Oregon
John A. Kitzhaber. MD. Governor

Public Utility Commission
550 Capitol St NE, Suite 215
Mailing Address: PO Box 2148
Salem, OR 97308-2148
Consumer Services
1-800-522-2404
Local: (503) 378-6600
Administrative Services
(503) 373-7394

January 14, 2013

Via Electronic Filing and U.S. Mail

OREGON PUBLIC UTILITY COMMISSION
ATTENTION: FILING CENTER
PO BOX 2148
SALEM OR 97308-2148

RE: Docket No. UM 1182 (PHASE II) – In the Matter of PUBLIC UTILITY COMMISSION OF OREGON Investigation Regarding Competitive Bidding.

Enclosed for electronic filing in the above-captioned docket is the Public Utility Commission Staff's Redacted Reply Testimony,

/s/ Kay Barnes
Kay Barnes
Utility Program
Filing on Behalf of Public Utility Commission Staff
(503) 378-5763
Email: kay.barnes@state.or.us

c: UM 1182 Service List (parties)

PUBLIC UTILITY COMMISSION
OF OREGON

UM 1182 (Phase II)

Staff Reply Testimony

Of

Robert J. Procter

In the Matter of
PUBLIC UTILITY COMMISSION OF OREGON
Investigation Regarding Competitive Bidding.

REDACTED

January 14, 2013

CASE: UM 1182
WITNESS: ROBERT J. PROCTER

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 200

Reply Testimony

REDACTED
January 14, 2013

Q. PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS ADDRESS.

A. My name is Robert J. Procter. My business address is 550 Capitol Street NE Suite 215, Salem, Oregon 97301-2551.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE.

A. My Witness Qualification Statement is found in Exhibit Staff/101.

Q. WHAT IS THE PURPOSE OF YOUR REPLY TESTIMONY?

A. The purpose of Staff Reply Testimony is to respond to the Direct Testimony filed by parties in this proceeding and to present Staff's findings.

Q. PLEASE SUMMARIZE STAFF'S REPLY TESTIMONY.

A. Staff's Reply Testimony is organized into three sections. Part I addresses how the four risks are accounted for in existing bid evaluation methods. Part II addresses whether the methods summarized in Part I result in bias towards the Benchmark Resource bid. Part III discusses several possible analytic methods, rules and guidelines that could be used to address the risk in bid evaluation in an unbiased way.[1] Finally, Staff has reached a series of conclusions and recommendations.

Summary of Findings

1. No party has demonstrated that bias exists in the RFP-related bid evaluation methods used by Portland General Electric (PGE), PacifiCorp

[1] This is a slight re-formulation of the third goal for Phase II. In Staff's opinion, this re-formulation retains the spirit of the third goal stated in Staff Opening Testimony.

(PAC), or Idaho Power Company (IPC). It is therefore premature to recommend modifying the Commission's competitive bidding Guideline 10(d).

2. There are significant, perhaps unattainable, data and methodological hurdles to measuring risk quantitatively in a thorough way that accounts for both contract terms and ownership. These data and methodological hurdles are significant and they would have to be resolved before risk could be quantitatively addressed in RFP-related bid evaluation. However, accounting for forecasting error in RFP-bid evaluation is feasible.
3. NIPPC's arguments and the approach to developing its proposed bid adders mistake forecasting error for risk. As a result, its proposed bid adders are better viewed as an attempt to capture forecasting error rather than adjustments for risk. Considering the significant data and methodological limitations laid out in Staff Opening Testimony,[2] their proposed bid adders should not be used as an adjustment for forecast error.
4. The utilities erroneously argue that bid adders cannot be used in RFP-related bid evaluation because (a) contract terms must be considered, and (b) prudence and cost recovery decisions affect ratepayer risk and those decisions cannot be known at the time of RFP-related bid evaluation. It is at least possible to develop bid adders to address

[2] Staff/100 Procter/8-22.

forecasting error, even on an *ex ante* basis, taking contract terms into account.

Throughout the three sections that follow, Staff reaches various conclusions on specific arguments made by various parties. Staff has not attempted to summarize those conclusions here since it seems more relevant to keep them in the body of Staff Reply Testimony**.** Also, Staff has not attempted to respond to every argument made by all parties.[3] Rather, Staff Reply Testimony addresses broader issues set forth in the parties' direct testimony, data responses, independent Evaluator (IE) reports, and a limited amount of literature review.

PART I – AN OVERVIEW OF HOW THE FOUR RISKS ARE CURRENTLY BEING ADDRESSED IN RFP-RELATED BID EVALUATION

Q. PLEASE RESTATE THE SCOPE OF THIS INVESTIGATION.

A. Phase II is concerned with evaluating how four specific risks identified by the Commission are accounted for during evaluation of bids submitted in response to a utility's RFP. As such, risks outside of that scope should not be a focus in this investigation. This investigation is directed at examining whether a utility's evaluation of bids submitted in response to an RFP is performed in such a way that it is biased in favor of a Benchmark Resource bid over a competing IPP bid. As a result, the first question that must be addressed is the extent to which there is bias in existing bid evaluation.

[3] What this also means is that multiple parties may have filed comments on a given issue and Staff Reply testimony does not necessarily address each party's comments.

