| 1 | BEFORE THE PUBLIC UTILITY COMMISSION | | |
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| 2 | OF OREGON | | |
| 3 | UM 1182 | | |
| 4 | In the Matter of | | |
| 5 | PUBLIC UTILITY COMMISSION OF OREGON Investigation Regarding Competitive Bidding STAFF PREHEARING BRIEF | | |
| 7 | 1. INTRODUCTION | | |
| 8 | Staff of the Public Utility Commission of Oregon (Staff) will use its prehearing brief to | | |
| 9 | summarize its position and conclusions in a short, succinct fashion. This is possible because | | |
| 10 | there are over-arching findings and principles at work that all lead to the same conclusion: the | | |
| 11 | Commission should not adopt the bid adders proposed by the Northwest and Intermountain | | |
| 12 | Power Producers Coalition (NIPPC) for three of the four "risk factors" under consideration (i.e. | | |
| 13 | construction cost over/under-runs, heat rate degradation and wind capacity factor). Staff further | | |
| 14 | recommends that the Commission not adopt any of the counterparty risk proposals suggested by | | |
| 15 | any party. | | |
| 16 | 2. SUMMARY OF STAFF'S AND THE PARTIES' CONCLUSIONS | | |
| 17 | The Commission identified the following four risk factors to be considered in Phase II of | | |
| 18 | UM 1182: (1) cost over-run and under-runs, (2) heat rate degradation, (3) wind capacity factor, | | |
| 19 | and (4) counter-party risks. See generally Order No. 12-324. The parties have spent the last | | |
| 20 | several months issuing and answering data requests, as well as preparing and submitting Opening | | |
| 21 | and Reply testimony, in order to explore and evaluate these risks. | | |
| 22 | One party, NIPPC, has recommended that the Commission adopt specified asymmetric | | |
| 23 | adjustments to the utilities' Benchmark Resources ("bid adders") for consideration in the bid | | |
| 24 | evaluation process. NIPPC argues that these bid adders are necessary to compensate for alleged | | |
| 25 | bias in favor of the utility's Benchmark Resource over the bids proposed by Independent Power | | |
| 26 | Producers (IPPs). | | |

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| | recommended that the Commission not adopt NIPPC's bid adders. Staff and the utilities each | |
| 3 | conclude that NIPPC has not established the existence of bias supporting the need for its adders | |
| 4 | Further, each IPP and power purchase agreement (PPA) is unique to a certain degree and it does | |
| 5 | not further the analysis to speak in terms of the "typical" PPA or that PPAs "usually" account for | |
| 6 | a particular risk. | |
| 7 | The utilities further recommended that the bid evaluation process account for | |
| 8 | counterparty risks that allegedly accompanies IPPs and PPAs. In response, NIPPC argues that | |
| 9 | there is no need to do so. In support of its position, similar to the utilities' arguments against th | |
| 10 | NIPPC adders, NIPPC asserts that, so far as counterparty risk goes, all IPPs are differently- | |
| 11 | situated and all PPAs contain unique terms and conditions. For these reasons, NIPPC argues | |
| 12 | against generic consideration of counterparty risk in the bid evaluation process. | |
| 13 | The Citizens' Utility Board of Oregon (CUB) filed Reply, but not Opening, testimony. | |
| 14 | CUB supports bid adders for wind capacity factor and cost over-run risks, but concludes the state | |
| 15 | of the record does not support a change in the bid evaluation methodology to account for | |
| 16 | counterparty or heat rate degradation risks. | |
| 17 | 3. OVER-ARCHING FLAWS WITH NIPPC'S PRESENTATION | |
| 18 | NIPPC misunderstands what the Commission stated in its Order No. 11-001 concerning | |
| 19 | "bias." NIPPC asserts that the Commission expressly declared that there is a bias in favor of | |
| 20 | "utility-owned-generation" (UOG) projects and has "re-opened UM 1182 not to reevaluate | |
| 21 | whether this bias exists, but rather to quantify it." NIPPC/300, Monsen/3-4. NIPPC is mistaken | |
| 22 | As Staff noted, the context under which the Commission found that bias exists for the | |
| 23 | Benchmark Resource bid is quite narrow. In that Order, the Commission clearly states that the | |
| 24 | bias which was identified arises when the utility is faced with two bids that have the same costs. | |
| 25 | Under this very narrow situation, the utility will "likely choose to build the plant" Staff/200 | |
| 26 | Procter/20. | |

