2008 Network Open Season: Update and Next Steps

August 13, 2008

2008 NOS Results and Restack

Dennis Oster

NOS Results (as posted July 7)

NOS Detail	Summary of Offers (May 15)	Preliminary PTSA Summary (June 16)	Final PTSA Summary (June 27)
Number of PTSA	316	160	153
Number of Total MW	14,464 MW	6,905 MW	6,410 MW
Participating Customers	38	29	28
PTSA Service Breakdown	5,819 MW (142 PTSA) for PTP 591 MW (11 PTSA) for NT		
Total Security	$83,238,144 Escrow @ $22,398,288 Letter of Credit @ $57,506,592 Direct Deposit @ $3,333,264		

2008 NOS Restack Results

Type	# of PTSA	MW
Authorized and Confirmed	18	387
Authorized but in process of being Confirmed	15	750
NOS Restack sub-TOTAL	**33**	**1,137**
Pending Cluster Study	120	5,273
TOTAL PTSA	**153**	**6,410**

- *BPA is continuing to process the Pending Queue*
- *42 new TSRs (2,638 MW) have been submitted since May 15, 2008 (as of August 8)*

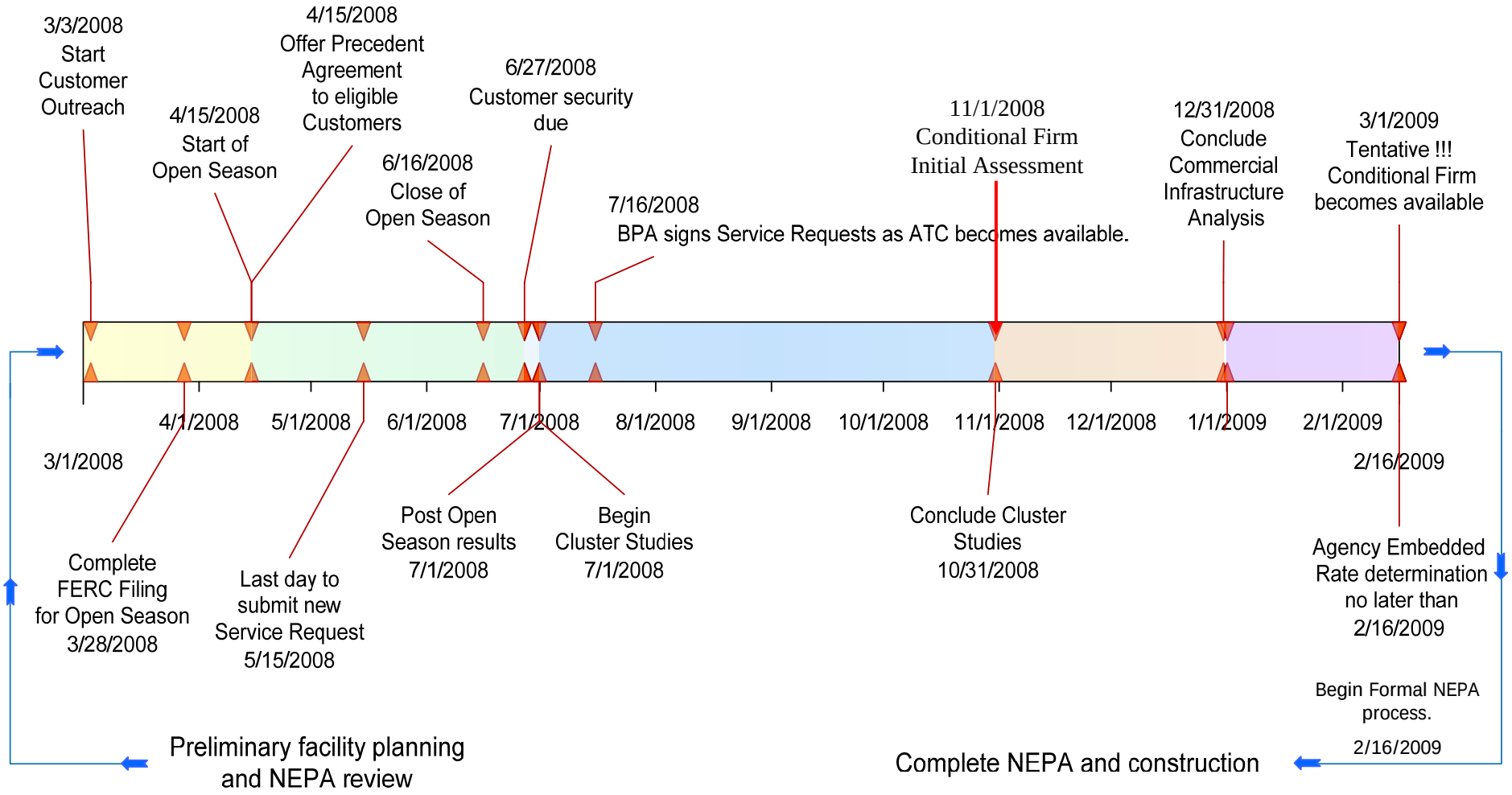
2008 NOS Restack Authorizations & Confirmed