Overview – Current Utility Risk Assessment during RFP-Related Bid Evaluation

Q. HAS ANY PARTY SUBMITTED TESTIMONY THAT ADDRESSES THE FOUR RISKS AS PART OF EXISTING RFP-RELATED BID EVALUATION?

A. No. NIPPC, PGE and PAC addressed risk in a way that is not consistent with how Staff defined it in Staff Opening Testimony. *See:* Staff/100 Procter/4. As stated in the part of Staff Opening Testimony that discussed NIPPC's bid adders, NIPPC made several implicit assumptions about risk to calculate its adders and apply them to the Benchmark Resource bid during bid evaluation. What NIPPC did not do is demonstrate that the existing RFP-related bid evaluation methods used by any of the three jurisdictional electric utilities are biased against bids from IPPs.

Q. HAS CONSIDERATION OF THE RECORD TO DATE CAUSED STAFF TO MODIFY ANY PART OF ITS APPROACH TO RISK?

A. Yes. First, in light of a broader record, Staff is retaining its definition of risk that was contained in Staff Opening Testimony. Staff/100 Procter/4. Staff Opening Testimony identified ratepayers as the focus of the risk analysis. Staff/100 Procter/3. However, with more information and review, Staff concludes it should have identified the utility as the focus of the risk analysis. Staff's reason for this change is the fact that it is not necessary to reach all the way to ratepayers to argue for or against bias at the point of bid evaluation. PGE and PAC brought attention to the issue of prudence and cost recovery, testifying that since those issues are addressed in a rate case, the ability to

address risk during RFP-related bid evaluation was at best limited. When bids are being evaluated, decisions about costs and their allocation should not obscure the task of fairly evaluating each bid. While the impact of rate case decisions on ratepayers remains a concern, Staff now views the utility as the more appropriate focus for a risk analysis at the point of RFP-related bid evaluation.

Q. DO ANY OF THE THREE UTILITIES COVERED IN THIS DOCKET INCLUDE THESE FOUR RISKS IN THEIR RFP-RELATED BID EVALUATION USING A STOCHASTIC METHOD?

A. No. The utilities use stochastic methods in RFP-related bid evaluation but those methods do not address any of the four risks that are the focus of Phase II.

Q. WHAT OTHER INFORMATION WAS EXAMINED TO FURTHER INVESTIGATE HOW UTILITIES PERFORM BID EVALUATION?

A. Staff also examined utility RFPs as well as IE reports filed with the Commission.

Q. DID THE IE REPORTS PROVIDE INSIGHTS INTO WHETHER UTILITIES GENERALLY UNDERSTATE COSTS OF THEIR BENCHMARK RESOURCE BID?

A. Yes. [redacted]

[redacted]

Q. WHAT FACTS HAVE BEEN ENTERED INTO THE RECORD THAT SUBSTANTIATE NIPPC'S IMPLICIT ASSUMPTION THAT IPP BIDS ARE TREATED UNFAIRLY?

A. No such facts exist in the record to date.

Q. PAC WITNESS KUSTERS ARGUES THAT SINCE THE APPROPRIATE FORUM FOR EVALUATING THE UTILITY'S ACTUAL COSTS AND THE PRUDENCE OF THE COMPANY'S RESOURCE DECISIONS IS A RATEMAKING PROCEEDING, IT IS IMPOSSIBLE TO ADDRESS PRUDENCE AND COST RECOVERY DURING BID EVALUATION (*See* PAC/100, KUSTERS/17, LINES 19-20). DOES STAFF AGREE?

A. Yes. Not only is it impossible, it is inappropriate. While it is true that prudence and cost recovery are issues for a rate case, bid evaluation and selection should not be seen as pre-judging how the issue of prudence or cost allocation will be handled in a rate case. At the point of RFP-related bid evaluation, the focus should be on evaluating how each bid addresses the underlying risk for each of the four risks under examination in Phase II. The focus should also be on how contract terms for each bid modify the utility's exposure to that underlying risk. Reaching a conclusion about whether or not the existing RFP-

[4] Boston Pacific Co., "FINAL CLOSING REPORT ON PACIFICORP'S 2012 RFP," April 8, 2008, p.8.
Ibid, p.8.
[5] Ibid.

related bid evaluation is biased in favor of the Benchmark Resource bid should be based on examining if the correct underlying risk distribution was used for each bid during bid evaluation.

Q. DOES STAFF SUPPORT PGE 'S RECOMMENDATION THAT THE EVALUATION SHOULD BE FOCUSED ON BID CHARACTERISTICS RATHER THAN ON OWNERSHIP?

A. Partially, but not completely. Staff supports placing greater emphasis on bid characteristics, including contract terms, than on ownership. However, ownership should still be an issue in bid evaluation because ownership may affect the bidder's approach to some or all of the four risks. The answer to the following question addresses this issue more thoroughly.

Q. ARE THERE CIRCUMSTANCES WHEN OWNERSHIP WILL AFFECT PROJECT COSTS INDEPENDENT OF CONTRACT TERMS?

A. Staff has identified only two cases where ownership and contract terms are not interdependent. Staff presents in Appendices A and B (at Staff/200 Procter/27-30) its assessment of the extent to which it may be possible to set aside the role of ownership during bid evaluation. Staff picked wind capacity factor to identify if ownership can be set aside.[6] Staff identifies the condition under which ownership makes no difference. However, as explained in those two appendices, there are a host of assumptions required to reach the conclusion

[6] PGE's Direct Testimony does not exactly argue that ownership should not be the issue in bid evaluation. Rather, they argue that "…each bid should be scored…based on the individual characteristics of that bid, and not on perceived or potential attributes associated with a bid or resource classification (e.g., utility-owned versus IPP owned)." PGE/100 Outama-Bettis-Mody-Hager/5.

that ownership and contract terms may be separated. As a result, Staff considers it problematic that the conditions will actually hold in the 'real world.'

