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February 1, 2013

VIA ELECTRONIC FILING
AND OVERNIGHT DELIVERY

Public Utility Commission of Oregon
550 Capitol Street NE, Suite 215
Salem, OR 97310-2551

Attn: Filing Center

Re: UM 1182 – PacifiCorp's Prehearing Brief

PacifiCorp d/b/a Pacific Power submits for filing an original and five copies of its Prehearing Brief in the above-referenced proceeding.

Please direct informal correspondence and questions regarding this filing to Bryce Dalley, Director, Regulatory Affairs & Revenue Requirement, at (503) 813-6389.

Sincerely,

William R Griffith/RBD

William R. Griffith
Vice President, Regulation

Enclosures

cc: UM 1182 Service List

CERTIFICATE OF SERVICE

I hereby certify that I served a true and correct copy of the foregoing document, in Docket UM 1182, on the date indicated below by email and/or US Mail, addressed to said parties at his or her last-known address(es) indicated below.

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DATED: February 1, 2013

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BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UM 1182

In the Matter of PUBLIC UTILITY COMMISSION OF OREGON Investigation Regarding Competitive Bidding	PACIFICORP'S PREHEARING BRIEF

Pursuant to Administrative Law Judge (ALJ) Traci Kirkpatrick's Prehearing Conference Memorandum issued September 27, 2012, PacifiCorp, d/b/a Pacific Power (the Company) submits this Prehearing Brief.

I. BACKGROUND

A great deal of testimony has been filed in this docket covering a number of issues. Because of the length of this docket and the complexity of the issues, the Company provides a summary of the procedural history and original goals of these proceedings.

A. Docket No. UM 1276

Perceiving there to be a bias inherent in the utility resource procurement process that favors utility ownership of generation assets over Power Purchase Agreements (PPAs) with independent power producers (IPPs), the Public Utility Commission of Oregon (Commission) opened docket UM 1276 in August 2006. The docket was an investigation into "performance-based ratemaking mechanisms to address potential build-vs.-buy bias."

In that docket, the Commission identified two key sources of this bias: (1) the fact that utility-owned resources allow a utility an opportunity to earn a return, while PPAs do not; and (2) the fact that rating agencies may treat PPAs as long-term commitments with debt-like obligations, and thereby impute debt equivalency amounts to a utility's balance sheet.[1]

Ultimately, the Commission declined to adopt any of the incentive mechanisms that were proposed by various parties in docket UM 1276, and closed the docket.[2] While the Commission remained concerned about the fact that only utility-owned resources allow a utility the opportunity to earn a return, the Commission concluded that the proceedings had failed to quantify the "scope and impact" of any such bias.[3] Without meaningful quantification of this bias, the Commission observed, it could not determine "whether any of the proposals in this docket would mitigate the bias without improperly rewarding the utilities and unfairly harming customers."[4]

B. The Reopening of Docket No. UM 1182

Although the Commission declined to adopt any specific incentive mechanism in docket UM 1276, it concluded that other things could be done to ensure that the request for proposals (RFP) process is fair for all parties. The Commission reopened docket UM 1182, to "further examine issues related to [the Commission's] competitive bidding

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[1] *In re the Public Util. Commission of Oregon Investigation Regarding Performance-Based Ratemaking Mechanisms to Address Potential Build v. Buy Bias,* Docket No. UM 1276, Order No. 11-001 at 5 (Jan. 3, 2011).
[2] The Commission identified two incentives for consideration: (1) a "Conservation Incentive Mechanism for Purchased Power" (proposed by PacifiCorp); and (2) a "Risk Avoidance Discount for PPAs in Competitive Solicitations" (proposed by Northwest and Intermountain Power Producers Coalition). *Id.* at 2.
[3] *Id.* While the Commission did not ultimately adopt any incentive for resolving what it believed to be a "rate-base" bias, it did conclude that the debt imputation issue could be addressed by utilities in individual rate proceedings, seemingly disposing of that issue.
[4] *Id.* at 6.

guidelines."[5] The Commission stated that, although adoption of the guidelines had greatly increased confidence in the utility RFP process, "we believe further improvements are needed to fully address utility self-build bias."[6]

Specifically, the Commission ordered further review of Guidelines 1, 11, and 10(d). The first two guidelines were addressed in Phase I of this docket.[7] Guideline 10(d) is addressed in this phase. Guideline 10(d) requires an independent evaluator (IE) hired for a particular RFP to evaluate the unique risks and advantages of a utility benchmark resource.

The Commission stated its dissatisfaction with past IE evaluation of the comparative risks and advantages of utility benchmark resources:

> We want a more comprehensive accounting and comparison of all of the relevant risks, including consideration of construction risks, operation and performance risks, and environmental regulatory risks. We also want more in-depth analysis of all of these risks. We invite comment on the analytic framework and methodologies that should be used to evaluate and compare resource ownership to purchasing power from an independent power producer.[8]

In light of these issues, the Commission ordered the following review with respect to Guideline 10(d):

> The determination of the appropriate analytic framework and methodologies to use to evaluate and compare resource ownership to purchasing power from an independent power producer (Guideline 10(d)).[9]

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[5] *Id.*
[6] *Id.*
[7] The first phase resulted in modifications to Guideline 13 (Order No. 11-340) and Guideline 1 (Order No. 12-007).
[8] Order No. 11-001 at 6.
[9] *See* Prehearing Conference Memorandum (January 26, 2011).

In order to address this issue, the parties conducted workshops and identified twelve different comparative risk items for evaluation in this docket.[10] Ultimately, four of the twelve items were chosen for analysis in this particular phase of the docket: (1) Wind Capacity Factors; (2) Heat Rate Degradation; (3) Cost Over- or Under-Runs; and (4) Counterparty Risk.

II. INITIAL RECOMMENDATION

A. The Focus of this Phase Should be the Independent Evaluator's Guideline 10(d) Comparative Risk Analysis and Not the Development of Generic Bid Adjustments

Although the Commission stated in Order No. 11-001 that it presumed the existence of a bias favoring a utility's benchmark resource, that bias was defined as the utility's incentive to select benchmark resources because they can put such resources into rate base.[11] The Commission did not find that the competitive bidding process itself was biased.[12] The Commission did not direct the parties to quantify or investigate bias. Rather, the Commission ordered an examination of the competitive bidding process to develop a more comprehensive accounting and comparison of all relevant risks.

Consequently, the Company understands this review of the competitive bidding process, and Guideline 10(d) in particular, to be one focused on improving the IE's comparative analysis of a utility's benchmark resource and other resource options under Guideline 10(d) and ensuring that the analysis is fair and reasonable rather than one seeking to address pre-determined deficiencies. In other words, this phase does not start

[10] *See* Administrative Law Judge Ruling (May 30, 2012).
[11] *See* Order No. 11-001 at 5.
[12] *See also* Staff/200, Procter/19 (concluding that the Commission has not yet opined on whether bias exists in the current bid evaluation criteria).

with the presumption of bias, nor with the assumption that the existing criteria must be methodically adjusted to account for such alleged bias.

Therefore, it is the Company's understanding that the purpose of systematically analyzing each of the twelve comparative risk items identified for review in this docket is to inform a more robust IE analysis of the risks of a utility's benchmark resource as compared to a resource proposed by a third-party. Once the comparative risks are more comprehensively understood, appropriate evaluation criteria can be developed for the Guideline 10(d) analyses performed in future RFPs.