| 1 | In its Order, the Commission acknowledged that utilities have an incentive to increase |
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| 2 | ratebase by adding Benchmark Resources. However, importantly, the Commission did not find |
| 3 | that the current bid evaluation process is biased, nor did the Commission make any conclusions |
| 4 | whatsoever about the four risk factors under review in Phase II of UM 1182. |
| 5 | As Staff witness Dr. Robert Procter (Procter) explained, a utility's bias towards building |
| 6 | ratebase is sometimes referred to as the "Averich-Johnson" effect (AJ Effect). See Staff/200, |
| 7 | Procter/19-20. The Commission's recognition of the AJ Effect does not constitute a finding that |
| 8 | bias exists in the current bid evaluation process for the four risk factors under consideration. <i>Id.</i> |
| 9 | As will be discussed in greater detail later, perhaps because of its fundamental misunderstanding |
| 10 | of Order No. 11-001, NIPPC has failed to show the existence of bias justifying the need for its |
| 11 | proposed bid adders. Indeed, because no bias has been shown, the use of NIPPC's proposed |
| 12 | adders may actually inappropriately create a bias in favor of the IPP bid over the Benchmark |
| 13 | Resource. See PAC/200, Kusters/9-10; PGE/200, Outama-Bettis-Mody-Hager/2-4; Idaho |
| 14 | Power/200, Stokes/3. |
| 15 | NIPPC's presentation is also flawed because it fails to support its recommendations with |
| 16 | sufficient data. Indeed, according to Staff witness Procter, "there are significant, perhaps |
| 17 | unattainable, data and methodological hurdles to measuring risk quantitatively in a thorough way |
| 18 | that accounts for both contract terms and ownership." Staff/200, Procter/2. To its credit, NIPPC |
| 19 | readily acknowledges the difficulties it has had in obtaining adequate data to support its case. |
| 20 | See, e.g., NIPPC/300, Monsen/25. |
| 21 | NIPPC's presentation is further flawed to the extent it proposes generic adders for the |
| 22 | three risk factors based upon the "typical" or "usual" IPP or PPA. It is manifest that not all IPPs |
| 23 | and PPAs are the typical ones. Accordingly, it is not appropriate, meaningful or useful to |
| 24 | propose generic adders based upon a "typical" PPA presented by a "typical" IPP. Interestingly |
| 25 | and importantly, NIPPC makes this identical observation in arguing against the imposition of an |
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| 1 | adjustment for IPP bids for counterparty risk. See NIPPC/500, Kasper/6-10; NIPPC/400, |
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| 2 | Collins/14. |
| 3 | Along the same line of thought, even to the extent a PPA is a "typical" one that includes |
| 4 | alleged benefits for ratepayers, NIPPC fails to address the potential costs that accompany a PPA |
| 5 | "benefit." Using a PPA "guaranteed" heat rate as an example, such guarantees are not provided |
| 6 | for free and such a PPA likely includes an embedded cost for it. See Staff/100, Procter/13. |
| 7 | NIPPC's presentation fails to account for the cost to ratepayers for such guarantees. Or, in the |
| 8 | case of construction cost over runs, NIPPC stresses that, under its "typical" PPA, an IPP may |
| 9 | have to absorb a construction cost over-run but fails to discuss that it would also retain the |
| 10 | benefits of a cost under-run. Here again, that risk coverage will not be provided for free. |
| 11 | A related flaw with NIPPC's presentation is it only focuses on the downside risks to the |
| 12 | Benchmark Resource, not the potential upside risks or benefits to the utility and its ratepayers. |
| 13 | See Staff/200, Procter/15-16. There are indeed potential benefits to ratepayers with UOG |
| 14 | projects. For example, while a utility may recover its cost over-runs (but only to the extent they |
| 15 | are shown to the Commission to be prudently incurred), it is not allowed to retain cost under- |
| 16 | runs and those benefits flow to ratepayers. As a result of NIPPC's selective approach to the |
| 17 | development of their proposed bid adders, it ignores the risk of construction costs savings, for |
| 18 | example, that utilities in this docket have experienced with its own projects. That is, risk is |
| 19 | "two-sided" in that it includes both the potential for actual costs to exceed forecasted cost and the |
| 20 | potential for actual costs to fall below that same forecasted cost. This selective approach to |
| 21 | developing its bid adders undermines the usefulness of NIPPC's proposed bid adders. |
| 22 | Staff's discussion in the following sections of its brief of the specific adders NIPPC |
| 23 | proposes for construction cost overruns, heat rate degradation and wind capacity factor should be |
| 24 | read in context with these overarching concerns. In other words, while for ease of reading Staff |
| 25 | does not repeat these overarching concerns in its discussion of each NIPPC adder, they apply and |
| 26 | underlie Staff's recommendation that the Commission not adopt any of them. |