Q. HOW DO CONTRACT TERMS (AN ELEMENT OF BID CHARACTERISTICS) AFFECT UNDERLYING RISK?

A. First, by 'underlying risk,' Staff means the risk distribution of actual construction costs for a specific type of technology. Assume for illustration purposes that the only specification that affects plant construction costs is the type of turbine used. Then, capturing the underlying risk in RFP-related bid evaluation means evaluating bids using the appropriate underlying risk distribution for that type of combined cycle combustion turbine (CCCT). Now, assume that the utility has what it considers a reliable construction cost risk distribution for the technology it is proposing. It is this underlying distribution that is the appropriate risk measure to use to include construction cost risk in RFP-related bid evaluation. Contract terms for the CCCT under examination may then modify this underlying risk. For example, if the bid is a fixed price offer with contract terms that are judged to fully indemnify the utility against excess construction costs; the utility is then shielded from the underlying risk for costs in excess of the bid. The portion of the underlying distribution of construction cost risk remains unchanged. What changes is the portion of that distribution that must be included in RFP-related bid evaluation for that specific bid. Part of the underlying distribution for construction cost risk will also cover construction costs lower than the expected value of the distribution. Depending on whether

the bid is from a utility or an IPP, the utility will likely be exposed to that part of the underlying risk distribution.

Q. PLEASE EXPLAIN FORECASTING ERROR.

A. Forecasting error is the potential to use the wrong value for construction cost, or heat-rate, or counter-party risk, or wind capacity factor for no other reason than the value was miss-forecast. NIPPC's proposed bid adders are appropriately viewed as attempting to account for forecast error.

Utility Approach to Evaluating the Four Specific Risks under Investigation

Construction Cost Risk

Q. WHAT IS THE STAFF RESPONSE TO PGE'S PROPOSED APPROACH TO ADDRESS CONSTRUCTION COST RISK?

A. PGE's approach as described on PGE/100, Outama-Bettis-Mody-Hager/7 addresses the situation where bid or contract terms, or both, indemnify the utility and its ratepayers against forecasting error. The witnesses do not address the underlying risk.

Q. WHAT IS PGE'S EXPERIENCE WITH UNDER-ESTIMATING CONSTRUCTION COSTS OF BENCHMARK RESOURCE BIDS AND OTHER SELF-BUILD RESOURCES?

A. PGE states that it has not seen evidence suggesting that utility-owned plants have a tendency towards cost over-runs. It notes that its own projects have come in under budget. *See* PGE/100, Outama-Bettis-Mody-Hager/23-24.

Q. WHAT IS STAFF'S REACTION TO THIS ARGUMENT?

A. The issue is not whether there is evidence of cost over-runs or under-runs at existing utility-owned plants. The potential for a forecasting error is always present. However, past experience of this sort would tend to argue against applying NIPPC's bid adder. For example, on PGE/100, Outama-Bettis-Mody-Hager/21, lines 16-21, the witnesses assert that when it comes to a gas plant, the specifications for that plant are quite thorough and the contractor submits a fixed price bid containing 'contractual guarantees' that preclude cost increases except for change orders. Such circumstances narrow the potential for forecasting error. On PGE/100, Outama-Bettis-Mody-Hager/23, the witnesses discuss how the construction cost for PGE's Port Westward plant was 6.4 percent below the initial cost estimate. This 6.4 percent cost savings illustrates that forecasting error can occur in both directions.

Q. WHAT IS STAFF'S ASSESSMENT OF PGE'S PROPOSED SOLUTION TO MORE FULLY ACCOUNT FOR CONSTRUCTION COST RISK?

A. On PGE/100, Outama-Bettis-Mody-Hager/24, lines 13-15, the Company indicates that its approach should be modified "…to account for whether or not a bid includes a full wrap or cost guarantee." Staff supports this approach being an explicit part of bid evaluation as long as it is understood to also include the potential for construction cost savings of the kind that the Company experienced with Port Westward and Phases I-III of Biglow Canyon. While ratepayers and utility executives may be more sensitive to cost increases than cost decreases, the forecasting error that is a cost decrease needs to be accounted for when estimating bid adders. One additional argument for

including the potential for cost reductions is to work towards creating a level playing field between a utility bid and an IPP bid. Including the possibility of over-forecasting construction costs should account for the role ownership plays in determining if the utility even sees the cost savings from forecast error.

Heat-Rate Risk

Q. ON PGE/100, OUTAMA-BETTIS-MODY-HAGER/16-20, PGE EXPLAINS HOW ITS BID EVALUATION HANDLES HEAT-RATE. DOES ITS APPROACH ADDRESS HEAT-RATE RISK?

A. No. It appears that PGE's current approach does not account for risk as it was defined in Staff Opening Testimony. *See* Staff/100 Procter/4, lines 1-7. What PGE's method does appear to do is modify the expected value of heat-rate. Staff is supportive of how PGE modifies the expected value of heat-rate. However, for the same reasons as were set forth above, it is important to note that modifying the expected heat-rate and accounting for heat-rate risk are two separate adjustments. The former substitutes one value for a new one that is considered to be a more accurate estimate of the expected heat-rate.

