



Joint Initiatives Update

WestConnect Stakeholder Meeting

Phoenix, AZ

November 17, 2011

JI Work Streams

- Existing Efforts
 - Dynamic Scheduling System (DSS)
 - Intra-Hour Transmission Scheduling
 - Intra-Hour Transaction Accelerator Platform (I-TAP)/webExchange
 - ATC MOD Compliance Coordination
- Possible New Efforts
 - Work relating to a Voluntary Capacity Market
 - Work relating to a Voluntary Energy Imbalance Market
 - Other



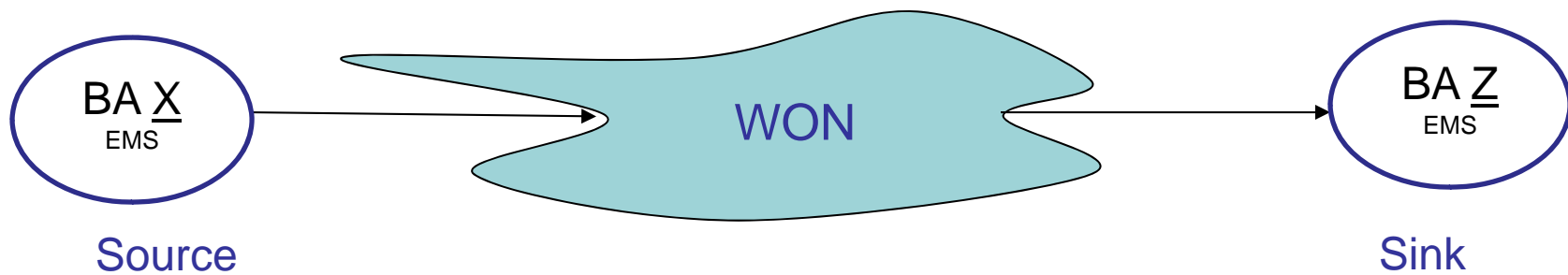
Dynamic Scheduling System (DSS)

Dynamic Scheduling System (DSS)

- Allows Dynamic Schedules to be implemented quickly
 - Without excess infrastructure requirements
 - a *one-time* DSS implementation vs. multiple implementations
 - Minimal changes to existing processes and procedures

Conventional Dynamic Schedule Exchange

Dynamic Signal Transfers
EMS to EMS Connection, Fixed Point to Point, Fixed Data Points,
Using ICCP on the WON



