ATTACHMENT A

Rationale Supporting Determination of Rate Treatment Applicable to Projects Under 2008 Network Open Season

Background

Bonneville Power Administration's (BPA) decision regarding which of the 2008 Network Open Season (NOS) Precedent Transmission Service Agreements (PTSA) and associated Transmission Service Requests (TSR) may reasonably be offered service at embedded cost transmission rates is a key milestone for BPA. That decision to continue the NOS process with projects that enable 3,699 MW of transmission service demonstrates the success of the NOS concept and stands in sharp contrast to the status of BPA's transmission service request queue less than a year ago.

BPA initiated the NOS process with a letter to customers on March 19, 2008,[1] announcing the upcoming NOS.

As of March 19, 2008, BPA's transmission service request queue contained 9,262 MW of requests for service on BPA's network, exclusive of requests for service on the Southern and Montana Interties. At that time, BPA forecast only 2,491 average MW of load growth for all utilities within the Pacific Northwest from 2008 through 2017, not all of which would be served using BPA transmission.[2] Although there is interest by developers in new interties, there are no plans for capacity expansions of BPA's interties with other regions.

Because the amount of requested demand in BPA's transmission queue prior to NOS far exceeded forecast load growth for the region plus intertie capacity, clearly some transmission requests that were in the queue were speculative. Under the *pro forma* Open Access Transmission Tariff (OATT) mechanism for individual processing of TSRs, BPA transmission planners could not predict which requested paths would actually be used or when any new generation using the paths would be operated. Further, offsetting flows resulting from the combination of requests in the queue could not be studied under the individual study approach. These factors made planning for queued transmission requests impractical. The lumpy nature of transmission upgrades also made it impractical for customers submitting TSRs that were processed individually to assume cost responsibility for an entire upgrade. With the requested demand in the queue consistently exceeding forecast load growth and intertie capacity, the queue congestion became unmanageable, and the requests in the queue were not an accurate reflection of regional transmission needs.

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[1] A copy of the letter is available at: http://www.transmission.bpa.gov/customer_forums/open_season/docs/NOS_letter.pdf.

[2] BPA, 2007 Pacific Northwest Loads and Resources Study (2007 Whitebook), p. 6. Pacific Northwest is defined in 16 U.S.C. § 839a(14). 2007 Whitebook, p. 36. The 2007 Whitebook is available at: www.bpa.gov/power/pgp/whitebook/2007. Transmission service would normally be based on some higher level of peak demand.

BPA developed the NOS process to eliminate the bottleneck in the queue so that BPA could provide transmission for new generation to meet growing loads, transmit new renewable generation to meet state renewable portfolio standards,[3] and meet the obligations under BPA's OATT to process TSRs.[4] BPA worked with customers and other stakeholders to develop the NOS process for approximately a year before the 2008 NOS. Customers and other stakeholders supported the NOS. The Federal Energy Regulatory Commission (FERC) approved BPA's proposed NOS as meeting FERC's reciprocity standards. *Bonneville Power Administration,* 123 FERC ¶ 61,264 (2008).

Structure of NOS

The NOS combines a cluster study of participating long-term TSRs with a precedent agreement. The NOS required customers with TSRs to sign a Precedent Transmission Service Agreement (PTSA) to remain in the transmission service request queue. The PTSA obligates customers to take service if BPA timely satisfies two conditions: (1) BPA determines that it can reasonably provide service for TSRs in the cluster at embedded cost PTP and NT transmission rates, and (2) if facilities must be built to provide the service, BPA decides, after completion of a BPA-funded National Environmental Policy Act (NEPA) study, to build the facilities. The PTSA is similar to precedent agreements used in the natural gas industry, under which pipeline developers subscribe sufficient demand so that FERC may issue a certificate of public convenience and necessity that allows construction. *See Texas Eastern Transmission Corporation*, 82 FERC ¶ 61,236, 61,915-916 (1998). Under the NOS, subscription to transmission capacity through the PTSA allowed BPA to determine whether there was sufficient demand to reasonably provide service at embedded cost rates and go forward with NEPA review of the necessary facilities. The cluster of TSRs that were offered service or studied in the NOS were those that were in the queue as of May 15, 2008, and for which signed PTSAs were submitted by June 16, 2008. Such customers were required to submit refundable security equal to one year of transmission revenues for their requests.

The NOS fairly distributes risks between BPA and customers. Under NOS, BPA will not proceed with financing construction of facilities needed for new transmission service at embedded cost rates unless there is sufficient commitment from customers to take service. For each new facility, BPA considered benefits in addition to committed requests in making this rate treatment decision. These considerations are consistent with the Commercial Infrastructure Financing Proposal (CIFP), discussed below. With sufficient commitments and other benefits, BPA has determined that for 3,699 MW of requests in the NOS that need some combination of the five projects described below, expected embedded cost rate impacts are reasonable. BPA has decided to go ahead with NEPA studies for the facilities needed to serve those requests, before making a decision whether to build.