4. FORECAST ERROR AND RISK ASSESSMENT

| In addition to the overarching analytical flaws set forth above, Staff has an important |
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| concern that merits special discussion. Staff concludes that NIPPC's bid adders mistake "forecast |
| error" for "risk assessment." In Staff's view, this is a critical distinction. |

| Staff defines "forecast error" as the potential to use the wrong expected value for a factor |
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| solely because the value was incorrectly forecasted. Staff/200, Procter/9. To take a simple |
| example, if a coin is flipped 100 times, and Person A pays Person B \$1.00 for every "head" and |
| Person B pays Person A \$1.00 for every "tail," the expected value of the wager for person A and |
| person B is \$0.00. In other words, on an expected value basis, the money paid out by either |
| Person A or B is expected to equal the money received by each. Continuing with this example, if |
| an analyst were to base his or her decision to participate in this "investment" using an expected |
| value other than \$0.00, they have made what Staff terms a "forecast error." While it is difficult |
| to imagine such an error occurring in this 'simple' example, it is not hard to imagine such an |
| error occurring in developing a bid for such a complex investment as a new power plant. |

Each of NIPPC's proposed bid adders suffers from this fatal flaw. It is a fatal flaw since this investigation was to focus on risk, and not on assessing if bid evaluation uses the correct expected values for construction cost, heat-rate, or wind capacity. Staff supports the goal of bid evaluation being performed using the correct expected values while also separating this issue from the issue of accounting for risk associated with construction cost, heat-rate, wind capacity, or counter-party. NIPPC appears to understand this distinction considering that it argued "While the variance and standard deviation can be useful tools for estimating the variation of data in a given population, these statistics do not influence the expected value..." NIPPC/300 Monsen/15 lines 14-16. Staff agrees with that statement. That is one way to understand the distinction Staff has been making between forecast error and risk. That is, risk is measured by the variance and the standard deviation, and second, the expected value is never a measure of risk.

