

2010 Network Open Season: Staff Recommendation for Customer Comment

May 20, 2011(second modification)

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*Comments submitted to techforum@bpa.gov by COB
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Inputs to the 2010 NOS Rolled-in Rates Determination

- 2010 NOS Inputs
 - LTF TSRs with 2010 PTSAs
 - Cluster study and plans of service
 - Direct assignment evaluation
 - Commercial Infrastructure Financial Analysis (CIFA) for Net Present Value (NPV) and rate pressure
 - **All CIFA numbers based only on new costs associated with 2010 projects**
 - Regional Economic Benefits Analysis (REBA) to identify any benefits to regional transmission loadings, congestion and production costs.
 - Risk Assessment
 - Business Assessment
 - Capital (increases and access)
 - Customer Input



2010 NOS Findings

- 1,522 MW requiring only the 2008 NOS projects will proceed.
- 60 MW requiring reliability upgrades in Central Oregon will proceed.
- No decision is required for the 53 MW that could be authorized using existing ATC.
- 2,124 MW require projects resulting from the 2010 cluster study of which 200 MW are Redirects and NT service.



2010 NOS: Northern Intertie Challenges

- Staff's recommendation regarding the Northern Intertie project is subject to the caveat that BPA needs to consider the resolution of a number of uncertainties:
 - There are some upgrades to other transmission providers' systems that would have to be accomplished to enable BPA to provide a substantial portion of the service.
 - PSAST upgrades
 - PSE's Portal Way transformer
 - Additional work is needed to determine the potential costs of these upgrades, the allocation of the costs for these upgrades, and how BPA would participate in these upgrades with other transmission providers.
 - The I-5 project is required to enable a substantial portion of the MW of service that need the Northern Intertie upgrade. This should provide time to address the uncertainties listed above. Any delay of the I-5 project will delay the need for any upgrades to support the westside Northern Intertie service.



2010 NOS: CUP West Challenges

- Staff's recommendation regarding CUP West is subject to the caveat that BPA should consider a number of uncertainties and risks specific to this project:
 - Additional technical analysis is needed to better determine the increased capacity provided by the CUP West. These technical studies are estimated to take 3 – 6 months and are not expected to result in any additional capacity beyond that currently identified. In addition, successful completion of the WECC Path Rating process will be required.
 - Because this infrastructure upgrade would primarily serve just one customer, the risk associated with deferral of service or failure to take service may be different and potentially more significant than for other NOS projects.
 - Unlike projects identified in NOS 2008 that are moving forward at rolled-in rates, CUP West also requires transmission expansion on another Transmission Provider's system; TSRs have been submitted with that TP and study and design work is moving forward.
 - The rate issue regarding the Montana Intertie currently in progress in the rate case could change the CIFA analysis outcomes.
 - The Cluster Study and CIFA were based on an assumption that Network is as defined today. If the definition of Network changes, the plan of service and costs could also change



2010 NOS Recommendation

- The Northern Intertie reinforcements move forward at rolled-in rates.
 - **-1.2%** rate pressure* (870 MW of PTP)
 - \$70.7 million in direct capital costs** (does not include Portal Way transformer)
- BPA should delay the rolled-in rates determination for CUP West until additional technical studies are complete. If there is no material change in the MW of capacity or cost of the CUP West project as a result of the additional technical studies, BPA staff will continue to recommend a rolled-in rates determination.
 - The combined rate pressure for moving forward with the Northern Intertie Upgrades and the CUP West upgrades is **-0.7%** with a direct capital cost estimate of \$186.2 million.

* Rate pressure includes 20 MW of PTP TSRs that can be authorized using existing ATC.

** See Appendix on Updated Plan of Service for Northern Intertie Reinforcement



2010 NOS Recommendation (continued)

- The Garrison to Ashe line should not move forward at rolled-in rates. It has an estimated direct capital cost of \$943.5 million and would create 14.7% upward rate pressure.
- 25 PTSAs for 1,522 MW can move forward based on the infrastructure upgrades from 2008 NOS without any increased capital expenditures or impact to rate pressure.
- Two PTSAs for 60 MW should move forward based on reliability upgrades in Central Oregon that BPA has already made the decision to complete.



2010 NOS: NEPA Obligations

- If the Northern Intertie and/or CUP West projects move forward at rolled-in rates, BPA will proceed with environmental review and preliminary engineering work.
 - Estimated costs for environmental review and preliminary engineering work are:
 - Northern Intertie up to \$2 million to \$4 million
 - CUP West \$6 million to \$8 million
 - According to the PTSA, BPA has 39 months to complete the environmental review and make the decision whether to build these facilities.



