

January 13, 2009

VIA E-MAIL

Department of Energy
Bonneville Power Administration
P.O. Box 64109
Vancouver, WA 98666-1409
Email: evking@bpa.gov
Attention: Eric King

**Re: Comments of Puget Sound Energy, Inc. on the BPA Technical Proposal
Entitled “Connecting Variable Generating Resources to the Federal
Columbia River Transmission System (FCRTS)”**

Dear Mr. King:

In this letter, Puget Sound Energy, Inc. (“PSE”) comments on the technical proposal dated December 29, 2008, entitled “Connecting Variable Generating Resources to the Federal Columbia River Transmission System (FCRTS)” (the “Technical Proposal”).

By commenting herein PSE does not waive or consent to any change in its existing contract rights, and PSE reserves any and all of its contractual and other legal rights.

The Technical Proposal proposes to address the following problem, as identified by Bonneville Power Administration (“BPA”):

Much of the wind on the BPA system has been developed in the Lower Columbia region. Wind projects located in the same general area tend to move up and down simultaneously, frequently resulting in large, unscheduled swings in wind generation. This causes BPA to increase or back off generation in like amounts in real time to maintain the constant balance of loads and resources needed to keep the lights on. Today, BPA provides these balancing services from federal dams. But the hydro system’s limits are being reached. Excessive wind generation imbalance is beginning to impose real consequences on power system operation that could affect system reliability.

Technical Proposal at p. 1. The Technical Proposal sets forth a proposal under which BPA will develop an approach to set rates in the 2010–2011 rate case that will establish the amount of balancing reserves that BPA will provide, and that approach will then apparently be carried forward to set the amount of balancing reserves and rate assumptions that BPA will use in the future. Under the proposal, following the adoption of an approach to setting the quantity of reserves carried for intermittent or "variable generating" resources in the rate case, BPA would then control intermittent resources¹ either directly or indirectly through the project operators via the approach outlined below so that BPA does not exhaust balancing reserves.

BPA proposes to calculate a total amount of balancing reserves provided for both load and resources. BPA proposes that once it deploys 90 percent of the total balancing reserves held it will either order a reduction in the output of intermittent resources that are "over-generating" or curtail the transmission schedules of intermittent resources that are "under-generating." The Technical Proposal provides that an alarm will notify BPA and operators once AGC has deployed 85 percent of balancing reserves, but is not clear how the alarm will be issued or if it will simply be a situation in which the data behind the alarm will be made available. Technical Proposal at p. 5.

The Technical Proposal discusses the possibility of "netting" facilities to alleviate the impact of some of the restrictions imposed by its new approach, but the proposal states only that BPA is "willing to explore the development of a netting approach"² and the proposed LGIA language neither facilitates nor contains any reference to netting. See e.g., Attachment C(A), Section 3(b)(ii) wherein the Interconnection Customer must reduce the output of the "Generating Facility" within ten minutes, without providing an alternate response through a netting approach.

Without netting, under the Technical Proposal, when an intermittent resource generates more energy than scheduled and BPA has consumed 90 percent of its balancing reserves, BPA's Automatic Generation Control (AGC) equipment would send a signal to the operator of the intermittent resource. This signal is considered a dispatch order by BPA and would identify the maximum generation limit to which the operator must reduce the output of the intermittent resource. If the operator of the intermittent resource fails to fully respond within ten minutes, BPA proposes to assess such operator a significant "failure to comply" penalty. The Technical Proposal would also permit BPA to take the intermittent resource off-line by opening the breaker if the operator fails to respond within ten minutes. Additionally, the Technical Proposal purports to allow BPA to seize operational control of an intermittent resource if the operator of such resource fails to fully respond to a Dispatch Standing Order three times within a 24-month period. An operator can then regain operational control of its resource only (a) after 24 months

¹ The Technical Proposal uses the term "variable generating resources" to refer to "an electric generator that is not dispatchable and cannot store its fuel source and therefore cannot respond to changes in system demand or respond to transmission security constraints." Technical Proposal at 1. This definition is the same as the definition provided for "intermittent resources" in the *pro forma* Schedule 9 (Generator Imbalance) to the *pro forma* Open Access Transmission Tariff ("OATT") under FERC Order No. 890.