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| 1 | In its Opening testimony, Staff stated its definition of risk. Risk is the variation of | | |
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| 2 | outcomes around the expected outcome of some choice. See Staff/100, Procter/3-4. Staff further | | |
| 3 | stated that risk should be measured by calculating the variance of values around an expected | | |
| 4 | value (two typical measures of risk are variance and standard deviation). Id. | | |
| 5 | Staff concludes that NIPPC's proposed bid adders are flawed because, rather than | | |
| 6 | account for risk, they modify the expected value for construction cost, heat-rate, and wind | | |
| 7 | capacity factor. Stated differently, NIPPC's bid adders do not account for risk because the | | |
| 8 | adders do not account for the variation of values around an expected value as is captured by the | | |
| 9 | variance or standard deviation. This is an important point because it demonstrates a fundamenta | | |
| 10 | misunderstanding by NIPPC of how to measure and account for risk. Staff also notes that, even | | |
| 11 | if this phase of the docket did concern forecast error (which it does not), due to data and | | |
| 12 | methodological hurdles, NIPPC's bid adders should not be used for forecast error either. See | | |
| 13 | generally Staff/200, Procter/2, 9. | | |
| 14 | Since the issue of risk is central to the Commission's direction to the parties for Phase II | | |
| 15 | of this docket, Staff went to some length to distinguish between forecast error, on the one hand, | | |
| 16 | and variations around that expected value as measured by variance or standard deviation, as risk, | | |
| 17 | on the other hand. NIPPC in its Reply testimony (NIPPC/300 Monsen/17 lines 16-18 and | | |
| 18 | NIPPC/300 Monsen/18 lines 1-4) uses Staff's arguments incorrectly in an effort to support its | | |
| 19 | argument that its proposed bid adders captures risk. Specifically, referring to construction cost | | |
| 20 | adder, NIPPC argues "The 7% bid adder represents the deviation from the expected | | |
| 21 | outcomeThe methodology I used is a straightforward way of assessing riskthat avoids | | |
| 22 | unnecessarily complex statistical analyses." Id. | | |
| 23 | The distinction that Staff made between expected value and risk in its testimony and | | |
| 24 | NIPPC's incorrect interpretation of Staff's argument that is noted above can be illustrated with | | |
| 25 | the coin flip example above if that example is extended to include two players (bidders). What | | |
| 26 | the example below will clarify is the difference between modifying an expected value versus | | |

| 1 | accounting for risk. | The example is structured | to distinguish between | the expected value of a |
|-----|----------------------|---------------------------|------------------------|-------------------------|
| - 1 | 8 | 1 | 0 | |

- 2 range of outcomes (think costs for example) on the one hand, and the risk of that range of
- 3 outcomes as measured by variance or stand deviation, on the other hand. It will be demonstrated
- 4 that these are two very different measures (expected value versus variance or standard deviation)
- 5 and modifying the expected value is not, as NIPPC claims, "...a straightforward way of
- 6 assessing the risk..." What NIPPC terms "...complex statistical analyses" cannot be simply set-
- 7 aside in a desire for ease and simplicity. Rather, that complexity must be addressed to meet the
- 8 Commission's direction for this phase of the docket.
- In this expanded coin flip example, two people (think to competing bids for two new power plants, or projects) each flip a coin ten times for each of three games. The example is
- structured to result in the same expected value for the two of them but different amounts of risk.
- 12 It is this volatility around the expected value that is risk. Capturing this volatility is completely
- 13 different than adjusting the expected value. Say that Person (project) A flips ten times in game
- one and comes up with six heads and four tails for a total payoff of \$2 (remember Person A
- 15 receives \$1 for each head and pays \$1 for each tail). Person (project) B flips for ten times and
- 16 gets seven heads and three tails for payoff of \$4. They each play this game two more times with
- 17 Person (project) A getting a "value" of \$4 in game two and \$6 in game three. Person (project) B
- 18 gets a value of \$0 in game two and \$8 in game three. In summary,

| 19 | Person A | Person B | |
|----|------------|----------|-----|
| 20 | Game One | \$2 | \$4 |
| 21 | Game Two | \$4 | \$0 |
| 22 | Game Three | \$6 | \$8 |

- Now, the expected value for Person (project) A is \$4 and the expected value for Person (project)
- B is also \$4 (i.e. Total payoff of \$12 for each person, divided by 3 games). They each have the
- 25 same expected value.