1. The Purpose of a 10(d) Review Is to Ensure the Appropriate Evaluation of Bids, Not to Encourage Specific Outcomes with Respect to Certain Types of Bids or Bidders

Under Guideline 10(d), the IE is directed to score any benchmark resource and "as many bids as the IE believes to be necessary to conclude that the *process* was fair and the result was reasonable."[13] If the IE is able to provide a comprehensive accounting of all of the relevant risks and benefits of a proposed utility benchmark, and can compare those risks to the relevant risks and benefits of a third-party proposal, then the resources may be compared fairly. In this way, the Guideline 10(d) review is designed to ensure that each resource proposal is evaluated based on its individual merits. In addition, focusing on improving the Guideline 10(d) evaluation process will also ensure fair, transparent and objective criteria are applied to third-party and benchmark resource proposals alike. Consistent with the foregoing, the Guideline 10(d) evaluation should not be focused on ensuring a particular outcome by generically assigning adjustments to certain classes of resources and not others. Any improvement to the Guideline 10(d) process should be

[13] *In the Matter of an Investigation Regarding Competitive Bidding*, Docket No. UM 1182, Order No. 06-446 at 13 (August 10, 2006) (emphasis added).

aimed at ensuring that the alternatives are evaluated objectively and fairly in this manner vis-à-vis the same goal: achieving the least-cost, least-risk resources for customers.[14]

2. The Introduction of Generic Bid Adjustments to the RFP Process Distorts the Proper Evaluation of Resources And Does Not Improve It

The Northwest and Intermountain Power Producers Coalition (NIPPC) proposes to introduce generic bid adjustments in the Guideline 10(d) evaluation process.[15] The proposed generic bid adjustments are asymmetrical in that NIPPC selectively proposes that they be applied to increase the cost of only a utility-owned resources.[16] The concept of *generic* bid adjustments—adjustments that will apply broadly and not on a case-by-case basis—should be rejected entirely because they will not assist the IE in the objective and fair evaluation of resource options. Furthermore, considering only the risks of utility-owned resources without comparing them to risks of third-party owned resources captures only half the picture, and it distorts bid rankings by introducing a pre-determined and guaranteed bias as a matter of policy.[17] This is not in customers' interests because it will not advance the goal of selecting the least-cost, least-risk resource.

Generic bid adjustments are inadvisable because they cannot take into account the uniqueness of each RFP or the uniqueness of each bid proposal. A RFP-specific Guideline 10(d) evaluation appropriately takes into account the facts and circumstances of each individual RFP, including the market and available technologies at the time the RFP is issued.[18] In addition, a RFP-specific evaluation can take into account the multitude of

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[14] For this reason, the Company believes that the RFP comparative risk analysis should focus on risk to utility customers. By contrast, Staff believes the risk analysis during the RFP process should focus on risks to the utility, rather than customers. *See* Staff/200, Procter/5. The Company does not believe a 10(d) evaluation should involve reviewing benchmark resources and other bids for their relative risks to the utility.
[15] *See* NIPPC/100, Monsen/4.
[16] *Id.*
[17] PAC/200, Kusters/9.
[18] *Id.* at 8.

different contractual structures a third-party might use to sell power to a utility. These contract structures can include fixed or variable price PPAs, tolling service agreements (TSAs) with varying degrees of market exposure, or lease agreements, all of which will have different terms and conditions that create different types and degrees of risk to customers.[19] The risks and benefits of each proposal cannot be assumed without understanding the underlying financial structure and the terms and conditions of the specific contractual arrangement.[20]

The comparative risks associated with different resource options are also highly dependent on the facts specific to a particular bid solicitation and the nature of the bids received in response to that solicitation. Furthermore, the risks faced by both utilities and third parties in developing new resources can change significantly given external factors, including the following: economic conditions, natural gas prices, commodity prices, equipment and materials costs, global supply/demand for major components, lead time on critical path equipment, labor costs, technological advancements, and general supply and demand for engineer, procure and construct (EPC) contractors.[21] Generic pre-determined bid adjustments cannot accurately account for the wide ranges of variability that exist in any given RFP.

Consequently, much of NIPPC's testimony and arguments focused on the quantification of generic bid adjustments is simply irrelevant to the Commission's directive in Order No. 11-001 to develop an appropriate analytic framework and

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[19] PAC/200, Kusters/4.
[20] For example, a TSA may provide a guaranteed heat rate however, the guaranteed heat rate would be subject to specific loading and temperature of the generation facility, and therefore not a single heat rate guarantee per se.
[21] PAC/200, Kusters/7.

methodologies to use to evaluate and compare resource ownership to purchasing power from a third-party in future RFPs.

B. Policy Issues Should Be Addressed Prior to Additional Discovery and Fact-Finding

While this phase is focused on four comparative risk items: 1) Wind Capacity Factor; 2) Heat Rate Degradation; 3) Construction Cost Over- and Under-runs; and 4) Counterparty Risk, the Company is mindful that there are eight remaining comparative risk items left for evaluation. The Company recommends that efforts be made to clearly identify how the remaining eight comparative risk items identified for review in this docket are to be addressed. In prior comments, the Company has argued that parties should initially attempt to develop a conceptual framework or set of policy recommendations prior to engaging in potentially irrelevant and extensive fact-finding. The Company continues to believe that this is advisable: an agreed-upon set of policies would provide guidance to parties in developing a comparative risk analysis. Also, any factual issues that arise will be more easily resolved once threshold policy issues are resolved.

One way that this could be accomplished would be for the Commission to direct Staff, potentially in consultation with an independent third-party expert, to set forth a straw proposal that initially assesses the potential comparative risks associated with the four items addressed herein as well as the eight remaining items. Parties could be given the opportunity to comment on the straw proposal before it is finalized and submitted to the Commission for adoption. Having such a framework established up-front to guide the comparative risk analysis will assist the parties in avoiding unnecessary or irrelevant fact-finding and/or discovery disputes.

In its opening testimony, Staff provided the beginnings of such a straw proposal. Staff noted that the focus of this phase should be solely on the development of a more in-depth analysis of the comparative risks and advantages that arise from selecting a benchmark resource versus buying the output from an IPP.[22] Staff set forth a proposed conceptual framework designed to address three goals, which Staff defined as: "(1) determine how the risks are addressed in bid evaluation; (2) determine what bias exists, and (3) recommend adjustments to guideline 10(d) to account for that bias."[23] The Company agrees, foremost, that adoption of a conceptual framework for the comparative risk analysis would be helpful. With respect to Staff's proposed framework, the Company agrees with the first goal and part of the third goal because it is critical to first establish what the risks are, and how they are defined, prior to developing or modifying evaluation criteria that appropriately accounts for these risks.[24]

However, as already noted above, the Company disagrees that it is necessary or warranted to determine what bias exists, if any, in the current evaluation process. Rather, the focus should be on ensuring that the process is fair and robust and provides a transparent and objective evaluation process in the RFP.[25]

Alternatively, the Commission could direct Staff and/or other parties to develop a framework for the comparative risk analysis. This framework could be geared toward answering threshold policy questions, for example:

1) How should risk be defined when comparing utility resource options?

