ATTACHMENT A

Rationale Supporting Determination of Rate Treatment Applicable to
Projects Under the 2010 Network Open Season

Bonneville Power Administration's (BPA) decision regarding which of the 2010 Network Open Season (NOS) Precedent Transmission Service Agreements (PTSA) and associated Transmission Service Requests (TSRs) may reasonably be offered service at rolled-in transmission rates is a key milestone in the NOS process. As explained below, BPA has decided that 1,522 MW of TSRs in the 2010 NOS should continue to move forward at rolled-in rates, because BPA could provide service for those requests with construction of the projects moving forward as a result of the 2008 NOS. An additional 113 MW of TSRs are moving forward because BPA can provide service without new facilities or with new facilities that BPA has already decided to construct for reliability purposes. The remaining TSRs require new reinforcements identified in the 2010 NOS Cluster Study (Cluster Study). BPA is moving the Northern Intertie Reinforcements forward at rolled-in rates, subject to the caveats that further discussion is required regarding the upgrades required on adjacent systems, BPA and the adjacent transmission owners must reach agreement on system upgrades and cost allocation, and BPA would not plan to proceed with construction of the Northern Intertie Reinforcement without a clear path forward on both the Big Eddy-Knight project, which is part of West of McNary Reinforcement, and the I-5 Corridor project. BPA also is moving forward at rolled-in rates with the Colstrip Upgrade Project West (CUP West), but it is delaying its determination of which specific TSRs will move forward under that project. Determining the specific TSRs that would move forward under CUP West requires an additional study that is expected to be completed in the next three to six months and establishment of remedial action schemes that require additional discussion with customers. Finally, a final decision on whether to proceed with construction of either the Northern Intertie Reinforcements or CUP West is contingent upon completion of the NEPA processes for these projects.

Background

BPA announced the 2010 NOS process in a notice to customers on May 11, 2010,[1] and the 2010 NOS commenced on June 1, 2010. The deadline to submit TSRs to participate was June 30, 2010. The structure of the 2010 NOS is essentially the same as that of the 2008 and 2009 NOS.[2] The NOS combines a requirement that customers sign a PTSA to participate with a cluster study of participating TSRs. In order for customers with eligible TSRs to participate in the 2010 NOS, they were required to sign PTSAs and satisfy other requirements by August 18, 2010.

[1] A copy of the letter is available at: http://transmission.bpa.gov/Customer_Forums/open_season_2010/2010_NOS_Announcement.pdf.

[2] Please refer to the 2008 NOS Decision Letter for a description of the circumstances that led to the 2008 NOS, the structure of the NOS process, and the 2008 NOS rolled-in rates decisions. The 2009 NOS Decision Letter describes the 2009 NOS rolled-in rates decisions.

BPA offered 121 PTSAs to customers with eligible TSRs representing approximately 7,304 MW of service. Customers signed and met other requirements for 76 of those PTSAs for a total of 3,759 MW.

Cluster Study Results

BPA included the TSRs for which customers signed PTSAs in the Cluster Study to determine the system reinforcements, if any, required to provide service. The Cluster Study included three primary elements. First, BPA used its ATC Methodology to identify for each PTSA the impact to each monitored flow gate and other areas of the transmission system to determine if the TSR could be served by the current infrastructure. BPA also performed sub-grid assessments to consider impacts on other facilities on the system that are not included in the monitored flow gates. As a result of these analyses, BPA determined that six TSRs, representing 53 MW, could be authorized with no further system reinforcements beyond any requirements identified in the generator interconnection studies.

If BPA determined that the transmission system lacked flowgate capacity or if sub-grid impacts violated reliability limits for a particular request, BPA deemed that system reinforcements were necessary. BPA determined that 25 TSRs, representing 1,522 MW, could be provided service with the projects moving forward at rolled-in rates as a result of the 2008 NOS. Those projects include:

1. McNary-John Day Reinforcement
2. Big Eddy-Knight Reinforcement (in combination, the McNary-John Day Reinforcement and the Big Eddy-Knight Reinforcement are known as the West of McNary Reinforcements (WOMR)
3. I-5 Corridor Reinforcement
4. Central Ferry-Lower Monumental Reinforcement (CF-LOMO)

As the second element of the Cluster Study, BPA grouped the requests that were deemed to need additional system reinforcements into study areas based on electrical proximity and the other impacts described above. For each group of PTSAs for a study area, BPA studied the requests and identified or developed a plan of service for the required system reinforcements. BPA identified or developed plans of service for the following study areas:

1. Northern Intertie Reinforcements (includes upgrades in several areas of the Northern Intertie)
    a. Northern Intertie East (NIE) North to South Reinforcements
    b. Northern Intertie East (NIE) South to North Reinforcements
    c. Northern Intertie West (NIW) North to South Reinforcements
    d. Northern Intertie West (NIW) South to North Reinforcements

2. Colstrip Upgrade Project West[3] (CUP West)
3. Garrison-Ashe Project (GASH)
4. Central Oregon Reinforcement Project (CORP) and Redmond Transformer (REDM)

The following table shows the number of PTSAs and amount of associated MW for each project or combination of projects needed to provide the requested service. Note that many of the TSRs require more than one upgrade and some require a combination of upgrades identified in the 2008 NOS and the 2010 NOS.