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| 1 | To capture the <i>riskiness</i> of the coin flipping of Person (project) A versus Person (project) |
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| 2 | B, it is necessary to calculate the variance and standard deviation. These additional calculations |
| 3 | are necessary since even if the expected value is adjusted for one of these two projects that does |
| 4 | not account for differences in the riskiness of Person (project) A versus the riskiness of Person |
| 5 | (project) B. Specifically, in this example, the <i>variance</i> for project B is 21.33 while it is only 5.3 |
| 6 | for project A. Calculating the standard deviation puts this variability into the same units, dollars |
| 7 | as the expected values for Persons (projects) A and B. The standard deviation of Person |
| 8 | (project) A is \$2.30 while it is \$4.60 for Person (project) B. 1 This example illustrates that the |
| 9 | riskiness of project B is twice that of project A. This example, while simplified to clarify the |
| 10 | difference between the expected value and risk, clearly demonstrates that if one bases a selection |
| 11 | decision on expected value without determining how risky each project is, they may very well |
| 12 | pick the wrong project. This is a possible outcome since a person might be indifferent between |
| 13 | these two "projects" based on their expected values when they should prefer "project" A since it |
| 14 | has the same expected value but is also much less risky |
| 15 | To summarize Staff's argument, for each of NIPPC's bid adders, it calculates an average |
| 16 | increase for each of the cost and performance aspects of the Benchmark Resource bid. The |
| 17 | result of those proposed adjustments is a revised expected value for each adjustment. That is |
| 18 | what Staff calls adjusting for forecast error. In contrast, capturing the riskiness of each separate |
| 19 | bid involves more complex calculations that cannot be avoided if risk is to be measured. Making |
| 20 | an adjustment to the expected value is quite different than those required to correctly account for |
| 21 | risk. |
| 22 | |
| 23 | |

26 taking the square root of the variance.

Variance is calculated in the following way (using the values for Person A): $((2-4)^2 + (4-4)^2 + (6-4)^2)/(3/(3-1))$. The denominator of (3/(3-1)) is used when the sample is small, which it is in

²⁵ this case (only three games). If the number of games were larger, say 100, then the denominator can be simplified to (3-1). Using these same numbers, the standard deviation is determined by

5. CONSTRUCTION COST OVER/UNDER-RUNS

| 2 | NIPPC, primarily through its witnesses Monsen and Kasper, proposes a cost over-run |
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| 3 | adder for utility Benchmark Resources of 7.0% of the initial estimated construction costs, with |
| 4 | an incremental adder of 5.7% per year for the first five years. See, e.g., NIPPC/100, Monsen/4. |
| 5 | Staff and the utilities submitted extensive testimony showing that NIPPC's work is based on |
| 6 | incorrect facts, an insufficient data base and, in some cases, gross-oversimplification of the data. |
| 7 | Rather than reiterate this testimony at length, Staff will merely summarize the main points. |
| 8 | In addition to the overarching concerns set forth above, Staff is primarily concerned that |
| 9 | the data set NIPPC uses to support its adder is extremely small, which ultimately impacts its |
| 10 | usefulness. Staff/100, Procter/11. Staff then set forth three concerns which directly arise from |
| 11 | NIPPC's use of a small dataset: (1) NIPPC's inappropriate blending of the costs associated with |
| 12 | different types of plants (e.g. pooling CCCT costs with those of SCCTs); (2) calculating the |
| 13 | adder based upon the average difference in construction costs; and (3) failure to address |
| 14 | construction cost overruns for renewable resources. Staff/100, Procter/12-13. |
| 15 | PacifiCorp, PGE and Idaho Power are also concerned with NIPPC's data set. PacifiCorp |
| 16 | explained that, for its current bid evaluation process, it requests fixed-price bids where possible. |
| 17 | PAC/100, Kusters/18-19. Very simply stated, where such bids cannot be obtained, the company |
| 18 | accepts them but then requires contingency reserves, liquidated damages provisions and imputes |
| 19 | risk adjustments as appropriate. Id. at 19-22. In its Reply testimony, PacifiCorp criticized |
| 20 | certain aspects of NIPPC's Opening testimony. See PAC/200, Kusters/12-24. In addition to the |
| 21 | overarching concerns set forth above, PacifiCorp carefully rebutted NIPPC's analysis of history |
| 22 | of overruns at plants used in Monsen's study. Id. at 16-24. |
| 23 | PGE's presentation is similar to PacifiCorp's. PGE generally describes its bid evaluation |
| 24 | process at PGE/100, Outama-Bettis-Mody-Hager/10-15. PGE states it has no evidence of bias in |
| 25 | the process and suggests that the Commission may want to consider requiring that a bid with a |
| 26 | |