Q. PGE STATES THAT IT INCLUDES THE COST OF THE SERVICE AGREEMENT TO SUSTAIN HEAT-RATE CONSISTENT WITH THE LONG RUN AVERAGE HEAT-RATE DEGRADATION. *SEE* PGE/100, OUTAMA-BETTIS-MODY-HAGER/16. DOES THE COST OF THIS SERVICE AGREEMENT ACCOUNT FOR RISK?

A. No, it does not account for risk. While it appears appropriate to include the service agreement cost, that cost is defined as covering only maintenance

costs.[7] Unless there are bid or contract terms that indemnify the utility against forecast errors, the utility remains exposed to changes in costs from this forecast error. Here again, the underlying risk associated with variations in heat-rates is a separate consideration from forecast error and requires separate evaluation in RFP-related bid evaluation.

Wind Capacity Factor

Q. WHAT IS STAFF'S ASSESSMENT OF THE ARGUMENT ON PAC/100, KUSTERS/9, LINES 15-23 THAT PAC IS INCENTED TO FORECAST WIND AVAILABILITY ACCURATELY?

A. First, Staff wants to point out that PAC witness Kusters is addressing the potential for forecasting error. Consistent with other of Staff's comments, forecasting error is not the issue in this investigation. The problem with forecasting error is partially addressed through rate case proceedings that determine what costs may be passed thru to ratepayers and what costs are absorbed by shareholders. Having said that, it appears that over-production is better for both the utility, in the case of a utility-owned plant, and the IPP, in the case of an IPP-owned plant, than is under-production. For both those cases, variable costs are very close to zero and the utility uses the output to cover its fixed cost. Therefore, over-production has a cost next to zero (with variable costs near zero) and the utility has more assurance of at least covering its fixed costs. For the IPP-owned plant, over-production is also

[7] This Staff comment is not an assessment of the prudence of that cost and should not be viewed as one. As Staff has articulated in this Reply Testimony, issues of prudence and cost recovery are outside the scope of this investigation.

preferred to under-production given Kusters' argument that the utility is obligated to purchase all the over-production at the fixed price established in the contract. In contrast, under-production relative to expected output results in greater risk to the utility in the form of under-recovery of fixed expenses.[8]

Q. WHAT IS STAFF'S REACTION TO PGE'S ARGUMENT THAT SINCE ALL BIDDERS OF WIND PLANTS WILL BE USING THE SAME WIND FORECASTING TOOLS AND EXPERTS, THERE IS NO NEED TO EXAMINE WIND CAPACITY FACTOR RISK FOR UTILITY-OWNED PLANTS VERSUS IPP PLANTS? *SEE* PGE/100, OUTAMA-BETTIS-MODY-HAGER/8, lines 9-11.

A. Staff does not support PGE's point of view. The underlying risk is always present and it may be different for utility versus IPP owned plants. At this point, there are no data submitted in this docket that sheds light on this issue.

Q. REFERRING TO PAC'S OPENING TESTIMONY ON THE CAPACITY FACTOR METRIC (*SEE* PAC/100, KUSTERS/6-11), IN YOUR OPINION, IS THE COMPANY'S APPROACH CONSISTENT WITH ACCOUNTING FOR WIND CAPACITY FACTOR RISK?

A. No. On the referenced pages, PAC discusses a consistent way to determine the expected value for wind capacity factor for each bid on the initial short-list. PAC witness Kusters explains that PAC uses the modal value for wind capacity factor. PAC/100, Kuster/8 lines 4-11. However,

[8] Appendices A and B layout the math demonstrating that market purchases and sales cancel out. Those appendices also define the terms under which the utility and its ratepayers would be indifferent between the Benchmark Resource bid and the IPP bid.

using the modal value is not the same as accounting for wind capacity factor risk.[9] In contrast, Staff set forth the definition of risk, and related risk metrics, in its testimony at Staff/100, Procter/3-4.

Q. REFERRING TO WIND CAPACITY FACTOR, KUSTERS ARGUES THAT THE EFFECT ON CUSTOMERS OF LOWER OR HIGHER THAN EXPECTED WIND CAPACITY FACTOR IS THE SAME FOR BOTH UTILITY-OWNED AND IPP OWNED RESOURCES. *SEE* PAC/100, KUSTERS/8-9. DOES STAFF AGREE?

A. Not necessarily. If the total cost of wind plant with a lower wind capacity performance under utility ownership equals the total cost with lower wind capacity performance under IPP ownership, then Staff agrees with Kusters.[10] If the wind plant total cost with the higher capacity performance under utility ownership equals the total cost with higher capacity performance under IPP ownership, then Staff agrees with Kusters.[11]

Staff Assessment of NIPPC'S Bid Adders

Q. WHAT IS STAFF'S OVERALL CONCLUSION ABOUT APPLYING NIPCC'S BID ADDERS?

A. NIPPC has not shown that its proposed bid adders are required at this time.

Q. PLEASE EXPLAIN.

[9] Staff set forth the definition of risk, and related risk metrics, in its Opening Testimony at Staff/100, Procter/3-4.
[10] Appendix A lays out the argument for this conclusion.
[11] Appendix B lays out the argument for this conclusion.

A. As was discussed in Staff's Opening Testimony, the Commission directed that Phase II examine four specific risks and to determine how those risks are addressed in the bid evaluation process. In particular, this examination is to focus on how the Benchmark Resource bid is treated versus how an IPP bid is treated for each of the four risks during bid evaluation. NIPPC assumes that the existing bid evaluation methodology of the three electric jurisdictional utilities is biased in favor of the Benchmark Resource bid. However, this investigation must first establish that bias exists before adjusting bids in any way.