Group	TSRs	Demand
Authorize	6 TSRs	53 MW
REDM	1 TSRs	20 MW
REDM, CORP	1 TSRs	40 MW
I-5, WOMR	1 TSRs	33 MW
WOMR	24 TSRs	1,489 MW
CF-LOMO, GASH	16 TSRs	530 MW
GASH	1 TSRs	14 MW
CUP West, CF-LOMO	13 TSRs	480 MW
I-5, WOMR, CF-LOMO, NIE: North-South	2 TSRs	100 MW
I-5, WOMR, CF-LOMO, NIE: North-South, CUP West	1 TSRs	75 MW
I-5, WOMR, NIW: North-South	9 TSRs	825 MW
NIE: South-North, CUP West	1 TSRs	50 MW
WOMR, NIW: South-North	1 TSRs	50 MW

More detailed information on the specific TSRs in each group is posted on BPA's website at: http://transmission.bpa.gov/Customer_Forums/open_season_2010/cluster_study_summary_by_cluster_020411.pdf.

For the third step of the Cluster Study, once BPA completed the technical studies, it added the proposed projects to a 2016 ATC base case and confirmed that the projects allowed BPA to provide the requested service.

[3] BPA, NorthWestern Energy, Avista, and the Colstrip Parties commissioned a joint exploratory study, the Colstrip 500 kV Upgrade Exploratory Study, in 2009. The upgrades that comprise CUP WestCUP WestCUP West were first identified in that joint study.

Direct Assignment Determination

PTSA section 5(a)(3) provides that "all Expansion Facilities resulting from the Cluster Study are subject to a determination of Direct Assignment of costs." All plans of service and system reinforcements identified in the Cluster Study as necessary to provide service to TSRs are subject to a determination of whether costs of the system reinforcements should be directly assigned to the applicable customer(s). Plans of service that are determined to be directly assigned to the customer are excluded from consideration for rolled-in rate treatment under the Commercial Infrastructure Financing Analysis (CIFA) pursuant to PTSA section 5(b).

In the 2010 NOS, BPA determined that none of the identified reinforcements are appropriate for direct assignment to the customer(s) whose TSR(s) require the plan of service. This determination was based on the technical attributes of the plan of service and on BPA's policies, including its Guidelines for Direct Assignment Facilities.[4]

Rolled-In Rate Determination

PTSA section 5(c) states that BPA will evaluate the projected costs and benefits of proposed expansion facilities consistent with the CIFA to determine "in its discretion whether Transmission Service can reasonably be provided under the applicable PTP or NT rate schedule (Bonneville's 'rolled-in' or 'embedded' rate)."[5] The CIFA allows BPA to rely on its previous analysis for purposes of evaluating facilities that have already moved forward in a previous NOS process or that BPA has already decided to construct independent of NOS. As explained below, BPA's determination regarding the TSRs that require 2008 NOS projects and the Central Oregon reliability upgrades relies on BPA's previous analysis and decision regarding those projects.

To estimate the rate pressure for new upgrades that Cluster Study identifies as necessary, BPA performed a net present value analysis (NPV) of the costs of the two projects, including the revenues received from the NOS TSRs that would receive service over each project. For the NPV analysis, BPA assumed no increase in current embedded cost rates to recover additional project costs and assumed an average annual 1% embedded cost rate increase representing normal rate increases over time.

[4] The Guidelines for Direct Assignment Facilities are posted at http://www.transmission.bpa.gov/includes/get.cfm?ID=827.

[5] The Commercial Infrastructure Financing Analysis (CIFA) is posted at: http://www.transmission.bpa.gov/customer_forums/open_season_2009/. The CIFA is referred to as the "Commercial Infrastructure Financing Proposal" in the PTSA.

The NPV analysis assumed the following direct project costs from the Cluster Study:

Project-Description	Estimated Total Direct Cost ($M)
Northern Intertie Reinforcement Total	$70.7
Colstrip Upgrade Project West Total	$115.4
Garrison to Ashe Project Total	$943.5
All 2010 NOS Projects	$1129.6

The NPV analysis was organized as follows: 1) each project and the service associated with the project were individually evaluated as an independent capital project; 2) all projects necessary to provide service to the applicable PTSA customers were evaluated; and 3) evaluations were performed for several scenarios identified in the Cluster Study.