² Technical Proposal at p. 5.

have elapsed; (b) under terms specified by BPA at that later date; and (c) if the generator “demonstrates to the sole satisfaction” of BPA that it has modified its operations of the resource so that it is able to fully respond to any order to reduce output within 10 minutes. Attachment C(A), Section 3(b)(iv) and Attachment C(B), Section 3(b)(1)(iv).

When an intermittent resource generates less energy than scheduled and BPA has consumed 90 percent of its balancing reserves, BPA proposes to curtail the transmission schedule, or e-tag, of the intermittent resource for the balance of the hour to the amount of the power actually being generated plus its proportionate allocation of balancing reserves for variable generation irrespective of whether the schedule is held by the generator, a recipient of the power or a third party. According to BPA, curtailing “the transmission schedule to actual variable generation output shifts the responsibility for balancing the under-generation to the wind power customer and its balancing authority.” Technical Proposal at p. 3. The proposed LGIA language contains no reference to the approach BPA has put forth for under-generation.

BPA has stated that it intends to apply the foregoing approach to balancing reserves to all new *and existing* intermittent resources interconnected to the BPA system. And while the proposal states that it is limited to intermittent resources, the draft language with which BPA intends to amend the standard and existing LGIAs is not limited to intermittent resources. For example, BPA proposes that

Transmission Provider’s Control Area requirements include compliance with operating instructions issued in accordance with Transmission Provider’s dispatch standing orders, pursuant to which, among other things, Transmission Provider may order Interconnection Customer to reduce the output of the Generating Facility in any hour to the MW amount listed in the generation schedule for the hour (or to an amount higher than that listed in the generation schedule for the hour) if Transmission Provider determines that such reduction is necessary to preserve the reliability of the Transmission System or to avoid a violation of the Clean Water Act or the Endangered Species Act.

Technical Proposal at ATTACHMENT C: LGIA: (A. Version 1: For Existing Agreements Without Equipment for Direct Control).

In any event, the proposal outlined in the Technical Proposal presents a substantial amendment to Interconnection Customers’ rights under existing Large Generator Interconnection Agreements (“LGIA”), even if the proposal were limited to LGIAs for intermittent resources.

BPA does not have the right to unilaterally amend existing LGIAs such as those with PSE. For example, Appendix C of BPA’s existing LGIAs typically provides specifically that it can only be modified or amended by mutual agreement of the Parties.

Of additional concern with regard to any modification of contract rights is the fact that BPA intends to impose the proposed modifications to existing contract rights before

it develops and finalizes the procedures under which the limitations to contract rights will be implemented and before it has defined the approach to determining the quantity of balancing reserves it will commit to provide. *See* (i) Technical Paper at p. 1, wherein BPA states that the approach will be developed in the rate case; and (ii) "Work Plan for Filing OATT Schedule 9," BPA Transmission Services, January 6, 2009, wherein development of procedures for dispatch standing orders, technical requirements, and communications protocol are listed as a related items for which no schedule is given while modification of LGIAs is listed by BPA as a critical action item completed by February of 2009.

Further, as indicated above, BPA proposes to amend Attachment C to the LGIAs to require compliance with "Transmission Provider's dispatch standing orders." There appears to be no requirement proposed by BPA that the adoption and implementation of "Transmission Provider's dispatch standing orders" be done in an open, transparent manner. Further, BPA's proposed amendment of Attachment C uses the term "among other things" in describing the purposes for which Transmission Provider's dispatch standing orders may be issued without including any express limitation on what those "other things" might be. As such, BPA's proposed LGIA amendments are unreasonably overbroad and cannot in any event be adopted by BPA unilaterally.

In addition to foregoing flaws, BPA's proposal also deviates significantly from each of the following:

- (i) the *pro forma* Open Access Transmission Tariff ("OATT") provided in Order No. 890 and related orders of the Federal Energy Regulatory Commission ("FERC");³
- (ii) the OATT of BPA on file with FERC; and
- (iii) the standard LGIA of BPA on file with FERC.

Such deviations will be discussed in more detail below.