Network Open Season 2010

- In conclusion,
 - BPA staff recommends that the Northern Intertie reinforcement move forward at rolled-in rates.
 - BPA staff recommends delaying the rolled-in rates determination for CUP West until the additional technical analysis can be completed. If there is no material change in the MW of capacity or cost from the additional study, BPA staff will continue to recommend moving CUP West forward at rolled-in rates.
 - We believe that the environmental review process for the Northern Intertie and potentially for the CUP West will provide time for some of the uncertainties to resolve or at least become less uncertain.
 - We believe that obligation created by a rolled-in rates determination for capital expenditures required to do the environmental review for Northern Intertie reinforcement and potentially for CUP West are reasonable given the benefits they provide.



Appendix



Update to Northern Intertie Reinforcement Plan of Service & Costs

Original Plan of Service (\$26.2M*)	Status	Updated Plan of Service (\$70.7M*)
NI West (N→S)		
➤ Eastside Scheduling	No Change	➤ Eastside Scheduling
➤ Monroe-Novelty Hill 230-kV Upgrade	No Change	➤ Monroe-Novelty Hill 230-kV Upgrade
➤ Monroe-Snohomish #1 & #2 230-kV Upgrade	No Change	➤ Monroe-Snohomish #1 & #2 230-kV Upgrade
➤ Olympia-South Tacoma 230-kV Reconductor (36.5 miles)	Update	➤ Olympia-South Tacoma 230-kV Rebuild (36.5 miles)
	New	➤ Chehalis-Covington 230-kV Rebuild (from Cowlitz Tap to Chehalis – 46 miles)
➤ Tacoma-Cowlitz 230-kV Rebuild (Tacoma)	Update	➤ Tacoma to reconfigure system
➤ Cowlitz 230-kV Strain Bus (Tacoma)	Update	➤ Removed
➤ Portal Way 230/115-kV Transformer (PSE)	No Change	➤ Portal Way 230/115-kV Transformer (PSE) <i>Undetermined Cost Treatment</i>
NI East (N→S)		
➤ Boundary-Nelway RAS	No Change	➤ Boundary-Nelway RAS
➤ Addy-Devil's Gap 115-kV Reconductor (Avista)	Update	➤ Removed

* Cost estimate does NOT include costs for Portal Way transformer



TSR Breakdown by Cluster

NOS 2010 Cluster	NOS 2008 Projects Required	Original PTP	NT or Redirect Requests	Total
Authorized		20	33	53
Require NOS 2008 Projects Only	I-5, WOMR, CF LOMO	1,483	39	1,522
Reliability Projects				
Redmond and Ponderosa Transformers		60	-	60
Commercial Projects				
CUP (West)	CF LOMO	480	-	480
GASH	CF LOMO	530	-	530
GASH		14	-	14
NI (East): North -South	I-5, WOMR, CF LOMO	100	-	100
NI (East): North -South & CUP (West)		-	75	75
NI (West): North - South	I-5, WOMR, CF LOMO	700	125	825
NI (East) South - North & CUP (West)		50	-	50
NI (West): South - North	WOMR	50	-	50
Total <i>Not</i> Requiring Commercial NOS 2010 Projects		1,563	72	1,635
Total Requiring Commercial NOS 2010 Projects		1,924	200	2,124
Total MWs Submitted in NOS 2010		3,487	272	3,759



Direct Capital Costs for 2010 Proposed Projects

PROJECT	Energization Date	Energization Fiscal Year	Reliability Benefit	2011	2012	2013	2014	2015	2016	2017	2018	Direct Cost (\$M)
NCS 2010 Proposed Projects												
CUP (West)	10-2015	2016	\$0.000	\$0.000	\$5.320	\$29.320	\$40.412	\$40.412	\$0.000	\$0.000	\$0.000	\$115.464
GASH	10-2018	2019	\$0.000	\$0.000	\$18.870	\$28.304	\$94.348	\$235.869	\$235.869	\$188.695	\$141.521	\$943.477
NI (East): North-South	10-2015	2016	\$0.000	\$0.000	\$0.250	\$0.250	\$0.450	\$0.050	\$0.000	\$0.000	\$0.000	\$1.000
NI (East): South-North	10-2013	2014	\$0.000	\$0.000	\$0.250	\$0.250	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.500
NI (West): North-South	10-2014	2015	\$0.000	\$0.000	\$21.364	\$35.116	\$13.676	\$0.000	\$0.000	\$0.000	\$0.000	\$70.156
NI (West): South-North	10-2013	2014	\$0.000	\$0.000	\$0.250	\$0.250	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.500

- Each of the Northern Intertie estimates includes about \$0.5M for Eastside scheduling. If multiple NI projects are completed then there is still only a \$0.5M cost for the Eastside scheduling component. Adjustments have been made when analyzing groups containing multiple Northern Intertie projects to prevent double counting of this \$0.5M.
- Revenues resulting from TSRs requiring capital improvement on other utilities' systems were included in the analysis.