The following are the base point assumptions used in the NPV and rate analysis modeling:

- Discount rate of 9%.
- Overhead rate for NPV of $2 million per project per construction year.
- Overhead rate for rate pressure analysis only of 23%.
- 1% rate increase per year.
- 1.67% inflation rate.
- Any reliability benefits identified in the Cluster Study of the expansion projects would be taken into account.
- Revenues begin at the start of the year after completion of expansion facilities.
- No revenues were assessed for redirect requests or NT requests.
- PTSAs were assumed to roll over for the life of the expansion facilities (all PTSAs have duration of more than five years).
- Project cost and revenues not adjusted for risk.
- Revenues from PTSAs for which service can be provided without new facilities (53 MW) were not included in the NPV analysis but were included in the determination of rate pressure.

1) 2010 NOS TSRs Requiring 2008 NOS Projects

The Cluster Study determined that BPA could provide service for 25 TSRs, representing 1,522 MW, received during the 2010 NOS process with the projects that moved forward at rolled-in rates in the 2008 NOS. For purposes of the evaluation under the PTSA and CIFA for those 2010 NOS TSRs, BPA relied on its evaluation of those projects for the rolled-in rate determination for the 2008 NOS, and did not revisit all of the assumptions and information underlying that decision. Due to the additional revenues associated with the 2010 NOS TSRs

and the effect of those revenues, the estimated rate pressure associated with the 2008 NOS projects should decrease over a 20 year period. The 2010 NOS TSRs that require the projects that already moved forward at rolled-in rates provide additional benefit and justification for those projects, and those 2010 TSRs will move forward at rolled-in rates.

In addition, cluster studies show that 13 of the 14 TSRs that would be accommodated by the Northern Intertie Reinforcement (1050 out of 1100 MW) also require completion of at least one of the 2008 NOS projects currently undergoing separate environmental reviews under the National Environmental Policy Act (NEPA). If, as a result of these reviews or other considerations, there is no decision to build these two 2008 NOS projects, the 2010 NOS projects would not provide all of the expected benefits. Therefore, BPA is reasonably requiring that the review processes for these 2008 NOS projects are complete before making a decision to proceed with construction of the Northern Intertie Reinforcement. BPA is diligently pursuing all NOS 2008 projects.

2) TSRs Requiring Central Oregon Reliability Upgrades

The Cluster Study also identified two TSRs for a total of 60 MW that could be granted service once BPA completes reliability upgrades that are already in progress in Central Oregon. Because these two projects (the Redmond Transformer and the Central Oregon Reinforcement Project) are currently under way and are moving forward for reliability reasons unrelated to NOS, these two TSRs will move forward at rolled-in rates as well.

3) TSRs Requiring Northern Intertie Reinforcements

The Cluster Study determined that the Northern Intertie Reinforcements without CUP West would serve 12 TSRs with a combined 975 MW of service. The revenues from the TSRs (850 MW of original PTP requests) and megawatt demand that the projects would serve, combined with the estimated project costs, resulted in a positive NPV and should result in downward pressure on network transmission rates over a 20-year period. While this represents only one of many factors that might impact rates in future years, this downward rate pressure is within the rate pressure range that was generally considered acceptable in the 2008 NOS, and suggests that the project is worth pursuing.[6]

The Northern Intertie Reinforcements require upgrades on other transmission providers' systems, which is a unique situation that BPA has not faced in previous NOS processes. BPA does not control the costs or schedule of those upgrades, which raises questions about whether such requests appropriately fall within the scope of a NOS process focused on defining the facilities on BPA's network that would be required to provide the requested service. The situation leaves BPA with at least two obvious options: 1) do not move forward with the reinforcements at rolled-in rates in NOS and address the need for third-party upgrades under the

[6] The range of rate pressure that was generally considered acceptable in the 2008 NOS was based on customer comment. Please refer to the 2008 NOS decision documents, posted at http://www.transmission.bpa.gov/customer_forums/open_season/.

non-NOS provisions of BPA's OATT; or 2) move forward with the reinforcements at rolled-in rates but recognize that successful completion of additional discussions regarding construction of and cost responsibility for the upgrades will be needed prior to making a decision to build.

The challenges associated with the upgrades on third-party systems create uncertainty for BPA and customers, but BPA believes that the commercial analysis and potential benefits of completing the Northern Intertie Reinforcements support a decision to move forward with the project at this time. BPA's decision to move forward at this time is subject to the caveat that the ultimate decision to build the facilities depends on, among other things, the willingness of other transmission providers to construct upgrades on adjacent systems and the outcome of discussions about cost responsibility for the upgrades on other systems. The time that the PTSA allows for BPA to complete the environmental studies prior to the decision whether to build should provide BPA, customers, and adjacent transmission providers an opportunity to resolve these challenges.

