

Dynamic Transfer Capability: Requesting and Awarding Access - Pilot, Version ~~34~~

Effective: ~~1/10/11~~TBD

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Version 4 of this Business Practice is out for comment through July 31, 2012. Please send comments to techforum@bpa.gov and include the business practice title in the subject line.

Note: This is a pilot program, and BPA Transmission Services expects to continue to modify the process outlined herein as the pilot progresses and as BPA Transmission Services gains experience in the management of Dynamic Transfer Limits.

This Business Practice sets forth revised requirements for requesting and awarding Dynamic Transfer Capability (DTC) under the Dynamic Transfer Capability Pilot Program. Under Phase 3 of the Pilot Program, all DTC awards for new uses will expire on October 1, 2013 at 00:00. Historic Uses of DTC do not expire on this date. It replaces the Requesting Access to Dynamic Transfer Capability - Pilot, Version 2 Business Practice posted August 16, 2010 that suspended Bonneville Power Administration's (BPA's) review of Dynamic Transfer Capability requests.

BPA is proposing to continue the Pilot Program through the next Rate Period, which runs between October 1, 2013 and September 30, 2015. This would be Phase 4 of the Pilot Program.

This Business Practice is primarily focused on requesting and awarding requests for access to Dynamic Transfer Capability for the purpose of meeting the proposed rate case ~~date-deadline~~ for Customers to elect ~~whether~~ to self-supply balancing resources for the FY14-15 Rate Period. by May 1, 2011, although BPA will accept requests for access to DTC for other purposes.

All requests for ~~new~~ access to DTC for the purpose of electing to self-supply balancing resources must be received by ~~January 28, 2011~~August 31, 2012 to be considered in the next study period, which BPA expects to complete by November 30, 2012. ~~eligible for an award of DTC. A Customer with an Historic Use of DTC is not required to submit a request for DTC, unless that customer wants to change its Historic Use or seeks additional DTC for a new use. Requests for DTC for other new uses may be submitted at any time.~~

Because ~~Dynamic Transfer Capability DTC~~ on the BPA system is limited, BPA may not have sufficient DTC Variable Transfer Capability to accommodate all requests. In making awards, BPA will continue to endeavor to honor as many requests as reasonably practical in order to optimize the use of DTC on BPA's system.

In Pilot Phase 3 BPA included an evaluation priority and because for requests for the purpose of self-supplying balancing reserves and to move a wind project out of the BPA's Balancing Area Authority (BAA) will be evaluated first, BPA may not have sufficient DTC to accommodate all requests. Because this priority has not been a determinative factor in making awards, BPA is proposing to eliminate this priority. Because DTC is location, use and resource dependent, BPA will continue its policy that there is no queue for DTC requests.

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BPA is proposing to consider requests for longer than two years to move wind projects out of BPA's Balancing Authority. However, there is no assurance BPA will be able to grant any such awards. In the event that such requests may be accommodated, additional limitations would apply with respect to such conditions as the term of the award and associated costs for maintaining the award.

BPA is also proposing to adopt some of the terminology recommended by the Wind Integration Study Team in its DTC Task Force Phase 3 Report published on December 21, 2011.

BPA expects to revise this Business Practice to accommodate future requests and requirements for access to Dynamic Transfer Capability.

This Business Practice is to be used in association with the Dynamic Transfer Operating and Scheduling Requirements, ~~V1 Business Practice currently planned for a second comment period in January 2011. The Dynamic Transfer Operating and Scheduling Requirements, V1 Business Practice will that~~ describes the technical and operational requirements needed to effect dynamic transfers on BPA's system, as well as other Business Practices noted in Section 6.

As this is a pilot program, Transmission Services expects to continue to modify DTC policy as the pilot progresses.

Version 4 updates timelines to submit a request for DTC consist with the BPA rate period, removes the old evaluation process and priority in studying DTC, proposes the option of an extended term for DTC awards under very limited circumstances (where BPA's balancing authority area boundaries are changed) and proposes additional limitations on such awards. BPA is also proposing to adopt some of the terminology recommended by the Wind Integration Study Team in its DTC Task Force Phase 3 report. Additional changes are as noted in the red-line text.

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Comments will be accepted on the additional update through JULY 31, 2012. Please send comments to techforum@bpa.gov and include DTC Requesting and Awarding in the subject line.