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[22] Staff/100, Procter/3.
[23] *Id.*
[24] PAC/200, Kusters/5.
[25] *Id.*

2) What are the potential risks associated with both benchmark resources and third-party proposals with respect to each comparative risk?
3) Where does each risk exist?
4) Should each risk be quantified?
5) If so, how should each risk be quantified? Should it be quantified based on historical data or current conditions?
6) Should each risk be quantified on a generic or case-by-case basis?

The Commission could adopt the proposed conceptual framework prior to making a final determination regarding the current four comparative risk items or specifically addressing the remaining eight comparative risk items.

Regardless of the manner in which it is developed, once a conceptual framework and policies are agreed upon, the parties can assess the comparative risks of all of the items, including the four initially addressed, by applying this framework. That outcome can then inform the development of RFP-specific analyses. The Company provides recommendations herein with respect to the appropriate policy framework and, as mentioned, opposes the introduction of generic bid adjustments. However, regardless of whether or not the Company's recommendations are adopted, it may be useful for the Commission and all parties to start from a common policy framework.

III. DISCUSSION

A. Wind Capacity Factor

1. The Company's RFP Evaluation of Wind Capacity Factors and Associated Risks

The Company's RFP evaluation process has two key stages with respect to wind capacity factors and associated risks: 1) initial screening; and 2) developing the final shortlist.[26]

When submitting proposals for wind resources, many third-party bidders include a capacity factor report, typically from a third-party expert. The Company includes its capacity factor report for the benchmark resource from a third-party expert. During the initial screening stage, all third-party alternatives are evaluated using the expected capacity factor provided by the third-party bidder and supported by the expert report if submitted by the bidder. In the case of a benchmark resource, the capacity factor provided by the utility is supported by the expert report submitted. After the initial screening, the Company develops an initial shortlist. At that point, the Company retains a qualified and independent third-party technical expert (Capacity Factor Expert) to assess the expected resource wind capacity factor associated with each alternative on the initial shortlist—including the benchmark resource, if one exists. The Capacity Factor Expert prepares a report with a capacity factor estimate for each resource on the initial shortlist. Under the Company's criteria, the Capacity Factor Expert may not be the same expert the Company relied on in preparing its original benchmark submittal to the IE, and it is required to disclose any conflicts with bidders or project bids on the initial shortlist.[27]

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[26] PAC/100, Kusters/6.
[27] *Id.* at 6-7; PAC/200, Kusters/32.

The purpose of the Capacity Factor Expert is to ensure that the wind capacity factors for all proposals, including any benchmark resource, are forecasted consistently, and as accurately as possible. There are a number of challenges to estimating wind capacity factors at this point in time. No industry standard methodology currently exists for estimating wind capacity factors, and the technology for this forecasting is still evolving.[28] The Capacity Factor Expert has the flexibility to take into account current trends in wind capacity factor forecasting, improving forecasting accuracy. This eliminates the need to rely on historical or anecdotal data, which, for the reasons more fully described below, cannot accurately estimate the future risk of wind capacity factor forecast errors.

Because two qualified wind study experts may provide two different, yet both reasonable, forecasts for the same project given the same data, using the same expert to assess all projects competing in a single RFP ensures that all of the wind capacity forecasts were generated using consistent risk and statistical assumptions. The Capacity Factor Expert analyzes the capacity factors proposed by all bidders (and the utility) using the same criteria, regardless of ownership. The Company has found that using a Capacity Factor Expert is the best method for achieving the goal of ensuring that resources are compared fairly in the RFP process. The Company supports requiring the use of a Capacity Factor Expert as a mandatory condition of an RFP process where wind resources are involved.

2. NIPPC's Proposed Wind Capacity-Factor Adjustment for Utility-Owned Wind Projects Improperly Distorts the Objective Economic Evaluation of a Benchmark Resource

[28] PAC/200, Kusters/32.

Although NIPPC approves of the Company's use of a Capacity Factor Expert, NIPPC nevertheless asks the Commission to adopt a bid adjustment to automatically reduce the capacity factor for utility-owned wind generation.[29] NIPPC argues that this adjustment is necessary because utilities typically overestimate the capacity factor for utility-owned wind plants.[30]

NIPPC argues that utility customers bear greater risks when utility-owned wind projects are selected than when IPP projects are selected. This is so, NIPPC argues, because the costs of utility-owned projects are generally passed on to customers.[31] By contrast, NIPPC argues, IPPs are typically liable for project costs and charge customers only for delivered generation.[32] Consequently, NIPPC argues, when compared to utility-owned resources, PPAs shield ratepayers from capacity factor risk.[33] NIPPC argues that its review of wind capacity factor data demonstrates that utilities consistently overstate capacity factors, justifying use of a generic bid adjustment.

The Citizens' Utility Board of Oregon (CUB) supports NIPPC's request for a generic wind capacity factor adjustment for utility-owned projects to account for what it sees as a fundamental difference between utilities and IPPs. In CUB's view, utilities are incentivized to forecast wind capacity near the highest level of the range and IPPs are incentivized to forecast wind capacity at the lowest level of the forecast range.[34] Although CUB supports use of an adder, it provides no analysis of its own, agreeing only with the

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[29] NIPPC/100, Monsen/32. The precise number for the adder has been designated confidential and will not be included in the brief.
[30] NIPPC/300, Monsen/39.
[31] *Id.* at 37.
[32] NIPPC/100, Monsen/29.
[33] *Id.*
[34] CUB/100, Jenks-Feighner/5.

adder approach, "although not necessarily with NIPPC's methodology or the actual value of the proposed adder."[35]

NIPPC's asymmetrical adjustment for capacity factor, like its other proposed bid adjustments, is not supported with adequate data or analysis. Moreover, any incentive that may exist to forecast high or low, which in the Company's experience has not been borne out in practice, should not be addressed through the introduction of arbitrary bias. Instead, efforts should be made to ensure that wind capacity factors are forecasted as accurately as possible during future RFP processes.

a. NIPPC's Proposed Wind Capacity Factor Adjustment for Utility-Owned Wind Projects is Based on a Flawed Methodology

With respect to the proposed bid adjustment itself, NIPPC's methodology for calculating the proposed adjustment is entirely unreliable. NIPPC concludes from its analysis that utilities routinely overestimate the capacity factors for their wind plants. In the absence of reliable evidence demonstrating this is indeed true, introducing an arbitrary adjustment to correct a presumed issue simply distorts the process.

NIPPC's analysis is flawed in a number of ways. First, Commission policy states that the appropriate capacity factor to consider for prudency review is the capacity factor at the time of project approval. NIPPC erroneously compares observations of past performance to capacity factors originally anticipated for the plants.[36] In other words, it uses wind plant capacity factors taken from the wrong point in time.