Q. WHY DID NIPPC'S BID ADDERS NOT INCLUDE BENEFICIAL OUTCOMES?

A. NIPPC implicitly assumes that only unfavorable outcomes need to be addressed. Further, it assumes if the utility bid wins, and actual costs are higher than forecasted costs, that cost increase is fully passed through to ratepayers. Therefore, bid evaluation need only consider these downside risks. They also assume that if the IPP bid won and actual costs exceeded forecasted costs, the excess costs would remain with the IPP. Therefore, in NIPCC's view, bid evaluation must account for this discrepancy by applying adders only to the Benchmark Resource bid.

Q. WHAT IS STAFF'S REACTION TO THOSE ASSUMPTIONS?

A. Unless 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. In addition, Staff agrees with PGE and PAC that bid and

contract terms must be examined in order to determine utility exposure to those potential impacts.[12]

Q. STAFF HAS RAISED NUMEROUS CONCERNS ABOUT USING NIPPC'S BID ADDERS IN BID EVALUATION. IS STAFF ARGUING THAT QUANTITATIVE MODELING IS SIMPLY NOT FEASIBLE?

A. No. If this were a data rich environment, one method that has been used is the econometric approach. One source distinguishes between what Staff will call the 'micro approach' in contrast to a 'macro approach.'[13] Econometrics is one possible micro, bottom-up, approach to analyzing each of the four risks. In light of the concerns set forth in Staff's review of NIPPC's adders in Staff Opening Testimony and further elaborated on throughout Staff Reply Testimony, Staff is doubtful this fairly complex approach is feasible without a significant commitment of money and time.[14] [15]

Q. NIPPC FILED NUMEROUS DATA REQUESTS INQUIRING ABOUT CAPITAL SPENDING DURING THE FIRST FIVE YEARS OF PROJECT OPERATION. IS THAT RELEVANT TO THE PHASE II INVESTIGATION?

---

[12] NIPPC did make a few modifications to their calculation of at least the heat-rate adder. However, Staff's primary concerns about their data and approach as expressed in Staff Opening Testimony (Staff/100 Procter/8-22) apply here. .

[13] Club De La Securite de L'Information francias, "Risk Management Concepts and Methods," 2008-2009.

[14] One possible approach is laid out in an article published on October 27, 2010 in The Business Times, titled "Using financial econometrics to measure risk." This article provides a quick overview of econometric modeling to measure risk in financial markets.

[15] The econometric approach, when successful, provides a wealth of information concerning the importance specific explanatory variables has on the dependent variable and the degree of confidence in those results. This can help the analyst determine how applicable past observations are to predicting future outcomes. Many, if not all, of Staff's concerns with the data and method used by NIPPC revolve around having the ability to extrapolate from past information to apply a bid adder/subtractor to different bids with different contract terms in future RFP-related bid evaluations.

A. No. It appears that NIPPC is attempting to make the argument that any capital spending during the first five years of project life should be considered a part of construction costs. Considering the Staff comments about the data and methodology for their construction cost bid adder addressed both in Staff Opening Testimony and this Reply Testimony, it is not necessary to also address whether it is valid to build the data set using construction costs up to the point of the on-line date, or five years into operation, or the entire project life. This is an issue that should be addressed if and when an effort is undertaken to establish methods to address both the underlying risk as well as forecasting error. Also, if there were a major flaw in how RFP-related bid evaluation assessed construction costs for Benchmark Resource bids, Staff would expect to see some evidence of it in the IE reports and the list of winning bidders. At this point in time, Staff is not aware of any such evidence.

Q. IF THE RESPONSES FROM PGE, PAC, AND IPC SHOW THAT CAPITAL COST SPENDING OCCURRED DURING THE FIRST FIVE YEARS OF PROJECT OPERATION, WOULD THAT SUBSTANTIATE NIPPC'S ARGUMENT THAT THOSE COSTS SHOULD BE COUNTED AS CONSTRUCTION COSTS?

A. Not by itself. What it would demonstrate is that the utility incurred capital cost during the first five years of project operation. It would then be important to determine the cause of that capital spending.

PART II –ASSESSING IF BIAS EXISTS IN RFP-RELATED BID EVALUATION

This section first examines NIPPC's arguments about bias and bid adders. It then moves to assess if bias exists in RFP-Related bid evaluation. After stating Staff's current viewpoint on those issues, the discussion turns to Staff's conclusion regarding bias in existing RFP-related bid evaluations.

NIPPC's Arguments about Bias and Bid Adders

Q. WHAT BIAS HAS NIPPC ARGUED EXISTS IN BID EVALUATION?

A. NIPPC argued that bias exists because the Benchmark Resource bid can pass cost increases through into rates whereas the IPP cannot pass an equivalent cost increase through into rates. That is, their methodology looks to how cost recovery may be addressed as part of prudence review in a rate case to determine if bias is present in bid evaluation.