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Definitions:

Committed Use: ~~-Dynamic Transfer Capability, exclusive of Historic Use, that has been committed by contract~~ to a new use or reserved by BPA for its own use.

Dynamic Transfer: A term that refers to methods by which the control response to load or generation is assigned, on a real-time basis from the Balancing Authority to which such load or generation is electrically interconnected (native Balancing Authority) to another Balancing Authority (attaining Balancing Authority) or other controlling entity on a real-time basis. This includes Pseudo-Ties, Dynamic Schedules, and dynamic arrangements within the BPA Balancing Authority Area. The provision of the real-time monitoring, telemetering, computer software, hardware, communications, engineering, energy accounting (including inadvertent interchange), and administration required to electronically move all or a portion of the real energy services associated with a generator or load out of one Balancing Authority Area into another. (NERC definition). Also defined as a term that refers to methods by which the control

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~~response to load or generation is assigned, on a real-time basis from the Balancing Authority to which such load or generation is electrically interconnected (native Balancing Authority) to another Balancing Authority (attaining Balancing Authority) or other controlling entity on a real-time basis. This includes Pseudo-Ties, Dynamic Schedules, and dynamic arrangements within the BPA Balancing Authority Area.~~

~~Dynamic Transfer Capability: The capability of the transmission system to accommodate continuous ramping of a resource(s) over a pre-determined range, such that the control of the electrical output of such resources(s) can be varied from moment to moment by an entity other than the host utility/host Balancing Authority Area operator.~~

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~~The Dynamic Variable Transfer Limit less the sum of Historic Use and Committed Uses of that flowgate.~~

~~Dynamic Transfer Limit: The capability of the transmission system to continuously ramp a resource(s) over a pre-determined range, such that the control of the electrical output of such resource(s) can be varied from moment to moment by a user of Dynamic Transfer Capability other than the host utility/host balancing area operator.~~

~~PUF (Path Utilization Factor) Calculation: An equation based on a POD, POR, and Transmission Demand used to determine the impacts to a Constraint. For example, the impact on Constraint A would be calculated by the following formula:~~

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$$\text{Impact to Constraint A} = \frac{(\text{PUFA based on POR} - \text{PUFA based on POD}) * \text{Transmission Demand}}{\text{Transmission Demand}}$$

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~~Variable Transfer Limit: For a given Static Transfer, the amount of frequent but unpredicted variability in the power transfer across a flowgate that can be accommodated over a specified intra-hourly timeframe while insuring the reliable operation of the system and avoiding unacceptable adverse impacts on equipment and customers. (Units: MW).~~

A. Eligibility Requirements

1. An Applicant must meet each of the following requirements to be eligible ~~to be for an awarded of access to~~ Dynamic Transfer Capability:
 - a. Hold a valid Transmission Service Agreement with BPA for firm service with an original term of at least two years and spanning the period for which access to Dynamic Transfer Capability is being requested; and
 - b. Submit a request for access to Dynamic Transfer Capability pursuant to ~~s~~Section ~~3B~~ of this Business Practice.

B. Requesting Access to Dynamic Transfer Capability

1. An Applicant that desires ~~new~~ access to Dynamic Transfer Capability on BPA's system ~~for a new use~~ must request access to such capability pursuant to this Business Practice.
2. Requests for access to Dynamic Transfer Capability may be made at any time. However, there is no queue for requests for access to Dynamic Transfer Capability.
3. Requests must be received by Close of Business ~~January 28, 2011~~ August 31, 2012 to be eligible for an award of Dynamic Transfer Capability in ~~April 2011~~ November 2012.

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4. Requests received after August 31, 2012 will be considered at a later date.