1. The Technical Proposal Deviates Significantly From the *Pro Forma* OATT in Order No. 890-B and Would If Given Effect Nullify BPA's Obligation to Provide Generator Imbalance Service

The proposal offered in the Technical Proposal would, if given effect, nullify BPA's obligation to provide Generator Imbalance Service to intermittent resources.⁴

³ *See Preventing Undue Discrimination and Preference in Transmission Service*, Order No. 890, 72 Fed. Reg. 12,266 (Mar. 15, 2007), FERC Stats. & Regs. ¶ 31,241 ("Order No. 890"), *order on reh'g*, Order No. 890-A, 73 Fed. Reg. 2984 (Jan. 16, 2008), FERC Stats. & Regs. ¶ 31,261 (2007) ("Order No. 890-A"), *order on reh'g*, Order No. 890-B, 123 FERC ¶ 61,299 (June 23, 2008) ("Order No. 890-B").

⁴ The proposal would, if given effect, also effectively nullify BPA's obligation to provide generator imbalance to thermal and other resources, based on the failure to limit the application of the proposal in the proposed Appendix C language. Although these comments primarily address the application of BPA's proposal to intermittent resources, PSE also objects to the imposition of the proposal on other resources that do not fall under the definition of intermittent resources.

This approach is particularly troubling in light of the fact that FERC, in Order No. 890, specifically adopted generator imbalance provisions similar to the graduated bandwidth approach to imbalance charges previously implemented by BPA. According to Order No. 890, this graduated bandwidth approach to imbalance charges was intended to “increase consistency among transmission providers in the application of imbalance charges, and to ensure that the level of the charges provides appropriate incentives to keep schedules accurate without being excessive” Order No. 890 at ¶ 663. Order No. 890 recognized that BPA’s graduated bandwidth approach was particularly important to the integration of intermittent resources:

The Final Rule also benefits clean energy resources by reforming energy and generator imbalance charges. These reforms are particularly important to intermittent resources such as wind power because these resources have limited ability to control their output and, hence, must be assured that imbalance charges are no more than required to provide appropriate incentives for prudent behavior.

Order No. 890 at ¶ 5.

BPA now seeks to break from its earlier approach and effectively remove its obligation to provide generator imbalance to intermittent resources almost in its entirety by limiting the balancing reserves it will provide and imposing significant and excessive failure to comply penalties (e.g., seizure of operational control of intermittent resource facilities).

The proposal offered by BPA in the Technical Proposal penalizes intermittent resources because of the special circumstances and/or limitations of those resources. Order No. 890 obligated transmission providers to supply generator imbalance and allowed for the application of generator imbalance charges as an incentive to accurately schedule resources. In Order 890, FERC recognized that the graduated bandwidth approach to imbalance charges whereby intermittent resources were exempt from the application of the most severe penalties was necessary because of the inability of intermittent resources to control the dispatch and storage of power:

Furthermore, we conclude that the partial exemption from imbalance charges for intermittent resources appropriately reflects the special circumstances faced by such resources and, consequently, is not unduly discriminatory. Moreover, formalizing generator imbalance provisions in the *pro forma* OATT will standardize the future treatment of such imbalances from the wide variety of generator imbalance provisions that exist today in various generator interconnection agreements. Standardizing generator imbalances should lessen the potential for undue discrimination, increase transparency and reduce confusion in the industry that results from the current plethora of different approaches.

Order No. 890 at ¶ 667.

In adopting the graduated bandwidth approach modeled after BPA's prior approach, FERC identified the following three principles that must be reflected in imbalance charges:

(1) the charges must be based on incremental cost or some multiple thereof; (2) the charges must provide an incentive for accurate scheduling, such as by increasing the percentage of the adder above (and below) incremental cost as the deviations become larger; and (3) the provisions must account for the special circumstances presented by intermittent generators and their limited ability to precisely forecast or control generation levels, such as waiving the more punitive adders associated with higher deviations.

Id. at ¶ 663. The proposal outlined in the Technical Proposal is inconsistent with the three principles identified in Order No. 890 outlined above. This is of in light of the following directive in Order No. 890 with regard to the three principles of the graduated bandwidth approach:

To the extent a transmission provider wishes to deviate from these revised pro forma provisions, it may demonstrate in an FPA section 205 proceeding that the proposed changes are consistent with or superior to the *pro forma* OATT as modified by this Final Rule. However, we note *that proposed alternative provisions must comply with the three imbalance charge principles addressed in the NOPR and adopted in this Final Rule and be consistent with or superior to the specific imbalance charges set forth in the pro forma OATT* (and discussed above).