Customer	ARef #	Service Type	MW Req'd	Req'd Term	Requested POR	Requested POD	Start	Stop	Confirmed
Finley BioEnergy, LLC	71915090	PTP	1	20	Boardman 115	Troutdale 230	10/1/08	10/1/28	5/1/08
Portland General Electric Company	71660916	PTP	50	1	BPAT.PGE	PGE_CNTGS	10/1/09	10/1/10	6/5/08
Mason County PUD No. 3	72246895	NT	1	23	Nine Canyon Tap 115	Belfair 115kV, Benson 11	3/1/08	3/1/31	6/16/08
Tacoma Power - REDIRECT	72032784	PTP	3	19	BELL230	MIDWAY230MIDCR	8/1/08	1/1/27	6/16/08
PacifiCorp	72275622	PTP	1	1	Vantage 230-MIDCR	Rock Creek 230	1/1/08	1/1/09	6/26/08
Windy Point Partners, LLC	72290782	PTP	50	5	Rock Creek 230	NW Hub	11/1/07	11/1/12	7/7/08
Windy Point Partners, LLC	72290690	PTP	50	5	Rock Creek 230	NW Hub	11/1/07	11/1/12	7/7/08
Windy Point Partners, LLC	72290729	PTP	50	5	Rock Creek 230	Troutdale 230	11/1/07	11/1/12	7/7/08
Windy Point Partners, LLC	72290777	PTP	50	5	Rock Creek 230	Covington 230	11/1/07	11/1/12	7/7/08
Windy Point Partners, LLC	72290781	PTP	50	5	Rock Creek 230	Covington 230	11/1/07	11/1/12	7/7/08
Windy Point Partners, LLC	72290789	PTP	50	5	Rock Creek 230	NW Hub	11/1/07	11/1/12	7/7/08
Clatskanie PUD	72169285	PTP	5	5	BPAPOWER	CLATSKANIE	10/1/18	10/1/13	7/14/08
Clatskanie PUD	72169296	PTP	5	5	BPAPOWER	CLATSKANIE	10/1/08	10/1/13	7/14/08
Clark Public Utilities - **NT**	72075169	NT	6	2	FCRPS	Clark NT DP	9/1/08	10/1/11	7/17/08
Grays Harbor County PUD No. 1	72080322	PTP	2	15	Nine Canyon Tap 115	Aberdeen Contiguous	2/1/08	7/1/23	7/29/08
Grays Harbor County PUD No. 1	72080765	PTP	2	15	Nine Canyon Tap 115	Aberdeen Contiguous	2/1/08	7/1/23	7/29/08
PacifiCorp	72333240	PTP	10	5	GARRISON	BPAT.NWMT	5/1/08	5/1/13	8/6/08
PacifiCorp	72169148	PTP	1	5	BPAT.PACW	JUNIPERWIND	5/1/08	5/1/13	8/7/08
18 TSRs			387						

2008 NOS Next Steps
(through February 2009)

Dennis Oster

Network Open Season Timeline



2008 NOS Next Eight Months Overview

Key Deliverables	Tentative Public Engagement
PTSA Offers.	• Done
Restack and PTSA Acceptance ▪ Identify PTSAs that can be ACCEPTED ▪ Planning completes sub-grid analysis ▪ OASIS conformance and AE counter-sign	• August 13 Customer Meeting
Cluster Study • Identify study areas for Cluster Study • Assemble Project Teams • Complete technical studies for each area • Work with Project Team members to develop cost/schedule • Cluster Study to Marketing	• August 13 Customer Meeting • August 14 Columbia Grid • Sept/Oct Columbia Grid • Sept/Oct Customer Meeting • Oct/Nov Columbia Grid • Oct/Nov Customer Meeting
Commercial Infrastructure Financial Policy Analysis • Determine Net Present Value of required projects • Rate pressure for the identified capital projects together and individually	• Nov/Dec Customer Meeting
Internal Agency Decision on Proposed Capital Projects • Agency Decision Framework with a cross-agency team to identify the business case the agency impacts for the proposed capital projects • Develop business case • Agency approval (revision to transmission capital program as required)	• January Customer Meeting
Close-out letter • Create a close-out letter with the decision on the NOS • Post final close-out letter with the decision on the NOS	• Feb 2009 - Final close-out letter