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- 4.5. Requests for access to Dynamic Transfer Capability must be submitted to BPA at DynamicRequestQueue@bpa.gov using a template available at www.transmission.bpa.gov/wind/dynamic_transfer/default.cfm. Requests must include the following information:
- a. Applicant's name, which must match that of the provided BPAT AREF;
 - b. Applicant's contact information:
 - i. Two point of contact names (one contact to address real-time operations issues related to the request);
 - ii. Phone number for each contact; and
 - iii. Email address for each contact.
 - c. AREF of a firm transmission agreement for which access to Dynamic Transfer Capability is being requested;
 - d. AREF of any third-party transmission provider reservations that will be used in conjunction with the above BPAT reservation;
 - e. Identification of the Source and Sink at a level of detail sufficient to allow BPA to accurately calculate the ~~Dynamic Transfer Capability impacts~~ impact of the proposed use of Dynamic Transfer Capability:
 - i. The path specified must correspond with the path of the provided BPAT AREF;
 - ii. Applicants may contact their BPA Account Executive for assistance;
 - iii. Applicants will be contacted if BPA determines further detail is necessary;
 - f. Maximum capacity (in MWs) to be dynamically transferred, not to exceed the demand of the provided BPAT AREF.
 - g. Maximum desired Ramp Rate (in MWs per minute) to be dynamically transferred;
 - h. The desired Start Date for the dynamic transfers.
 - i. Intended use of the Dynamic Transfer Capability (e.g., to enable self-supply of wind balancing services as part of the Customer Supplied Generation Imbalance Pilot Program);
 - j. If the Applicant intends to use the Dynamic Transfer Capability to be awarded pursuant to this request to remove a resource from BPA's Balancing Authority Area, identification of the resource or resources that will be used to balance this resource; and
 - k. The Start Date for a Request to use Dynamic Transfer Capability to self-supply wind balancing service is October 1, 2012³.
 - l. The Stop Date for all ~~Requests that changes BPA's Balancing Authority boundary may be later than to use Dynamic Transfer Capability is~~ September 30, 2013⁵. For example, moving a wind or other generator out of BPA's Balancing Authority Area would qualify for a later Stop Date Request.
 - m. The Stop Date for all other Requests to use Dynamic Transfer Capability is September 30, 2013³.
5. BPA will confirm receipt of requests for access to Dynamic Transfer Capability via email to the identified points of contact within three Business Days.

C. Evaluating Requests for Access to Dynamic Transfer Capability

1. If BPA determines that an Applicant's request for Dynamic Transfer Capability will not impact Dynamic-Variable Transfer Capability or, if granted, would have a de minimus

impact on ~~Dynamic-Variable~~ Transfer Capability, BPA may grant the request at any time with no deduction of posted ~~Dynamic-Variable~~ Transfer Capability values.

2. In allocating available ~~Dynamic-Variable~~ Transfer Capability, BPA shall grant requests in order to optimize the use of ~~Dynamic-Variable~~ Transfer Capability on BPA's system, so as to:
 - a. Preserve Historic Use; and
 - b. Preserve Committed Uses;
 - ~~c. Facilitate participation in self-supply wind balancing services as part of the Customer Supplied Generation Imbalance Pilot Program Phase 2, and facilitate moving a wind project from BPA's Balancing Authority Area to another Balancing Authority Area.~~
3. ~~Requests for access to Dynamic Transfer Capability to enable self supply of Wind Balancing Service as part of the Customer Supplied Generation Imbalance Pilot Program Phase 2 and to move a wind project out of BPA's Balancing Authority Area will be processed first. All other requests for access to Dynamic Transfer Capability will then be processed. In doing so, In evaluating requests,~~ BPA will seek to optimize ~~the~~ awards of Dynamic Transfer Capability so as to grant as many requests as possible consistent with the purposes of the Dynamic Transfer Capability Pilot Phase ~~2~~4.
4. ~~BPA evaluation may include the following:~~
 - ~~a. A Power Transfer Distribution Factor (PTDF) analysis for a request for access to Dynamic Transfer Capability.~~
 - ~~b. In the event that two or more Constraints have the same Dynamic Transfer Capability value, BPA Transmission Services will use the following ranking as a tie breaker:~~
 - South of Allston
 - AC Intertie
 - Northern Intertie
 - LaGrande
 - West of Garrison
 - West of Slatt
 - West of McNary
 - Cross Cascades North
 - Cross Cascades South
 - North of John Day
 - North of Hanford
 - ~~c. In the event that two or more requests have the same Dynamic Transfer Capability value on a Constraint, BPA Transmission Services will use the time stamp of the original valid email request as a tie breaker.~~
5. BPA will take the following additional information into consideration, prior to making any offers:
 - a. In evaluating a request, BPA Transmission Services will consider previous use of (or failure to use) access to Dynamic Transfer Capability previously awarded under this, Business Practice; and
 - b. Impacts on the interconnected system, sub-grid system, and/or local area system that could potentially cause ~~Dynamic-Variable~~ Transfer ~~Capability-Limit~~ constraints between the Point of Receipt (POR) and Point of Delivery (POD) as determined by BPA Transmission Services Technical Operations.