| 1 | construction cost overrun guarantee (which it terms a "wrap") receive a higher bid than one that | |
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| 2 | does not. Id. at 7, 22. | |
| 3 | In its Reply testimony, PGE submits testimony from its expert consultant, Jonathan | |
| 4 | Jacobs, about NIPPC's proposed construction cost adder. See PGE/300, Jacobs/30-39. Simila | |
| 5 | to Staff, Jacobs finds that NIPPC's database is insufficient and indeed, it would be very difficult | |
| 6 | to develop an adequate database. Id. at 31-33. Jacobs also finds flaws with the specific alleged | |
| 7 | comparative plants used by NIPPC's in its analysis. Id.at 33-34. Finally, Jacobs concludes | |
| 8 | NIPPC's calculation of its adder is problematic. <i>Id.</i> at 35-40. | |
| 9 | For its part, Idaho Power raises similar concerns and also notes that, in Idaho, the risk of | |
| 10 | cost overrun is already accounted for. Idaho Power then offers specific criticisms of NIPPC's | |
| 11 | presentation. See generally Idaho Power/100, Stokes/5-8; Idaho Power/200, Stokes/1-13. | |
| 12 | For the reasons stated, Staff recommends that the Commission not adopt NIPPC's | |
| 13 | construction cost overrun bid adder for utility Benchmark Resources. | |
| 14 | 6. HEAT RATE DEGRADATION | |
| 15 | Generally, as plants age, they become less efficient. This change in efficiency is | |
| 16 | measured by the "heat rate" - an increasing heat rate indicates a decrease in efficiency (i.e. using | |
| 17 | more fuel to produce the same amount of energy). ² NIPPC proposes a bid adder to heat rate | |
| 18 | estimates for gas-fired UOG plants so that the average expected plant heat rate over the course of | |
| 19 | the analysis period is at least 8.0% above the starting heat rate to account for heat rate | |
| 20 | degradation. See NIPPC/100, Monsen/4. Very simply stated, NIPPC justifies its heat rate adder | |
| 21 | on the premise that ratepayers are liable for heat rate degradation for UOG projects whereas a | |
| 22 | "typical" PPA will assign liability for heat rate degradation to the IPP (rather than to the utility, | |
| 23 | and ultimately, the utility's ratepayers). NIPPC/100, Monsen/24-25. | |
| 24 | | |
| 25 | ² All parties offered similar definitions of heat rate. For example, PGE witness Jacobs defined the "heat rate" of a power plant as the ratio of fuel use to electric energy production. PGE/300, | |
| 26 | Jacobs/7. | |