Second, and more importantly, NIPPC's analysis is flawed because it relies on a data set that is too small. NIPPC relies on a very short historical period that provides insufficient data for a statistically meaningful analysis. As Staff has pointed out, there is

[35] *Id.*
[36] PAC/200, Kusters/33.

simply not enough data available at this point in time to support appropriate quantitative modeling.[37] The history of the Company's wind fleet is simply too limited to support NIPPC's recommendation.[38] Moreover, the majority of the actual generation data obtained to date occurred during two non-normal wind years (2009 and 2010), skewing NIPPC's already-questionable calculations.[39] In addition, only one of the Company's wind resources (the Dunlap project) was selected after being evaluated as a benchmark resource. In that case, the actual capacity factor during the first full year of operation was significantly above what was predicted by the Capacity Factor Expert during the RFP evaluation.[40]

b. NIPPC's Assumption that Capacity Factor Errors Are One-Sided Is Unsupported

The Company's experience undermines NIPPC's assertion that errors in forecasting wind capacity factors are one-sided.[41] In its 2009 Renewable RFP (2009R RFP), for example, the Company's data show that the independent Capacity Factor Expert adjusted capacity factor estimates for third-party bidders to a greater extent than the Company's benchmark resource.[42] This document shows that the proposed capacity factors for all of the bid proposals on the shortlist were reduced.[43] This demonstrates that a predetermined, asymmetrical capacity factor adjustment only applicable to benchmark resources is unjustified.

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[37] Staff/200, Procter/16.
[38] PAC/200, Kusters/34, 36; *see also* PGE/200, Outama-Bettis-Mody-Hager/7 (noting the problems with calculating an adder based on a very limited amount of data, particularly when industry is immature and continually evolving).
[39] *Id.* at 33-34; PAC/200, Kusters/36.
[40] *See* PAC/206.
[41] PAC/200, Kusters/36.
[42] *Id.* at 36. An example of an IE report that includes results from a Capacity Factor Expert is included in this docket as NIPPC/311.
[43] *Id.* at 36-37; *see also* PAC/207.

As Staff notes with respect to this asymmetry, NIPPC's proposal "implicitly assumes that only unfavorable outcomes need to be addressed" in the bid evaluation process.[44] But,"[u]nless there is a logical reason to exclude the uncertainty in outcomes favorable to the utility (Staff cannot think of one), Staff does not support NIPPC's approach."[45] The asymmetrical nature of the capacity factor adjustment proposed by NIPPC also disregards any potential benefits to utility customers associated with a cost-of-service resource.[46] In short, Staff appears to agree with Portland General Electric (PGE) and PacifiCorp that, in each RFP, individual bid and contract terms must be examined to determine customer exposure to various risks.[47]

3. Conclusions and Recommendations

The Company recommends that the RFP process be modified to explicitly require the use of Capacity Factor Experts. The Company considers the use of Capacity Factor Experts to be the best practice available, based on information known at this time, and recommends that an independent Capacity Factor Expert be used to evaluate the capacity factors for all resources, both third-party and benchmark resources, in a RFP shortlist. Alternatively, the IE, or another independent entity with sufficient expertise, could be tasked with performing a full and complete capacity factor evaluation for all bids and the utility.

Using a generic bid adjustment is inappropriate and will lead to distorted outcomes, particularly when that bid adjustment is based on insufficient data. NIPPC's recommended adjustment introduces an asymmetric bias that has no basis in evidence,

[44] Staff/200, Procter/15.
[45] *Id.*
[46] *Id.* at 12.
[47] *Id.* at 16.

distorts the economic evaluation of a benchmark resource, and potentially increases costs for customers.

If the Commission finds that modifications to the current method of assessing the risks associated with wind capacity factors are necessary as part of the IE's Guideline 10(d) analysis, the Company is willing to work with Staff and/or an independent third-party expert to make this element of the evaluation process more thorough and transparent.

B. Heat Rate Degradation

1. PacifiCorp's Evaluation of Heat Rate Degradation and Associated Risks

a. The Company's Determination of a Resource's Heat Rate

Evaluating the expected heat rate of a thermal resource is an important part of the bid evaluation process. Fuel costs are one of the major components of the total cost of electricity, particularly for natural gas plants, and a plant's heat rate represents its overall thermal efficiency. Consequently, the energy costs attributable to the cost of fuel are directly proportional to a resource's heat rate.[48] Heat rate degradation reflects the fact that a plant's performance ordinarily declines over time.[49]

During the bid evaluation process, the Company assesses the heat rate of a plant differently depending on whether the resource is a benchmark resource, an asset purchase and sale agreement (APSA), or a third-party TSA.[50] In the case of either a benchmark resource or an APSA, the company uses the "new and clean" heat rate information

[48] PAC/100, Kusters/11.
[49] Although certain maintenance and upgrades can alter this curve.
[50] A TSA is a form of PPA.

provided by either the EPC contractor (in the case of a benchmark resource), or the APSA bidder.[51]

These "new and clean" heat rate values are derived from heat rate information provided by the Original Equipment Manufacturer (OEM), then adjusted for specific characteristics of the bid, such as site-specific considerations and any third-party design impacts.[52]

A plant's "new and clean" OEM heat rate is then converted to a long-term schedule of expected plant performance. To do this, the Company applies a heat rate degradation curve, provided by the OEM, to the "new and clean" heat rate. To ensure consistency, the Company uses the same degradation values for proposals that use the same OEM equipment.[53] The exception is when a third-party bidder elects to follow maintenance schedules different from those recommended by the OEM. In this situation, the long-term schedule of plant performance should be adjusted to reflect these modifications, because maintenance and overhaul tasks have a major effect on plant performance over the life of the asset.[54] The Company knows of no other source of heat rate data as reliable as data from the OEM.[55]

When the resource at issue is a third-party TSA, the Company uses the heat rate information provided in the bidder's proposal.

b. Evaluating the Comparative Risks of Various Resources with Respect to Heat Rate

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[51] PAC/100, Kusters/11-12.
[52] *Id.* at 12.
[53] *Id.*.
[54] *Id.* The OEM's heat rate degradation schedule is prepared based on the OEM's recommended maintenance schedule. The Company enters into long-term maintenance contracts for its major OEM equipment to ensure it is maintained and overhauled according to OEM recommendations. OEMs also periodically make mechanical and controls upgrades available that can improve heat rates if they are purchased and installed. *Id.* at 13-14.
[55] *Id.* at 12.

As with other elements of the bid evaluation process, the comparative evaluation of heat rate issues among various resources is fact-specific and an accurate evaluation of resources at issue depends on the specific details of the actual bids.

Utility ownership provides a number of benefits (related to heat rate) that a TSA typically does not provide. For instance, a utility may choose to operate a plant at a less efficient heat rate when doing so benefits customers. For example, rather than running the resource at full load (and thereby most efficiently in terms of heat rate) a utility might back down a resource's output to provide reserve capacity or use it to integrate variable energy resources (such as wind) into the utility's system.[56]

However, the Company typically works to negotiate a TSA that includes a financial heat rate guarantee—a contractual concept in which regardless of the actual operational efficiency of the resource used to supply energy under the TSA, the price paid for that energy would be calculated based upon a contract heat rate.[57] A heat rate guarantee may be in the form of a single guaranteed contract heat rate, but it is more common for the counterparty to provide a guaranteed contract heat rate that is tied to ambient conditions and loads. The contractual guarantee may also include operational provisions whereby the Company may dispatch the unit in exchange for some pass-through of fuel and variable costs to the utility. The value of the heat rate guarantee to utility customers will depend upon these specific provisions.

The value of the heat rate guarantee also depends, to a large extent, on the specific details of the guarantee as it compares to an OEM heat rate degradation curve. Moreover, the value of a heat rate guarantee varies with the financial health of the party providing it.

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[56] *See, e.g., Id.* at 14-15.
[57] *Id.* at 15.

