Interconnection Request, Surplus Interconnection Service Request, Repower Request, or Replacement Request, Appendix 1 if applicable, and W9e~~;~~ Request for Taxpayer Identification Number and Certification form, shall receive the deposit refund.
- c. Prior to the commencement of a study, reasonable costs incurred by BPA in processing, validating and scoping the Interconnection Request shall be deducted from the deposit refund.

5. Failure to include the key details listed in this Section A.1, with any payment to BPA, will allow BPA's Accounts Receivable Department the right to reject a payment.

B. Interconnection Request Criteria⁴

1. To initiate an Interconnection Request, Interconnection Customer must provide BPAT all of the following:
 - a. A completed application in the form of Appendix 1 of the LGIP (including applicable technical information), ~~with the paragraph index preserved and~~ signed by a person holding signatory contractual authority.
 - b. ~~An Initial Deposit of A non-refundable application fee of \$10,000 (per Interconnection Request)~~ transmitted within one (1) Business Day of the submission of the Interconnection Request as specified ~~in Section A above in the Deposits section.~~
 - c. Evidence of Site Control as specified in the Site Control Business Practice.
 - d. Generation Model and Performance Attestation.
 - e. ~~Site Control documentation or, in lieu of demonstrating Site Control the Interconnection Customer may submit a separate Site Control deposit of an additional \$10,000 as specified above in Large Generator Interconnection Deposits. This additional deposit (less costs incurred) is refundable only if Site Control is demonstrated within 10 Business Days after the Interconnection Request is received by BPAT.~~
 - d.e. W9e: form, Request for Taxpayer Identification Number and Certification form, of ~~the~~ Interconnection Customer. This requirement may be waived at the discretion of BPAT ~~if the~~ Interconnection Customer has submitted previous Interconnection Requests to BPAT. ~~The~~ Interconnection Customer should consult with their Transmission Account Executive prior to submitting the Interconnection Request for clarification.
 - e.f. Certificate of Incorporation of ~~the~~ Interconnection Customer if not previously submitted to BPAT.
 - i. If ~~an~~ Interconnection Customer is a subsidiary or partner of another entity, or if another entity controls ~~the~~ Interconnection Customer, a letter from the parent or controlling entity's letterhead is required and must include the name(s) and position(s) of those holding contractual signatory authority on behalf of ~~the~~ Interconnection Customer and the Certificate(s) of Incorporation for each entity.
 - ii. ~~The~~ Interconnection Customer must provide BPAT ~~with~~ written notification of a name change to the company within 15 Business Days from the effective date of the name change and include a cover letter with the company's official correspondence letterhead stating the new name of the company.

⁴~~An increase in the generating capacity (i.e. nameplate) of a project requires a new Request, even if the Interconnection Service MW remains the same.~~

C. Surplus Interconnection Request Criteria

1. Surplus Interconnection Service enables an existing Interconnection Customer whose Generating Facility is already interconnected, or an Interconnection Customer's affiliate or non-affiliate, to utilize the unused portion of an existing Interconnection Customer's Interconnection Service within specific parameters outlined in the LGIP and applicable ~~B~~business ~~P~~pactices.
2. Surplus Interconnection Service requests must be emailed to interconnection@bpa.gov.
- 2-3. BPA provides an interconnection process that allows the use of Surplus Interconnection Service and the transfer of Surplus Interconnection Service to a non-affiliate if the existing Interconnection Customer or one of its affiliates does not intend to use the Surplus Interconnection Service.
- 3-4. BPA may perform reactive power, short circuit/fault duty, and stability analyses studies as well as steady-state (thermal/voltage) analyses as necessary to ensure evaluation of all required reliability conditions to provide Surplus Interconnection Service and ensure the reliable use of Surplus Interconnection Service. BPA may also perform an environmental analysis.
- 4-5. Surplus interconnection ~~s~~Service cannot be granted if doing so would require Network Upgrades or would increase the Interconnection Service limit.
 - a. The original Interconnection Customer must indicate to BPA the amount of Surplus Interconnection Service that is available for use, when that service is available, and describe any other conditions under which Surplus Interconnection Service at the Point of Interconnection may be used. BPA ~~Transmission~~ will make the final determination ~~with regard to~~ regarding the Surplus Interconnection Request. The Surplus Interconnection Customer must provide BPA ~~Transmission Services~~ the following in any ~~Surplus Generator Interconnection Request~~ (Surplus Interconnection ~~Service~~Service Request) for a Large Generating Facility:
 - i. A cover letter stating: (i) the identity of Surplus Interconnection Customer, (ii) the existing Point of Interconnection that Surplus Interconnection Customer proposes to use for Surplus Interconnection Service, (iii) the identity of the existing Interconnection Customer, (iv) if Surplus Interconnection Customer is any entity other than the existing Interconnection Customer, Surplus Interconnection Customer's affiliation, if any, to the existing Interconnection Customer, (v) the amount of Surplus Interconnection Service Surplus Interconnection Customer seeks to use, and (vi) the expected In-Service Date of the Surplus Interconnection generating facility and signed by a person holding signatory contractual authority.
 - ii. An Initial Deposit of \$10,000 transmitted within one (1) Business Day of the submission of the Surplus Interconnection Service Request as specified ~~above in the Deposits section in Section A.~~
 - iii. ~~Site Control documentation or, in lieu of demonstrating Site Control the Surplus Interconnection Customer may submit a separate Site Control deposit of an additional \$10,000 as specified above in Large Generator Interconnection Deposits. This additional deposit (less costs incurred) is refundable only if Site Control is demonstrated within 10 Business Days~~