Id. at ¶ 668 (*emphasis added*). The Technical Proposal erroneously considers the special circumstances faced by intermittent resources as grounds for applying additional penalties and limiting services provided to those resources, and creates undue discrimination and an additional hurdle to the successful integration of intermittent resources.

2. The Technical Proposal Deviates Significantly From BPA's OATT On File With FERC

The Technical Proposal proposes the inclusion of an Appendix C (Technical Requirements) ("Appendix C") to Attachment C of BPA's LGIA. As pointed out above, proposed section 3(b)(i) of Appendix C provides that BPA, as part of its Control Area requirements, may order Interconnection Customer to reduce the output of a Generating Facility if such reduction is necessary to preserve the reliability of the Transmission System *or to avoid a violation of the Clean Water Act or the Endangered Species Act*:

(i) Transmission Provider's Control Area requirements include compliance with operating instructions issued in accordance with Transmission Provider's dispatch standing orders, pursuant to which, among other things, Transmission Provider may order Interconnection Customer to reduce the output of the Generating Facility in any hour to the MW amount listed in the generation schedule for the hour (or to an amount higher than that listed in the generation schedule for the hour) if Transmission Provider determines that such reduction is necessary to preserve the reliability of the Transmission System *or to avoid a violation of the Clean Water Act or the Endangered Species Act.*

Proposed section 3(b)(i) of Appendix C (*emphasis added*). In adding language allowing BPA to curtail generation and curtail schedules due to BPA's concerns with regard to the Clean Water Act and Endangered Species Act, BPA would clearly step beyond the bounds of what FERC and existing LGIAs have defined as the limited acceptable grounds under which a Transmission Provider can deviate from its service obligations. Furthermore, BPA is authorized (e.g., under Section 11(b)(6) of the Federal Columbia River Transmission System Act) and obligated under Orders 890 and 890-A (if it wishes to retain its reciprocity status) to purchase the reserves necessary to provide generator imbalance service to its customers. Under both of the foregoing provisions, BPA should turn to the market to purchase reserves if it is running into constraints on the hydro system due to its Clean Water Act and Endangered Species Act obligations.

Broadening curtailment authority to include the Clean Water Act and Endangered Species Act is a significant departure from the approach taken in BPA's recently filed OATT, which only allows curtailment of Firm Transmission Service on a non-discriminatory basis to maintain reliable operations:

In the event that a Curtailment on the Transmission Provider's Transmission System, or a portion thereof, *is required to maintain reliable operation* of such system and the system directly and indirectly interconnected with Transmission Provider's Transmission System, Curtailments will be made *on a non-discriminatory basis* to the transaction(s) that effectively relieve the constraint.

Section 13.6 (*emphasis added*). Similarly, BPA's OATT also only allows the curtailment of Non-Firm Transmission Service for reliability reasons:

The Transmission Provider reserves the right to Curtail, in whole or in part, Non-Firm Point-To-Point Transmission Service provided under the Tariff for *reliability reasons when an emergency or other unforeseen condition threatens to impair or degrade the reliability* of its Transmission System or the systems directly or indirectly interconnected with Transmission Provider's Transmission System.

Section 14.7 (*emphasis added*).

To the extent that the proposal in the Technical Proposal would allow BPA to curtail transmission for any purpose other than to maintain the reliability of BPA's Transmission System (and any system directly or indirectly connected with such system), then such proposals are inconsistent with BPA's OATT. Moreover, BPA has stated its intention to apply the proposal in the Technical Proposal only to intermittent resources. To the extent that the proposal in the Technical Proposal would allow BPA to curtail transmission of any intermittent resource differently from any other resource, then such proposal could be considered unduly discriminatory.

To be clear, PSE does not propose that BPA extend the scope of the proposal in the Technical Proposal to other resources to remedy any discriminatory impact. Indeed, PSE opposes the implementation of the Technical Proposal with respect to any generating facility interconnected with BPA's Transmission System (including, in particular, any such facility interconnected with BPA's Transmission System under an existing LGIA with PSE) and is further concerned by the fact that the draft LGIA language attached to the proposal is not clearly limited to intermittent resources.