EMS = Energy Management System, SCADA, ACE, AGC

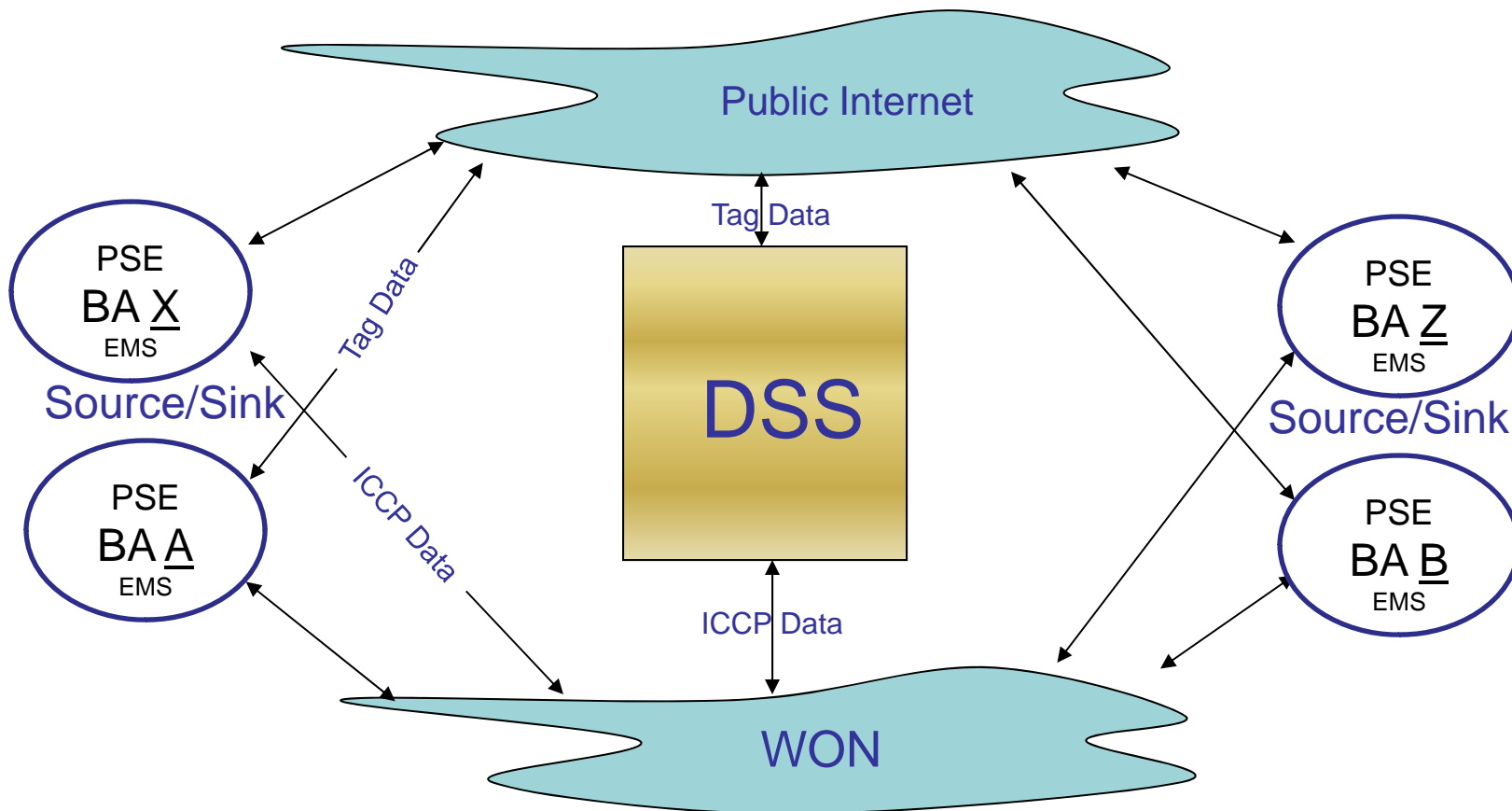
ICCP = Inter-Control Center Protocol

WON = WECC Operational Network

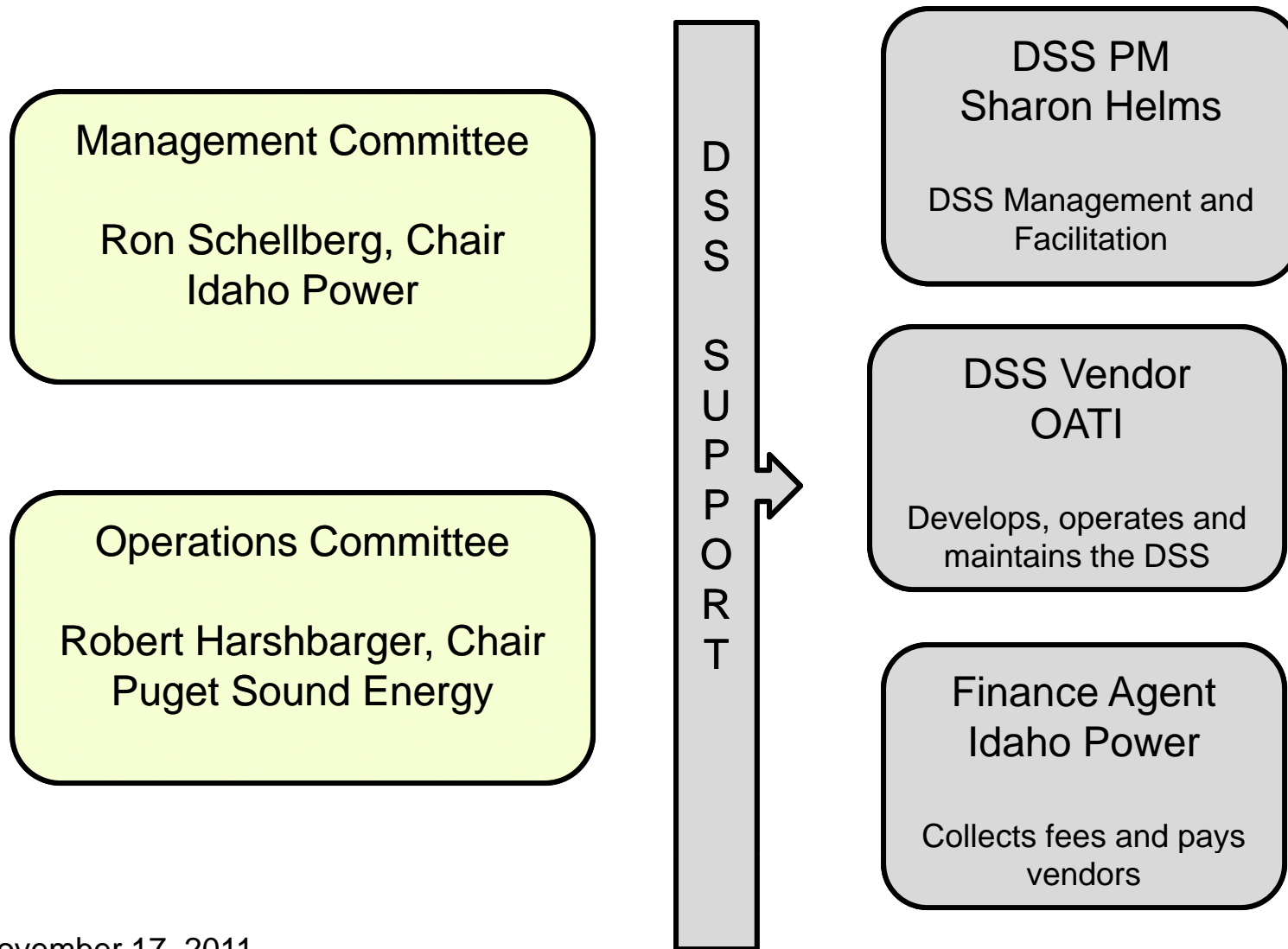
DSS Schedule Exchange

Using DSS webDynamic Application

Multiple Dynamic Signal Transactions between Multiple BAs
E-tag Driven



DSS Structure



DSS Participation

- 18 parties have executed participant and vendor contracts
 - Arizona Public Service Company
 - BC Hydro
 - BPA
 - Grant County PUD
 - Idaho Power
 - Imperial Irrigation District
 - NaturEner, USA
 - Northwestern Energy
 - PacifiCorp
 - Portland General
 - Powerex
 - Public Service of New Mexico
 - Puget Sound Energy
 - Seattle City Light
 - Salt River Project
 - Tri-State G&T
 - WAPA
 - Xcel Energy

DSS Today

- DSS is commercial
- Growing participation with further testing /configuration underway



Intra-hour Transmission Scheduling Business Practices

Intra-Hour Transmission Scheduling

- TSPs/BAs that have implemented intra-hour schedules
 - ✓ Avista, BC Hydro, BPA, Chelan, Grant, Idaho Power Company, NV Energy, PacifiCorp, Portland General Electric, Xcel Energy/PSCo, Public Service of New Mexico, Puget, SRP, Seattle, SWTransco, Tacoma, WAPA (Upper & Lower Colorado BAs)
- WestConnect TSPs/BAs are implementing with more restrictions than TSPs/BAs in other areas

Intra-Hour Transmission Scheduling

- Other TSPs/BAs will implement as soon as they receive regulatory approvals
 - ✓ APS, NorthWestern