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[3] In the Pacific Northwest, Oregon, Washington, and Montana currently have renewable portfolio standards. *See* http://www.epa.gov/CHP/state-policy/renewable_fs.html.

[4] BPA described the need for NOS in a March 2008 Fact Sheet, which may be found at: http://www.bpa.gov/corporate/pubs/fact_sheets/08fs/Factsheet-Network_Open_Season_March_2008.pdf

Cluster Study Results

BPA offered 316 PTSAs to eligible requests representing approximately 14,464 MW of service as part of the 2008 NOS. Customers signed 153 of those PTSAs for a total of 6,410 MW. Of this total, approximately 4,716 MW was associated with wind generation. Customers did not sign PTSAs for TSRs for approximately 8,054 MW, and BPA removed these TSRs from the queue. Removing these TSRs freed available transfer capability (ATC) to allow offers of 1,782 MW of transmission service without new construction. BPA included the remaining 4,628 MW of service requests for which customer signed PTSAs in a Cluster Study to determine the transmission system expansion required to serve those requests. The following table provides more detail about the PTSAs that BPA offered as part of the 2008 NOS.

* Includes two PTSAs split into partial TSRs.

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

	PTSAs Offered	PTSAs Signed	PTSAs not Signed	PTSAs Signed & Security Provided	PTSAs Signed & Security not Provided	TSRs Removed from Queue for Not Signing/No Security	Offers Resulting after Removing TSRs from Queue	PTSAs in Cluster Study
PTSAs & TSRs	316	160	156	153	7	163	42*	110
Total MW	14,464	6,905	7,559	6,410	495	8,054	1,727	4,628
Number of Customers	38	29	9	28	1	10	14	17

of the transmission system to determine reinforcement required to provide the requested service. BPA deemed that requests with impacts on more than one flow gate and that exceed the ATC on any individual flow gate required system reinforcement. BPA-TS performed a sub-grid assessment to consider impacts on other facilities on the system that are not included in the monitored flow gates. If BPA lacked ATC or sub-grid impacts violated reliability limits for a particular request, system reinforcements were deemed necessary.

Second, BPA grouped the requests into study areas based on impacts described above and electrical proximity. BPA identified the following study areas for development of a plan of service to provide the service requested:

1. West of McNary Reinforcement
2. I-5 Corridor Reinforcement
3. Little Goose Area Reinforcement
4. West of Garrison Remedial Action Scheme
5. Harney Area Reinforcement
6. Northern Intertie Reinforcement

7. LaGrande Area Reinforcement
8. Cross Cascades South Reinforcement
9. Cross Cascades North Reinforcement

For each group of PTSAs for a study area, BPA separately studied the requests and developed a plan of service for the required system reinforcements. 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.

PTSA Grouping

Grouping	PTSA	Demand
Authorize -- Pre NOS (no new facilities required)	4 PTSA	55 MW
Authorize—Post NOS† (no new facilities required)	43 PTSA	1,727 MW
West of McNary Reinforcement	45 PTSA	2,023 MW
I-5 Corridor Reinforcement	2 PTSA	150 MW
Little Goose Area Reinforcement	5 PTSA	200 MW
West of McNary & West of Garrison RAS±	1 PTSA	91 MW
Harney Area Reinforcement	28 PTSA	775 MW
Northern Intertie Reinforcement	2 PTSA	100 MW
West of McNary & LaGrande Area Reinforcements‡	2 PTSA	54 MW
West of McNary & I-5 Corridor Reinforcements	6 PTSA	495 MW
West of McNary & Little Goose Area Reinforcements	13 PTSA	640 MW
West of McNary & I-5 & Little Goose Area Reinforcements	2 PTSA	100 MW
NOS -- TSR Groupings	153 PTSA	6,410 MW

† Includes one PTSA split into two partial TSR's

± Includes one PTSA with a partial TSR (parent PTSA in West of McNary)

‡ Includes one PTSA with a partial TSR (parent PTSA in West of McNary)

More detailed information on the specific TSRs in each group is posted on BPA's website at: http://www.transmission.bpa.gov/customer_forums/open_season/docs/PTSA_Summary_by_Cluster.pdf

Third, once BPA completed the technical studies, it added the proposed projects to a 2014 ATC base case and confirmed that the projects allowed BPA to provide the requested service. The 2014 ATC base case also confirmed that the Cross-Cascades North and South Reinforcements were not needed to provide the requested service. ColumbiaGrid and the Northern Tier Transmission Group independently reviewed the cluster study results and confirmed that the plans of service are electrically feasible, would not result in adverse

consequences for the Western Interconnection, and would provide sufficient capacity to enable service.

