

Intra-Hour Scheduling Live Meeting Presentation

Intra-Hour Scheduling Pilot Phase I

November 19, 2009

1:45 PM – 3:00 PM



Instructions to Join the Live Meeting

Live Meeting Information:

1. Copy and paste the attendee URL in your browser:
<https://www.livemeeting.com/cc/bpa/join?id=INTRAHOUR&role=attend>
2. At the Welcome screen, enter the following:
Meeting ID: INTRAHOUR
Entry Code:
Location: <https://www306.livemeeting.com/cc/bpa/loginPage>
3. Click the "Join" button

Phone Bridge Information:

Bridge Number: 503-230-5566
Bridge Pass Code: 3766#



Agenda

- Background
- Roadmap and Timeline
- Project Summary
- Criteria for Participation
- Assessment and Next Steps
- Informational Resources
- Questions and Answers

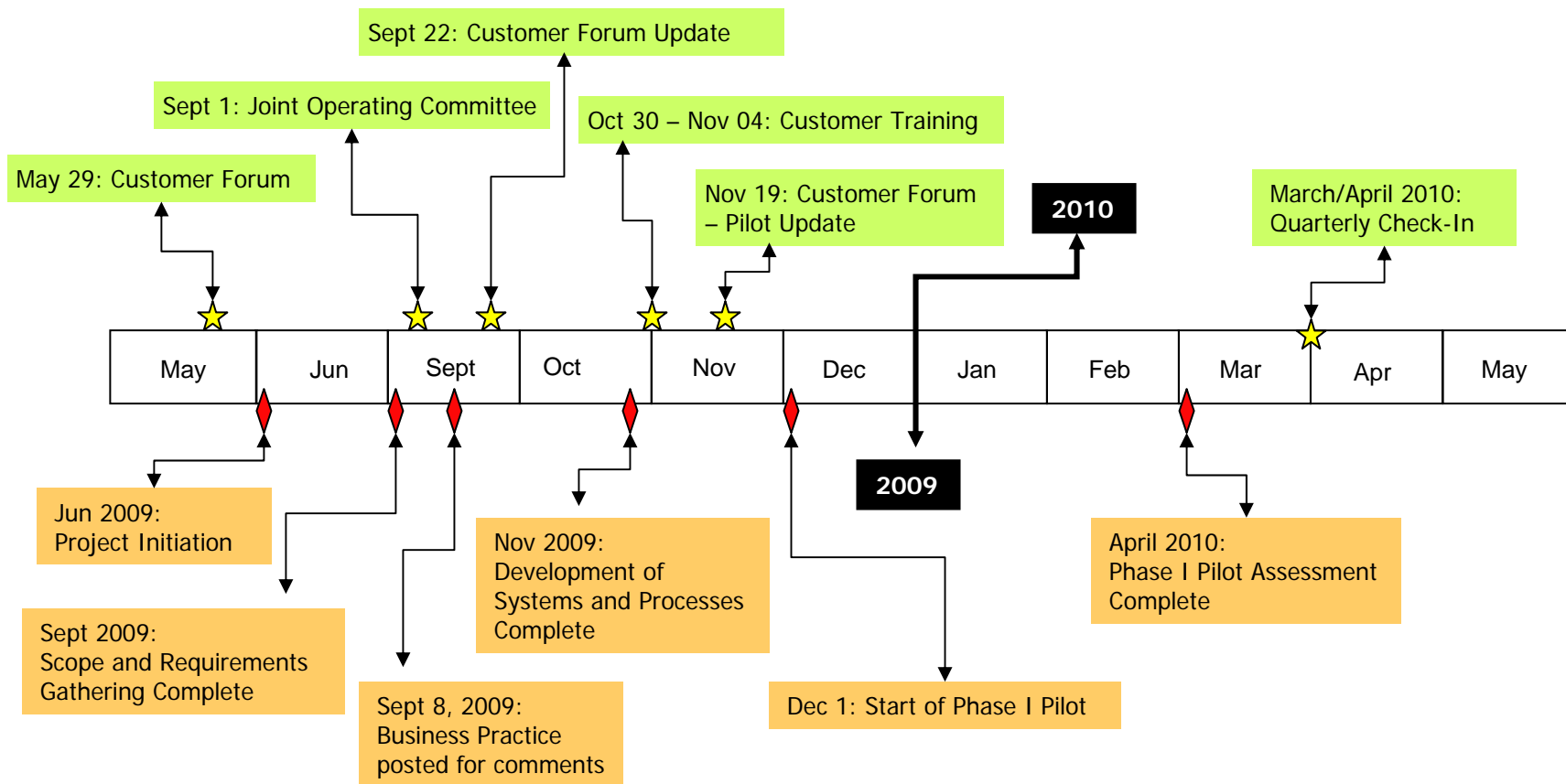


Background for Intra-Hour Scheduling Pilot Phase I

- On May 29th, the BPA Wind Integration Team held a public meeting to discuss and develop a wind initiative work plan for the next two years.
- Input received at the meeting resulted in BPA focusing on five Wind Integration Team projects to improve techniques for managing large amounts of wind generation interconnecting into BPA's balancing authority area (BAA).
- The Intra-Hour Scheduling Pilot (formerly called Sub-Hourly Scheduling) is one of these Wind Integration Team projects and is scheduled to go live on December 1, 2009.



Intra-Hour Scheduling Pilot Phase I - Roadmap



☆ = Customer Engagement which may be defined as face to face meeting, conference call or designated comment period.

◆ = WIT milestone



Summary of Intra-Hour Scheduling Pilot Phase I

- The purpose of this Pilot is to enable wind plants within the BPA BAA to submit mid-hour schedule changes in response to over generation of wind.
- The Pilot enables Wind Generators to:
 - Proactively mitigate limit directives that are part of the new Operational Controls for Variable Generator protocol implemented October 1; and
 - Minimize generation imbalance charges.
- Systems and processes have been developed to enable purchasing/selling entities to schedule excess wind generation exported from BPAT BAA on the half hour.
- The success of the Pilot depends on utilities' willingness and ability to purchase within-hour power from wind generators and receive intra-hour transmission schedules.
 - Several utilities are conducting similar intra-hour scheduling efforts.
 - BPA may partner with these utilities and others interested in exploring intra-hour scheduling.



Intra-Hour Scheduling Pilot Phase I - Reservation Process

- Customers must acquire NERC Priority Code 1-NS Transmission prior to submitting an e-Tag. This can be done in two ways:
 - Customers may either redirect existing firm transmission on a Non-Firm basis (NF-Secondary Hourly PTP); or
 - New transmission may be acquired by purchasing NF-INTRA HOURLY PTP.
- Reservation Availability Timelines
 - NF-SECONDARY HOURLY PTP – Opens in Preschedule and closes 60 minutes after the start of the hour.
 - NF-INTRA HOURLY PTP – Opens 20 minute before the start of the hour and closes at 15 minutes after the hour.



Intra-Hour Scheduling Pilot Phase I - e-Tagging Criteria

- Must be a New e-Tag
- Must be NERC Priority Code 1 transmission
- Must be a POR connected to a wind source within the BPA BAA
- Must be submitted within the current operating hour
 - Between :00 and :15
- Must start at :30 of the current operating hour
- Must stop at :00 of the next hour
- Must have a 10 minute start ramp



Phase I Pilot Program - Next Steps

- Phase I will go live on December 1st, 2009 at 09:00 AM and will run for 3 months.
- BPA will monitor and evaluate the Pilot to assess value and determine whether or not to extend or expand the Pilot.
- The evaluation results will be communicated around April 2010.
- Criteria that may be addressed in the evaluation of Phase I include:
 - Effectiveness and use of the intra-hour scheduling flexibility,
 - Expansion of the intra-hour scheduling program to include other generator participation,
 - Frequency and volume of potential within hour scheduling changes,
 - Reliability impacts,
 - System impacts, and
 - Impacts to customers.
- BPA will work with the Joint Initiative and other regional partners to ensure that Phase II, if offered, adequately addresses the collective goals of the region and the findings of the evaluation.



Intra-Hour Scheduling – Informational Resources

- The Intra-Hour Scheduling Pilot business practice is posted at <http://www.transmission.bpa.gov/includes/get.cfm?ID=1594>
- BPA provided training to customers in November; training handouts are posted at: http://www.transmission.bpa.gov/customer_forums/default.cfm.
- For general information on intra-hour scheduling efforts, go to BPA's [Wind Integration Team](#) or the [Joint Initiative](#).
- BPA wind operation information is posted externally at: <http://www.transmission.bpa.gov/Business/Operations/Wind/default.aspx>
- For updates on wind integration efforts in the Western Interconnect, see handouts from the [Northwest Wind Integration Forum](#) Oct. 28 workshop.
- For more information, please contact the Project Lead, Troy Simpson at 360-418-8659 or contact your BPAT Account Executive or Constituent Account Executive.



Questions and Answers