~~after the Surplus Interconnection Request is received by BPA Transmission Services.~~

- iii. Evidence of Site Control as specified in the Site Control Business Practice.
- iv. Modeling data ~~(in a format acceptable to BPA)~~ and project one line diagram for the Surplus Interconnection Service Request. Modeling data must be submitted in PowerWorld format (.aux) or GE PSLF format (.epc and .dyd).
- v. A letter of intent, signed by the existing Interconnection Customer, indicating: (i) the existing Interconnection Customer's intent to allow a specified portion of its Interconnection Service to be used by Surplus Interconnection Customer, (ii) the specified amount of Surplus Interconnection Service that the existing Interconnection Customer is making available, (iii) the date when the Surplus Interconnection Service will be available, (iv) the conditions under which such Surplus Interconnection Service may be used, and (v) the letter must also include a statement that the existing Interconnection Customer is waiving its priority right, on behalf of itself and any affiliate to utilize the Surplus Interconnection Service, only if Surplus Interconnection Customer is any entity other than the existing Interconnection Customer or an affiliate of the existing Interconnection Customer.
- ~~vi. W9e form, Request for Taxpayer Identification Number and Certification, of the Surplus Interconnection Customer. This requirement may be waived at the discretion of BPA Transmission Services if the Surplus Interconnection Customer has submitted previous Interconnection Requests or Surplus Interconnection Requests to BPA Transmission Services. The Surplus Interconnection Customer should consult with its Account Executive prior to submitting its Surplus Interconnection Request for clarification.~~
- ~~vii. Certificate of Incorporation of the Surplus Interconnection Customer if not previously submitted to BPA Transmission Services.~~
- vi. If a new Customer with BPA, must submit the W9e:Request for Taxpayer Identification Number and Certification form, of the Surplus Interconnection Customer. This requirement may be waived at the discretion of BPA if the Surplus Interconnection Customer has submitted previous Interconnection Requests or Surplus Interconnection Service Requests to BPA. The Surplus Interconnection Customer should consult with its Transmission Account Executive prior to submitting its Surplus Interconnection Service Request for clarification.
- vii. If a new Customer with BPA, must submit the Certificate of Incorporation of the Surplus Interconnection Customer if not previously submitted to BPA.
 1. If a Surplus Interconnection Customer is a subsidiary or partner of another entity, or if another entity controls the Surplus Interconnection Customer, a letter from the parent or controlling entity's letterhead is required and must include the name(s) and

position(s) of those holding contractual signatory authority on behalf of the Surplus Interconnection Customer and the Certificate(s) of Incorporation for each entity.

2. The Surplus Interconnection Customer must provide BPA Transmission Services with written notification of a name change to the company within 15 Business Days from the effective date of the name change and include a cover letter with the company's official correspondence letterhead stating the new name of the company.

D. Submission Procedures

1. Consistent with Section 4.2.1 of the LGIP, BPA will only accept Large Generator Interconnection Requests during an open Cluster Request Window. BPA will accept Surplus Interconnection Service, Repower, or Replacement requests at any time.

