

BPA's response to comment on 2012 Oversupply Management Protocol

March 2012

(Revised March 28, 2012)

Wind energy producers, regional utilities, interest groups and others submitted approximately 90 comments on Bonneville Power Administration's Feb. 7 proposed protocol for managing the possible seasonal oversupply of electricity. Bonneville has reviewed the comments and has made several changes to the protocol in response to the concerns addressed. The following is a summary of the major comments and Bonneville's response.

Audit

Comment:

PPC and NRU commented that Bonneville should reserve the right to audit all generators rather than limit itself to only 10.

Response:

This issue was addressed in Attachment P. Bonneville no longer limits the number of generators that may have their cost information validated by the independent evaluator.

Comment:

PGE suggested that Attachment P should include a process to review and appeal audits.

Response:

All costs and supporting data will be evaluated by an independent evaluator. If Bonneville receives information from the independent evaluator that the costs of displacement submitted by a generator are not justified by the supporting data and documentation, Bonneville may file a complaint with the Federal Energy Regulatory Commission (Commission) and ask the Commission to investigate further. Generators will have the opportunity to further explain their submitted costs of displacement to the Commission.

In addition, Section 12 of Bonneville's tariff includes dispute resolution procedures. However, Section 12.5 provides that "[n]othing in this section shall restrict the rights of any party to file a Complaint with the Commission under relevant provisions of the Federal Power Act." Thus, Bonneville is not required to enter into dispute resolution procedures under Bonneville's tariff prior to filing a complaint with the Commission.

Comment:

NIPPC believes that Bonneville's proposal for auditing costs is unnecessary and that any concerns should be addressed by the Commission.

Response:

Bonneville has revised Attachment P to require generators to self-certify that their costs are accurate, and to submit those costs to an independent evaluator. The displacement costs submitted by generators will be subject to random validation by the independent evaluator. If the independent evaluator determines that the displacement costs submitted are not justified by the



supporting data and documentation, Bonneville will file a complaint with the Commission requesting the Commission to investigate further and address any concerns.

Comment:

PPC and NRU indicated that Attachment P needs to be clear who will be subject to the audit. It should be clear that those choosing not to receive displacement costs will not be audited.

Response:

Attachment P has been revised to clarify that only generators that submit displacement costs for compensation will be subject to validation. The purpose of validating displacement costs is to ensure that the costs submitted are as accurate as possible.

Comment:

PPC and NRU commented that Attachment P should clarify the information that must be provided to justify a generator's costs.

Response:

Attachment P has been revised to require generators to submit data and information justifying its costs of displacement. In addition, generators must provide the independent evaluator with any additional information and supporting data necessary for the evaluator to do its evaluation. If a generator does not comply or provides insufficient data, Bonneville may file a complaint with the Commission.

Penalty

Comment:

Bonneville received a number of comments regarding its proposed penalty for inaccurate data submitted for displacement costs. A majority of the comments indicated that it was unclear how the penalty would be calculated. Others expressed concern that the penalty proposed was either too harsh or not harsh enough. Finally, some commenters wrote that Bonneville was taking on too much of a regulatory role in establishing and assessing penalties.

Response:

Bonneville will no longer assess penalties for submitting inaccurate data. If Bonneville receives information from the independent evaluator indicating that a generator's displacement costs are inaccurate, Bonneville will refer the matter to the Commission. Any remedies for the submission of inaccurate data will be handled by the Commission.

Term of Policy

Comment:

Bonneville received a number of comments on the appropriate term of the protocol in Attachment P. Comments ranged from having the protocol expire after one year, two years or ensuring it ends at the end of 2015. NRU suggested that the conclusion of the policy synch with the rate case, which is September 30, 2015 instead of December 31, 2015.

Response:

Bonneville has revised Attachment P to expire on March 30, 2013. Bonneville believes having a short-term solution in place is in the best interest of the region and will give the region time to work towards a long-term solution that may be agreeable to all or to a greater number of parties.

Non-Disclosure

Comment:

A number of commenters note that Bonneville is requesting market sensitive data and needs to have adequate protections in place for this confidential information. Caithness and PGE both indicated that the data requested by Bonneville is extremely sensitive and could lead to market power and negative market impacts if not protected. They encouraged BPA to ensure proper mechanisms are in place to ensure protection of this data. TransAlta also raised a concern that Bonneville is subject to Freedom of Information Act (FOIA) requests and may not be able to protect this data.

Response:

Bonneville understands that the information submitted by generators under Attachment P is commercially sensitive. Therefore, generators will submit their cost data to the independent evaluator, who will construct the cost curve. Bonneville will receive only aggregated information for purposes of implementing the cost curve and for billing. However, if the independent evaluator determines that a generator's costs are inaccurate, Bonneville must have access to the costs and supporting data and documentation in order to determine whether to ask the Commission to investigate further. Bonneville and the independent evaluator will execute non-disclosure agreements with all generators submitting displacement costs under Attachment P.

Bonneville also understands concerns about FOIA. As stated above, Bonneville will not have access to the generator's detailed cost information unless the independent evaluator determines that the costs submitted are inaccurate. In addition, Exemption 4 of FOIA excludes from disclosure "[a] trade secret or privileged or confidential commercial or financial information obtained from a person." Should this information become the subject of a FOIA request, BPA will coordinate with the generator to protect information that falls within this exemption.

Production Tax Credits

Comment:

A number of commenters were concerned that generators owned by public utilities are not eligible for production tax credits. This could mean that the costs for these generators would be lower and they would also be dispatched first via the cost curve. These commenters proposed that Bonneville create a proxy PTC for use in determining the displacement costs of these generators. They would not actually receive compensation for the proxy PTC, but would be placed higher on the cost curve.

Response:

Bonneville will not establish a proxy PTC value for public utilities at this time. Establishing a proxy PTC value could undermine the concept of the least-cost displacement cost curve, as generators that incur greater costs would be displaced at the same level or before generators that incur less costs due to the proxy PTC value. The result would be higher total costs for implementing Attachment P. Bonneville does not have enough information at this time to reach a different conclusion. Parties are free to submit further information on this concept, which Bonneville will consider if it uses a similar mechanism for handling oversupply in the future.

Comment:

PPC suggests that Bonneville could receive a credit towards its Treasury payment for payments made under Attachment P. PPC states that "[c]urrently, PTCs are paid to Generators by the Treasury and that

should continue to be the case...and BPA should negotiate an agreement with Treasury where BPA would receive credits from Treasury equal to the amount of the in-lieu payments, which could be applied to BPA's repayment obligation to Treasury.”

Response:

In the absence of legislation authorizing Treasury credits for payments made by Bonneville to generators for PTCs, Bonneville cannot obtain Treasury credits.

Comment:

Bonneville needs a process to verify that a generator would have earned PTCs. Seattle City Light commented that if a generator is not profitable, it would not receive PTCs.

Response:

Bonneville will use an independent evaluator to verify the accuracy of displacement costs submitted by generators, including the PTC, if a generator's costs are selected for validation. If selected for validation, generators must submit all supporting data and documentation to justify their displacement costs, including PTCs.

New Generators

Comment:

Opinions differed regarding whether Bonneville should compensate new generation that achieves commercial operation after March 6, 2012. Some commenters indicated that compensation for new generators should be zero or as low as possible to keep the costs of oversupply from growing. ICNU commented that Bonneville's ultimate goal should be to eliminate compensation for new generators that have appropriate notice, and that Bonneville should set a reasonable time line to cut off new generation from receiving compensation.

WPAG indicated that compensation for new generators should be set at zero and “those wind generators that went commercial before March 6, 2012, should be treated identically to new wind generation once their current commercial arrangements expire, or when they are subject to renewal.”

Snohomish County PUD commented that unless a new non-federal resource is developed to serve a utility's native load or its load growth, there should be no compensation paid under Attachment P.

Response:

Bonneville has revised Attachment P to provide compensation for RECs and PTCs for all existing and new generators. However, Bonneville will not compensate generators for foregone revenues or penalties for failure to deliver energy under power sales contracts signed after March 6, 2012. Generators with contracts for the sale of unbundled RECs and power sales agreements for bundled RECs and energy executed prior to March 6, 2012, will also be able to claim other contract costs, such as penalties, due to the displacement. Generators with new contractual arrangements entered into after March 6, 2012, will only be able to claim the costs of unbundled RECs and PTCs.