The effectiveness of a heat rate guarantee is therefore intertwined, to some extent, with the third-party's creditworthiness. Additionally, a contractual heat rate guarantee may fail when it becomes economically inefficient for a seller to continue performing under a contract. If the seller's project is not performing as expected, but the seller is contractually obligated to sell the power from that project under a contract with a guaranteed heat rate, it may become economically efficient for the seller to breach the contract and pay liquidated damages, a practice known as an "economic breach."[58] Also relevant is the specific level of contractual guarantee the seller can offer at a reasonable cost.

These and other complex factors are already identified and evaluated as part of the competitive bidding process. When evaluating the final shortlist, utility assets are modeled with appropriate heat rate degradation curves and part-load performance curves,[59] and the costs and benefits of reserves in the Company's planning and risk models are considered. At the same time, the bid-specific benefits of a TSA guaranteed heat rate, which can limit the utility customers' risk of liability for plant underperformance, are attributed to the TSA proposal.[60]

2. NIPPC's Proposed Generic Heat Rate Adjustment Improperly Distorts the Objective Evaluation of Heat Rates

NIPPC argues that the utilities' estimates of heat rate are inaccurate, and that a heat rate adder should be applied to all proposed natural gas projects "whenever ratepayers would be responsible for cost increases associated with higher-than-anticipated heat

[58] Moreover, a heat rate guarantee is likely to increase the price of a TSA, because a seller would be expected to embed a risk premium into the price of the TSA to account for the seller's increased level of risk.
[59] PAC/100, Kusters/16.
[60] If the bid evaluation process includes the heat rate degradation curve from a benchmark resource and a heat rate guarantee from third-party bidders, no adjustment is required because the evaluation process already accounts for the difference in the value.

rate."[61] According to NIPPC, the IE should incorporate an "8% heat rate adder" or use a heat rate forecast "that reflects anticipated degradation resulting in an 8% increase in the average heat rate over the bid evaluation period."[62]

NIPPC's proposed bid adjustment is inappropriate, as it would introduce asymmetrical and systematic bias to the competitive bidding process. Given the variety of projects, contracts, and bidder characteristics possible in any given RFP process, NIPPC's generic bid adjustments would serve to distort the process by introducing unfounded arbitrariness.[63]

There are serious errors in NIPPC's methodology. NIPPC derives its proposed adjustment from a database of operating characteristics of utility-owned generation from 1981 through 1999, known as the Wolfram data set.[64] This data set is not useful for the task NIPPC undertakes: namely, to demonstrate that utilities inaccurately estimate heat rates for benchmark resources, and to extrapolate future heat rate degradation trends relevant to utility RFPs.

First, the variations in heat rate that NIPPC pulls from the data set are from a variety of causes, all of which are conflated in the data set. It is difficult, if not impossible, to isolate the data relevant to heat rate degradation.[65] Heat rate variation is caused most significantly by variation in operation (*i.e.*, reduced load operation), ambient conditions, use of plants to provide various ancillary services, starting and stopping, and

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[61] NIPPC/100, Monsen/25.
[62] *Id.* at 27.
[63] As Staff notes, NIPPC's methodology provides no calculation of risk; its adder "has data and methodological issues," and NIPPC "does not appear to consider how contract terms of specific bids influence ratepayer exposure to [heat rate degradation] risk." Staff/100, Procter/14.
[64] NIPPC/100, Monsen/25.
[65] PAC/200, Kusters/27-28.

other factors other than actual heat rate degradation.[66] All of these factors are conflated in the data set.

Second, the data is obsolete. The most recent data is over thirteen years old, and therefore simply does not reflect the types of plants and maintenance schedules that are relevant to current and future RFPs.[67] As Staff notes, "the vintage of the plants in the data sub-set are not representative of gas plants that will be bid into future RFPs."[68] PGE agrees that publically available heat rate and generation data for combined cycle units are simply unlikely to provide useful estimates of heat rate degradation.[69] As a result, NIPPC's proposed adder is simply not reflective of resources that will be procured in future RFPs.

Other parties have also observed serious problems with NIPPC's methodology. Idaho Power Company (Idaho Power) argues that NIPPC fails to explain how heat rate degradation differs between utility-owned generation and generation owned and operated by IPPs. Moreover, NIPPC provides heat rate degradation values, but the specific risk or risk associated with heat rate degradation is never calculated.[70]

Additionally, as CUB notes, NIPPC improperly assumes that utility-owned projects fail to account for heat rate degradation, when, in fact, testimony from PGE and PacifiCorp indicates that they do. With regard to those utility assumptions, CUB agrees

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[66] *Id.* at 27.
[67] *See Id.* at 28; PGE/300, Jacobs/30.
[68] Staff/100, Procter/15 (noting that the subset of data actually used by NIPPC includes heat rates for plants with on-line dates earlier than 1981).
[69] *See* PGE 300, Jacobs/30.
[70] *See* Idaho Power/200, Stokes /15.

that the heat rate degradation data from the OEM is reasonable, and would provide results similar to any assumption used by an IPP.[71]

3. Conclusions and Recommendations

The Company has found that the best heat rate data available comes from the OEM. The most effective way to ensure that heat rates are appropriately established as part of the competitive bidding process is to have the IE verify that degradation values are consistent with OEM values. The RFP process could formally establish the use of OEM data for utility heat rates, and bidder-proposed data for TSAs. The IE could be instructed to review the application of this data during the bid evaluation process to ensure the data is appropriately applied.

In general, the Company finds that the current methods of evaluation of heat rate degradation account for the comparative risks for both benchmark resources and third-party proposals. However, if the Commission believes that modifications to the current method of assessing the risks associated with heat rate degradation are warranted, the Company would be willing to work with Staff or an independent third-party expert to make this element of the evaluation process more thorough and transparent.

One way to ensure that the evaluation of heat rate degradation is meaningful may be to include a number of additional factors to be evaluated in conjunction with heat rate data, including the value of operational flexibility offered by utility-owned generation, and the effects of various contractual guarantees offered by various bidders and the strength of those guarantees. The IE could be instructed to report on the impact of these differences as part of its evaluation.

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[71] CUB/100, Jenks-Feighner/6. CUB also asserts that the evidence in this docket does not permit a quantification of the level of risk related to heat rate degradation. *Id.*

Using a generic bid adjustment is inappropriate and will lead to distorted outcomes which will frustrate the acquisition of least-cost, least-risk resources for the benefit of customers, particularly when that bid adjustment is based on data that is not relevant to the types of resources typical of current and future RFPs.[72]

C. Cost Over- or Under-Runs

1. PacifiCorp's Evaluation of Cost Over- or Under-Runs and Associated Risks

a. The Company's Determination of a Resource's Construction Cost

For a benchmark resource, the Company's current practice is to obtain fixed price proposals from EPC contractors with fixed performance, scope, and schedule. The overall cost of a benchmark resource proposal also includes a cost contingency to account for potential EPC change orders, change in law provisions, required scope modifications and other unforeseen project costs.[73] As part of its bid solicitation process, the Company requests fixed price proposals from third parties. During periods of economic or market instability, the Company has accepted partially indexed price proposals.[74]

Though the Company requests fixed price proposals, whether or not the project is truly for a fixed price ultimately depends on the terms and conditions of the contract negotiated by the utility and the third-party bidder.[75]

b. Evaluating the Comparative Risks of Various Resources with Respect to Construction Cost

Assuming that the utility is able to negotiate a fixed price contract, the risk associated with the benchmark resource is that the utility may seek recovery of prudent

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[72] And, as Staff has noted, no bias appears to be present in the evaluation of heat rate degradation. Staff/200, Proctor/20.
[73] PAC/100, Kusters/18.
[74] *Id.* at 18-19.
[75] PAC/200, Kusters/13.

construction cost over-runs while a third-party may not. The risk associated with the third-party resource is that customers will not realize the benefits of any construction cost under-runs.[76] In addition, as with heat rate degradation, the value of the fixed price guarantee varies with the financial health of the party providing it. The effectiveness of a fixed price guarantee is therefore also intertwined, to some extent, with the third-party's creditworthiness.