As stated above, PSE is also concerned by the fact that BPA has made the acceptance of amendments to existing LGIAs a critical workplan item preceding the development of Schedule 9 to the OATT. "Work Plan for Filing OATT Schedule 9," at p. 2. In the Transmittal Letter submitted by BPA with its OATT filing, BPA argued that its tariff substantially conformed to the *pro forma* OATT despite the omission of Schedule 9 in part because BPA was providing generator imbalance as contemplated in the *pro forma* in its rate schedule and in existing LGIAs:

In addition, BPA believes its tariff substantially conforms or is superior to the *pro forma* tariff because BPA's rate schedule includes a rate for generator imbalance; because BPA has included generator imbalance service in all interconnection agreements it has entered into to date; because the great influx of wind generation into BPA's control area has created significant operational issues that are not easily resolved (BPA believes it is the only transmission provider that has such a large amount of wind generation proportionate to load and that has adopted the *pro forma* tariff); because, under these circumstances, prudence dictates caution regarding generator imbalance; and because BPA is working diligently with its stakeholders to resolve these issues in the most beneficial way for the region.

Bonneville Power Administration Petition for Declaratory Order Granting Reciprocity Approval and for Exemption from Filing Fee, FERC Docket No. NJ09-1-000, p. 35 (*emphasis added*). The fact that BPA is now proposing to revise existing LGIAs to increase penalties and increase, on a discriminatory basis, BPA's curtailment or interruption rights under those agreements is particularly troubling from the standpoint of reciprocity.

3. The Technical Proposal Deviates Significantly From BPA's Standard LGIA On File With FERC

Article 9.7.2 of the BPA Standard LGIA provides that BPA may interrupt service to an Interconnection Customer under a limited number of circumstances:

9.7.2 Interruption of Service. If required by Good Utility Practice to do so, Transmission Provider may require Interconnection Customer to interrupt or reduce deliveries of electricity if such delivery of electricity could adversely affect Transmission Provider's ability to perform such activities as are necessary to safely and reliably operate and maintain the Transmission System. The following provisions shall apply to any interruption or reduction permitted under this Article 9.7.2:

9.7.2.1 The interruption or reduction shall continue only for so long as reasonably necessary under Good Utility Practice;

9.7.2.2 Any such interruption or reduction shall be made on an equitable, non-discriminatory basis with respect to all generating facilities directly connected to the Transmission System;

....

The Technical Proposal conflicts with the above-quoted provisions. First, as discussed above, BPA's proposal would if given effect permit BPA to interrupt service to intermittent resources under circumstances (e.g., to avoid a violation of the Clean Water Act or the Endangered Species Act) other than to preserve the reliability of BPA's Transmission System and a system directly or indirectly interconnected with such system. Such proposal directly conflicts with Article 9.7.2 of BPA's standard LGIA, which only allows interruption of Interconnection Service as "necessary to safely and reliably operate and maintain the Transmission System." BPA's proposal would allow for interruptions of service for circumstances outside the limited circumstances set forth in Article 9.7.2 of the BPA standard LGIA.

Second, Article 9.7.2.1 of BPA's LGIA provides that an "interruption or reduction shall continue only for so long as reasonably necessary under Good Utility Practice." BPA's Technical Proposal does not refer to Good Utility Practice and does not specify any other standard (or time period) for any interruption. In that regard, the Technical Proposal would, if given effect, permit BPA to seize operational control of intermittent resources for indeterminate periods of time and without any demonstration that such seizure is either reasonable or necessary. In addition to being inconsistent with BPA's standard LGIA, this purported authority to seize operational control raises substantial due process and other constitutional concerns.

Third, Article 9.7.2.2 of BPA's standard LGIA requires that any "interruption or reduction shall be made on an equitable, non-discriminatory basis with respect to all generating facilities directly connected to the Transmission System." As discussed

above, the Technical Proposal, however, appears to apply solely to intermittent resources and not other resources. Therefore, BPA's proposal is clearly in contravention of the principles of Article 9.7.2.2 because any interruption pursuant to the Technical Proposal would not apply to all interconnected generators. As stated above, PSE does not propose that BPA extend the scope of the proposal in the Technical Proposal to other resources to remedy such discriminatory impact. PSE opposes the implementation of the Technical Proposal with respect to any generating facility interconnected with BPA's Transmission System (including in particular any such facility interconnected with BPA's Transmission System under an existing LGIA with PSE).

Fourth, the Technical Proposal does not comport with the communications requirements of Article 9.7.2.3, which requires that BPA shall notify Interconnection Customers by telephone as soon as practicable of the reasons for an unscheduled curtailment, interruption, or reduction, (and its known expected duration) and to follow the telephone call with written notification as soon as practicable.