4.2. To request an interconnection of a Large Generating Facility or Surplus Generating Facility, or to request a repower or replacement of an existing Generating Facility, ~~the Interconnection~~ Customer should submit the Request by email ~~one of the following methods:~~

- a. Submit Surplus Interconnection Service Requests, Repower Requests and Generator Replacement Requests via email to Interconnection@bpa.gov.
- b. Submit Large Generator Interconnection Requests via email to GI_ClusterStudies@bpa.gov.

Overnight Delivery Service	<p>Bonneville Power Administration—Attn: (Addressee) Organization Mailstop: (e.g. TSE/TPP-2; TPC/TPP-4, TPP/OPP-3) 905 NE 11th Avenue Portland, OR 97232</p> <p>The Interconnection Customer must use this address if a return receipt is requested.</p>
US Postal Service	<p>Bonneville Power Administration Transmission Marketing and Sales—TSE-TPP-2, P.O. Box 61409, Vancouver, WA 98666-1409</p> <p>Regular Mail Only—Express or return receipt requested mail must be sent to the address shown under Overnight Delivery above.</p>
Facsimile (fax)	<p>Faxed Interconnection Requests and other requests will be accepted only at (360) 619-6940.</p> <p>The Customer must include a cover page specifying the number of Requests and the number of pages faxed.</p> <p>BPAT is not responsible for the failure of fax transmissions.</p>
Email	<p>To: Interconnection@bpa.gov Subject: Generator Interconnection, Surplus Generator Interconnection, Generator Repower Request, or Generator Replacement Request</p> <p>Interconnection Requests and Surplus Interconnection Requests sent to other email addresses will not be entered into the Interconnection Queue or the Surplus Interconnection Queue.</p>

	<p>The completed application and any additional documents must be attached to the email as Portable Document Format (PDF) files; if the files exceed 30 MB the customer service engineer must be contacted for directions on how to submit the files. PDF files should be referenced and specified by their exact names in the email. For modeling data, BPA prefers GE PSLF format (.epc and .dyd). Please submit only the generator model and not a complete base case.</p>
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- ~~3. Interconnection Requests and Surplus Interconnection Service Requests sent to other email addresses will not be entered into the Interconnection Queue or the Surplus Interconnection Queue.~~
- ~~4. The completed application and any additional documents must be attached to the email as Portable Document Format (PDF) files; if the files exceed 30 MB the customer service engineer must be contacted for directions on how to submit the files.~~
 - ~~a. PDF files should be referenced and specified by their exact names in the email.~~
 - ~~b. Modeling data must be submitted in GE PSLF format (.epc and .dyd). Please submit only the generator model and not a complete base case.~~

E. Interconnection Queue Position

- ~~1. Consistent with Section 4.1 of the LGIP, Queue Position of an Interconnection Request or Surplus Interconnection Service Request is the date and time BPA receives a valid Interconnection Request or Surplus Interconnection Service Request via email as specified in Section D, Submission Procedures.~~
- ~~1. Queue Position of an Interconnection Request or Surplus Interconnection Request is the date and time BPAT receives a valid Interconnection Request or Surplus Interconnection Request, determined as follows for:~~
 - ~~a. Overnight Delivery Service: date and time when the request is delivered to the BPA mailroom.~~
 - ~~b. Fax: the date and time stamp on the fax.~~
 - ~~c. Email: the date and time that the email is received in the Interconnection@bpa.gov inbox by BPAT.~~
 - ~~d. Mail: the date and time stamp when the request is received by BPAT at the TSE-TPP-2 mailstop office.~~

F. Queue Process Status

1. Subject to the requirements of the LGIP, BPA~~T~~ shall post the relevant information contained in the Interconnection Request or Surplus Interconnection Request on the ~~external~~ Interconnection ~~Queue~~ webpage ~~under Related Links, "Interconnection Request Queue."~~
2. Upon BPA's receipt of the Interconnection Request or Surplus Interconnection Service Request, the queue status shall be shown as RECEIVED.
3. Upon receipt by BPA~~T~~ of an executed study agreement and deposit the queue status will be changed to STUDY.