In short, the comparative risks of construction cost over- or under-runs associated with different resource options—whether a third-party or benchmark resource—are highly dependent on the facts specific to a particular bid solicitation and the nature of the bids received in response to that solicitation. The current bid evaluation process attempts to capture the relative risks that are specific to a given RFP.

2. NIPPC's Proposed Bid Adjustment Improperly Distorts the Evaluation of the Risks of Construction Cost Over- and Under-Runs

NIPPC proposes a generic bid adjustment that would distort the objective evaluation of the risk of construction cost over- or under-runs. NIPPC proposes that the IE should assign a bid adjustment of 7.0% to the assumed installed costs of a utility-owned project.[77] NIPPC also recommends that the IE should estimate deferred capital expenditures of at least 5.7% of the initial plant cost (after application of the initial construction cost over-run bid adjustment) for each of the first five years of plant operations.[78]

This recommendation runs counter to the Company's own experience with construction costs, as the Company's experience has shown that it has often achieved

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[76] PAC/200, Kusters/12.
[77] NIPPC/100, Monsen/12.
[78] *Id*. at 23.

construction cost under-runs.[79] In addition, the Company's experience is that there is no discernible difference between the construction cost over- and under-runs in utility resources that were selected as the benchmark resource and those that were not acquired through a competitive bid solicitation.[80]

Indeed, a review of NIPPC's analysis shows that it is flawed for a number of reasons. NIPPC's first error is its conclusion that past construction cost over-runs are an indication that future construction cost over-runs will occur. In support of this conclusion, NIPPC presents a 2007 Edison Foundation study prepared by The Brattle Group finding that utility infrastructure construction was on the rise at that time, in large part due to dramatic increases in prices of steel, cement and other raw materials.[81] However, since 2007, electric demand has decreased sharply and economic conditions have reduced the backlog and pressure on labor costs, major equipment, and other commodities.[82] Instead of demonstrating a trend in construction cost over-runs, as NIPPC proposes, the 2007 Edison Foundation study actually underscores the dynamic nature of utility infrastructure costs. Generic bid adjustments, to be applied in all future RFPs, will effectively preclude evaluation processes that are flexible enough to value bid proposals in the context of relevant market circumstances.

NIPPC also presents anecdotal evidence of past construction cost over-runs for two projects, one built by Southern California Edison Company (SCE) and one built by Otter Tail Power Company. The SCE example is particularly inapt because it involves projects

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[79] *See* Exhibit PAC/204.
[80] And, as Idaho Power notes, given the lack of evidence that utilities systematically understate construction costs, a bid adder would simply act as a "penalty to all proposals," increasing costs for ratepayers. Idaho Power/200, Stokes/3.
[81] PAC/200, Kusters/13.
[82] *Id.* at 14.

developed on an expedited basis.[83] NIPPC further presents a sample of eleven utility-owned projects in California over the last ten years, which includes the aforementioned SCE example, to reach its conclusion that a 7.0% bid adjustment to the benchmark resource proposals in Oregon is appropriate. NIPPC does not present any information with respect to the underlying procurement methodology and EPC market that was in place to design and construct these resources.[84] This limited and questionably relevant set of anecdotes should not be used to conclusively determine that construction cost over-runs are likely in *all* future utility-owned projects.[85]

NIPPC's second error is that it misinterprets documents it presents to demonstrate construction cost over-runs at the Company's Dunlap, Lake Side, Seven Mile Hill, and Goodnoe Hills projects.[86] The Company's own analysis shows that there has been an average cost under-run of [redacted] associated with the Company's owned projects. Confidential Exhibit PAC/204 shows the costs used for evaluation purposes and the actual costs for the Company's owned thermal and wind projects. The highest construction cost under-run was [redacted], while the highest over-run was [redacted]. In addition, of the four Company projects that NIPPC claims experienced cost over-runs, only the Dunlap project was a benchmark resource in a competitive resource solicitation. As PAC/204 shows, the Dunlap project had a cost under-run of [redacted].

The third way in which NIPPC's analysis is flawed is that it is asymmetrical. The increased costs associated with the utility infrastructure market described by NIPPC also

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[83] *Id.* at 23.
[84] *Id.* at 22.
[85] *Id.* at 23. Idaho Power removed several projects from NIPPC's dataset that were planned and built in a particularly atypical manner (and not subject to a competitive bidding process). According to Idaho Power, removing just these few plants from NIPPC's analysis reduces NIPPC's proposed adder from 7 percent to negative 0.5 percent. *See* Idaho Power/200, Stokes/10-11. PGE also provides a comprehensive and robust assessment of NIPPC's data set. *See* PGE/300, Jacobs/33-40.
[86] *Id.* at 16-22.

affect IPPs and their proposals. In fact, in the Company's experience, when construction costs were rising in the 2007/2008 timeframe, IPPs began refusing to propose fixed price projects due to the volatility of the market.[87] NIPPC appears to assume, without any support, that all IPPs are always able to absorb whatever amount of cost over-run may occur.

In addition to the 7% construction cost over-run bid adder, NIPPC also proposes an annual bid adjustment for capital expenditures during the first five years of plant operation.[88] As noted in the Company's reply testimony, this issue is beyond the scope of this proceeding because it was not identified as one of the four factors to be addressed initially.[89] Staff agrees, noting that expenditures incurred during the first five years of operation are not relevant to this investigation.[90] For this reason, NIPPC's introduction of this issue should be rejected.

Notwithstanding, NIPPC's analysis is again flawed because it assumes, without support, that a utility *chooses* to incur *known* costs during the first five years rather than during the initial construction phase.[91] If this is the issue, which has not been shown, the appropriate response would be for the IE to help ensure, through an independent review of the benchmark resource, that there are no planned expenditures in the first five years that should more appropriately be considered as part of the bid proposal cost.

NIPPC's analysis with respect to construction costs during the first five years also appears to conflate the terms "total project cost" or "actual costs" with the amount included in customer rates at the time the project is placed in service. NIPPC states that

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[87] PAC/100, Kusters/18-19.
[88] NIPPC/100, Monsen/20.
[89] PAC/200, Kusters/24.
[90] Staff/200, Procter/17.
[91] NIPPC/300, Monsen/22.

"the cost of a plant initially put in ratebase can be misleading because a utility may choose to incur construction costs for a period after the online date of the plant."[92] NIPPC is correct that construction costs may be incurred for a period after the online date of the plant. However, this does not mean that those construction costs incurred after the original online date were not contemplated at the time of the RFP and included in the cost of the benchmark resource proposal. One hundred percent of the total project costs may not be included in customer rates immediately upon placing the resource into service. Rather, the timing of when costs associated with a project are included in customer rates is a function of the applicable ratemaking criteria rather than the in service date of the project.