Finally, the Technical Proposal would not be permissible under any other provision of the OATT, including Section 13, as the proposal would be applied in circumstances that could not reasonably be defined as Emergency Conditions.

4. Additional Issues for Clarification or Revision with Respect to the Technical Proposal (Including the Proposed Appendix C (Technical Requirements) Language)

In addition to the comments provided above, PSE requests that BPA clarify or revise the Technical Proposal including its proposed Appendix C (Technical Requirements) language to address the following:

4.1. The Technical Proposal discusses curtailing transmission schedules (E-tags) for intermittent resources for the balance of the hour to the amount of the power actually being generated plus the resource's proportionate allocation of balancing reserves when actual variable generation is less than scheduled and BPA has consumed 90 percent of its balancing reserves. The proposed Appendix C makes no reference to this approach to under-generation.⁵ Considering the very real problems that BPA's approach to under-generation will pose for wind generators, the inconsistency of this approach with the generator imbalance provisions of the tariff, and the negative effect BPA's approach would have on the market and the ability to sell firm wind out of BPA's Balancing Authority Area ("BAA"), portions of the proposal addressing up-regulation, or under-generation, are particularly inappropriate for adoption by BPA.

4.2. The Technical Proposal does not indicate whether BPA intends to file the proposed Appendix C (Technical Requirements) with FERC. The proposed Appendix C must be submitted to FERC as it is a significant modification to the standard LGIA BPA has currently filed with FERC. Such proposed Appendix C must be submitted as a

⁵ It was only recently that BPA asserted under-generation as an issue, and no data has been provided by BPA to explain why BPA's position on up-regulation changed.

deviation from the *pro forma* LGIA, which will require BPA to demonstrate, pursuant to section 205 of the Federal Power Act, that such proposed Appendix C is consistent with or superior to the *pro forma* LGIA, particularly in light of the inconsistencies identified in these comments. For example, the provisions broadening the scope of curtailment authority to include the Endangered Species Act and Clean Water Act should be removed, which would increase consistency with the paradigm established in the FERC 890 Orders.

4.3 In the September 10, 2008, Wind Integration Team Workshop, and the “Regulation, Load Following and Generation/Load Imbalance” White Paper, BPA presented information on an approach it adopted that it identified as “reserve requirement by hour of day.” This approach calculated forecasted reserve obligations by hour of the day rather than by hour of the day by forecasted wind generation. As a result of the approach adopted by BPA, the amount of regulation and following requirements is overestimated because it fails to consider the forecasted wind generation in the calculation. If BPA were to include the forecasted wind generation into its calculations, the amount of forecasted reserves for regulation and following requirements would be reduced and the accuracy of the calculation would be increased. This is because the unknown variables that must be accounted for in the calculation would be reduced and replaced with one “known” variable (i.e., the forecasted wind generation, which is known).

4.4 It is PSE’s understanding that BPA proposes to allocate reserves among intermittent resources using “Equation 1” in Attachment B to the Technical Proposal. However, BPA has failed to propose a transparent process by which a key factor in that equation, “R” (as to which Attachment B states that “R is the total reserve level carried in the BAA for variable generation”) will be determined for various time periods. With a given level of “R” the reserves allocated under “Equation 1” to each facility could decrease as more intermittent resource capacity is added onto the BPA Balancing Authority Area. The costs of reserves allocated to each facility should in such event also decrease corresponding to any decrease in reserves allocation. BPA’s proposal lacks transparency and promotes inconsistent results by segmenting the process under which total reserves are determined and reserves are allocated. Also, Attachment B should be modified so that reserves are not reduced during an hour. In that regard, Attachment B makes the following statement, which does not justify any such reduction:

The theory here is that if the system reserves are depleted early in the hour, it is indicative that the hour may experience significant problems and the adjustments should be larger (e.g. the bands narrower) early in the hour. It is proposed that the bands be narrowed at the beginning of the hour by the difference between the following requirement based on a 60-minute basis and a 10-minute basis.

4.5 BPA should modify both versions of Attachment C, Section 3(b)(ii) to allow for a response to a dispatch order through a netting approach (i.e., by reducing the output of a facility that has been netted with the “Generating Facility”). The current

language appears to arbitrarily and unnecessarily prohibit netting by specifically requiring the "Generating Facility" to reduce output.