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| 1 | Staff and the utilities have significant concerns with NIPPC's analysis supporting its heat |
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| 2 | rate adder. CUB, as stated earlier, also concludes that NIPPC did not prove its case for this |
| 3 | adder. |
| 4 | As with the construction cost over/under-run issue, all parties submitted extensive |
| 5 | testimony about this matter. Staff's observations on NIPPC's heat rate adder are found at |
| 6 | Staff/100, Procter/14-21 and Staff/200, Procter/11-12. In reviewing an earlier NIPPC |
| 7 | presentation about heat rate circulated prior to Opening testimony, Staff points out that NIPPC |
| 8 | did not provide a persuasive calculation of risk, that the adder has data and methodological |
| 9 | issues, and NIPPC's analysis did not consider how contract terms may vary from the "typical" |
| 10 | PPA. Staff/100, Procter/14. As to the data set, Staff explains that NIPPC's analysis relies upon |
| 11 | plants that are not representative of gas plants that will be bid into future RFPs. Staff/100, |
| 12 | NIPPC/15. NIPPC also used SCCT plants as a proxy for CCCT plants without showing that this |
| 13 | is an appropriate assumption. <i>Id.</i> at 15-16. Finally, Staff illustrates how NIPPC's methodology |
| 14 | is flawed at Staff/100, Procter/16-21. |
| 15 | PGE also presented extensive testimony on this topic. See PGE/100, Outama-Bettis- |
| 16 | Mody-Hager/16-20; PGE/300, Jacobs/7-30. PGE agreed with NIPPC that bids should include an |
| 17 | accurate estimate for heat rate degradation and explained that its bids for its Benchmark |
| 18 | Resources currently do incorporate heat rate degradation. PGE/100, Outama-Bettis-Mody- |
| 19 | Hager/20. PGE suggested that using the long-run degraded heat rate based on information |
| 20 | provided by the turbine manufacturer was the appropriate measure. PGE/200, Outama-Bettis- |
| 21 | Mody-Hager/5. Staff agrees with this suggestion while also noting that using the long-run |
| 22 | degraded heat rate essentially represents the expected value heat rate (which as discussed in |
| 23 | Section 4 above is different than accounting for heat rate risk). Staff/200, Procter/11. |
| 24 | PGE also presented testimony from its expert consultant, Jonathan Jacobs, who critiqued |
| 25 | and criticized aspects of NIPPC's heat rate analysis. See PGE/300, Jacobs/7-30. Very generally |
| 26 | stated, witness Jacobs concluded that NIPPC's approach was flawed for the same reasons |

| 1 | identified by Staff witness Procter and also because NIPPC failed to account for now the |
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| 2 | dispatch of the plant affects its calculated heat rate. Id. at 29-30. |
| 3 | PacifiCorp, through its witness Kusters, also criticized NIPPC's heat rate analysis. See |
| 4 | PAC/100, Kusters/11-17; PAC/200, Kusters/25-30. Preliminarily, similar to PGE, PacifiCorp |
| 5 | states that the best source for heat rate are the values provided by the turbines manufacturer |
| 6 | (PacifiCorp refers to this data as the "Original Equipment Manufacturer" or OEM). PAC/100, |
| 7 | Kusters/12; PAC/200, Kusters/25. PacifiCorp states that it then adjusts the OEM data for site- |
| 8 | specific characteristics and design and this adjustment is included as part of the bid evaluation |
| 9 | process. PAC/100, Kusters/11-12; PAC/200, Kusters/26. As to NIPPC's analysis, PacifiCorp |
| 10 | concludes, like Staff and PGE, that NIPPC's dataset is flawed and its calculation of heat rate |
| 11 | degradation is incorrectly performed. PAC/200, Kusters/27-30. |
| 12 | Idaho Power presents a similar critique of NIPPC's heat rate analysis as Staff, PGE and |
| 13 | PacifiCorp. See Idaho Power/100, Stokes/12-13; Idaho Power/200, Stokes/14-16. Idaho Power |
| 14 | notes that its Benchmark Resource bid also assumes a heat rate degradation in accordance with |
| 15 | the manufacturer's specifications. Idaho Power/200, Stokes/14-15. |
| 16 | For the reasons stated, Staff recommends that the Commission not adopt NIPPC's heat |
| 17 | rate degradation adjustment for utility Benchmark Resources. |
| 18 | 7. WIND CAPACITY FACTOR |
| 19 | NIPPC argues for the Commission to adopt an adder [which NIPPC designates as a |
| 20 | confidential number, so Staff does not specify it here] for utility Benchmark Resource bids to |
| 21 | effectively reduce the Benchmark Resource's expected wind capacity factor. See NIPPC/100, |
| 22 | Monsen/4; NIPPC/200, Monsen/36. NIPPC claims its adder is necessary because its evidence |
| 23 | shows that the utilities' Benchmark Resource projects have historically experienced lower than |
| 24 | expected wind capacity factors. |
| 25 | In its Opening testimony, Staff critiqued an earlier presentation on wind capacity factor |
| 26 | adjustments that was circulated by NIPPC which was very similar to that which NIPPC |