Bonneville will compensate generators for the costs of PTCs and RECs regardless of when the power sales contract was executed, as generators have no control over RECs and PTCs that they otherwise would receive for generating energy. However, generators do have significant influence and control over the terms of future contracts. Attachment P gives generators clear notice that they will be subject to displacement without compensation for power purchase agreements that penalize the generator for

failing to deliver power from a specific facility. Bonneville is prepared to work with the wind community to ensure that RPS policies enable this kind of fuel substitution during periods of high total dissolved gas on the Columbia River.

Comment:

A number of comments addressed whether the criteria for receiving compensation under the displacement cost curve should be based on commercial operation date or contract date. PG&E and SCE suggested that the criteria should be based on contract date to address existing contracts that have not yet reached commercial operation. Caithness suggested that section 3(a) might be modified to provide that a project will qualify for compensation under that provision if, by March 6, 2012, a project has: (1) begun to generate energy for sale, or (2) committed all project output to sale under long-term power sale agreements.

Response:

Generators that have contractual arrangements in place before March 6, 2012 will be fully compensated. Generators entered into these contracts before they had notice of Bonneville's final oversupply protocol, and based their economic arrangements accordingly.

Comment:

RNP indicated that Bonneville's proposal to treat new generators differently is discriminatory.

Response:

Bonneville has revised this part of the proposal significantly. As stated above, Bonneville will be compensating all generators for the lost value of PTCs and RECs, regardless of contract date. However, because generators entering into new contractual arrangements have notice that they will be subject to displacement and can structure their contracts accordingly, they are not similarly situated with respect to such contracts as compared to generators with existing contractual arrangements.

Comment:

Bonneville proposed that new generators would be given two options for treatment. One option was to opt to receive zero compensation and not be subject to the cost allocation. Some commenters requested that this same option be given to existing generators.

Response:

Bonneville agrees with this proposal and has amended Attachment P to give all generators the choice of being compensated for eligible costs and being subject to cost allocation, or to not be compensated for eligible costs and not be subject to cost allocation.

Comment:

PGE requests that Bonneville define "all other reasonably practicable actions to mitigate TDG levels" that will be implemented before Bonneville implements least-cost displacement. Puget comments that the Oversupply Management Protocol should include a commitment that Bonneville will take all reasonable actions before implementing displacement. Puget states that these actions should include, among others, bilateral sales, deferred maintenance, increased pumping, and payment of negative prices if they are less than the cost of implementing the protocol.

Response:

As detailed at length in Bonneville's answer to the complaint in this case, Bonneville took a variety of actions in 2011 to mitigate high water conditions before implementing environmental redispach.

Bonneville intends to continue to take all reasonable actions before implementing the oversupply protocol.

However, Bonneville cannot specify a fixed set of actions that it will take in each case. Not all actions will be possible in every high water event, and Bonneville must be able to weigh their effectiveness in each case. In responding to high water events Bonneville must balance a number of factors, including the impact on TDG levels, transmission reliability, flood control, other Biological Opinion objectives, reliable load service, and safety.

In the narrative accompanying the proposal, Bonneville did reiterate its commitment to taking all reasonable operational actions before implementing Attachment P:

BPA intends to use Attachment P only as a last resort after BPA has taken all other reasonably practicable actions to mitigate TDG levels. Last year, before implementing Environmental Redispatch, BPA committed to undertaking a number of actions that effectively mitigated TDG levels. BPA remains committed to taking all reasonable actions to reduce excess spill and mitigate TDG levels before invoking Attachment P.

In 2011 Bonneville took almost all of the actions PSE requests. It will continue to do so as circumstances warrant.

Negative Prices

Comment:

A number of commenters indicated that Bonneville should pay negative prices and allow the market to function in lieu of using Attachment P. In addition, a number of comments were submitted arguing that Bonneville should pay negative prices if it will lead to lower costs than using Attachment P.

Response:

Bonneville will use Attachment P to moderate TDG levels but will not pay negative prices. Bonneville does not believe paying negative prices to moderate TDG levels will result in a well functioning market. As discussed in last year's Record of Decision on BPA's Interim Environmental Redispatch and Negative Pricing Policies, Bonneville needs to generate power in order to moderate TDG levels and cannot make a rational economic choice whether or not to accept any particular price for its power. As a result, marketers will be able to charge any price for accepting Bonneville's power. In addition, thermal generators will likely hold out for negatively priced power once Bonneville begins paying negative prices. Bonneville does not believe other entities should be allowed to profit in this manner at Bonneville's expense when Bonneville must comply with its environmental responsibilities.

In addition, determining whether the payment of negative prices is cheaper than using the cost curve is extremely difficult, as Bonneville cannot forecast the precise amount of displacement needed for any hour in a timeframe to allow for marketing opportunities. As a result, BPA could pay negative prices when not needed to moderate TDG levels, creating a substantial risk that managing oversupply will be more costly.

Cost Curve

Comment:

Snohomish, WPAG, and PNGC argued that cost curve data should be transparent to all parties, including the quantity and cost of displacement.

Response:

Bonneville will report annually the MWh of energy displaced and the aggregated costs incurred under Attachment P. The cost curve and specific costs are confidential and will not be shared.

Comment:

PPL suggests that Bonneville should use an independent market operator.

Response:

Bonneville will use an independent evaluator to handle all displacement cost information and to create the cost curve. Bonneville believes that use of an independent evaluator is sufficient to ensure confidentiality and to ensure that generators are displaced in the appropriate order.

Comment:

Windy Flats commented that the methodology is vague, difficult to apply, and may not capture the true loss.

Response:

Bonneville understands the difficulty in developing a methodology that accurately captures the costs of each generator. Therefore, Bonneville has revised Attachment P to allow the generators to determine their costs, subject to validation by the independent evaluator.

Comment:

A number of commenters questioned why Bonneville's proposal does not take into account the impacts to counterparties to the generators' contracts. They expressed concern that while these contract holders will still receive energy, they are not going to receive the RECs they have contracted for and that the energy they receive will not meet their RPS requirements.

Response:

Bonneville understands that renewable energy is required to meet state RPS standards, and that the purchasing entity is expecting to receive that energy. However, when displacement occurs, the purchasing entity will receive free hydroelectric energy. While hydroelectric energy likely does not qualify for RPS compliance, displacement under Attachment P is similar to the purchaser's receiving hydroelectric energy under generation imbalance when the generator does not produce as expected, and the generator and purchaser have contractual mechanisms for dealing with such issues. Bonneville has considered the impacts on counterparties to the generators' contracts, but believes that these impacts are a matter of contract between the parties.

Comment:

Sierra Pacific Industries (SPI) raised concerns that section 6 of Attachment P does not take into account the physical and contractual issues of cogeneration facilities. Specifically, SPI states that the language for compensation is vague and does not ensure that SPI will not experience economic harm. In addition, SPI states that Attachment P has no specifics on minimum generation levels.

Response:

Cogeneration facilities that receive PTCs and RECs may claim displacement costs under Attachment P. All facilities will be able to calculate their own costs of displacement, as long as those costs are certified and justified by supporting data and documentation. In addition, Attachment P now includes a detailed list of factors a generator may consider in establishing minimum generation levels and ramp rates.

Comment:

NIPPC commented that thermals should be allowed to opt for compensation.

Response:

Attachment P allows thermals to opt for compensation if the generator experiences lost PTCs or RECs as a result of displacement. If a generator chooses not to be compensated, the generator will not be required to be a part of the cost allocation.

Comment:

PPL and TransAlta commented that thermal generators experience operational costs from displacement for which they should be compensated.

Response:

Thermal generators traditionally accept low- or zero-cost hydropower and voluntarily shut down during times of high water. If thermal generators experienced costs from displacement, they would not have voluntarily reduced generation in prior years or else such costs would have been reflected in their positive-priced bids for surplus hydroelectric power. In addition, thermal generators can establish minimum generation and maximum ramp rate levels to account for a variety of factors that might otherwise cause them to incur costs.