Embedded Cost Rate Determination

PTSA section 5(c) obligates BPA to "evaluate the projected cost and benefits of proposed Expansion Facilities consistent with its Commercial Infrastructure Financing Proposal posted on BPA's website . . . 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]

BPA developed the CIFP collaboratively with input from a stakeholder team. The CIFP provides that BPA should allocate the costs of new commercial infrastructure projects to the Integrated Network segment if, after consideration of the benefits of the project to the Network, the present value of long-term transmission service commitments equals the remaining project costs after deducting the value of the benefits to the Network. CIFP, p. 1. PTSA section 5(c) calls for a determination that is "consistent" with the CIFP and allows BPA to exercise its discretion to determine if embedded cost rate service can reasonably be provided. After applying an analysis that is consistent with the CIFP, BPA has determined that 74 PTSAs, associated with 3,699 MW of transmission service, can reasonably be provided service at embedded cost rates. This service requires the five projects described below that BPA has selected for NEPA study.

Prior to this decision, BPA held a public meeting on January 15, 2009, where BPA presented a staff recommended decision for comment and questions. BPA provided until January 30 for submission of written comments. BPA received comments from eight parties.[6] The Administrator considered these comments in arriving at a decision. These comments are summarized and BPA's responses are included as Attachment B to the Decision Letter.

On February 13 the United States House of Representatives and Senate passed the American Recovery and Reinvestment Act of 2009. President Obama is expected shortly to sign the Act into law. That Act includes a provision that increases BPA's ability to borrow from the U.S. Treasury by $3.25 billion. The enactment of this authority provides greater comfort in moving forward with the expenditures necessary to prepare for a decision to initiate construction of the projects because it substantially increases confidence that BPA will have adequate access to capital to build the projects should the agency decide to proceed with construction.

BPA has decided to move forward under the NOS with the following five projects: McNary-John Day, Big Eddy-Station Z, I-5 Corridor Reinforcement, Little Goose, and West of

[5] The Commercial Infrastructure Financing Proposal (CIFP) is posted at: http://www.transmission.bpa.gov/customer_forums/open_season/docs/CIFP_Metrics.pdf.

[6] The recommended decision is available at: http://www.transmission.bpa.gov/customer_forums/open_season/docs/2008_Network_Open_Season_Recommendation.pdf (Recommended Decision), and the customer comments are available at: http://www.transmission.bpa.gov/customer_forums/open_season/default.cfm?page=ccomments

Garrison Remedial Action Scheme. For the McNary-John Day 500 kV line, BPA is reviewing the recently completed Supplement Analysis for the McNary-John Day project environmental impact statement prior to making a determination to build. For the other four of these projects BPA will begin a BPA-funded NEPA review. BPA has decided that it cannot reasonably provide embedded cost service for the PTSAs and associated TSRs that require the following three projects: Harney Area Reinforcement, Northern Intertie Reinforcement, and LaGrande Area Reinforcement.[7]

There are several reasons for moving forward with the five selected projects and not moving forward with the remaining three.

First, the five projects in combination would be sufficient to serve 74 TSRs with a combined 3,699 MW of service, while the three projects not selected for continued study in the NOS would have provided service to 32 TSRs with only a combined 929 MW of service. The smaller amount of service to NOS TSRs provided by the three projects not selected combined with the costs of the projects would result in an unacceptable embedded cost rate impact if the three projects were included. The combination of the five selected projects and the NOS TSR service that can be offered with such projects would result in an estimated embedded cost rate increase over 20 years of 2.02%, which is within the range that BPA has determined is reasonable. *See supra* note 6, Recommended Decision at pp. 4–10. Adding the three projects not selected would result in a projected embedded cost rate increase over 20 years of 12.11%, well above an acceptable rate impact.

To estimate the embedded cost rate impacts, BPA performed a net present value analysis of the costs of the eight projects, after deducting the value of reliability benefits to the Integrated Network, and adding the revenues received from the NOS TSRs that would receive service over each project. For the net present value analysis BPA assumed no increase in embedded cost rates to recover additional project costs, but assumed an average annual 1% embedded cost rate increase representing normal rate increases over time.

[7] Additional detail concerning all eight projects may be found at: http://www.transmission.bpa.gov/customer_forums/open_season/docs/NOS_Cluster_Study_Summary.pdf.