- a. As each study is executed and commenced, BPA~~T~~ shall insert the stage being studied into the Comments section of the Interconnection Request posting.
 - b. During the study process if any of the posted Interconnection Request or Surplus Interconnection Service Request information changes, the posting will be revised and the date of the amendment recorded in the Comments section of the queue posting.
 - c. When each study report is final and has been provided to the Interconnection Customer or Surplus Interconnection Customer, a redacted summary of the report will be posted to BPA~~T~~ OASIS.
- ~~4. Upon execution of the Large Generator Interconnection Agreement (LGIA) or Surplus LGIA, the queue status shall be changed to CONFIRMED and the identity of the Interconnection Customer or Surplus Interconnection Customer will be posted.~~
- 5.4. Upon completion by BPA ~~Transmission Services~~ of the Interconnection Facilities Study, the queue status shall be changed to STUDY COMPLETED.
- a. After the Interconnection Facilities Study, ~~the~~ Interconnection Customer may still be performing environmental studies, or going through permitting processes. BPA ~~Transmission~~ does not post statuses for environmental studies or permitting.
 - b. After environmental studies and permitting are complete, BPA ~~Transmission~~ will tender a LGIA to ~~the~~ Interconnection Customer. Interconnection Customer will execute or withdraw. If Interconnection Customer executes the LGIA, ~~the~~ Interconnection Customer may go to design or construction or suspension. BPA ~~Transmission~~ does not post statuses for the LGIA.
5. Upon execution of the Large Generator Interconnection Agreement (LGIA) or Surplus LGIA, the queue status shall be changed to IA EXECUTED and the identity of Interconnection Customer or Surplus Interconnection Customer will be posted.
6. Upon energization of the Generating Facility, the queue status shall be changed to ENERGIZED.
 7. BPA~~T~~ will change the queue status to WITHDRAWN and include the reason for withdrawing the Interconnection Request in the Comment section if the Interconnection Customer or Surplus Interconnection Customer does any of the following:
 - a. Withdraws the Interconnection Request or Surplus Interconnection Service Request;_
 - b. Fails to execute a required Interconnection Studies agreement;_
 - c. Fails to submit the required deposit;_
 - d. Fails to meet required timeline milestones.
 8. If, at any time, the public process under the National Environmental Policy Act (NEPA) requires that the identity of ~~the~~ Interconnection Customer or Surplus Interconnection Customer become public, BPA~~T~~ may post the identity of ~~the~~ Interconnection Customer or Surplus Interconnection Customer.

G. Sale or Transfer of Generating Facility

1. Sale or Transfer of a Generating Facility Identified in the Interconnection Request:
 - a. In the event that ~~the~~ Interconnection Customer anticipates the sale or transfer of its interest in the Interconnection Request (~~S~~see Section 4.3 of the LGIP, Transferability of Queue Position) BPA ~~T~~ requires written notice at least 30 ~~e~~Calendar ~~d~~Days in advance of the transaction.
 - b. The Interconnection Customer should contact ~~the~~ Transmission Account Executive to seek guidance in advance of the 30 day written notice requirement, which contact shall be non-binding and will be held in confidence, in order to establish and identify clearly what (if any) agreements, rights and obligations are to be the subject of such a sale or transfer.
2. Sale or Transfer of a Generating Facility Identified in the Executed LGIA:
 - a. For the sale or, transfer of a Large Generating Facility for which ~~the~~ Interconnection Customer has an executed LGIA, the purchaser or transferee must execute a new LGIA. The new LGIA must specify the purchaser's or transferee's interest in the Large Generating Facility.

H. Environmental Studies

1. Tendering the Environmental Study Agreement (ESA):
 - a. In accordance with Section 3.4.5 of the LGIP for Interconnection Requests and 3.3.8 of the LGIP for Surplus Interconnection Requests, BPA will tender to ~~the~~ Interconnection Customer or Surplus Interconnection Customer an Environmental Study Agreement (ESA) as soon as practicable ~~after the Scoping Meeting~~.
2. Executing the ESA:
 - a. Within 30 Calendar Delays of receiving the ESA, ~~the~~ Interconnection Customer or Surplus Interconnection Customer must execute the agreement per the terms of Section 3.4.5 and 3.3.8 of the LGIP respectively; if ~~the~~ Interconnection Customer or Surplus Interconnection Customer fails to execute the ESA within 30 Calendar dDays of receipt, then BPA shall deem the Interconnection Request or Surplus Interconnection Service Request withdrawn pursuant to Section 3.7 of the LGIP.
3. Calculating the Deposits:
 - a. The appropriate deposit amount for the ESA for the Interconnection Request or Surplus Interconnection Service Request will be determined by BPA based on the extent of the required environmental studies. The deposit for the ESA may be either:
 - i. The estimated cost of all environmental evaluation and studies; or
 - ii. A partial payment of the estimated costs of all environmental evaluation and studies, including engineering and design requirements, that is sufficient to cover the BPA's preliminary review of the necessary environmental evaluation and studies.
4. Information Required for Conducting the Environmental Evaluation and Studies:

- a. BPA requires information from the Interconnection Customer or Surplus Interconnection Customer to conduct the National Environmental Policy Act (NEPA) analysis including but not limited to: preliminary designs, permits, status reports, and funds. The ESA details information that is required from ~~the~~ Interconnection Customer to complete this analysis.
5. Timeline for NEPA Analysis:
- a. BPA will proceed in good faith to ensure the timely completion of the environmental review for the Interconnection Request or Surplus Interconnection Service Request. BPA reserves the right to revise the estimated date of completion of the environmental review as necessary, and is not obligated to issue the NEPA document for its own actions within any specific timeframe.
6. Tendering the LGIA:
- a. Completion of the record of decision or other NEPA document is a necessary condition for the tendering of an LGIA or Surplus LGIA.

I. Material Modifications

1. A request to modify the operating characteristics of an Interconnection Request must be submitted via email to Interconnection@bpa.gov or ClusterStudies@bpa.gov for Large Generator Requests or Interconnection@bpa.gov for Surplus, Repower, or Replacement requests. This request must provide the following:
 - a. A completed Appendix 1 to the LGIP, including a detailed description of the proposed modification in Section 2 of Appendix 1 to the LGIP, and all information necessary to support BPA's analysis of how the proposed modification:
 - i. Results in equal to or better electrical performance;
 - ii. Does not increase ~~the~~ Interconnection Customer's requested ~~i~~Interconnection ~~s~~Service even if Generating Facility Capacity increases; and
 - iii. Does not cause any reliability concerns (i.e., material impacts to the transmission system, including impacts to short circuit capability limits, steady-state thermal and voltage limits, or dynamic system stability and response); and-
 - iv. For a Co-located Resource, a description of the primary and secondary controls that limit the combined output of the Co-located Resources to the requested Interconnection Service amount.
 - b. A new plant level model of the Generating Facility with a detailed description of the proposed modification, if the new model is different from that submitted ~~for the Interconnection System Impact Study to BPA~~ under the original Interconnection Request.
 - i. Plant level models must be submitted in one of the following formats: General Electric Positive Sequence Load Flow (PSLF) Power Flow (EPC), General Electric PSLF Dynamics Data File (DYD), PowerWorld Auxiliary File (AUX).

2. Within 30 Calendar Days of receipt of the request for a modification, other than addition of a Co-Located Resource, BPA will assess the modification request and notify ~~the~~ Interconnection Customer of whether the proposed modification is either:
 - a. A permissible change that is determined not to be a Material Modification; or
 - b. A Material Modification.
3. Within 60 Calendar Days of receipt of a request for the addition of a Co-Located Resource, BPA will assess the modification request and notify Interconnection Customer of whether the proposed addition of a Co-Located Resource:
 - a. Requires additional studies at Interconnection Customer's cost; or
 - b. Does not require additional studies.
4. If a request for the addition of a Co-Located Resource requires additional studies, BPA will provide a good faith estimate of time and cost to complete such studies. BPA may use Interconnection Customer's study deposits to perform the additional studies or may tender a reimbursable expense agreement to collect such funds as are needed to cover the good faith estimated study cost.
- 3.5. Within 30 Calendar Days after BPA's determination is sent, ~~the~~ Interconnection Customer shall provide BPA notice, ~~in writing, via email to GI ClusterStudies@bpa.gov for Large Generator Requests or to Interconnection@bpa.gov for Surplus, Repower, or Replacement requests,~~ of its desire to either withdraw or proceed with the requested modification. If such notice is not received within 30 Calendar Days after BPA's determination is sent, the proposed modification will be deemed withdrawn.