Comment:

SCE commented that thermal generators should be required to pay for the hydropower they receive because thermal generators experience cost savings from displacement.

Response:

Bonneville will not require thermal generators to pay for displacement under Attachment P. Most if not all thermal generation in Bonneville's balancing authority area will have voluntarily shut down with offers of low- or zero-cost hydropower before Bonneville implements Attachment P. Bonneville does not want to impede or discourage thermal generators' historical practice of cooperation in oversupply situations.

Displacement Costs

Comment:

A number of commenters indicated that generators should be able to update their displacement costs instead of submitting just one annual figure. The proposed intervals for updates ranged from real-time updates to monthly.

Response:

Attachment P has been revised to allow for generators to submit revised costs to the independent evaluator at any time. Revised costs will be included in the cost curve as of the first day of the second month following submission of the costs.

Comment:

A number of commenters indicated that it was unclear what qualified as displacement costs. More specifically, commenters expressed concern that the value of RECs varies by generator and stated that Bonneville's proposed valuation was not correct.

Response:

Attachment P allows generators to recover all costs related to PTCs and RECs. However, for contracts for the sale of unbundled RECs or bundled RECs entered into after March 6, 2012, generators will not be able to claim lost revenues for the failure to deliver energy, or contractual penalties.

Bonneville understands the difficulty in developing a formula to determine the value of RECs. Bonneville has revised Attachment P to allow a generator to determine the market value of its lost RECs, as long as the generator's determination is certified and supported by data and documentation.

Comment:

NIPPC states that compensation to a displaced generator should also include: lost revenue, failure to deliver renewable energy, disruption on hedging transactions, and variable costs incurred as a result of involuntary curtailment

Response:

Bonneville will compensate generators for lost PTCs, RECs, and other contract costs (for contracts executed prior to March 6, 2012) directly related to displacement. We have no evidence that generators incur any other costs as a result of displacement.

Comment:

WPAG has expressed concern about capping costs of displacement. WPAG indicates that the \$12 million estimate for costs related to Attachment P should be used as a cap for Attachment P costs.

Response:

Attachment P is intended to provide equitable compensation to generators that have economic models tied to actual production. While the \$12 million figure is an estimate for how much displacement is expected to cost, the cost could be much more depending on conditions. If a cost cap were implemented, many generators would be left without compensation if the costs exceeded the \$12 million estimate. The Commission invalidated Bonneville's prior Environmental Redispatch policies. Bonneville's oversupply proposal responds to the Commission's order. Given that context, Bonneville believes that the proposal represents a reasonable balance of Bonneville's statutory responsibilities and the need to craft a proposal that the Commission will approve.

Columbia Generating Station (CGS)

Comment:

One area of comments focused on the extent to which CGS generation levels should be reduced before Bonneville implements Attachment P. MSR stated that substituting very low-cost hydroelectric energy during the run-off for 1100 MW of nuclear-fueled thermal energy should be a win-win. SUB suggested

that CGS should be redispatched before curtailing wind generation. Other commenters (Energy Northwest, PPC, Franklin PUD, WPUDA, RNP) encouraged operation at safe and reliable levels.

Response:

Bonneville does not own or operate CGS. Instead, Bonneville is entitled as a matter of contract to the output of CGS. Consequently, this is a decision for Energy Northwest. Like any other thermal resource in the Bonneville balancing authority area, CGS will be directed to operate to minimum generation levels consistent with ramp capability, plant reliability and safety, and commitment to providing local VAR support or operating reserves.

Based on information provided by Energy Northwest, BPA understands that because nuclear power plants have limited ramping capability, 85% of nameplate is the preferred level of generation for CGS that provides reliable operations and ability to respond to requests to ramp. Cycling CGS from 100% to 85% is a much simpler operation than going to lower power levels. The reactor power level is changed by adjusting reactor recirculation pump (“RRC”) speed to reduce reactor flow as the secondary side (turbine generator, condensate and feed water system) is monitored to ensure it is automatically adjusting to the change in power level. No major pieces of equipment need to be realigned or taken out of service.

Cycling CGS to a lower level requires RRC pump speed to be lowered and control rods to be inserted to further reduce reactor power. In addition, the power level change necessitates the manipulation of equipment such as the removal of feed water reheaters from service. This increases the thermal cycles on CGS equipment. Increased thermal cycles over time result in steam leaks or degradation of pump mechanical seals that may require additional outages to repair. Manipulating CGS equipment in this manner can increase the probability of operator error, which can compromise reliability. As stated in Energy Northwest’s comments, the frequent manipulation of power levels at CGS can place strain on control room operators and stresses on plant equipment that were never intended.

Comments:

RNP suggested that CGS move from a bi-annual refueling cycle to an annual refueling cycle. Energy Northwest, PPC, Franklin PUD, WPUDA supported the bi-annual refueling cycle. Energy Northwest commented that annual refueling outages would substantially raise operating costs, significantly increase radiation dose to its workforce, and further increase stresses on plant equipment, adding more challenges to plant operations.

Response:

As indicated above, this is a decision for Energy Northwest. However, Bonneville understands that Energy Northwest will maintain the bi-annual refueling cycle. A 1998 study was conducted by Energy Northwest’s internal staff and by an independent consultant to determine whether to operate CGS on a 12-month refueling cycle rather than a 24-month refueling cycle. Both Energy Northwest’s internal staff and the independent consultant concluded that a 24-month refueling cycle would reduce costs and provide other benefits over a 12-month refueling cycle. The study concluded that the cost savings of 24-month refueling cycles over 12-month refueling cycles was expected to be in the range of \$8-\$10 million per year.

The study considered the following factors as part of its economic analysis:

- Fuel cycle costs as a function of cycle length;
- Refueling outage lengths and costs; and

- Availability and capacity factors with respect to replacement power costs.

Other factors considered were decreased collective radiation exposure, increased ability to plan the refueling outage and outage work, and staffing demands caused by annual outages.

Further, there are many intangible benefits that occur on a 24-month refueling cycle such as a reduction in radiation exposure to personnel, stress on personnel, and additional time to properly plan the execution of the next refueling outage. Planning a refueling outage is a significant undertaking that requires coordination of multiple efforts from completion of the design of projects, to the ordering of replacement parts, to sequencing of work to ensure that plant safety systems remain functional, to arranging for supporting personnel and specialty contractors, to completing security screening and training of typically more than 1,000 outage workers.

E-Tags

Comment:

Bonneville received multiple comments on whether the Oversupply Management Protocol was consistent with e-tagging standards. PGE and Powerex cited the Commission's December 7, 2011 order, in which the Commission stated that Bonneville "should update e-tags in accordance with applicable North American Electric Reliability Corporation and North American Energy Standards Board standards."

Response:

Implementation of the Oversupply Management Protocol is consistent with all applicable e-tagging standards. Displacement transactions that occur prior to the start of the operating hour are appropriately tagged using the FCRPS as the source. However, Attachment P is not used until after the start of the operating hour. Attachment P is similar to the use of generation imbalance service, and no changes to the e-tag are required.

The Commission's order did not state that Bonneville's practice violated any e-tagging standards. Bonneville has requested clarification and rehearing of the Commission's order in the event the Commission meant to suggest otherwise.

Large Generator Interconnection Agreements (LGIAs)

Comment:

PGE commented that changes to LGIAs cannot be made unilaterally.

Response:

Article 9.3 of the LGIA gives Bonneville the right to make unilateral changes to Appendix C for operational and reliability reasons. The Commission has ruled that Article 9.3 gives Transmission Providers this right. *Bonneville Power Admin.*, 112 FERC ¶ 61,195, at P 19 (2005). The Oversupply Management Protocol is an operational protocol that falls within the scope of Article 9.3.

Comment:

PG&E commented that it was unclear how Bonneville will collect accurate displacement costs from generators if they are not Bonneville transmission customers, and that only generators have accurate cost information.

Response:

Attachment P puts the obligation on the owner or operator of the generating facility rather than the transmission customer to submit costs. In order to make clear that all generators, not just transmission customers, are subject to the Oversupply Management Protocol, Bonneville is amending Appendix C to LGIAs to reference the Oversupply Management Protocol.

Reliability

Comment:

The Springfield Utility Board and Powerex commented that Bonneville's Oversupply Management Protocol may cause congestion and impact reliability.