Q. WHAT IS STAFF'S RESPONSE TO THAT ARGUMENT?

A. A determination of bias does not, and should not, be defined as NIPPC proposes. Phase II is not an investigation into cost recovery. Staff Opening Testimony defined bias in the following way: "If there are two bids that leave the utility and its ratepayers exposed in substantively different ways to at least one of the four risks under investigation, and the bid evaluation criteria does not accurately account for this difference, then that is evidence that the bid evaluation criteria contains bias."[16] A second way to determine if bias exists is if two identical bids, one from the utility and one from an IPP, are given different scores in bid evaluation. After reviewing relevant Commission orders, Staff concluded that "The Commission is interested in Phase II

[16] Staff/100 Procter/7, lines 13-17.

systematically evaluating if the *current bid evaluation criteria itself* [emphasis added] is structured in such a way as to result in bias. If it turns out that the existing bid evaluation criteria reasonably account for risk differences between two bids, then that is evidence that the bid evaluation criteria are free of bias."[17]

Q. WHAT WAS PGE'S REACTION TO THE COMMISSION'S DISCUSSION ABOUT BIAS?

A. PGE correctly stated that the Commission did not opine on whether bias was found to exist and whether the analysis and scoring of competitive bids results in higher power costs. *See* PGE/100, Outama-Bettis-Mody-Hager/3, lines 19-21.

Q. SINCE THE COMMISSION ALREADY ACCEPTS THAT BIAS EXISTS IN FAVOR OF THE BENCHMARK RESOURCE BID OVER THE IPP BID, PLEASE CLARIFY WHY IT IS IMPORTANT TO FIRST DETERMINE IF BIAS EXISTS.

A. Recall that Staff Opening Testimony argued that bias exists in favor of the Benchmark Resource bid at the expense of the IPP bid due to the impact of the Averich-Johnson Effect on the utility's incentive to over-capitalize. *See* Staff/100 Procter/4 lines 21-23 and 5 lines 1-6. Staff also stated that the Commission directed that Phase II examine risk in an analytically rigorous way. *See* Staff/100 Procter/3 lines 6-9. As a result of examining risk in an analytically rigorous way, it is possible that Phase II could conclude that bias

[17] Staff/100, Procter/7, lines 8-13.

does, or does not, exist in the bid evaluation process for any of the four risks under examination. A conclusion that no bias was found in favor of the Benchmark Resource bid, would not contradict the Commission's decision in Order 11-001 since it concluded "... bias is really a logical inference drawn from an understanding of ratemaking practices..."[18] That is, the Commission was addressing the incentive to over-capitalize that results from rate-of- return regulation. More specifically, Order 11-001 stated that "...owned resources offer a utility an opportunity to earn a return, while PPAs do not. If a utility is faced with the choice of building a generating plant or entering into a PPA -and there is no difference in cost between the two options-the utility will likely choose to build the plant because of the opportunity to earn a return on its investment."[19] Therefore, none of these findings set forth in Order 11-001 rely on an assessment of RFP-related bid evaluation to support the Commission's conclusions about bias.

Overview of Bias in Existing RFP-Related Bid Evaluation

Q. DOES BIAS EXIST IN PAC'S EXISTING RFP-RELATED BID EVALUATION METHODOLOGY?

A. Staff has not yet seen any evidence that bias exists. [redacted]

[redacted]

[18] In the Matter of the Public Utility Commission of Oregon, "An Investigation Regarding Performance Based Ratemaking Mechanisms to Address Potential Build-versus-Buy Bias," Order 11-001, Entered into 1-3-2011.
[19] Ibid, p. 2.

[redacted] In addition, since the IE scores all Benchmark Resource bids, that should limit PAC's ability to use its evaluation methods to rig the system in favor of its bid.

Q. DOES THE IE'S REPORT ADDRESS THE RISKS UNDER EXAMINATION IN PHASE II?

A. No. The report cannot address risks (different from forecasting error) that are not part of the RFP-related bid evaluation. However, it helped narrow the range of RFP's in which there *might* be a biased evaluation method. It does this indirectly by identifying the number of bids received, which ones were from an IPP or the Benchmark Resource bid or some other ownership structure, and what which of the entities submitted the winning bid. The number of RFP-related bid evaluations that are even candidates for bias are those where the Benchmark Resource bid won and one or more IPP bids was rejected.

---

[20] Boston Pacific Company, "Independent Evaluator's Final Closing Report on Pacificorp's All Source RFP, November 10, 2010.
[21] Ibid, pg. 16.
[22] On pp. 23-24 the IE explains what is meant by 'holding to the same risk.' It means that if the benchmark bid wins, then the utility can only include in rates those costs that are included in the bid offer that was used to determine the winning bid.

Reaching a conclusion that the Benchmark Resource bid won due to a biased RFP-related bid evaluation process must be based on an in-depth examination of the bids on the final short-list.

Q. DOES BIAS EXIST IN PGE'S EXISTING RFP-RELATED BID EVALUATION METHODOLOGY?

A. Based on PGE's summary of their existing bid evaluation process[23], Staff has not yet seen evidence that it contains bias. PGE states that each bid is scored using the details laid out in that RFP and the specifics of a given bid. In turn, the RFP's treatment of scoring and threshold criteria is developed in a public process with input from all parties with the Commission ultimately acknowledging the RFP. Since the IE assesses how well the bids are evaluated and scored, along with the selection of the short list, this further helps assure a level-playing field in how the criteria listed in the RFP are applied. In addition, a separate team evaluates the Benchmark Resource bid than the team that developed the RFP.