4.6 BPA must delete the terms "among other things" from both versions of Appendix C, Section 3(b)(i).

4.7 The Technical Proposal states that the approach described therein "will be applied to all new and existing variable generators interconnected to the federal system." Technical Proposal at p. 2. This language suggests that such approach would apply to existing and prospective LGIAs. PSE does not consent to any change in its existing LGIAs. In any event, the proposed Appendix C language should be modified to include the language in existing LGIA Appendix C requiring mutual agreement for amendments and modifications.

4.8 The proposal fails to account for the shift in liability that would result from BPA taking operational control over a facility, including, but not limited to, potential damages to that facility, the system and others; the failure to meet contractual obligations, etc. In other words, assuming *arguendo* that BPA takes operational control over a facility under the Technical Proposal, the LGIA must provide that liability arising from such control lies with BPA.

4.9 The Technical Proposal fails to properly and sufficiently account for the standard practice of scheduling wind through integrated schedules over an hour. In other words, a wind project could if the Technical Proposal were given effect be required to reduce generation or could have its schedule curtailed even if the wind generation had been forecasted and scheduled perfectly for the hour. For example, consider a wind facility:

(i) for which scheduled output for an hour is 50 MW,

(ii) the output of which would increase (in the absence of curtailment) uniformly during that hour from 0 to 100 MW (for integrated output for that hour of 50 MW, consisting of roughly 12 MW in the half hour and 38 MW in the second half hour),

(iii) for which the proportional allocation of balancing reserve for variable generation is 1 MW,

(iv) that is curtailed by BPA due to an "over-generation" situation halfway through the hour when the facility is generating at a level of 50 MW.

The Technical Proposal states as follow at page 2:

Over-generation: Reduce variable generator output: BPA will require variable generators to reduce generation. Via electronic signal from the BPA Automatic Generation Control system, BPA dispatchers will inform each variable generator operator of the generation limit it is allowed for

the remainder of the hour. This limit will consist of the generator's originally scheduled output plus its proportional allocation of balancing reserve for variable generation (discussed in Attachment B).

Each generator operator will be required to reduce its generation to its limit for the balance of the hour.

In the example under consideration, the limitation on output (apparently instantaneous output) of the wind facility for the second half of the hour would thus apparently be equal to roughly 25 MWh. Thus, the total permitted generation of the facility for the hour would apparently be about 37 MWh, even though 50 MWh was scheduled for the hour and the scheduling of the facility was "perfect." The fact that this can occur suggests that the issue this proposal addresses is not actually one of poor forecasting.⁶

4.8 BPA should provide additional clarity and parameters for the proposed random testing, which parameters should be equitable and adopted only after opportunity for BPA customer comment. There is a potential to incur substantial losses as a result of tests. BPA should provide a defined window in which tests would be performed. Furthermore, BPA should not apply any penalty because there is no precipitating reliability event that would justify such penalties. Any failure in testing should instead result in mandated remediation actions (e.g., if the violation in testing was caused by a flaw in the ICCP communications, then that must be fixed with X amount of time).

4.9 The "stranded cost" provision of the proposed Appendix C, Section 3C is overly broad and fails to provide adequate, express limitation to the discretion of BPA to identify costs as "stranded costs" for which an Interconnection Customer must compensate BPA if an Interconnection Customer self-supplies Control Area Services or acquires those services from a third party. PSE recommends that BPA replace the proposed Appendix C, Section 3C language with the following:

At any time during the course of this LGIA, Interconnection Customer may self supply, or acquire from a third party, any of the Control Area Services then required by this LGIA to be supplied or acquired, provided that any Control Area Services(s) provided by Interconnection Customer or a third party are (1) comparable to the Control Area Services provided by Transmission Provider and (2) consistent with Transmission Provider's Open Access Transmission Tariff and associated business practices. Interconnection Customer's obligation to take and pay for any Control Area Service will terminate as soon as Interconnection Customer-self supplies such Control Area Service(s) and/or acquires it from a third party. In the event that Transmission Provider incurs stranded costs due to Interconnection Customer's self supply or third party acquisition of any Control Area Service(s), Interconnection Customer may be required to compensate Transmission Provider for its stranded costs so long as they

⁶ BPA initially proposed that reserves would be allocated based on forecast error (e.g., the lower the forecast error, the higher the portion of reserves made available). The Technical Proposal, however, allocates reserves based on capacity.

are reasonable and consistent with Transmission Provider's Open Access Transmission Tariff.