Response:

Bonneville does not expect the Oversupply Management Protocol to impact congestion and reliability. The magnitude of the changes in generation patterns created by the substitution of Federal hydropower is nothing new. Bonneville has experienced similar changes in generation patterns in the past, and has not run into significant issues with reliability or transmission congestion.

Further, Bonneville's Dispatchers will be constantly monitoring the implementation of Attachment P. If its implementation creates congestion or reliability issues, Bonneville will take all necessary actions to ensure system reliability.

Biological Issues

Comment:

Save our Wild Salmon (SOS) commented that the current proposal again ignores the many alternatives at Bonneville's disposal and has insufficient biological justification. SOS continues to allege that Bonneville is using salmon protection as an excuse for policy decisions regarding wind power curtailments, despite a lack of scientific evidence supporting its claims. SOS then has several suggestions on how the river should be better managed to protect salmon, including that Bonneville should manage TDG to the Oregon's TDG standard of 120% in the tailrace, and also base its management on actual in-river conditions.

Response:

While we respect SOS's dedication to salmon conservation, we respectfully cannot agree to their recommendations. As far as managing to the Oregon TDG limits (as opposed to Washington's), we agree that operating in that manner could result in very small increases in spill.

However, under the Clean Water Act, when two states have applicable water quality standards, such as on the Columbia River (i.e. Washington and Oregon), Bonneville and the other federal agencies responsible for water management take reasonable actions to moderate TDG in accordance with the more stringent of the two state's standards. Although SOS states in their letter that Oregon's TDG water quality standard is "the more stringent," based on our analysis managing to the Oregon TDG waiver would result in exceeding Washington's 115% 12 hour average TDG water quality standard.

Moreover, we note that SOS recently sued the State of Washington in an effort to force the state to drop its 115% forebay 12-hour average TDG water quality waiver, so that like Oregon, Washington

would rely only on the 120% tailwater 12-hour average TDG water quality standard. The court upheld the State of Washington's 115% TDG exemption. We believe that that challenge, against the State of Washington - the entity with the authority and responsibility to establish water quality standards - is the appropriate forum to resolve these issues, not the Oversupply Management Protocol.

Comment:

Mr. Martino commented that it is far from clear that Bonneville has explored its options to spill and benefit fish without incurring excess nitrogen saturation. He recommends that Bonneville open discussions with fisheries agencies on how to spill and benefit fish and that Bonneville withdraw its proposal to pay non-hydro producers to shut down.

Response:

It is not clear what Mr. Martino is referring to when he states that BPA has not explored options to spill without incurring excess nitrogen. To the contrary, the FCRPS Biological Opinions and the many implementation plans issued over the last 15 or so years demonstrate that the Action Agencies (U.S. Army Corps of Engineers, Bureau of Reclamation, and Bonneville) have constructed a multitude of structural improvements at the dams designed to improve fish passage by improving spill conditions, costing many millions of dollars. In addition, the Corps has conducted a steady stream of studies, including one in the late 90's that looked at structural modifications to reduce gas and other studies that looked at optimizing various spill patterns at the various projects. Dam operations have also been adaptively managed to optimize juvenile fish passage survival.

Comment:

SOS commented that it believes Bonneville's policy is based primarily on economics and not the biological needs of Columbia and Snake River salmon. SOS believes that TDG constraints cited by Bonneville as limitations on its ability to spill water for salmon have little biological basis. SOS notes that when SOS and its partners petitioned the Washington Department of Ecology for a change in the standard, Bonneville actively opposed the change and sought to keep the 115% forebay standard. According to SOS, Bonneville has also failed to seek a waiver from Washington's standards during overgeneration episodes, an option very much available to the agency.

Response:

For a detailed response to the biological issues, please read the Affidavit of Jason Sweet, attached to our Answer filed with FERC in Docket No. EL11-44-000 on July 19, 2011, and the 2009 Washington and Oregon report that served as the basis for the respective State TDG water quality standard decisions (also attached to that Affidavit.) But in short, we continue to believe the ability to displace generators within our balancing authority results in reductions in system TDG, and thereby benefits migrating salmon and steelhead, as well as other aquatic biota. As far as the charge that the policy is primarily based on economics rather than biology, Bonneville disagrees. In its filings with the Commission, Bonneville explained at length how its actions benefit endangered fish and other aquatic life.

Discrimination

Comment:

Bonneville received a number of comments stating that the Oversupply Management Protocol discriminated against wind generators and does not provide comparable transmission service.

Response:

The Oversupply Management Protocol is different from last year's Environmental Redispatch Policy, as generators will be compensated for displacement. The protocol provides an equitable, short-term solution to the concerns expressed by the Commission that Bonneville's Environmental Redispatch Policy "impinges on the transmission service obtained by non-Federal generation" and imposed "business, commercial, and economic impacts," specifically lost PTCs and RECs. *Iberdrola Renewables, Inc. v. Bonneville Power Admin.*, 137 FERC ¶ 61.185, at P 62, 63. It reconciles the standard of comparable and not unduly discriminatory or preferential transmission service with Bonneville's statutory responsibilities, as required by the Commission and as outlined in Bonneville's filing with the Commission.

Legislation

Comment:

Franklin PUD commented that Bonneville should continue to pursue legislative solutions to allow for hydropower to displace wind if necessary to comply with environmental laws.

Response:

Bonneville will continue to work with the interested parties in the region on legislative solutions. Legislative solutions that allow displaced generators to remain eligible for renewable energy incentives that continue to promote renewable energy development would mitigate the potential economic impacts of displacement.

Power Sales Agreements

Comment:

WPAG commented that the Oversupply Management Protocol should clarify that all contractual arrangements under a customer's Network Transmission Service Agreements and Power Sales Agreements will be satisfied when a customer's resources are displaced.

Response:

Bonneville does not believe any of a customer's contractual arrangements with Bonneville are implicated by the Oversupply Management Protocol. Should a problem arise, Bonneville will work with customers to find a solution.

Aquifer Release

Comment:

Idaho Water Resource Board commented that Bonneville could partially mitigate high flows by managed recharge of Idaho's Eastern Snake Plain Aquifer.

Response:

Thus far Bonneville has been unable to identify any diversion of water to aquifer recharge sites that would be an effective response to oversupply. However, Bonneville is prepared to work with interested parties to try to identify instances in which such action would be beneficial.

Reserves RFP

Comment:

In 2011, Bonneville held a request for proposals for "DEC-ing" reserves from non-Federal generation. Bonneville should either demonstrate that the results of the RFP were inapplicable or make appropriate use of DEC-ing resources bids. DEC-ing bids from third parties, where they provide relief from oversupply conditions at lower prices than direct displacement of other forms of generation, should be part of the Protocol's displacement cost curve.

Response:

Bonneville's RFP requested bids for DEC reserves for July 2012 through September 2013, excluding April 1 through June 30, when Bonneville expected to be facing oversupply conditions. BPA did not request DEC resources for this period since Bonneville does not expect thermal resources to be running that could supply DEC reserves on an economical basis. Bonneville had assumed in its rate case that the resources offered under the RFP would have costs comparable to those Bonneville incurs to provide DEC reserves but found that the costs were significantly higher. Even if the cost of non-Federal DEC resources was not a concern, running a thermal plant during oversupply conditions to ensure that it could be reduced or DEC-ed within-hour would hurt rather than help the oversupply situation.

Information Posting

Comment:

A number of commenters made suggestions regarding the information Bonneville should provide during and after oversupply events. PGE asked that, within 60 days of closure of each fiscal year that the protocol is in effect, Bonneville report to the region the events that triggered each oversupply situation and the prudent actions Bonneville employed in advance and during the event to prevent or minimize its costs incurred. NWECC commented that the protocol should include a thorough and transparent review of conditions, choices and results of its implementation, including full consideration of data and analysis methods. NRU commented that Bonneville should post monthly reports of the costs and MWh of energy displaced.

Response:

Bonneville understands the need to provide information surrounding oversupply events, and we are committed to doing so, with the frequency and format for how this additional information will be shared still to be determined. As noted in Attachment P, we have made a commitment to provide yearly totals. Beyond that commitment, and the additional information to be provided, we are also open to further discussion with other parties about our oversupply policy.