The net present value analysis began with the following direct project costs identified in the NOS Cluster Study:

Project Cost and Schedule

Estimated Direct Costs Only (no overheads)

Project-Description	Estimated Total Cost ($k) / Confidence Level	Proposed Energ. Date
McNary-John Day + Other Upgrades	$246,545 / High	Dec-12
Station Z + Big Eddy-Station Z	$115,658 / Medium	Feb-13
I-5 Corridor Reinforcement Total	$341,996 / Medium	Sep-15
Little Goose Area Reinforcement Total	$99,435 / Medium	Sep-13
West of Garrison RAS	$2,300 / Low	Sep-11
Harney Area Reinforcement Total	$359,589 / Low	Sep-14
Northern Intertie Reinforcement Total	$225,301 / Low	Sep-15
LaGrande Area Reinforcement Total	$131,989 / Low	Sep-14
Total	$1,522,813	

Notes:

1. Estimated costs in FY08 dollars.
2. Energization dates assume rolled-in rate determination is made in Feb. 2009.

The Net Present Value (NPV) analysis was organized as follows: 1) each project and the service enabled by the project was individually evaluated as an independent capital project; 2) all expansion projects necessary to provide service to all 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 impact analysis only of 23%.
- 1% rate increase per year.
- 2% inflation rate.
- Reliability benefits identified in the Cluster Study were taken into account.
- Revenues begin at the start of the year after completion of expansion facilities.

- 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 from existing ATC (1,782 MW, without constructing additional facilities) were not included in the NPV analysis but were included in the determination of rate impact.

None of the individual projects or analyzed scenarios resulted in a positive NPV. Inclusion of NOS revenues where service is provided from existing ATC (no new facilities required) results in slightly positive NPV for two scenarios—WOMR/West of Garrison and WOMR/Little Goose. [8]

Second, the customers generally support the recommended decision, as reflected in the comments. Some customers wanted BPA to add one of the three projects not selected, and one commenter questioned inclusion of the I-5 Reinforcements.

Third, all but one (Little Goose) of the chosen projects are on paths that are heavily used and will support the system for future uses and load growth. The I-5 Corridor has heavy loading during summer months and is subject to curtailment. Encumbered ATC on the South of Allston path is at or near its capacity, and new generation proposed for the area could further impact path loadings. Subsequent to closing the 2008 NOS, BPA has received additional TSRs that would require I-5 Corridor upgrades. When combined with expected additional non-firm uses, there is a high likelihood that future revenues will help offset the rate pressure from I-5 Corridor reinforcement.

The West of McNary Reinforcements (McNary-John Day and Big Eddy-Station Z) are on a key path for generation east of the Cascades reaching load centers west of the Cascades. The West of Garrison Remedial Action Scheme is on an encumbered path that has the potential to bring diverse new wind generation from Montana to load centers to the west. In the Little Goose area, BPA has over 2,200 MW of requests in its Generation Interconnection queue, so the Little Goose Area Reinforcement also has excellent future use potential.

The three projects that were not selected have uncertain future use potential. As a result, the costs of these projects combined with their relatively small amount of NOS PTSA service, would have unacceptable impacts on BPA's embedded cost rates. Further, if BPA had decided to go ahead with these projects and roll their costs into embedded cost rates, BPA could face stranding much of its investment in these projects for an indefinite period.

There were only two PTSAs that would need the Northern Intertie Reinforcement, and the total requested demand for the TSRs was only 100 MW.

[8] The following negative net present values are consistent with the rate impacts: Harney Area Reinforcement, negative $213,607,000 to serve 775 MW; Northern Intertie Reinforcement, negative $170,015,000 to serve 100 MW; and LaGrande Area Reinforcement, negative $125,500,000 to serve 54 MW. In contrast, the five selected projects together have a negative net present value of $159,719,000 to serve 3,699 MW.

The LaGrande Area Reinforcement had NOS TSRs needing only 54 MW of capacity. Since some of the demand for the LaGrande Area Reinforcement was for service to BPA requirements loads, BPA will be conducting an assessment of how to meet its transmission needs for service to Idaho. BPA will be considering a number of options, including participation with other utilities, and BPA will decide at a later date how best to meet these needs.

The Harney Area Reinforcement would have served 775 MW of NOS TSRs. The project included a new 179 mile 500kV line to Malin. The Harney area is an undeveloped wind resource area, and it is not yet clear what the future use of the area will be, or when the generation requesting interconnection in the area would proceed to construction. Further, adding Harney to the selected projects with the requested amount of service would increase projected embedded cost rates by over 6% over 20 years, which is an unacceptable increase.

Finally, the Eligible Customers whose PTSAs were not selected to proceed to environmental review for embedded cost rate service have other options to receive transmission service from BPA. Those customers will be eligible to participate in a future NOS. They could proceed under the OATT process for individual TSRs and fund an environmental review for future incremental cost rate service. If they proceed under the OATT process for future incremental cost rate service, it is possible that sufficient new requests for service needing those paths will be made such that a future NOS will result in embedded cost rate service for requests needing those projects. During the environmental review study process for incremental cost rate service under the OATT, BPA may explore alternate plans of service with the customer that could be less costly.