NOS Cluster Study

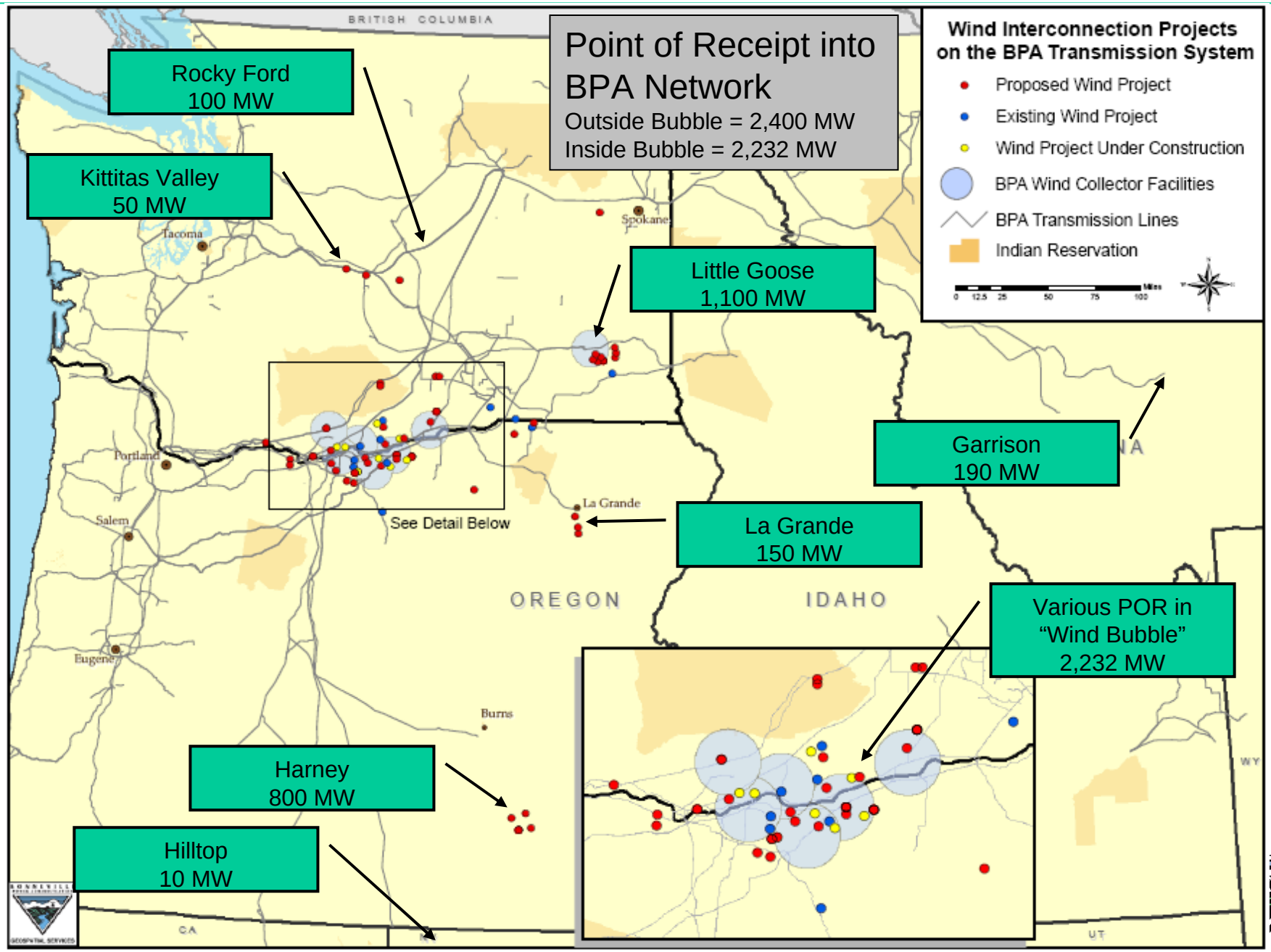
Kyle Kohne and Pat Rochelle

NOS Cluster Study Status

- Support Reservation Desk with TSR Authorizations – Completed
- Identify TSRs (PTSA groups) requiring system reinforcements – Completed
- Identify study areas for cluster study – Completed
- Assemble Study/Project Teams – Completed
- Develop reinforcement alternatives for technical studies – 8/15/08
- Preliminary study results – 9/5
- Complete preliminary cost estimates and schedule – 10/17
- Determine TTC increase or TSRs enabled with the new projects – 10/24
- Cluster study to Marketing – 10/31

NOS Cluster Study Areas

- West of McNary
- I-5 Corridor
- Harney Area
- Little Goose Area
- Walla Walla Area
- McNary Area
- West of Cascade North
- West of Cascade South



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NOS Round Two

Bob King & Chuck Combs

NOS Issues From FERC Order

- NOS FERC Order:
  - Initiate consultation and stakeholder process
  - Expand NOS to interties (IOS)
  - See that CIFP (NOS financial analysis) gives appropriate weight to benefits of assessing transmission constrained renewable resources , including not disadvantaging projects that do not have large reliability benefits and Facilitating implementation of RPS with upgrades to existing path
  - Decision process and authority (which Executive) for seizing NOS security deposits: procedure under development
- Additional issues:
  - SIS/SFS outside of NOS

2008 NOS Bulletin Modifications and Adjustments

Dennis Oster and Kammy Rogers-Holliday

Bulletin Modifications and Adjustments: SIS/SFS

- SIS/SFS for Network TSRs (Section 10.4)
  - NOS eligible
    - Per section 10.4 of the 2008 NOS Bulletin, SIS/SFS studies will be terminated following the queue update for NOS Participants, and also terminated for Customers who did not sign the PTSA.
    - All eligible TSRs (with signed PTSAs) will be included in the NOS cluster study.
  - Outside of NOS
    - At this time BPA does not intend to perform SIS/SFS studies for new Network TSRs outside of an NOS scenario unless specifically requested in order to fully understand the effectiveness of the cluster study process and to ensure BPA resources are not diverted from the cluster study.
    - This issue will continue to be reviewed during the 890 process.

Bulletin Modifications and Adjustments: Partial Term Service