Pumped Storage

Comment:

Two individual commenters suggested that Bonneville consider pumped storage as a solution to high-water events. In addition, the National Hydropower Association commented that pumped storage development could play a significant role in resolving the problem by storing excess energy until supply no longer exceeds demand.

Response:

In 2010 Bonneville commissioned a study called "Hydroelectric Pumped Storage for Enabling Variable Energy Resources within the Federal Columbia River Power System" from HDR

Engineering, Inc. After reviewing the energy storage options available, HDR concluded that pumped storage, although costly, could provide energy storage as well as other benefits, including hydrologic storage, electrical load balancing, frequency control, and incremental and decremental power reserves. Bonneville is working with the Bureau of Reclamation and the Columbia Basin Irrigation Districts to evaluate the potential for modernization and upgrade of equipment at the John W. Keys III Pump Generating Plant at Grand Coulee Dam. So far other storage projects do not appear to be cost-effective, but Bonneville continues to explore storage as an option through its technology innovation and demand response initiatives.

Scope of Commission's Order

Comment:

NIPPC, RNP, PGE, Petitioners, PSE, and AWEA comment that Bonneville should file a complete open access transmission tariff in response to the FERC order. NRU and PNGC, on the other hand, comment that the issues being addressed in Bonneville's public tariff process are separate and distinct from the issues in the environmental redispatch proceeding. NRU and PPC comment that Bonneville's cost allocation proposal is outside the scope of the FERC filing and not before the Commission for review in this proceeding.

Response:

Bonneville believes the Commission ordered it only to file tariff provisions that address the comparability concerns with regard to environmental redispatch, as noted in its request for clarification and rehearing. As the Commission has not yet responded to Bonneville's request, Bonneville is acting on its understanding of the Commission's order. Bonneville is preparing a reciprocity filing that will include its entire tariff for Commission review under the reciprocity standard. Bonneville expects to make this filing by the end of March.

Bonneville agrees that the cost allocation proposal is not before the Commission for review in this proceeding. Bonneville must set its rates in a proceeding conducted under section 7(i) of the Northwest Power Act. The cost allocation proposal will form the basis of Bonneville's initial proposal in the oversupply rate case. However, Bonneville will consider all the evidence submitted in the rate case and establish an oversupply rate only at the end of the case, at which time it will submit the rate to FERC for its review.

Cost Allocation

Comment:

Several parties made suggestions regarding the appropriate allocation of costs of displacement under the oversupply management protocol. Puget commented that it was inappropriate to adopt the protocol without providing assurance of how costs will be allocated. SCE said that the details of cost allocation should be included in the protocol. Other parties made similar comments. Many commenters explicitly recognized that the protocol cannot establish a cost allocation methodology, nor can it bind the Administrator to a particular rate design or methodology. A number of commenters reserved comment on the cost allocation proposal until the rate case, while others offered responses to the proposal.

Response:

In the narrative explanation of the Draft Oversupply Management Protocol, Bonneville set out a potential cost allocation of oversupply costs resulting from the protocol. As explained in the narrative, Bonneville cannot commit to adopt any particular form of cost allocation for the costs associated with the Oversupply Management Protocol, as Bonneville must establish rates under the rate-setting procedures of the Northwest Power Act. Because, however, Bonneville intends to submit the cost allocation proposal as part of its initial proposal in the rate case, Bonneville requested comments on the proposal.

Bonneville has indicated that its initial proposal in the oversupply rate case Bonneville will propose that 50% of the costs be allocated to users of the Federal base system and 50% to generators in Bonneville's balancing authority area that elect to be compensated for their costs of displacement. Because Bonneville can allocate costs and set rates only in a rate case held under section 7(i) of the Northwest Power Act, Bonneville cannot commit to a cost allocation in its filing or in the protocol.

Section 7 of the Northwest Power Act governs the establishment of Bonneville's rates. Section 7(a) provides that the Bonneville Administrator "shall establish, and periodically review and revise, rates for the sale and disposition of electric energy and capacity and for the transmission of non-Federal power." 16 U.S.C. § 839e(a)(1). The rates are to be established

to recover, in accordance with sound business principles, the costs associated with the acquisition, conservation, and transmission of electric power, including the amortization of the Federal investment in the Federal Columbia River Power System (including irrigation costs required to be repaid out of power revenues) over a reasonable period of years and the other costs and expenses incurred by the Administrator pursuant to this chapter and other provisions of law.

Id. Under section 7(a)(2), the rates become effective "only . . . upon confirmation and approval by the Federal Energy Regulatory Commission" upon a finding that the rates are sufficient to assure repayment of the Federal investment in the Federal Columbia River Power System and meet the Administrator's other costs; are based upon the Administrator's total costs; and as to transmission rates, equitably allocate the costs of the Federal transmission system between Federal and non-Federal power utilizing such system. *Id.* § 839e(a)(2).

Section 7(i) of the Northwest Power Act sets forth the process the Administrator must follow in establishing rates. It provides as follows:

In establishing rates under this section, the Administrator shall use the following procedures:

(1) Notice of the proposed rates shall be published in the Federal Register Such notice shall include a date for a hearing in accordance with paragraph (2) of this subsection.

(2) One or more hearings shall be conducted as expeditiously as practicable by a hearing officer to develop a full and complete record and to receive public comment in the form of written and oral presentation of views, data, questions, and argument related to such proposed rates. In any such hearing—

(A) any person shall be provided an adequate opportunity by the hearing officer to offer refutation or rebuttal of any material submitted by any other person or the Administrator, and

(B) the hearing officer, in his discretion, shall allow a reasonable opportunity for cross examination

Id. § 839e(i)(1)-(2).

At the conclusion of the hearing, the Administrator

shall make a final decision establishing a rate or rates based on the record which shall include the hearing transcript, together with exhibits, and such other materials and information as may have been submitted to, or developed by, the Administrator. The decision shall include a full and complete justification of the final rates pursuant to this section.

Id. § 839e(i)(5). Finally, “[t]he final decision of the Administrator shall become effective on confirmation and approval of such rates by the Federal Energy Regulatory Commission pursuant to subsection (a)(2) of this section.” *Id.* § 839e(i)(6).

Thus, the Northwest Power Act sets forth a formal process that the Administrator must follow in establishing rates. This process affords parties considerable procedural rights that the Administrator must honor. The Commission reviews Bonneville’s rates only after the conclusion of the process.

Bonneville can lawfully commit to proposing a given rate or cost allocation as its initial proposal in the rate case. As noted above, however, the Administrator must allow parties an opportunity to challenge the proposal and must make his decision establishing the rates on the rate case record. The initial proposal in the rate case cannot legally bind the Administrator.

Therefore, Bonneville has included in this filing the cost allocation methodology that will form its initial proposal in the oversupply rate case. Any party that disagrees will have full opportunity to challenge Bonneville’s proposal on this or any other relevant ground and to propose another cost allocation proposal that would satisfy the applicable statutory criteria.

Bonneville expects to start the formal process this spring and finish later this year. At the conclusion of the rate case the Bonneville Administrator will make his decision and submit proposed rates to the Commission under section 7 of the Northwest Power Act. The Commission will be able to review the rates at that time.

Comment:

Petitioners argue that Bonneville may hold a rate case only after the Commission has approved a new oversupply policy.

Response:

Bonneville disagrees. Beginning a rate case this summer will not harm any parties because rates cannot go into effect until approved by the Commission. Scheduling the oversupply rate case before the BP-14 general rate proceeding significantly reduces the administrative burden of the BP-14 rate case on Bonneville and the rate case parties. In addition, the rate case will help inform future resolution of oversupply problems.

Comment:

In the narrative explanation of the draft protocol, Bonneville introduced a proposal to allocate approximately 50% of the oversupply costs to the users of the federal base system and approximately 50% of the costs to wind generators in Bonneville's balancing authority area. Comments on this proposal ranged from arguments that the oversupply costs are fish and wildlife costs and must be recovered through power rates, to arguments that the costs should be borne by consumers of wind power, to the argument that the costs are transmission costs. A number of parties either questioned the legal basis for the cost allocation proposal or asked that Bonneville supply more justification for the allocation of costs. Several commenters questioned whether the proposal meets the equitable allocation standard of the Northwest Power Act.