Standardization – Step One

- Requests for new intra-hour e-Tags (INC) can be submitted
- Requests for intra-hour adjustments to existing e-Tags (INC/DEC) as soon as the TSP or BA establishes sufficient tools/automation (may be after 7/1/11)
- No transaction limitation (by any party, for any reason, import/export/wheel-through)
- Intra-hour requests must be submitted between XX:00 and XX:15 for the second half of the current hour

Standardization – Step One

- Intra-hour requests will default to 10-minute duration straddle ramps
- Intra-hour requests will be for a duration of 30 minutes but will be integrated over the full hour for interchange accounting purposes
- No bumping (access to intra-hour scheduling is subject to availability on a first-come first-serve basis and the participating TSPs have indicated they will not displace an existing hourly or intra-hourly schedule to "make room" for a subsequent intra-hour request even if that request is utilizing higher priority transmission service)

Standardization/Caveats

- Focused on intra-hour scheduling opportunities for unanticipated events, NOT going to half-hour scheduling
- Relies on more flexible use of existing transmission products (no new intra-hour product)
- Requires automation



Intra-Hour Transaction Accelerator Platform (I-TAP)

I-TAP / webExchange– Why

- One stop shop for energy and capacity transactions, OASIS requests, e-Tag creation and submittal
- Will allow faster deal consummation, scheduling and approval
- Reduces the keystrokes necessary for the completion of transactions thereby increasing the speed in which they can be performed while reducing the potential for errors

I-TAP / webExchange – What

- Has bulletin board for subscribers to post offers to buy or sell energy and / or capacity
- Utilizes instant messaging technology for communicating between parties
- Allows subscribers to purchase and manage transmission at the same time as energy / capacity
- Able to submit an e-tag for the transaction with single click

I-TAP / webExchange - How

- Existing transmission rights are swept into webExchange so transactions can utilize transmission already owned
- Transmission Providers' ATC is available in webExchange and can be secured without interacting directly with OASIS
 - i.e.: the user stays in webExchange environment
- ATC postings can be displayed to include transmission costs to each buyer
- Click once and all electronic processes can start immediately: OASIS request, tag creation and submittal

I-TAP / webExchange

– Other Items of Note

- Primarily intended for current and next hour transactions due to the increase in efficiency
 - Any duration Bid or Offer can be posted
- Offers are anonymous until transaction is consummated
- Credit remains the responsibility of each individual entity
- All energy / capacity transactions take place via bilateral agreements between the transacting parties

I-TAP / webExchange - Status

- Just finishing the final development of webExchange
 - Full cycle of the product is now in place
- Subscribers have been in the development environment since July
- Factory Acceptance testing took place October 3-6, 18
- Training occurred October 17 -18
- Implementation scheduled for November 7, 2011

I-TAP/webExchange Participants

Grant

PGE

Snohomish

PSE

Tri-State

Seattle

WAPA

Xcel

Powerex

EWEB

BPA

PNM

Avista

Tacoma

NorthWestern

Idaho

PacifiCorp

Iberdrola



MOD-029 Activity Coordination

ATC MOD Activity Coordination

- NERC issued a Waiver/Exception on March 4, 2011 revising MOD-029 to allow TPs to use historic path rating for flow limited paths
- New Strike Team has been formed and meets periodically for roundtable discussions and updates on NERC action
- Small Drafting Team was formed and has developed Issue Paper and Draft SAR with proposed language to allow the rescission of the NERC Waiver/Exception
- West-wide consensus building process underway



Future JI Activities

New Activities

- Develop problem statement & proposal for investigation of a flexible reserves or capacity market for extreme wind ramping events
- Develop records to document usage of JI products

Contacts

- Facilitators

Sharon Helms (503-644-6262)

sharon.helms@comprehensivepower.org

Charlie Reinhold (480-215-0299)

reinhold@ctcweb.net

Kristi Wallis (206-726-1699)

kristiwallis@sprintmail.com

- Joint Initiative materials posted on CG website

www.columbiagrid.org



Questions?