J. Identification of Contingent Facilities; Requesting Cost Estimates and Schedules

1. BPA~~T~~ will identify Contingent Facilities in the ~~System Impact Phase Two Cluster~~ Study and Facility Study reports. To identify Contingent Facilities, BPA~~T~~ will use a technical screening process for identifying Contingent Facilities as outlined in the LGIP.
2. If requested by Interconnection Customer, and if readily available and not commercially sensitive, BPA~~T~~ will provide, upon request of the Interconnection Customer, the ~~an~~ estimated ~~of the~~ interconnection facility and/or network upgrade costs and ~~estimated the~~ in-service ~~date completion time of for~~ each ~~identified~~ Contingent Facility ~~when this information is readily available and not commercially sensitive. identified in~~ Interconnection Customer's Interconnection study report, which may be subject to later updates if a Contingent Facility's estimated costs and in-service dates change. Interconnection Customer can submit such a request to Interconnection@bpa.gov. Clearly label the email with the subject line "Contingent Facility Cost and Schedule Request" and in the body of the email, call out each Contingent Facility exactly as they were defined in the study report.

K. Phased Interconnection and Provisional Interconnection Service

1. Phased Interconnection Service:

- a. If ~~the~~ Interconnection Customer plans to complete and achieve Commercial Operation of its Generating Facility in two or more successive phases under a single LGIA, then each phase, including all milestone dates, and cost payment tables must be documented in the Appendices of the LGIA.
2. Provisional Interconnection Service:
 - a. If ~~the~~ Interconnection Customer plans to execute an LGIA for Provisional Interconnection Service, then ~~the~~ Interconnection Customer shall follow the processes for Phased Interconnection Service as described above.

L. Repower and Replacement Requests

1. A Generating Facility Repower Request is a request to change aged components of an existing generating facility. The MW nameplate of the generating facility may increase, but not the interconnection service limit. If a generator wishes to utilize the increased MW (i.e., increase the ~~i~~Interconnection ~~s~~Service ~~l~~limit), a new Interconnection Request is required.
 - a. A Repower Request must be made at least one (1) year in advance of the change. The Generating Facility must have a valid LGIA that has been with the same owner for at least one (1) year prior to the request.
 - i. The Repower Request can be submitted via email to Interconnection@bpa.gov ~~per the terms of Section D. above.~~
 1. The request should identify the existing LGIA, and provide any technical or modelling data available.
 - ii. The required \$10,000 deposit can be submitted per the terms of Section A. above.
 - b. Within 10 ~~b~~Business ~~d~~Days, BPA will schedule a scoping meeting. At the scoping meeting, BPA will determine whether or not the request is a potential Material Modification. If the Repower Request is determined to be a potential Material Modification, ~~the~~ Interconnection Customer may withdraw the Repower Request, or proceed with a normal Interconnection Request. BPA will assign and post a queue number if the customer chooses to proceed with a standard Interconnection Request.
 - c. If the Repower Request is determined not to be a potential Material Modification, BPA will tender an ESA Environmental Study Agreement and a technical study agreement, if needed. Even though a Repower Request may not be a potential Material Modification, there may still need to be some technical studies conducted if key electrical characteristics (like voltage control) of the generating facility are changing or if any new or modified facilities (like updated relays) are needed. The technical studies will provide plan of service, schedule, and estimates for any BPA actions.
 - d. After technical and environmental studies are complete, BPA and generating facility owner will update the existing LGIA to capture any construction items and the new description of the Generating Facility.
2. A Generating Facility Replacement is a request to replace one or more aged generating units at an existing generating facility (e.g., one or more turbines at the generating

facility). The MW nameplate of the generating facility may increase, but not the ~~i~~Interconnection ~~s~~Service limit. If a generator wishes to utilize the increased MW (i.e., increase the interconnection service limit), a new Interconnection Request is required. The request must be at the same POI and voltage level as the original generating facility.