Response:

As Bonneville noted in its narrative, its cost allocation proposal will form its initial proposal in the rate case. Parties to the rate case will be able to raise all legal and other challenges to the proposal at that time and the Administrator will consider all such challenges in making his final decision. Neither this comment process nor Bonneville's filing with the Commission is the proper forum to test either the legality or the factual justification of any particular cost allocation methodology.

Comment:

A number of commenters suggested that Bonneville should adhere to the principle of cost causation in allocating oversupply costs.

Response:

Bonneville agrees that cost causation is an appropriate standard. Although this issue too will be addressed in the rate case, Bonneville will note that, as outlined in its filing with the Commission, it believes that the proposed allocation adheres to the principle of cost causation. On the one hand, the need for an oversupply management protocol relates to Bonneville's fish mitigation obligations. On the other hand, Bonneville adequately managed high-water occurrences before the advent of wind generators connecting to Bonneville's transmission system. Therefore both users of the hydroelectric system and of wind generation contributed to the costs. The issue of cost causation will be a topic of discussion in pre-rate case workshops and during the rate case.

Comment:

Several commenters objected to the proposed use of transmission rates (through a new control area charge) to recover oversupply costs. Other commenters suggested that use of transmission rates is the preferred approach and that the cost should be spread broadly to all transmission users. The Petitioners suggested that if the oversupply costs are considered transmission costs, then they are system costs that should be shared by all users of the system, rather than directly assignable, non-grid costs.

Response:

Whether the costs should be recovered through power rates or transmission rates will be a topic of discussion in pre-rate case workshops and during the rate case. Bonneville does note that even if the costs are allocated to transmission rates (i.e., transmission and ancillary and control area service rates), that does not necessarily mean that all transmission users would pay the rates. Not all transmission rate schedules apply to all transmission customers.

Comment:

NIPPC suggested that if thermal plants are compensated, they would be subject to paying the oversupply rate. White Creek questioned whether the allocation factor for wind generators should be based on nameplate capacity or a usage basis. Several commenters suggested alternative rate forms, such as a displacement rate or a locational rate.

Response: Rate design will be a topic of discussion in pre-rate case workshops and during the rate proceeding. Parties may raise their cost allocation and rate design proposals in those forums.

Comment:

Several commenters offered suggestions regarding the costs that should be recovered by the oversupply rate. WPAG suggested that Bonneville include foregone revenues as recoverable costs. Conversely, Turlock pointed out that generators traditionally experience foregone revenues during certain periods, so that oversupply does not present a unique situation. NRU suggested that administrative costs, such as the cost of the cost curve audits, be included as recoverable costs.

Response:

Cost recovery will be a topic of discussion in pre-rate case workshops and during the rate case. Parties may make their arguments for the appropriate costs to include in the rates in those forums.

Comment:

The Petitioners argued that charging oversupply costs to the wind generators violates the Commission's prohibition of "and" pricing.

Response:

Petitioners may raise the issue of "and" pricing in pre-rate case workshops and during the rate case. Bonneville would note, however, that even the Petitioners' comment notes that "the Commission's transmission pricing guidelines" provide, among other things, "that a public utility" may not adopt "and" pricing. Bonneville is not a public utility, and its ratemaking is governed by the Northwest Power Act, not by FERC's pricing guidelines.

Comment:

Several commenters take issue with the use of transmission reserves. BPA noted that it does not have time to hold a rate case for fiscal year 2012, and therefore the costs associated with the Oversupply Management Protocol for 2012 will be covered through transmission financial reserves, which would be recovered under the cost allocation methodology adopted in the rate case.

Response:

The narrative explanation stated that the oversupply rate would be structured to recover both future costs and the 2012 oversupply costs that are covered by use of transmission financial reserves. The prompt start of the oversupply rate case should alleviate concerns that Bonneville's transmission rates may be adversely affected by the expenditure of transmission financial reserves. We expect to recover and repay the transmission reserves without any effect on transmission rates.

Oversupply Management and Balancing Reserves

Comment:

WPAG commented that in 2011 Bonneville released capacity reserved for balancing services to mitigate oversupply conditions and that the Oversupply Management Policy should expressly reserve the right to do so in future high water events.

Response:

In the discussions that have taken place in the region for several years now Bonneville has articulated various operational actions it would take to mitigate high water events. Bonneville took a number of actions last year to mitigate high water conditions before resorting to environmental redispatch. One of these measures was the temporary reduction of its balancing reserves.

Bonneville has already established in the BP-12 ROD that it may reduce balancing reserves to address conflicts between the maintenance of those reserves and non-power requirements. (See BP-12 ROD sections 3.2.3.1 and 3.2.3.9.) Bonneville does not believe it needs to repeat this position in the oversupply protocol, or that it should call out a particular action in the protocol, since Bonneville takes many actions to help with oversupply conditions.

Scheduling Practices

Comment:

A number of commenters expressed concern that the Oversupply Management Protocol provides incentives to inflate schedules, since Bonneville will compensate generators for the difference between the MW of scheduled generation for the hour and the MW of generation Bonneville orders the generator to reduce to. Some commenters made specific suggestions regarding scheduling practices. ICNU and PPC commented that parties should be required to supply information to verify scheduling accuracy and that schedules should be subject to audit. PPC recommended that Bonneville should consider basing compensation on calculated output. Grant County PUD suggested that schedules should be audited and should be based on expected wind generation for the hour as determined by physics-based scheduling procedures.

White Creek Wind requested clarification as to whether compensation will be based on scheduled or potential energy and asked how closely schedules will have to match potential generation. Snohomish PUD commented that Bonneville should use a standard method for establishing generation output rather than relying upon schedules.

Response:

Scheduling accuracy is important to ensure that the compensation under Attachment P is appropriate. Bonneville has revised Attachment P to provide that schedules are subject to audit if a generator appears to be inflating its schedule or otherwise scheduling inaccurately. Bonneville will be using its own forecasts of expected wind generation to validate schedules submitted during an oversupply event. If Bonneville believes that a schedule submitted during an hour of displacement is inaccurate or inflated, Attachment P allows Bonneville to ask the independent evaluator to review. The independent evaluator may request additional information from a generator to support its submitted schedules. If the independent evaluator concludes that schedules are inaccurate or inflated, Bonneville may request the Commission to investigate further.

The suggestion that Bonneville compute the schedules itself has a number of challenges. The computed basis for payment would often differ from the amount of displacement actually provided. For example, even if a schedule is accurate the computations could result in a different figure.

In addition, using computed schedules would likely result in capturing more hours and generators for potential oversupply than system conditions warrant. Bonneville may not know whether it needs to implement Attachment P until the top of the hour. If the generators were expected to submit schedules based on computations, however, they would have to be informed in advance of this expectation, and therefore might often submit computed schedules when they were unnecessary. If, on the other hand, Bonneville changed submitted schedules to computed schedules when oversupply was imminent, it would be changing many schedules at the last minute, a less-than-ideal situation.

Definitions

Comment:

NRU and PPC comment that Bonneville should add a definition for “Displacement Hours” to specify the hours in which Bonneville compensates generators for displacement. Both parties suggest that “displacement hours” should be those in which Bonneville is providing replacement power at zero cost and the generator has reduced generation to the level ordered by Bonneville, and that they should not include the hours in which a resource is ramping down to the required level or back up to its scheduled output.

Response:

Defining “displacement hours” would add clarity to the proposal, and Bonneville has done so. In general the proposed definition is the appropriate one. However, during those hours in which a generator is ramping down to meet the required displacement level, or ramping back up to schedule, its output is reduced because of the displacement order. Therefore, it is appropriate to compensate the generator for the amount displaced.

Comment:

NRU commented that Bonneville needs to clarify the definition of “generator” to make clear whether the term refers to a generating unit or a generating plant.

Response:

Bonneville has clarified the definition in Attachment P to make clear that it applies on a facility-by-facility basis, not to each company or to individual generating units.