| 1 | submitted as its analysis in its Opening testimony. Staff was primarily concerned with NIPPC's | | | |
|----|--|--|--|--|
| 2 | dataset because it only included utility-owned wind projects. See Staff/100, Procter/22. | | | |
| 3 | PacifiCorp, and to a lesser extent PGE, vigorously challenge NIPPC's wind capacity | | | |
| 4 | factor adjustment. PacifiCorp first explains that, after the initial bid screening is completed, it | | | |
| 5 | retains an independent "capacity factor expert" to assess the expected wind capacity factor for | | | |
| 6 | each resource on the initial short list. PAC/100, Kusters/6-7. PacifiCorp then states that, even it | | | |
| 7 | NIPPC had evidence to support its proposed adjustment, PacifiCorp's use of an independent | | | |
| 8 | expert negates the need for NIPPC's proposal. PAC/200, Kusters/31-32. PacifiCorp witness | | | |
| 9 | Kusters further testifies that the company has had difficulty negotiating a capacity factor | | | |
| 10 | guarantee from the PPA counterparties. Id. at 8-9. | | | |
| 11 | Turning to NIPPC's presentation, PacifiCorp argues that NIPPC fails to appreciate that | | | |
| 12 | there is an insufficient history associated with PacifiCorp's wind fleet to allow for broad | | | |
| 13 | extrapolation into the future. PAC/200, Kusters/34-36. PGE makes similar observations in its | | | |
| 14 | testimony. See PGE/200, Outama-Bettis-Mody-Hager/6-10. PGE supports PacifiCorp's use of | | | |
| 15 | an independent expert. <i>Id.</i> at 10. | | | |
| 16 | For the reasons stated, Staff recommends that the Commission not adopt NIPPC's wind | | | |
| 17 | capacity factor adjustment for utility renewable Benchmark Resources. | | | |
| 18 | 8. COUNTERPARTY RISK | | | |
| 19 | Staff recommends the Commission not adopt any of the parties' proposals for | | | |
| 20 | counterparty risk. ³ The reasons for Staff's position are incorporated in its Summary of Findings | | | |
| 21 | set forth in its Reply testimony. See Staff/200, Procter/1-2; and at 4, lines 1-12. Briefly, no | | | |
| 22 | party has demonstrated that bias exists in the bid evaluation process, there are difficult hurdles | | | |
| 23 | overcome in obtaining and measuring risk quantitatively, and the parties' recommendations are | | | |
| 24 | based, in part, on an analysis that mistakes forecast risk for risk of bias. | | | |
| 25 | ³ Staff notes that NIPPC presents an adder for counterparty risk for the first time in its Reply | | | |
| 26 | testimony. See NIPPC/400, Collins/19. | | | |

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9. 1 2 Staff recommends that, based on its analysis and the state of the record in Phase II, the 3 Commission not adopt any of NIPPC's proposed bid adders for utility Benchmark Resources and 4 not adopt any of the parties' recommendations for adjustment to the bid evaluation process for 5 counterparty risk. 6 In addition to the reasoning presented in this prehearing brief, Staff points out that its 7 recommendations draw support from the fact that, if there were a major problem in the utilities' 8 current bid evaluation process, Staff would expect to see some evidence or mention of it in the 9 report prepared by the independent evaluator (IE). Staff's review of the IE reports submitted 10 over the years has not revealed any concerns stated by the IEs on this issue. See Staff/200, 11 Procter/5-6, 17, 20-21. 12 day of February 2013. DATED this 13 Respectfully submitted, 14 ELLEN F. ROSENBLUM 15 Attorney General 16 17 Michael T. Weirich, #82425 18 Assistant Attorney General Of Attorneys for Staff of the Public Utility 19 Commission of Oregon 20 21 22 23 24 25

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CONCLUSION

CERTIFICATE OF SERVICE

| 2 | I certify that on February 1, 2013, I served the foregoing Staff Prehearing Brief upon the | | |
|----|--|--|--|
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