- Partial Term Service (Section 14.4.2) - Upon further review of partial term service for NOS Participants, we have identified the following issue:
  - Partial term allows for increments of ATC to be offered throughout the life of the request including rollover. There is a potential for the full term of the agreement never to be met thus, not meeting the intent of NOS nor allowing for the full economic forecast that has been applied to the CIFP to be achieved.
  - This removal does not preclude future considerations in whole or on a case by case basis where the integrity of the data requirements for NOS can be maintained.

Bulletin Modifications and Adjustments: PTSA Assignment

- Proposed Rules of Assignment for PTSA (Section 14.5)
  - Reseller notifies AE of intent to transfer PTSA to an Assignee in writing 60 days in advance of effective date. Assignor/Reseller must identify the Assignee when the Assignor/Reseller notifies the AE.
  - The potential Assignee must demonstrate that it meets the NOS security obligations before the Effective Date of the assignment. AE shall not offer a new PTSA or SA until the Assignee has satisfied such security obligations.
  - The Reseller submits a Transfer TSR and the Res Desk notifies the AE that a Transfer TSR has been submitted.
  - Upon receipt of the Transfer TSR and application deposit by the Res Desk, the AE will offer PTSA (with SA tables) to Assignee for signature.

Commercial Infrastructure Financial Policy

Rebecca Fredrickson and Mark Jackson

CIFP Assumptions: Developing the New Facilities Business Case

- Step 1 – Initial Assessment
  - Inputs: Signed PTSA where no ATC is available after queue restack
  - Outputs: Likely facilities and rough cost estimates to meet those requests
  - Decision: If there is a possibility that requests can be met at embedded cost rates, then proceed to 2.
- Step 2 – Cluster Study
  - Inputs
    - Signed PTSAs from 1.
    - System expansion portfolio
  - Outputs
    - Facilities
    - Costs
    - Estimated date of energization of specific elements
    - Where possible a determination of other reliability facilities (and costs) deferred, eliminated or where the need for future construction is advanced due to PA needs.
    - Other benefits determined (loss reductions, other quantitative and qualitative benefits)