Generators Subject to the Protocol

Comment:

Several parties commented that Bonneville should clarify that only generators in Bonneville’s control area are subject to displacement. PGE commented that Bonneville should clarify that the protocol applies only to generators that are directly interconnected into the Bonneville balancing authority area, and does not include generators that are dynamically scheduled out of the control area or are moved into another control area by pseudo-tie. Seattle City Light commented that Bonneville should specifically exclude dynamically scheduled resources from the protocol. Turlock Irrigation District commented that Attachment P is not clear about the resources that are subject to the protocol.

Response:

Attachment P clarifies the applicability of the Oversupply Management Protocol. Bonneville is responsible for displacing those resources that interconnect to Bonneville's transmission system and affect the operation of the hydrosystem (for example, resources integrated into Bonneville's automatic generation control). Accordingly, the protocol excludes generating facilities smaller than 3 MW aggregate nameplate generating capacity (which are not operationally integrated into Bonneville's control area via automatic generation control) and generating facilities that are moved out of Bonneville's control area via pseudo-tie. Because generators that are dynamically scheduled to another control area are still integrated into Bonneville's automatic generation control system, they are subject to the protocol.

Limitation to Balancing Authority

Comment:

SOS comments that if this issue truly is about protecting endangered salmon, why is the protocol limited to paying wind generators only in Bonneville's control area? They assert that the fact that Bonneville is unwilling to do so demonstrates yet again that, when push comes to shove, this is an economic issue for Bonneville, not a fish issue.

Response:

Bonneville interconnected the wind and other resources in its balancing authority and, therefore, is responsible for not making the TDG problem any worse in its balancing authority during excess spill events. The Oversupply Management Protocol provides the mechanism Bonneville needs to moderate TDG during excess spill events due to resources interconnected within Bonneville's balancing authority. Bonneville has no obligation to displace generation outside its balancing authority during such excess spill events. Therefore the protocol does not apply outside its balancing authority.

Given that and the concerns we have previously related about unreasonable market exposure, Bonneville has no responsibility to displace generation outside its balancing authority during such excess spill events.

Business Practices

Comment:

Several customers commented that Bonneville should clarify elements of its business practices related to oversupply. PGE commented that Bonneville should clarify how customers will be reimbursed for generation imbalance services during oversupply events and that Bonneville should provide "an equitable solution for loss returns" during times of projected or actual oversupply. PNGC commented that BPA should clarify that customers will not be charged for DERBS during displacements and that Bonneville should issue annual reports listing the amount of displacement and compensation paid.

Response:

Bonneville will modify its business practices to reflect its implementation of Attachment P. Bonneville will propose to modify the Generator Imbalance business practice to exclude GI charges for generators during hours in which they are displaced. GI charges will continue to apply to all other generators and Energy Imbalance charges will continue to apply to loads.

Bonneville will also propose to waive in-kind loss returns during hours Attachment P is in effect. Bonneville also agrees that DERBS charges should not apply to a generator during hours in which the

generator is displaced. Finally, Attachment P includes a provision for an annual report that includes both the amount and cost of displacement.

DSO 216

Comment:

PGE commented that Bonneville should clarify its operational practices and objectives regarding DSO 216 prior to and after oversupply events and asks that BPA provide a forecast of DSO 216 events.

Response:

Just prior to initiating the Oversupply Management Protocol, the DEC reserves available for over generation will be closed out and the output of wind generating facilities will be reduced to the scheduled amount. This will prevent resources generating above schedule from creating or contributing to greater displacement amounts under the Oversupply Management Protocol.

Just after an oversupply event has ended, balancing reserves will be restored to a level consistent with the available balancing reserves at the time. Flexibility is typically limited at this time and large imbalances resulting from inaccurate schedules can cause DSO 216 events to occur. The frequency of these events will be determined by the accuracy of the schedules submitted. Bonneville cannot provide a forecast of DSO 216 events, as the number of DSO 216 events is dependent on the accuracy of schedules submitted.

During the oversupply event, it is important that customers continue to schedule to their loads to the best of their capabilities. Over and under scheduling resources in these conditions can result in volatility that impacts the ability to meet load, carry necessary reserves and avoid excess spill. Customers are also asked not to artificially depress the output of resources below their schedule based on anticipation of a DSO 216 order or a limit signal for oversupply management. These actions can over commit generation and force a DSO 216 curtailment event.

Following an oversupply event, if a generator's forecast for wind output does not account for the fact that the wind has been limited, those forecasts will be inaccurate and will underestimate the generation levels when the limitation is lifted. Underestimating generation levels may cause DSO 216 limitation events when coming out of an oversupply event. This problem can be mitigated if the wind facility uses the potential output of the facility in forecasting when the facility's output is limited. Potential output is an estimate of the amount the wind facility would be generating if not limited.

Thermal and Cogeneration Resources

Comment:

Several customers submitted comments regarding compensation for thermal and cogeneration resources. PNGC commented that compensation should be based on generation estimates rather than schedules for behind-the-meter resources, which submit estimates rather than schedules. Clark Public Utilities commented that its River Road thermal resource has costs not covered by Bonneville's compensation scheme, including risks of having to replace the resource temporarily and operational and reliability risks. Clark suggested that BPA should continue to allow non-VER resources to set minimum generation levels, that minimum generation levels and ramp rates should account for maintenance testing and reliability, and that Bonneville should adhere to minimum generation levels. PPL commented that thermal generators run risks of mechanical failure and costs caused by cycling the units. NIPPC commented that thermal generators suffer from reduced efficiency when redispached

and can have contractual fuel obligations or single point of delivery obligations that might be violated during redispatch.

Response:

Bonneville will include as compensable costs only Renewable Energy Credits, Production Tax Credits, and contract costs caused by the failure to generate. We understand that there may be other costs associated with reducing generation during oversupply periods. Bonneville believes these costs are offset by replacing scheduled energy from non-VER generators with free Federal power, which results in reduced fuel costs for thermal generators. Bonneville's past experience with oversupply is that virtually all thermal generators in the balancing authority voluntarily displace in return for free Federal hydropower, indicating that their savings at least equal any costs. Finally, Bonneville notes that most of the potential costs thermal generators cite are taken care of by allowing generators to set minimum generation levels.

In response to PNGC's comment, Bonneville has added a provision in Attachment P to base costs on generation estimates for behind-the-meter resources. As noted above, the operational and reliability concerns raised by Clark, PPL, and NIPPC are accounted for in the factors for establishment of minimum generation levels, and BPA will honor minimum generation levels that are established consistent with Attachment P and BPA's minimum generation business practice.

Minimum Generation Levels

Comment:

Several commenters suggested factors Bonneville should allow generators to consider in establishing minimum generation levels. Some commenters said that Bonneville should strictly honor minimum generation levels set by generators.

Response:

Bonneville has included in the protocol a number of factors that generators may consider in setting minimum generation levels and will include other appropriate factors in its minimum generation business practice if any others are identified in the public process to develop the business practice. As was the case for environmental redispatch, generators will be able to modify these levels by noon of the WECC pre-schedule day for which the modification is to be in effect. As noted above, BPA will honor minimum generating levels set in accordance with Attachment P and BPA's minimum generation business practice.

Right to Recoup Payments

Comment:

PSE comments that the protocol should include an express and enforceable waiver of the right to recoup payments of displacement costs in the event that Attachment P does not go into effect or is declared void.

Response:

Bonneville does not believe it is appropriate to include such a waiver. If Attachment P does not go into effect or is declared void, Bonneville can determine at that time whether recoupment is appropriate based on the order denying Bonneville the right to implement Attachment P or declaring it void, and other appropriate considerations.

Statutory Authority

Comment:

WPAG comments that the legality of the oversupply proposal is questionable. WPAG states that Bonneville has not cited legal authority that supports the proposal.

Response:

Bonneville's authority is based on its statutory transmission and environmental authorities and mandates, including its obligation to comply with reliability standards adopted under Section 215 of the Federal Power Act, and its authority to enter into arrangements and make expenditures to carry out its statutory responsibilities. By disposing of excess water, displacement under the oversupply protocol will preserve transmission system reliability and ensure that Bonneville meets its environmental responsibilities.