Q. DOES BIAS EXIST IN IPC'S EXISTING RFP-RELATED BID EVALUATION METHODOLOGY?

A. Staff has not yet seen evidence that there is bias. Also, it does not appear there was much potential for bias given the results of the RFP since the Benchmark Resource bid won in only two of the six RFP's reviewed by Staff. Of the RFP-related bid evaluations IPC has conducted since 2006, only one had a Benchmark Resource bid still in contention after the initial short-list was

[23] Staff relied on PGE/100, Outama-Bettis-Mody-Hager/10-15 to reach these conclusions.

determined. For its 2006 Geothermal RFP, three of the bids were for Benchmark Resource bids. Those three bids were withdrawn which left three IPP bids. As for its 2008 Geothermal RFP, it did not contain a Benchmark Resource bid. Its 2008 Mona RFP attracted two bids, both from marketers.[24] All except one of the bids received in response to its 2008 RFP for 2012 Baseload were from a third-party. That remaining bid was for a Benchmark Resource bid and it was also the winning bid. IPC received three bids in response to its 2009 Eastside RFP for Summer Capacity and Energy. There were two RFP's and they each covered a different number of years. Of the bids received, all but one was from a marketer and that remaining bid was from an IPP.

PART III – POSSIBLE WAYS TO ACCOUNT FOR THE FOUR RISKS AND CONTRACTS IN RFP-RELATED BID EVALUATION

Part III first addresses a broad concern of the Commission. Then, several possible changes to Guideline 10(d) are examined guidelines.

Q. ASSUMING BIAS EXISTS, WHAT IS THE POSSIBILITY THAT THE SOLUTION COULD CREATE A LARGER PROBLEM THAN BIAS CREATES?

A. The Commission expressed concern about this very issue. In its Order 11-001, the Commission stated that even after a long process "…we know little about the scope and impact of this bias. …Because we have not quantified the

[24] IPC indicates that a Benchmark Resource was used as a cost reference. At this time, Staff is unclear what that means.

impact of the bias on rates, however, the cost of the proposed incentives might greatly exceed whatever harm might otherwise be inflicted on customers."[25]

Using Generic Adders

Q. HOW DOES STAFF VIEW PGE'S PROPOSAL THAT BID EVALUATION SHOULD NOT USE GENERIC ADDERS OR ANY TYPE OF BID SCORING BASED ON WHAT ENTITY MADE THE BID? *See* PGE/100, Outama-Bettis-Mody-Hager/6, lines 4-6.

A. Staff's response is mixed. There may be circumstances when Staff would support developing 'generic' adders using the RFP process as a way to address forecasting risk. These 'generic' adders would be RFP-specific but would also be 'generic' in the sense that they may apply to a variety of bids from a variety of bidders submitted in response to a specific RFP. It should be noted that while PAC argues that pre-determined adders will not benefit the utility or mitigate any perceived self-bias (PAC/100, Kusters/2, lines 22-23 and 3, line 1), it does support adopting specific methods and evaluation approaches that could help the IE fairly evaluate bids (PAC/100, Kusters/3, lines 3-6). Staff may be open to investigating setting pre-determined adders to address forecasting error as part of the RFP development process.[26] As for addressing the underlying risk for each of the four risks that are the focus of Phase II, as Staff has explained at length, that appears to be an undertaking of an entirely different magnitude. At this point in time, Staff does not see evidence that

[25] Order 11-001 at 5.
[26] PAC notes that they already use that process to develop the non-price scoring (PAC/100, Kusters/5, lines 7-12).

there is enough potential gain to warrant undertaking that work in a way that also is sensitive to the Commission's concern that a solution may be worse than the problem.

Q. WHAT ABOUT THE POSSIBILITY OF DEFINING A SET OF CONTRACT TERMS AND PROHIBITING THEIR MODIFICATION AS ONE PART OF DEFINING A SET OF BID ADJUSTERS?

A. That approach could possibly be used. In PAC's opening testimony, Kusters proposes this approach.[27] Since no bidder may modify the prototype contract in the RFP (for the four risks under investigation), this at least simplifies the problem of matching contract terms with bid adders. This approach could be called the "Reference Contract" approach.

Q. HOW DOES THIS APPROACH SIMPLIFY THE PROBLEM OF ESTABLISHING A SET OF BID ADJUSTERS?

A. The bid adjusters do not necessarily need to be developed using the rigorously quantitative bottom-up method. A set of bid adjusters could be proposed by the utility in the RFP along with a rationale. Parties to the process developing the RFP could then comment. Through this peer group approach, a set of bid adjusters are developed that link to specific contract modifications. This approach could also relax PAC's requirement that no contract changes would be allowed, at least with respect to the bid adjusters that would be developed. However, until bias is shown to exist, Staff is not advocating that this work be undertaken.

[27] Ibid., pp. 31-32.

Q. DOES THIS CONCLUDE STAFF REPLY TESTIMONY?

A. Yes.

APPENDIX A

Let's first look at under-production due to the wind capacity factor falling below the expected wind capacity factor. For purposes of exposition, we must make a number of simplifying assumptions to examine the impact of ownership on the utility's exposure to costs. Assume the following:

1. Two wind plants with identical technologies are located next to each other (one is an IPP, and the other is the Benchmark Resource).
2. Loads, L, are to be met by this one plant (one bid wins) and by market purchases.
3. Parameters are defined as follows,

P_c, Fixed per unit purchase price of power from wind plant.

P_m, Fixed per unit price of market purchases.

Q (x), Quantity of wind plant output under condition 'x.'

$q_{u,}$ Wind plant output when wind capacity factor is < expected value.

$Q(L-q_u)$, Quantity of market purchases when plant underperforms.

