

Acknowledgements

The background of the slide is a blue-tinted photograph of a vast, calm ocean stretching to the horizon. The sky is filled with soft, wispy clouds, and the water's surface shows gentle ripples. The overall mood is serene and expansive.

Joint Initiative Update

- Joint Initiative = 3 regional transmission planning groups
 - Columbia Grid
 - Northern Tier Transmission Group
 - WestConnect
- Constitutes much of the transmission in the west.

Joint Initiative Update

Three Major Efforts

- Dynamic Scheduling System
- Intra-hour Transaction Accelerator Platform
- Intra-hour business practices

Dynamic Scheduling System

- The DSS is a communications infrastructure that exchanges dynamic signals via e-Tag and ICCP links
- Before the scheduling period, participants will create DYNAMIC type e-Tags reflecting their dynamic schedules.
- During the operating hour, webDynamic will use the composite e-Tag data to distribute MW requests to BAs with obligations to requesting participants.
- After the scheduling period, webDynamic will update the e-Tag with the correct integrated quantity.
- **Allows BAs to access each others dynamic flexibility.**

DSS Current Participants

18 parties have executed participant and vendor contracts

Arizona PSC

BCTC

Grant County PUD

Imperial Irrigation District

Northwestern Energy

PowerEx

Puget Sound Energy

Salt River Project

WAPA

PacifiCorp

BPA

Idaho Power

NaturEner, USA

Portland General

Public Service of New Mexico

Seattle City Light

Tri-State G&T

Xcel Energy

DSS Timeline – next steps

- DSS is scheduled to 'go live' mid to late October, 2010
- Moratorium on additional parties joining will be lifted once DSS is operational
- BAs should contact OATI or Sharon Helms of NTTG at (503) 644-6262 for more info.
- IPPS should start discussions with BAs

ITAP

Intra-hour Transaction Accelerator Platform

- Facilitates bilateral transactions through an electronic trading platform that provides information, communications links, and user interfaces
- Will allow intra-hour transactions, but not limited to.
- OATI selected as vendor and will provide I-TAP services through its webExchange product
- 16 parties have signed subscription agreements

The Real Scoop

- Value priced trading tool.
- Post and transact on bids and offers.
- System will scour OASIS sites and give you list of transmission paths and costs.
- Will automatically populate your tag.

ITAP Timeline – next steps

- Technical Steering Committee (TSC) formed
- Develop Technical Specification with OATI
 - Liaison among all I-TAP Parties & OATI
 - Factory testing during product development phase

ITAP Timeline – next steps

- Technical Steering Committee (TSC) formed
- Develop Technical Specification with OATI
 - Liaison among all I-TAP Parties & OATI
 - Factory testing during product development phase
- John Jamieson (PGE) is Chair
- Go live implementation mid-2011





Intra-hour Business Practice Developments

Joint Initiative TSPs/BA currently accepting Intra-hour schedules

NV Energy

BPA

PGE

Grant

Seattle

PacifiCorp

PSE

Chelan

Tacoma

PSCo

[Avista has amended OATT, has draft pilot business practice posted but has not yet implemented]

Intra-hour Business Practice Developments

- Participating TSPs/BAs have adopted an approach to get to standardized intra-hour business practices by July 1, 2011
- In addition to those JI TSPs/BAs already offering intra-hour scheduling, Idaho Power, NorthWestern Energy, BC Hydro, and SRP have adopted approach, and Alberta is considering

Joint Initiative Update

- **Step One**

- **No later than July 1, 2011**

- New tags (INC) for Intra-Hour Transmission Schedules can be submitted from any source for any reason
- Adjustments to existing tags (INC/DEC) for Intra-Hour Schedules can be submitted as soon as sufficient tools/automation can be established (may be after July 1st)
- No transaction limitation - any party, any reason, import/export/wheel
- **Intra-Hour Schedules can be submitted between XX:00 and XX:15 for the second half of the current hour**
- Intra-Hour Schedules will be for a duration of 30 minutes but will be integrated over the full hour
- No bumping (access to intra-hour scheduling is subject to availability and the majority of participating TSPs have indicated they will not displace/curtail an existing hourly or intra-hourly schedule to "make room" for a subsequent intra-hour request even if that request is a higher priority) **(last in line)**

Joint Initiative Update

- **Step Two**

- **After Step 1 Full Implementation**

- Intra-Hour Schedules can be submitted from any source for any reason (both INC and DEC)
- No transaction limitation (by any party, for any reason, import/export/wheel-through)
- Intra-Hour Schedules can be submitted 15 minutes before start time
- Intra-Hour Schedules will ramp in at XX:10 for XX:15, XX:25 for XX:30, and XX:40 for XX:45

- **OR**

- Intra-Hour Schedules will ramp at XX:15 for XX:20 and XX:35 for XX:40
- Intra-Hour Schedules will be for a duration of up to 45 minutes
- Intra-Hour Schedules will end at the top of the hour

WECC Update

The background of the slide is a blue-tinted photograph of a vast, calm ocean extending to a distant horizon. The sky is filled with soft, wispy white clouds. The overall color palette is a range of blues, from deep navy to light sky blue.

WECC Update

- Efficient Dispatch Toolkit
- Enhanced Curtailment Calculator

Comprehensive Incremental Studies by
National Renewable Energy Lab

WECC Update

- Efficient Dispatch Toolkit
 - End goal is a centralized energy imbalance market.
 - Bid in
 - Central dispatch
 - Single clearing price
- WECC funding \$500,000 cost benefit study
- Not decided who would run the market

WECC Update

Similarities and Differences to other markets like SPP

Similarities

- Centralized, automated dispatch
- Nodal price signals
- Energy market

Differences

- No consolidated regional tariff
- Real-time only
- Energy-only market
- Does not include unit commitment

Enhanced Curtailment Calculator (ECC)

- A tool for determining curtailment obligations (currently performed by webSAS) that is enhanced to include a wider range of transmission paths and more granular models of topology
- WECC will pursue independent of EDT?

Who to contact?

- **Michelle Mizumori**
- **Managing Director, Operations and Market Interface**
- **mmizumori@wecc.biz**
- **(801) 819-7624**

National Renewable Energy Lab studies

- Egghead look at incremental impact of ITAP/DSS/intra-hour markets over base case
- Will then look at incremental impact of EDT over this outcome.
- Funded by WGA?
- More info contact NREL.