



Bonneville Power

Summary of Wind Integration Team Work Plan

DRAFT

1) Dispatcher Standing Orders (DSO 216)

Project Lead: Kevin Johnson

Milestone: 10/01/2009

Project Description

The purpose of this project is to implement automated tools and communication protocols to limit wind to schedule or curtail e-Tags to actual in response to the amount of reserves deployed per the 2010/2011 wind integration rate. This project, as planned, does not provide wind generation owners the ability to manage generation imbalance through self supply, netting and it does not aggregate signals where a single owner operates multiple plants.

2) Dynamic Limits Study

Project Lead: Brian Tuck

Milestone: 02/15/2010

Project Description

The purpose of this project is to determine the evaluation criteria, necessary requirements, and establish a credible, repeatable, and timely methodology to allow dynamic scheduling in BPA's network system and interties. This project does not identify dynamic limits of any particular generator, load nor implement dynamic scheduling. Limits on selected paths will be identified.

3) Third-Party Supply Pilot - RFI Implementation (Balancing Area Reserve Augmentation)

Project Lead: Kasi Beale

Milestones:

11/2009: Implement pilot stage 1 (goal is to have pilot agreements with two parties)

3/2010: Evaluate pilot stage 1, decide whether to implement stage 2 other generators (subject to dynamic limit studies)

Project Description

The team goal is to define criteria and processes for third party supply and establish a pilot project in early FY 2010 to test access to non-FCRPS generating resources for balancing reserves. In Stage 1, the pilot project will acquire and deploy additional load following and regulation capacity from two non-FCRPS generators, in exchange for a payment. The objectives of Stage 1 are to test automation systems, assess costs and assess capability to offset FCRPS reserves. During testing, we are assuming that third-party supply would not result in reduction of FCRPS capacity reserved by BPA-TS. However, in later stages, implementation of third party supply would be expected to more directly offset FCRPS reserve requirements. In Stage 2 the goal is to expand to Pilot to include additional providers,

including sources outside the BPA BA. BPA will focus first on developing operational third party supply from generation sources, and then in later stages demand side sources may be tested.

4) Forecasting

Project Lead: Steve Barton

Milestones:

10/01/2009: Sites

01/31/2010: In-house forecasting

07/01/2010: State awareness

Project Description

The purpose of this project is to improve BPA's ability to forecast wind power generation, and to develop and deploy tools for dispatch and hydro duty schedules to achieve greater understanding and awareness of wind generation patterns and operational risks.

5) Customer Supplied Generation Imbalance Pilot (Self-Supply with Netting)

Project Lead: Salah Kitali

Milestone: 10/01/2010

Project Description

The purpose of this project is to begin the development of systems and processes that would enable customers to self supply generation imbalance, from their own resources or contract resources, for one or more wind generators. All of the generators, customer owned and contracted, will be netted for the purposes of calculating Generation Imbalance (GI), wind limits and e-Tag curtailments. If given a limit order, the customer will have the option of which resources to limit; including thermal and contract resources. The generator owner/operator, not BPA, will deploy reserves needed for imbalance of its resources.

6) Sub-Hourly Scheduling Pilot

Project Lead: Troy Simpson

Milestone: 12/01/2009

Project Description

The purpose of this pilot is to begin the development of systems and processes that would enable purchasing/selling entities to acquire Wind generation (on the half hour) that would have been susceptible to limit directives that are part of the DSO216 implementation.