3. NIPPC's Risk Assessment Regarding EPC Contracts is Flawed

In its reply testimony, NIPPC introduced witness Mr. Kasper, who provides testimony regarding protections that EPC contracts provide to a utility during and after development of a power generation project that the utility will own.[93] NIPPC claims that even a well-drafted EPC contract will not "protect the utility or its ratepayers from all contingencies and risks."[94] As an initial matter, the Company has not made the claim that a well-drafted EPC contract will protect customers from all contingencies and risks. The Company includes a cost contingency in its benchmark resource proposal to account for potential EPC change orders, change in law provisions, required scope modifications and other unforeseen project costs.[95]

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[92] *Id.* at 22.
[93] NIPPC/500, Kasper/2.
[94] *Id.*
[95] PAC/100, Kusters/18.

NIPPC's testimony is notable in two ways. First, NIPPC goes to great length to show how not all EPC contracts are created equal and notes that "the protections that current market conditions allow the utilities to obtain in their EPC contracts may change once the economy recovers, and EPC contractors may not be willing to provide the same protections that the utilities testify they are able to obtain today."[96] This is precisely why the Company has argued that risks must be assessed on a case-by-case basis and generic bid adjustments should be avoided; current market conditions and contracting practices do not necessarily inform future trends. Also, NIPPC makes a series of generalizations regarding the bidding practices of utilities.[97] However, these statements are too general to support a generic bid adjustment, and will likely be different on a case-by-case basis. Bid proposals should be evaluated based on their individual merits, and should not be arbitrarily adjusted.

Second, the testimony is asymmetrical. In most cases, the issues raised are also faced by project developers when contracting with EPC parties. NIPPC appears to assume, without explanation, that in this case all of the risks will be simply absorbed by the project developer. An appropriate comparative analysis of risks would review how these risks impact project developers and how and whether those risks play a role in the RFP process.

4. Conclusion and Recommendations

The Company agrees with Staff that no evidence of bias has been shown with respect to the evaluation of construction cost over- or under-runs that would justify the use

[96] NIPPC/500, Kasper/2.
[97] *See Id.* at 4.

of generic bid adjustments.[98] A correction of NIPPC's analysis shows the following: (1) construction cost over-runs are not a demonstrable past or current trend; (2) the Company reasonably and fairly estimates its utility benchmark resource costs; and (3) there is no need to impute a prescriptive construction cost over-run bid adjustment to benchmark resources.

Given the fluidity of comparative risks that may exist in any given bid solicitation, the more appropriate response is a more robust IE evaluation of these risks on a case-by-case basis, rather than a generic bid adjustment that would apply to all situations.

A risk-adjusted methodology would appropriately account for the risks associated with construction cost over- or under-runs. The Company recommends that a risk-adjusted methodology be applied and reviewed by the IE to compare the respective risks of the resources at issue in any given bid solicitation.[99] Any risk-adjusted methodology should be symmetrical and assess the risks of both benchmark resources and third-party proposals—including the financial structure and terms and conditions of the contract associated with the relevant project. A symmetrical risk adjustment methodology would also take into account the effects of various contractual guarantees offered by bidders and the strength of those guarantees. Any risk adjustment methodology should also consider whether or not the existing process already accounts for the relevant risk—in the Company's case, an adjustment may not be necessary because the Company includes a contingency cost for third party proposals or the benchmark resource consistent with

[98] Staff/200, Proctor/20.
[99] PAC/100, Kusters/23.

industry practices.[100] The IE could be instructed to report on the impact of the risk adjusted methodology as part of its evaluation.

If the Commission believes that modifications to the current method of assessing the comparative risks associated with construction costs are warranted, the Company would be willing to work with Staff or an independent third-party expert to make this element of the evaluation process more thorough and transparent.

D. Counterparty Risk

1. The Company's Evaluation of Counterparty Risk

The evaluation of counterparty risk is an important element of evaluating the comparative risks between benchmark resources and third-party owned resources. The creditworthiness of the counterparty, as well as the entity providing credit assurances on the counterparty's behalf, are important because the counterparty's ability to perform its obligations under the contract can impact risk associated with a particular proposal as well as the overall costs to customers.[101]

As with the other factors discussed herein, the Company attempts to assess the probability of default on a case-by-case basis.[102] The Company includes credit requirements in its RFPs. The evaluation of the credit quality of the bidder is not completed, however, until the time a bidder is selected for the final shortlist.[103]

Due to the variety of potential creditworthiness amongst bidders and the need to evaluate each one fairly, it is appropriate to evaluate each bidder on a case-by-case basis. There are varying levels of creditworthiness among third-party bidders as well as a variety

[100] *Id.* at 20.
[101] *Id.* at 25.
[102] *See Id.* at 25-30.
[103] *Id.* at 26.

of potential financial structures that could be included in any proposal, each with its own strengths and weaknesses.[104] For example, one potential structure is the establishment of a Special Purpose Entity (SPE), which relies on the PPA or TSA and the Company's credit to finance the project.[105]

2. NIPPC's Recommendation on Counterparty Risk Could Potentially Harm Customers

NIPPC observes that utilities tend to have stronger credit ratings than IPPs. NIPPC argues that utilities overstate the problem of "counterparty risk" in the context of competitive bidding, to the detriment of IPPs.[106]

To correct this alleged problem and "level the playing field," NIPPC argues that utilities should be forbidden from evaluating an IPP's creditworthiness as part of the bid-scoring process.[107] In addition, NIPPC proposes giving bidding IPPs several alternative options for improving their credit scoring relative to utilities, including adding 9 percent to a utility's benchmark bid to account for the fact that utilities tend to have better credit ratings than IPPs.[108]

On one hand, NIPPC supports these broad recommendations by drawing general conclusions about IPP financial performance risk. On the other hand, NIPPC concedes that "[g]eneralizing about PPA is hazardous, because each one can have a unique combination of contractual elements."[109] The Company agrees with the latter statement, and believes that due to the varying nature of IPPs, the focus of this docket should be on improving the evaluation process such that each bidder is treated equitably and fairly.

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[104] *Id.* at 27-28.
[105] *Id.* at 29.
[106] NIPPC/400, Collins/1.
[107] *Id.* at 2, 19..
[108] *Id.* at 19.
[109] *Id.* at 14.

Furthermore, due to the changing nature of wholesale energy markets, utility infrastructure markets, and the economy in general, broad generalizations regarding future counterparty performance based on past experiences are simply not relevant to future RFPs.[110]

NIPPC downplays the risk of IPP bankruptcy or non-performance and the potential impact on utility customers. NIPPC argues that much of the risk of IPP nonperformance "is mitigated by the excess supply that exists in the market in the event of an inability to perform, and the remainder of which can be and is effectively dealt with in PPA terms."[111] NIPPC fundamentally misunderstands how and why utilities procure resources: utilities procure resources based on need; they do not maintain an ever-expanding fleet of redundant resources that can easily absorb the failure of one resource. Therefore, IPP credit, which NIPPC correctly notes is especially important prior to the commercial operation date (COD), [112] is important.

NIPPC argues that going to the market for replacement power in the event an IPP fails can actually benefit customers.[113] However, the failure of an IPP can have profound consequences on utility customers that NIPPC does not consider—namely, that customers lose the price protection or reliability benefits of a long-term resource as well as any costs that may have been incurred, such as gas or constructed pipeline laterals, to fuel the plant.