4.10 As discussed above, the alleged authority of BPA to seize operational control raises substantial due process and other constitutional concerns. BPA should address such due process and other constitutional concerns and institute processes to protect against a violation of rights.

4.11 Power pool reserves are available because high speed cutouts are a contingency event. Therefore, in any event the proposed approach should provide that BPA will provide the operator of an intermittent resource an opportunity to call on contingency reserves prior to BPA's implementation of e-tag curtailments for under-generation *caused by high speed cutouts*.

4.12 Any dispatch standing order including any limit to schedule order (collectively, " DSO/Limit to Schedule order") issued by BPA must comply with the following:

- a. Through a public process, BPA must have adopted and published a formal protocol establishing duties, responsibilities, and process with regard to the issuance of any DSO/Limit to Schedule order. (e.g.: how is the need for any DSO/Limit to Schedule order determined? how is any DSO/Limit to Schedule order applied? how are any recipients of the respective DSO/Limit to Schedule orders determined? what is the timing for any DSO/Limit to Schedule orders?). Any DSO/Limit to Schedule order procedure or protocol must be publicly available (subject to compliance with any applicable Critical Energy Information Infrastructure requirements).
- b. An e-tag and telephone call by BPA informing of the order must be received at least 30 minutes before the hour to permit adjustment.
- c. Any BPA DSO/Limit to Schedule order must be consistent with OATT requirements; such as non-discriminatory application of orders across customers (including Point-to-Point and Network customers) and resources.
- d. BPA must provide regulation and load following in amounts that are determined through a public process but that are not less than the reserves providing regulation and load following sufficient to meet BPA's contractual obligations; BPA must apply and exhaust such regulation and load following amounts before issuing any DSO/Limit to Schedule order.
- e. No BPA generator imbalance charges can be applied in situations in which issues a BPA DSO/Limit to Schedule order.
- f. No BPA DSO/Limit to Schedule order can be issued in connection with service under a contract unless BPA is complying with its obligations under

that contract to provide generator imbalance service and is complying with its OATT requirements.

- g. BPA can only issue DSO/Limit to Schedule orders to limit generation to the integrated hourly schedule. (This would, for example, permit variations of generation levels within the hour so long as the total generation over the hour does not exceed the amount scheduled for that hour.)
- h. BPA must make after-the-fact postings describing any DSO/Limit to Schedule order issued and conditions permitting the issuance of any DSO/Limit to Schedule order and any assessment of failure to comply ("FTC") penalty.

4.13 Any BPA curtailment order issued by BPA must comply with the following:

- a. All Conditional Firm and Non-Firm must be limited or curtailed by BPA before issuance by BPA of any curtailment order.
- b. BPA must not schedule transmission in excess of its ATC on any affected path/flowgate.
- c. An e-tag and telephone call must be received from BPA a reasonable time in advance of the order, given the affected resources, to permit adjustment.
- d. Curtailment orders by BPA must follow OATT requirements; including non-discriminatory application of orders across customers and resources and uniform unauthorized increase ("UIC") charges for Point-to-Point and Network customers.
- e. BPA must make after-the-fact postings describing conditions permitting the issuance of any curtailment order and any assessment of FTC or UIC.

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January 13, 2009

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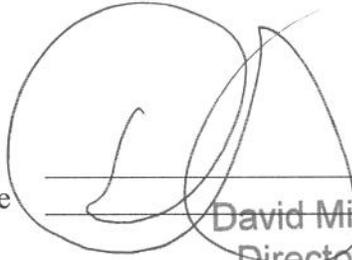
For the reasons set forth above, the Technical Proposal including the proposed Appendix C must be revised consistent with the foregoing and to avoid unreasonable, arbitrary and capricious action by BPA.

PSE appreciates BPA's review of these comments and consideration of the recommendations contained herein. By return e-mail, please confirm BPA's receipt of these comments.

Sincerely,

Puget Sound Energy, Inc.

By _____
Title _____



David Mills
Director
Energy Supply & Planning
Puget Sound Energy, Inc.

Cc: Ty Bettis, Portland General Electric
Stefan Brown, Portland General Electric