- a. A Replacement Request must be made at least one (1) year in advance of the change. The Generating Facility must have a valid LGIA that has been with the same owner for at least one (1) year prior to the request. ~~A-Interconnection~~ ~~e~~Customer with Energy Resource Interconnection Service (ERIS) in the existing LGIA may only request ERIS on the Replacement Request. ~~A-Interconnection~~ ~~e~~Customer with Network Resource Interconnection Service (NRIS) in the existing LGIA may request NRIS or ERIS.
 - i. The Replacement Request can be submitted via email to Interconnection@bpa.gov~~per the terms of Section D. above.~~
 1. The ~~Replacement~~ ~~r~~Request should identify the existing LGIA, and provide any technical or modelling data available. Modeling data must be in a .dyd or .epc file format.
 - ii. The required \$10,000 deposit can be submitted per the terms of Section A. ~~above.~~
- b. Within 10 ~~b~~Business ~~d~~Days, BPA will schedule a scoping meeting.
- c. After the scoping meeting, BPA will tender ~~the-Interconnection~~ ~~e~~Customer an Environmental Study Agreement-ESA and a technical study agreement, if needed. The Replacement Impact Study will examine any changes in electrical performance of the new generator; the Reliability Assessment will examine any reliability issues if there is a gap between the old generator going offline and the new generator coming online; and the Replacement Facility Study will provide scope, schedule, and cost estimates for any required BPA actions.
- d. ~~Interconnection~~ Customer may request a modification or withdraw the replacement request any time before the evaluation is complete. Modification requests or withdrawals should be emailed to sent to the Interconnection@bpa.gov mailbox with the request clearly explained in the email. Modifications to the cessation date of the existing generator or COD of the new generator may require a new Replacement Request and such modifications are subject to the one (1) year notice clause.
- e. After technical and environmental studies are complete, BPA and the generating facility owner will update the existing LGIA to capture any construction items and the new description of the Generating Facility.

M. Request for Technological Advancement

1. Requests for Technological Advancement must be made prior to the return of the Interconnection Facility Study Agreement or Surplus Interconnection Facility Study Agreement.
2. Send requests for Technological Advancement of a project via email to Interconnection@bpa.gov. The email must clearly explain the proposed Technological Advancement and attach any proposed model updates, customer studies, or other

pertinent information that demonstrates the proposed Technological Advancement is of equal or better performance than the original request. Permissible Technological Advancements cannot change the electrical characteristics of a project, cannot change the requested nameplate or ~~h~~Interconnection ~~s~~Service amount, cannot change or add a fuel type, and cannot require extensive studies to determine if the proposed Technological Advancement is a Material Modification. For requests that do not meet these requirements, ~~a~~Interconnection ~~e~~Customer should request a Material Modification Analysis instead.

3. A \$10,000 deposit should be submitted with the request for Technological Advancement per the terms of Section A ~~of this business practice~~.
4. BPA will determine if studies are needed to process the Technological Advancement request. If no studies are needed, BPA will refund the \$10,000 deposit. If studies are needed, BPA will use reasonable efforts to conclude the studies in 30 ~~e~~Calendar ~~d~~Days. The results of the studies will either determine that the request for Technological Advancement is permissible and can be incorporated into the Interconnection or Surplus Interconnection Service Request, or that the request for Technological Advancement is not permissible. If the proposed Technological Advancement is not permissible, Interconnection eCustomer may abandon it or they may submit a new Interconnection or Surplus Interconnection Service Request and start over with a new qQueue pPosition.

~~N. Requesting Cost Estimates and Schedule for Contingent Facilities~~

- ~~1. If requested by a customer, and if readily available and not commercially sensitive, BPA will provide an estimate of the costs of and the in-service date for each Contingent Facility identified in a customer's Interconnection study report, which may be subject to later updates if a Contingent Facility's estimated costs and in-service dates change. A customer can submit such a request to Interconnection@bpa.gov. Clearly label the email with the subject line "Contingent Facility Cost and Schedule Request" and in the body of the email, call out each Contingent Facility exactly as they were defined in the study report.~~

O.N. Transmission Credits - Generator Large

1. Refer to ~~the BAT Transmission Credits - Generator - LGI BP GI Transmission Credits Business Practice~~ for further discussion on eligibility for ~~T~~transmission ~~C~~redits under the LGIA.

P.O. Energy Imbalance Market

1. If a generator wishes to participate in the Energy Imbalance Market, see the Energy Imbalance Market (EIM) Business Practice for requirements.

Q. Policy References

- ~~1. BPA OATT: Attachment L~~

~~2. Forms~~

- ~~a. Assignment of Transmission Credits~~
- ~~b. Standard Large Generator Interconnection Agreement (BPA OATT, Attachment L)~~

~~3. Related Business Practices~~

- ~~a. New Customer Application Process~~
- ~~b. Long-Term Firm Queue Management~~
- ~~c. Redirects~~

~~4. Reference Data~~

- ~~a. Reports on Study Statistics~~
- ~~b. Interconnection Study Reports~~
- ~~c.a. Study Models and Assumptions~~

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