In light of what is believed to be these minimal risks of non-performance, NIPPC argues that the utilities' methods for evaluating IPP financial performance risk are simply unfair and unnecessary. Many parties with no prior experience successfully navigated the

[110] PAC/200, Kusters/38-39.
[111] NIPPC/400, Collins/1.
[112] *Id.* at 14-15.
[113] *Id.* at 18.

hazards during "California's boom."[114] Yet the California energy crisis was, in part, the result of utilities' dependence on short-term market purchases. Dependence on short-term market purchases helped push one utility into bankruptcy and nearly bankrupted two more. Price protections are important, and history shows that wholesale energy is not always readily available in abundance.

NIPPC further states, due to typical financing structures, including the creation of a SPE, that an IPP will not go bankrupt as long as it is able to make money on the PPA. However, this is precisely why pre-COD creditworthiness is so critical. A less creditworthy IPP will experience more difficulty absorbing the risks of construction cost over-runs or other difficulties prior to its COD.

NIPPC also states that:

> [T]he North American Electric Reliability Corporation (NERC) standards maintain minimum reliability, at ratepayer cost. Operational performance risks of all supply are mutualized. The role of the PPA is to deter unreasonable reliance by the IPP on that fact.[115]

This statement further reveals a fundamental misunderstanding regarding utility procurement practices. RFPs are often issued to procure economic resources that may be needed to maintain system reliability. If the project does not materialize because the PPA had inadequate credit, or for any other reason, the utility and its customers could experience system reliability issues. Individual IPPs, not subject to an obligation to serve or the regulatory compact, do not have the same critical obligation to ensure system reliability.

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[114] *Id.* at 13.
[115] *Id.* at 16-17.

NIPPC goes on to note that "[i]t might be worth considering the extent to which other suppliers of the utilities, whether for poles or rail cars, are required to have comparable letters of credit in order to provide adequate "assurance" of their ability to receive revenue for product."[116] This statement again misconstrues the nature and purpose of a generating asset – if the generator does not come on-line, the utility and its customers lose price stability and potentially system reliability; energy is simply not analogous to most other types of commodities.

NIPPC states that the use of credit assessments has no nexus whatsoever to any financial performance risk of an IPP under the forms of customary PPAs. NIPPC claims that financial performance risk is to IPP lenders and is transaction specific. However, this overlooks the default risk inherent in any PPA, that regardless of the language, if the IPP enters bankruptcy, the Company may not be able to recover the full damages "allowed" in the contract. In the event of a bankruptcy, the Company's claim may be subordinated to those of other secured creditors' or IPP employee claims.

Furthermore, NIPPC notes that almost all IPPs will place generation assets in a SPE and therefore "it is not feasible to assess credit that cannot yet exist and can depend as much upon PPA prices as all other considerations combined."[117] However, the use of a SPE actually increases credit risk as the Company has no ability to file a claim against the IPP, for any unpaid portion of a claim against the SPE, as the SPE ring fence structure prevents this outcome. If the purpose of the bid evaluation process is a robust and objective analysis of the risks of a utility's benchmark resource as compared to a resource

[116] *Id.* at 17.
[117] *Id.* at 3.

proposed by a third-party, legitimate issues concerning counterparty risk should be considered.

3. Conclusions and Recommendations

According to NIPPC, one of the benefits of a PPA is its ability to contractually protect ratepayers from increased costs such as cost over-runs or unanticipated heat rate degradation.[118] However, an IPP's ability to absorb these risks hinges largely on the financial strength and creditworthiness of the IPP. It also hinges on negotiated contract terms: an IPP project is ultimately "fixed-price" only to the extent the relevant contract states that it is. As such, NIPPC's proposal to remove consideration of bidder credit from the RFP process should be rejected.

As part of the bid evaluation process, credit risk and probability of default should be quantified on an RFP- and resource-specific basis.[119] The Company recommends that the Guideline 10(d) evaluation include an assessment of counterparty risk as well as an assessment of the strength of the relevant third-party contract terms. The Company proposes establishing as part of the bid evaluation process a non-price score based on the counterparty's probability of default between the time of the final shortlist and the on-line date for the proposed resource.[120]

Counterparty risk should be applied to all third-party bidders at different stages of the RFP process. The Company recommends that a utility perform a credit evaluation on

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[118] *See, e.g.,* NIPPC/300, Monsen/19 (asserting that a typical PPA "structure" does not allow an IPP to pass through construction costs that exceed an agreed-upon price); NIPPC/300, Monsen/28 (stating that heat rate guarantees shield ratepayers from costs associated with heat rate degradation in IPP plants). An IPP's ability to deliver on these contractual promises depends, to some extent, on the IPP's financial strength and willingness to perform. *See* PAC/100, Kusters/27-28.
[119] PAC/200, Kusters/38.
[120] *Id.*

all bidders and utilize the information in its determination of a shortlist, as well as prior to entering into a PPA or any other contract.[121]

The Company suggests that a contract template with non-negotiable terms be developed for use in the bidding process. This template could include basic, non-negotiable terms, including security, credit support, default and remedies, compliance and audit requirements, standard operation requirements, and third-party sales and purchase obligations.[122] This credit evaluation process should be validated by the IE. The purpose of this review is, in part, to ensure that the least-cost, least-risk option is chosen for the benefit of customers.

IV. CONCLUSION

NIPPC's proposed bid adjustments suffer from the same flaws that existed in docket UM 1276: the absence of robust data and an appropriate quantification of bias. Consequently, the adjustments proposed by NIPPC would improperly distort the RFP analysis by hard wiring asymmetrical bias in the evaluation process, regardless of RFP and resource uniqueness, and would likely increase customer rates "with no assurance of offsetting risks and costs to the ratepayer."[123]

The Company recommends that systematic analysis of each of the twelve comparative risk items identified in this docket can lead to a more robust IE analysis of the risks of a utility's benchmark resource as compared to a PPA to meet the Commission requirement under Guideline 10(d). If the Commission finds that modifications to the process are needed, the Company recommends that the Commission direct the utilities to

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[121] *See* PAC/100, Kusters/26.
[122] *Id.* at 30; PAC/200, Kusters/38. A template PPA with highlighted terms that could be considered non-negotiable is included as Exhibit PAC/208.
[123] Order No. 11-001 at 6.

work with Staff or another independent third-party expert, to develop criteria to address the risks to utility customers for each issue identified in this docket.

In addition, the Company has proposed a number of recommendations in its testimony for four of the twelve comparative risks, including instances where the assessment of relevant contract terms will be critical to ensure third-party bidders' contract provisions will mirror the protections that were a part of the assessed bid. The Company also proposes certain non-negotiable contract terms. By adopting such terms, the Commission would insert some regulatory and risk mitigation certainty into the existing completely bilateral contract negotiations.

The Company recommends that NIPPC's proposed pre-determined generic bid adjustments to be applied asymmetrically to benchmark resources be rejected. Rather, the Company recommends that the Commission direct the parties to focus this docket on its original intent—not to remedy any perceived or alleged, yet undemonstrated, bias—to develop a more comprehensive accounting and comparison of all of the relevant risks, including consideration of construction risks, operation and performance risks, and environmental regulatory risks between benchmark resources and IPPs.