CIFP Assumptions: Developing the New Facilities Business Case

- Step 3 – Initial Financial Model Run
  - Inputs: Outputs from 2, PTSA demand
    - Financial assumptions (all CIFP modeling uses Treasury borrowing assumptions)
      - PTP contracts for 5 years or longer will all roll over for the duration of the analysis
      - Discount rate is 9%
      - 1% annual rate increases for PTP rate going forward
      - Rates pressure is assumed to be a combined rate
    - Outputs: Net Present Value (NPV) of cash flows, cash look by year, net revenues by year, rate pressure by year.
      - If NPV is positive, prepare business case and recommendation to build.
      - If NPV is negative, prepare business case with qualitative justifications for all facilities and go to step 4 for further analysis.

CIFP Assumptions: Developing the New Facilities Business Case

- Step 4 – Iteratively Remove Plan of Service (POS) Elements
  - Isolate elements of the POS that have the highest cost per MW subscribed and set aside from POS
    - Goes to normal OATT process for incremental rate or advance funding
    - Customer pays NEPA costs
  - Re-run cluster study and benefits evaluation
  - Run financial model with remaining PAs for NPV test.
  - Repeat until positive NPV.

Financial Assumption for Price Escalation of Capital Projects

- BPA Finance and Asset Management have reviewed specific price escalation indexes historically, and going forward, from 1990 to 2018.
  - Although utility costs have accelerated in recent years, Global Insight believes that this accelerated pace will not be sustained.
  - Global Insight's long-term forecasts of utility costs out to 2018 indicate that price escalation for several utility cost components will converge and level off to closely follow the generalized GDP inflation forecast starting in 2009.
  - Based on the Cross Agency review of Global Insight's price escalators, we do not see any benefit to change the price escalation factors for project cost analysis at this point in time.
  - BPA Finance will continue to evaluate specific utility cost indexes for price escalation, based on detailed feedback form both business units, as Finance moves forward toward distributing their annual agency inflation forecast this fall 2008.
  - Global Insight is a highly regarded national forecasting service to which BPA subscribes. Forecasts are based on sophisticated large-scale econometric models.

Commercial Infrastructure Evaluation:
Reflecting Generator Profiles in the Planning Review

Objective:

- As part of the assessment of the future need for reinforcing or expanding the existing transmission system, we need to develop a realistic portrayal of future generation profiles. BPA expects existing generators will have limitations in the future, and future generators must meet specific requirements to serve regional load growth.

Context:

- There are likely to be future energy and capacity limitations on the ability of the Federal hydro system to meet load growth.
- Over time, Renewable Portfolio Standards (RPS) require increasing percentages of retail sales from qualifying resources.
- Defining the future need, if any, for specific facilities is a critical element of the financial analysis.
- If there is a demonstrable future facility need, then requests for transmission service now that require those facilities only need to generated sufficient revenue for Transmission Services to recover the acceleration costs of building the facilities now instead of later.
- To properly allocate costs and we need to demonstrate cost causation with a defensible quantification of the regional benefits and future needs.

Reflecting Generator Profiles in the Planning Review

Challenges:

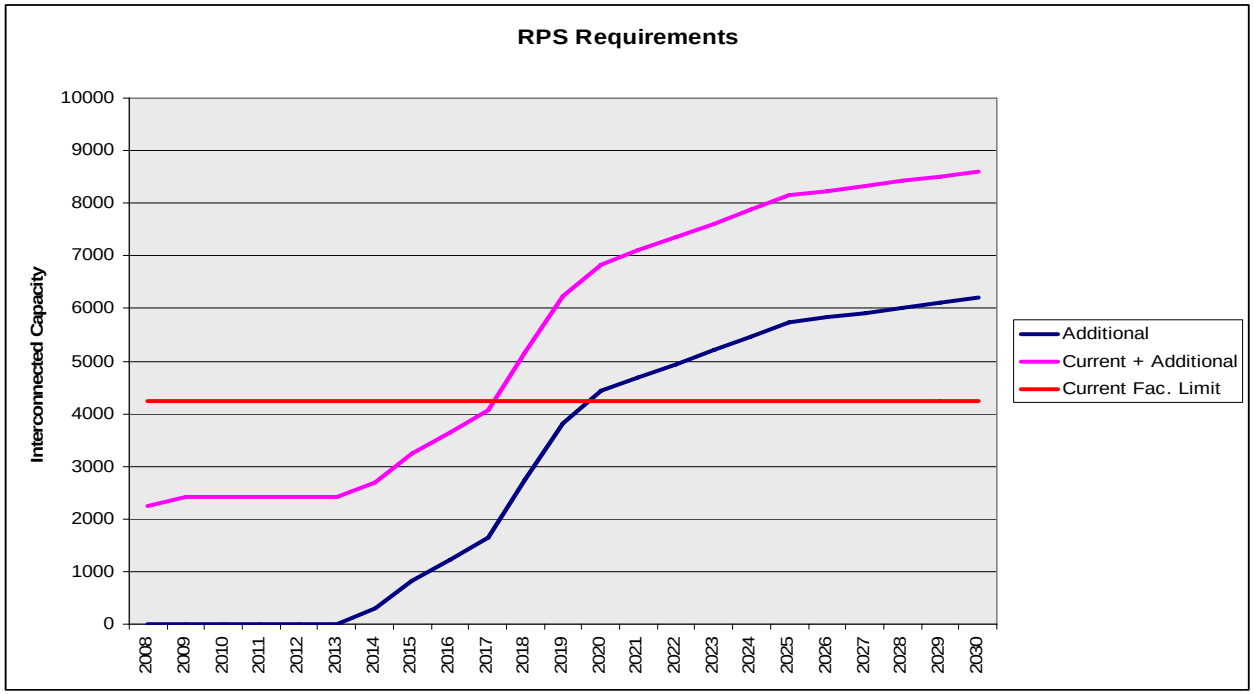
- There is no regional process that seeks an optimal Transmission expansion solution taking into account future needs for Capacity and Energy resources.
- We have a Network Open Season that resulted in nearly 5,000 MWs of RPS-qualifying resources.

Proposed Solution:

- Use the RPS requirement and the RPS-qualifying generators that signed precedent agreements as part of the study process. Assume these resources will displace other resources to establish a future date where existing transmission facilities are insufficient to meet RPS needs.

Reflecting Generator Profiles in the Planning Review (cont.)

The following graph illustrates how RPS requirements could fit in with an assessment of future needs for facilities. The RPS requirements are regional numbers from the Council, and the facilities limit is just for illustration.



In this example, existing facilities allow sufficient RPS-qualifying generation to meet regional needs until 2017. After that, facilities have to be in place to continue to meet RPS needs. This sets a 5-year acceleration cost recovery target for the financial evaluation.

2008 NOS Critique and Debrief

Sean Egusa

2008 NOS Constructive Critique

- Some Questions:
  - What changes should be considered to the overall NOS approach?
  - Should we modify the NOS timeline in any way?
  - What specific changes are needed to the queue restack?
  - Is there anything we could have done differently with FERC?
  - What specific changes are needed to the customer communication process?
  - What specific changes are needed to the Bulletin/Business Practice and/or PTSA?

2008 NOS Observations

- Overall, the process and timeline worked reasonably well, including the deadlines for the PTSA.
- Evaluate the relationship between NOS and Attachment K planning process.
- Maintain ongoing discussions with customers and constituents.

2008 NOS Constructive Critique

- NOS Communications
  - Establish a consistent and predictable timetable for recurring NOS to accommodate industry timing
  - Ensure that customers understand that PTSAs will be delivered over a period of time (not a single release date)
  - Ensure sufficient warning to any changes to “business as usual” to mitigate customer and internal impacts. (Linkage, SIS/SFS, ATC authorizations)
- NOS Procedures
  - Propose security due with signed PTSA
  - Review possible additional requirements, if any, for future NOS participation for TSRs with hub-based PORs or PODs
  - Ensure all organizations are duly represented at the right time within the process.

2008 NOS Constructive Critique (cont.)

- NOS Bulletin
  - Targeted modifications to the NOS Bulletin (SIS/SFS, Partial Term, Assignment)
  - Revisit and conduct due diligence on issues related to Competitions, Redirects, Ancillary Services, etc.
  - Ensure PTP and NT scenarios are addressed.
- NOS PTSA
  - Add language to better clarify unusual scenarios
    - Example: Add language where a generator outside of BPA's control area is serving load within BPA's control area but is not considered an intervening system.
  - Review processes to minimize duplicate work.
  - Design language more specific to NT
    - Example: NT Exhibit A, Table 2, document third party agreements for the provision of ancillary services.

2008 NOS Customer Observations

- *Tabula Rasa*

Next Steps and Review

Bob King