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D. Offering Access to Dynamic Transfer Capability

1. ~~For all new requests received by August 31, 2012, BPA will notify the Applicant whether their award has been granted and the term of the DTC award by Close of Business April 15, 2014 November 9, 2012. Requests received after August 31, 2012 will be processed at a later date.~~
2. BPA may:
 - a. Deny a request entirely;
 - b. Grant a request as submitted;
 - c. Offer to grant a request in part, or
 - d. Offer to grant a request conditioned on meeting additional requirements necessary to maintain reliability.
 - e. ~~For a request for DTC that changes BPA's Balancing Authority Area boundary, BPA will consider a Stop Date later than September 30, 2015. BPA reserves the right to limit the term of any long-term DTC award for a new use and may impose additional requirements such as but not limited to recalling the award for reliability purposes or requiring the Applicant to agree to reimburse BPA for costs BPA may incur in honoring a long-term request.~~
3. An Applicant must notify BPA of its acceptance or rejection of a Dynamic Transfer Capability offer within ~~five~~¹⁰ Business Days of notification of the Dynamic Transfer Capability award offer by BPA.
4. A Dynamic Transfer Agreement or, if appropriate, an amendment to an existing agreement, will be offered to an Applicant whose request for access to Dynamic Transfer Capability has been granted as submitted or an offer of a partial or conditional grant has been accepted by the Applicant.
5. Dynamic Transfer Agreements will include the following provisions:

The Dynamic Transfer Agreement is contingent on the Applicant executing appropriate agreements with other impacted Balancing Authority Areas;

BPA will not allow a Dynamic Transfer involving BPA and another Balancing Authority to occur until the necessary contracts have been executed, as determined by BPA, and until that Balancing Authority has agreed to comply with the requirements of BPA's Dynamic Transfer Operating and Scheduling Business Practice, or its successor.

Any use of Dynamic Transfer Capability must be consistent with BPA's Dynamic Transfer Capability Operating and Scheduling Business Practice, or its successor;

The Applicant may terminate or reduce its use of Dynamic Transfer Capability as may be agreed between BPA and the Applicant;

If a new use conflicts with an Historic Use, the Historic Use will prevail; and

The Applicant may not redirect rights to use Dynamic Transfer Capability under the Dynamic Transfer Agreement

6. BPA reserves the right to temporarily suspend or limit use of Dynamic Transfer Capability when necessary to protect reliability or when the terms of this Business Practice or other applicable business practices or their successors are not being met.

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7. The Applicant must return an executed Dynamic Transfer Agreement to BPA's offices within 30 calendar days of the Date of Tender. If prior to that deadline BPA receives the Applicant's written request for an extension, BPA may grant an additional 15 calendar days under this section.
8. If the Applicant fails to return an executed Dynamic Transfer Agreement within the specified time, the Applicant's request will be deemed withdrawn.
9. The Applicant may return the signed originals of the Dynamic Transfer Agreement either by:

US Postal Service to:
Bonneville Power Administration
Transmission Sales - TSE-TPP-2
P.O. Box 61409
Vancouver, WA 98666-1409

Overnight Express to:
Bonneville Power Administration
Transmission Sales - TSE-TPP-2
7500 NE 41st St, Suite 130
Vancouver, WA 98662-7905

Required Telephone Number: (360) 619-6016
Fax to: (360) 619-6940

Email to: DynamicRequestQueue@bpa.gov

10. If the Applicant returns the Dynamic Transfer Agreement by fax or email, BPA must receive the original signed hardcopies within five Business Days after the date of the fax or email.
11. Once the Dynamic Transfer Agreement is executed, BPA will work with the Applicant to ensure telemetry and other operational requirements necessary to comply with applicable business practices are met prior to implementing Dynamic Transfers.

12. BPA will post the amount, source, sink, ramp rate and other conditions, and recipient of each Dynamic Transfer Capability award.