The Oversupply Management Protocol is a necessary tool for Bonneville to protect endangered fish and other aquatic species during periods of excess spill in spring and summer by moderating TDG to the extent practicable in accordance with applicable state water quality standards enacted under the Clean Water Act. In addition, the Oversupply Management Protocol ensures system reliability by balancing loads and resources. Given Bonneville's responsibilities to protect endangered fish and other aquatic species under the Northwest Power Act, Clean Water Act, Endangered Species Act and associated judicial orders, as well as Bonneville's responsibilities to maintain system reliability and comply with reliability standards, the Oversupply Management Protocol provides comparable service.

The Federal Columbia River Transmission System Act provides that the Bonneville Administrator "shall operate and maintain the Federal transmission system within the Pacific Northwest . . . to . . . maintain the electrical stability and electrical reliability of the Federal system." 16 U.S.C. § 838b(d). The Northwest Power Act requires the Administrator to

use the Bonneville Power Administration fund and the authorities available to the Administrator under this chapter and other laws administered by the Administrator to protect, mitigate, and enhance fish and wildlife to the extent affected by the development and operation of any hydroelectric project of the Columbia River and its tributaries.

Id. § 839b(h)(10)(A).

The Administrator must exercise his responsibilities for mitigating and enhancing fish and wildlife affected by the hydroelectric facilities "in a manner that provides equitable treatment for such fish and wildlife with the other purposes for which such system and facilities are managed and operated." *Id.* § 839b(h)(11)(A)(i).

The oversupply protocol ensures that Bonneville fulfills the above responsibilities. They provide authority to take action and expend funds for this purpose. In addition, the Bonneville Project Act provides that "the Administrator is authorized to enter into such contracts, agreements, and arrangements . . . and to make such expenditures . . . upon such terms and conditions and in such manner as he may deem necessary." *Id.* § 832a(f). This authority was reaffirmed in section 9(a) of the Northwest Power Act. *Id.* § 839f(a). Thus, the Administrator has broad authority to determine how best to fulfill his statutory mandates.

Ratemaking Requirements

Comment:

The Petitioners commented that providing free hydroelectric generation in substitution for other generation is a sale of power at a price of \$0/MWh, a rate that has not been established under section 7(i) of the Northwest Power Act. Petitioners add that under Bonneville's Firm Power Products and Services (FPS) rate schedule, the parties must agree on the price.

Response:

Assuming that Bonneville's substitution of hydroelectric energy for displaced energy is a sale of power, it is a sale made under the FPS rate schedule, which provides that both demand and energy charges "shall be as specified by BPA or as mutually agreed by BPA and the Customer." Therefore, the FPS rate schedule applies even if the parties have not agreed on the price.

Bonneville does not agree, however, that the substitution of hydroelectric energy for displaced energy under the oversupply protocol is a sale of power. Petitioners rely on *Portland Gen. Elec. v. Johnson*, 754 F.2d 1475 (9th Cir. 1985) (*PGE*), and *Cal. Energy and Dev. Comm'n v. Bonneville Power Admin.*, 754 F.2d 1470 (9th Cir. 1985) (*CEC*), companion cases in which Bonneville took various actions to dispose of excess water rather than spill it. In *PGE*, Bonneville sold power to its direct service industry (DSI) customers at the nonfirm rate, which the DSIs were not eligible for and which was less than half the rate that applied to them. The case did not concern environmental or reliability issues. Instead, Bonneville sold the DSIs power in excess of their current demand to "increase [Bonneville's] revenues" and to "profit from the sale of energy that would otherwise be wasted." *PGE*, 754 F.2d at 1478.

Thus, *PGE* concerned a straightforward sale of energy, purely for reasons of profit. The sale was "inconsistent with the rate schedule," and therefore normally would require modification of the rate schedule through the statutory ratemaking procedures. *Id.* at 1482.

The displacement of renewable energy under the oversupply protocol is significantly different. As Petitioners note, in this case the displacement is not pursuant to an agreement – there is no power sales contract. The purpose is not to increase Bonneville's revenues – the displacement has no such effect – but to maintain reliability and fulfill Bonneville's statutory environmental responsibilities. It is an operational action taken to moderate harm to endangered salmon and other aquatic life. The only purpose of the transaction in *PGE* was to increase sales, which "resulted in a net increase in BPA revenues." *Id.* at 1483. That is not the purpose here. To the contrary, the displacement *decreases* Bonneville's net revenues, since Bonneville is paying the displaced generators their costs.

In the companion case to *PGE*, Bonneville arranged to sell power to the owners of the Trojan nuclear plant. Bonneville's applicable rate was higher than the cost of running Trojan. To induce the Trojan owners to purchase hydroelectric power, Bonneville purchased "scheduling rights" to Trojan for approximately three months. This purchase enabled Bonneville to shut down Trojan, thereby requiring the owners to purchase power from Bonneville. Under the rate schedule, the price for the power was \$15.5 million. Because, however, Bonneville had purchased the scheduling rights for \$13.1 million, the effective price for the power was \$15.5 - \$13.1 million, or \$2.4 million.

Although Bonneville argued that it had engaged in two separate transactions – the purchase of the scheduling rights and the sale of power – the court concluded that the scheduling rights "were, by

themselves, virtually worthless to BPA” and that in reality Bonneville had paid the Trojan owners to purchase power from it. Thus, Bonneville had simply reduced the price for the sale; as in *PGE*, this was an action that normally would require modification of the rate schedule through the statutory ratemaking procedures. *CEC*, 754 F.2d at 1474.

The current oversupply case presents the converse situation. In *CEC* the court said that Bonneville was really making a sale, and payment for the scheduling rights was simply part of the sale price. In this case, Bonneville is not making a sale, but is compensating generators for their displacement. Bonneville is paying renewable generators it shuts down to compensate them for their losses.

As in *CEC*, the underlying nature of the transaction is critical. Just as in *CEC* the purchase of the Trojan scheduling rights could not be separated from the sale of energy to the Trojan owners, under the oversupply protocol the provision of free hydroelectric power cannot be separated from the displacement of renewable generation. The end game in *CEC* was increased sales, which required the purchase of scheduling rights. The end game here is displacement, which requires the substitution of hydroelectric power. And as in *PGE*, the substitution is not made pursuant to a power sales contract.

In *CEC* the transaction was a sale for \$2.4 million; in this case it is recompense for required displacement of the generator.

General Disagreement

Comments:

Bonneville received a number of comments disagreeing generally with Bonneville’s decision to compensate wind generators.

Response:

The Commission’s December 7, 2011 order found that Bonneville’s Environmental Redispatch Policy failed to provide comparable transmission service and ordered Bonneville to file tariff amendments to address this issue. Bonneville’s Oversupply Management Protocol is intended to provide an equitable response to the Commission’s order that balances all of BPA’s statutory responsibilities. As outlined in BPA’s filing with the Commission, that is what BPA has done.

National Environmental Policy Act (NEPA)

Comment:

Two commenters expressed concerns about BPA’s compliance with the National Environmental Policy Act for the implementation of the Oversupply Management Protocol and for the integration of wind power.

Response:

Bonneville will comply with NEPA for implementing the Oversupply Management Protocol. The implementation of the Oversupply Management Protocol, filed as an amendment to BPA’s Open Access Transmission Tariff, will allow Bonneville to balance generation and load under specific hydro and load conditions. The protocol would not change current status quo hydro system operations, which would continue operating within existing constraints in compliance with existing Endangered Species Act biological opinions, such as the NOAA Fisheries’ 2008 FCRPS BiOp and its 2010 supplement,

and state and tribal water quality standards. Therefore, implementing the protocol is an action that does not individually or cumulatively have a significant effect on the human environment and does not require the development of an environmental assessment or environmental impact statement. Bonneville will comply with NEPA by documenting these considerations in a Categorical Exclusion under NEPA.

With regard to NEPA compliance for the integration of wind power, Bonneville examines the environmental effects of integrating wind projects into the transmission grid in project-specific NEPA analyses. See, for example, *Whistling Ridge Environmental Impact Statement* (August 2011), and *Record of Decision for the Electrical Interconnection of the Juniper Canyon I Wind Project* (May 2010). These project-specific NEPA documents discussed the reasonably foreseeable high wind/high water effects on fish and water quality due to the integration of wind power, as well as measures to reduce or avoid those impacts.