

BPA Transmission Services Order 890 Customer Involvement

“Work Plan for Filing OATT Schedule 9”

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WORK PLAN FOR FILING OATT SCHEDULE 9

BACKGROUND

On October 3, 2008, BPA filed a request for declaratory order granting reciprocity approval from the Federal Energy Regulatory Commission of our Order 890 revised Open Access Transmission Tariff (OATT) filing. BPA did not include Schedule 9, Generator Imbalance Service, with that filing. As part of our OATT submittal to FERC, BPA stated that within 60 to 90 days we would issue a work plan for filing Schedule 9.

Before BPA can make a commitment to meet the obligations under Schedule 9, we need to coordinate and align provisions and technical requirements in Large Generator Interconnection Agreements (LGIA), develop modifications to Schedule 9 language, and develop appropriate Rates. In support of those critical elements of the work plan, we will have ongoing efforts to refine Dispatch Orders, develop and install modifications to automatic generation control systems, develop and install dispatch and plant communication systems, and develop related Business Practices.

CONTEXT OF THE WORK PLAN

Under the FERC 890 *pro forma* tariff, Generator Imbalance Service is provided when a difference occurs between the output of a generator located in the Transmission Provider's Control and a delivery schedule from that generator to (1) another Control Area or (2) a load within the Transmission Provider's Control Area over a single hour. The Transmission Provider must offer this service, to the extent it is physically feasible to do so from its resources or from resources available to it, when Transmission Service is used to deliver energy from a generator located within its control area.

Over the last two years, BPA has experienced a large influx of wind resources interconnecting to the control area. We anticipate that up to 3,000 MW of wind resources will interconnect by the end of 2009, and over 3,000 MW of additional wind resources are seeking to interconnect within a few years.

Generation inputs must be available to provide energy and capacity for Generator Imbalance Service. The reserve requirements for balancing large amounts of wind resources are significant and there is a finite limit to the ability of the Federal Columbia River Power System (FCRPS) to provide those reserves. To address the challenges presented by integrating variable wind generation, BPA has developed an agency wind integration strategy. Developing supportive policies and rates to reduce the amount of required reserves and to augment the available supply of those reserves is a key objective of our wind integration strategy

Developing modifications of the tariff language and Filing OATT Schedule 9 is one element of that strategy and this work plan charts the path to that filing.

CRITICAL WORKPLAN ELEMENTS

Modify LGIA and Other Interconnection Agreements

BPA will include specific provisions and technical requirements in those agreements to reflect the balancing requirements for variable generators. BPA will also update existing agreements to reflect the new requirements. A technical operating approach for managing variable generation within the limits of the FCRPS to provide generation imbalance is currently under development in consultation with wind project developers and BPA customers..

Estimated Timeline:

Update LGIA and offer new agreements no later than February 2009.

Update existing LGIA and other interconnection agreements - ongoing

Establish Rate Provisions and Pricing

Some changes are needed in transmission General Rate Schedule Provisions, definitions, and rate design for Generator Imbalance and Wind Integration Within-Hour Balancing Service. These changes will align rate language with proposed Schedule 9 language and define the limits to FCRPS balancing reserves for the FY 2010 – 2011 rate period.

Estimated Timeline:

Final FY 2010 – 2011 rates filed with FERC by July 30, 2009

Develop Schedule 9 Modifications and File with FERC

We may need to make modifications to the FERC *pro forma* language to keep rate and tariff provisions aligned. As with other deviations from FERC Order 890 OATT language, BPA will engage regional stakeholders and customers in discussions about any proposed changes to the *pro forma* Schedule 9.

Estimated Timeline:

Development is contemporaneous with FY 2010 – 2011 rate case. We expect Final Schedule 9 proposed language to be filed with FERC by September 30, 2009.

RELATED IMPLEMENTATION EFFORTS

We need to maintain multiple ongoing efforts to successfully provide balancing capability without compromising the reliable operation of the transmission system. We have formed a Wind Integration Team to help develop and implement solutions. Under the requirements of the LGIA, BPA has coordinated a Joint Operating Committee (JOC). The JOC has designated representatives from generators with LGIAs and is managed by BPA's Technical Operations staff. The following implementation specifics will evolve over time as BPA refines these efforts

Improve Variable Generation Scheduling Practices

Work With Variable Generators to Improve Forecasting and Scheduling: Inaccurate scheduling coupled with the large amount of variable generation interconnected in the BPA Balancing Area has resulted in operational issues that could impact system reliability.

Augment Supply of Generation Inputs

Continue Efforts to Establish a Pilot Program: Acquiring non-Federal generation increments and decrements may increase the available supply of generation inputs to balance variable resources. BPA expects to implement a pilot project during the FY 2010 - 2011 rate period.

LGIA-Related Elements

Establish Technical Requirements and Install Plant Communications Equipment: The technical requirements and communication protocols to limit wind plant output and other operational requirements are specified by BPA and discussed with the JOC.

Dispatch Standing Orders (DSO)

Develop Revisions to Dispatch Standing Orders (DSO): These orders define the actions dispatchers will initiate and the responsive actions generators must implement to modify plant output to maintain reliable operation of the system. BPA Technical Operations staff develops DSO and the communication protocols are discussed at JOC meetings.

Automatic Generation Control (AGC)

Develop, Install, and Test Modifications to AGC: Changes to AGC system are necessary so all generators can receive an automated signal when BPA is close to exhausting its balancing reserves and BPA requires generators to reduce variable generation to scheduled amounts for over generation or curtail transmission schedule e-Tags for under generation when necessary.

Curtailment Procedures

Develop Specifications and Install, Curtailment Allocation Procedures: BPA will implement procedures that will allocate balancing reserves for each project and calculate the amount of associated curtailment for each individual facility when system conditions require the curtailment. This may include curtailing schedules to match actual plant output when there is a mismatch between schedules and actual generation levels.

Business Practices (BP)

Develop New and Modify Existing BP: Several Transmission Services BP are impacted by Schedule 9 provisions, related rate schedules, and new curtailment procedures. We have a robust process to involve customers and stakeholders in the development and modification of the requirements contained in these documents. Under that process, BPA will initiate BP changes as needed.