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E. Additional Information Forms

- [Dynamic Transfer Capability Request Template](#)

Related Business Practices & Documents

- [Dynamic Transfer Operating and Scheduling Requirements](#)
- ~~Remote Loads & Remote Resources~~
- Customer Supplied Wind Balancing Services Pilot Program

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Version History

Version 4	Xx/xx/xx Version 4 updates timelines to submit a request for DTC consist with the BPA rate period, removes the old evaluation process and priority in studying DTC, proposes the option of an extended term for DTC awards under very limited circumstances (where BPA's balancing authority area boundaries are changed) and proposes additional limitations on such awards. BPA is also proposing to adopt some of the terminology recommended by the Wind Integration Study Team in its DTC Task Force Phase 3 report. Additional changes are as noted in the red-line text.
Version 3	1/10/11 Version 3 of the revised Requesting Access to Dynamic Transfer Capability - Pilot Phase 2 includes the following changes from Version 2 posted August 16, 2010: • Title of business practice was changed from Requesting Access to Dynamic Transfer Capability - Pilot to Dynamic Transfer: Requesting and Awarding - Pilot Phase 2. • Replaced "Transmission Customers" and "Customers" with "An Applicant" throughout the document Section 1 • Added the following definitions: Applicant, Committed Use, Dynamic Transfer, Dynamic Transfer Agreement, Dynamic Transfer Operating Agreement, Dynamic Transfer Limit, Historic Use, and revised the Dynamic Transfer Capability definition. • Revised step 1.10 Section 2 • Changed title of section from General Requirements to Eligibility Requirements • Revised step 2.1 • Step 2.2.1: Increased the original term from one year to two years • Deleted steps 2.2.2 and 2.2.3 Section 3 • Revised steps 3.1 - 3.2 • Added steps 3.3 - 3.5 Section 4 • Changed title of section from "Evaluation of Requests with Impacts to Dynamic Transfer Capability" to "Evaluating Requests for Access to Dynamic Transfer Capability" • Revised step 4.1 • Added steps 4.2 - 4.5 Section 5 • Revised step 5.1 - 5.5 • Added steps 5.6 - 5.11
Version 2	08/16/10 Changes include moving former section 4.3.1 to section 2.2.3.1 and deleting Attachment A. Customers may continue to submit requests to be evaluated under section 2.2.3.1 in order to assess whether there is no impact to Dynamic Transfer Capability values. This business practices also includes the following changes: Section 1: Definitions • Deleted the definition of DTC Request Deadline in step 1.3 Section 2: General Requirements • Added step 2.1 • Deleted "request" and added "be awarded" to step 2.2 • Added step 2.2.3.1 Section 3: Requesting Access to Dynamic Transfer Capability • Added "(one contact to address real-time operations issues related to the requests):" to step 3.1.2.1 Section 4: Evaluation of Requests with Impacts to Dynamic Transfer Capability • Deleted "for Access" from the title and added "with Impact" • Rewrote step 4.1 for clarity • Deleted steps 4.2 - 4.5.2 Section 5: Offering Access to Dynamic Transfer Capability • Deleted step 5.1.1.1 • Rewrote the new step 5.1.1.1 and step 5.1.1.5 for clarity • Deleted steps 5.1.2 - 5.1.2.5 Attachment A: 2010 DTC Request Deadline & Associated Timelime • Deleted entire Attachment A
Version 1	02/16/10 Transmission Services is lifting the suspension on new work related to dynamic transfer, which was implemented in July 2009 while the Wind Integration Study Team (WIST) performed an initial dynamic transfer limits study. The results of this study and the associated methodology will be posted on February 15, 2010 at www.transmission.bpa.gov/wind/dynamic_transfer/default.cfm . This Business Practice describes the proposed process and guidelines for Transmission Customers to

submit requests for access to Dynamic Transfer Capability in order to dynamically transfer, pursuant to Transmission Services' Dynamic Schedules and Remote Resources and Remote Loads Business Practices, on a specific path impacting Transmission Services' Balancing Authority Area (BAA). Note that this is a Pilot and the process outlined herein is expected to be modified as the dynamic transfer limits study progresses and as Transmission Services gains experience in the management of these new dynamic transfer limits. An initial evaluation period will occur in July 2010, to determine the efficacy of this Pilot. This evaluation will assess the suitability of all deadlines and timelines, the effectiveness of the processing algorithm in both supporting the Customer Supplied Generation Imbalance Pilot Program and optimizing use of the Dynamic Transfer Capability, and the effects of the one-year DTC awards without rollover. Also note that Transmission Services will be: 1) updating the Dynamic Schedules and Remote Resources and Remote Loads Business Practices, and 2) posting a Customer Supplied Wind Balancing Services Pilot Program Business Practice, subject to a customer review and comment period, within the next several months.