4) TSRs Requiring CUP West and Garrison-Ashe

The Cluster Study included approximately 1249 MW of TSRs that impacted either the West of Garrison or West of Hatwai paths on the eastern part of BPA's network. Providing service for all of these requests would require construction of some combination of the Garrison-Ashe line, CUP West, and establishment of remedial action schemes (RAS) for the generators associated with the TSRs. With respect to the Garrison-Ashe line, the Cluster Study estimated direct costs of approximately $1 billion. The CIFA estimated that the upward rate pressure associated with Garrison-Ashe would be approximately 14.7% over 20 years (based on 1024 MW of original PTP requests). This is well above the acceptable level of rate pressure, and Garrison-Ashe is not moving forward at rolled-in rates for that reason.

The 2010 NOS Cluster Study assumed that construction of CUP West and implementation of RAS requirements (without the Northern Intertie Reinforcements) could potentially serve 13 TSRs with a combined 480 MW across West of Garrison or West of Hatwai. CUP West was first identified in an exploratory study commissioned by BPA, NorthWestern Energy, and Avista Corporation in 2009 to evaluate upgrades to existing facilities to increase transfer capability from the Colstrip Generating Facility to the Northwest. The study is nearing completion, and the 2010 NOS Cluster Study incorporated the CUP West plan of service as a means of serving some 2010 NOS TSRs.

The estimated direct cost of CUP West is approximately $115 million, which would result in an estimated upward rate pressure of 0.77% over 20 years (assuming service to the 480 MW identified above and construction of the Central Ferry-Lower Monumental line). Based on these assumptions, the rate pressure falls within the acceptable range of 2.0% used in previous NOS processes. This suggests the project is worth pursuing at rolled-in rates, particularly given that the upgrades were first identified in the joint, multi-year study intended to assess needs that are independent of NOS. As explained below, considering CUP West in conjunction with the Northern Intertie results in less upward rate pressure.

Although BPA is proceeding to the next stage with CUP West at rolled-in rates, it is delaying its determination of which specific TSRs will be included under the project. Completion of additional studies and establishment of RAS is necessary to more definitely determine the amount of capacity associated with the project. The final phase of the Colstrip exploratory study is completion of a sub-synchronous resonance study to assess whether CUP West would result in damage to the Colstrip generating units or have other reliability impacts. The manufacturer of the Colstrip generating units, General Electric Corporation, must complete this study, and it is expected to take three to six months. The results of this study are not expected to reduce the amount of service associated with CUP West which includes 530 MW over West of Garrison and an additional 75 MW over West of Hatwai assumed in the Cluster Study, but it is possible that the study could uncover something unexpected. BPA needs the results of the sub-synchronous resonance study before determining the specific amount of TSRs (in MW) that will move forward under CUP West.

The Cluster Study assumes that the generators associated with the TSRs requiring CUP West must be subject to RAS for CUP West to result in any capacity to provide service to those TSRs. Development of RAS will require identifying the generator associated with each TSR and ensuring that the customer meets the requirements for an effective protective scheme. Without knowing the generator associated with each TSR and that the generator is subject to RAS, BPA is unable to determine that construction of CUP West would result in capacity to provide the service for a particular TSR. BPA is unable to determine which specific TSRs should be included under CUP West under these circumstances.

The time required to complete the sub-synchronous resonance study provides BPA and customers the opportunity to address the RAS requirement before BPA determines the rate treatment for individual TSRs. BPA expects to work with customers during the next three to six months to address the RAS requirement. Given that BPA is delaying its final determination regarding which specific TSRs will be included under CUP West, the PTSA provides the customer with these TSRs a limited period of time to terminate the PTSA. If customers terminate PTSAs or the remaining study indicates that CUP West will result in less capacity than BPA assumed in the Cluster Study, BPA will take those factors into account in making those final decisions.

5) Combination of Northern Intertie Reinforcements and CUP West

The CIFA estimates direct capital costs of approximately $186 million associated with construction of both the Northern Intertie Reinforcements and CUP West. Constructing both projects allows additional offers for 125 MW that could not be offered by completion of either project individually. Based on these assumptions, moving forward with both projects at rolled-in rates would result in downward rate pressure over 20 years of approximately -0.7%. This falls within the range that BPA and customers have considered acceptable in the past.

6) Capital Access Concerns Related to 2010 NOS projects

BPA has not included the nearly $200 million of capital investments related to the 2010 NOS projects in its recent planning assumptions for capital availability. BPA is concerned about capital availability and is planning a regional discussion on access to capital later this year. The decision to proceed with construction of the 2010 NOS projects will take into account the outcome of the regional access to capital discussion.

Additional information on the 2010 NOS process including all public summaries of results or recommendations can be found at:
http://transmission.bpa.gov/Customer_Forums/open_season_2010/