$L- q_u > 0$ and $Q(L-q_u) + q_u = L$.

When the IPP-owned plant underperforms, part of the cost the utility will face is the total cost of output from the wind plant plus the total cost of market purchases to replace the wind plant output. That is,

$P_c*Q(q_u)$ = Total Cost of output from the wind plant.

$P_{m*}\ Q(L-q_u)$ = Total Cost of market purchases, and

$[P_c*Q(q_u)] + [P_m*Q(L-q_u)]$ = Total Cost to the utility to meet load When the wind plant is IPP-owned.

Now, let's look at utility costs under the same scenario but with the utility-owned wind plant. Here, the utility will face the total fixed cost of constructing and operating the wind plant plus the total operating costs of the wind plant for a given level of output. Assume the following:

TFC, Total Fixed Cost of the wind plant,

$TVC(q_u)$, Total Variable Cost of the wind plant at output q_u.

Therefore, the total cost of the wind plant output q_u is:

$$TFC + TVC(q_u).$$

The utility will also face the same per unit cost of market purchases, and in the same quantity as was the case with the IPP plant. That is, the total cost of market replacement power equals:

$$P_m*Q(L-q_u).$$

In the case where plant output falls below what is required to meet load due to the wind capacity factor falling below expectations, these market purchases are an added cost to meet load. Therefore, total cost to the utility to meet load using the utility-owned wind plant plus market power purchase costs is:

$$TFC + TVC(q_u) + P_m*Q(L-q_u).$$

Now, the only way that the cost the utility faces with output q_u is the same irrespective of plant ownership is if:

$$TFC + TVC(q_u) = P_c*Q(q_u).$$[28]

[28] Recall that the two terms defining the cost of market purchases cancel out when we equate the cost of power under IPP ownership to the cost of power under utility ownership and simplify those two equations.

At least we now can see what must be true for the statement in question to be true. While that equality could hold in principle, it would be quite unusual for it to be satisfied in reality. Also note that Kusters testimony argued that we needed to know the amount and cost of market purchases. When the amount and cost of market purchases are the same for the IPP plant and the Benchmark Resource, as they are in the above layout, the issue of market purchases drops away. In addition, the issue of prudence review is an unnecessary complication. At this point, we have no information that indicates that the prudence decision is more in doubt for an IPP bid than it is for the Benchmark Resource bid, or vice versa. Therefore, it is reasonable to remove that issue.

APPENDIX B

An examination of the case of over-performance arising from an actual wind capacity factor exceeding the expected wind capacity factor uses the same layout that was used in Appendix A. Instead of q_u, we substitute $q_{o,}$ which is the plant output when the wind plant over-performs. Instead of buying replacement power from the spot power market, the IPP or utility sells into that same market. For simplicity, the market price is assumed to be the same as it was in Appendix A.[29] When plant output exceeds expectations, the plant over-performs and the revenue from market sales, $P_m*Q(L-q_o)$, is a benefit to the utility or a benefit to the IPP. The revenues from sales into the power market by the IPP versus the utility cancel each other out when we simplify our formulas. That leaves us with the following equality:

$$TFC + TVC(q_o) = P_c*Q(q_o).$$

Here again, this equality must hold for the utility's *exposure* to costs to be the same irrespective of the plant ownership.

[29] While the market buy price and the market sell price may vary in the spot market, that fact is not a complication that adds anything to the issue being examined.

CERTIFICATE OF SERVICE

UM 1182
Phase II

I certify that I have, this day, served the foregoing document upon all parties of record in this proceeding by delivering a copy in person or by mailing a copy properly addressed with first class postage prepaid, or by electronic mail pursuant to OAR 860-001-0180, to the following parties or attorneys of parties.

Dated this 14th day of January, 2013 at Salem, Oregon

Kay Barnes

Kay Barnes
Public Utility Commission
550 Capitol St NE Ste 215
Salem, Oregon 97301-2551
Telephone: (503) 378-5763

UM 1182
SERVICE LIST (PARTIES)

***OREGON DEPARTMENT OF ENERGY**	
RENEE M FRANCE **(C) (W)** SENIOR ASSISTANT ATTORNEY GENERAL	NATURAL RESOURCES SECTION 1162 COURT ST NE SALEM OR 97301-4096 renee.m.france@doj.state.or.us
MATT HALE **(C) (W)** MANAGER ENERGY TECHNOLOGY	625 MARION ST NE SALEM OR 97301 matt.hale@state.or.us
VIJAY A SATYAL **(C) (W)** SENIOR POLICY ANALYST	625 MARION ST NE SALEM OR 97301 vijay.a.satyal@state.or.us
***OREGON DEPARTMENT OF JUSTICE**	
JANET L PREWITT **(C) (W)** ASSISTANT AG	NATURAL RESOURCES SECTION 1162 COURT ST NE SALEM OR 97301-4096 janet.prewitt@doj.state.or.us
AVISTA CORPORATION	
DAVID J MEYER **(W)** VICE PRESIDENT & CHIEF COUNSEL	PO BOX 3727 SPOKANE WA 99220-3727 david.meyer@avistacorp.com
AVISTA UTILITIES	
PATRICK EHRBAR **(W)** MANAGER, RATES & TARIFFS	PO BOX 3727 SPOKANE WA 99220-3727 pat.ehrbar@avistacorp.com
CASCADE NATURAL GAS	
DENNIS HAIDER **(W)** EXECUTIVE VP, GAS SUPPLY & BUS DEVELOP	8113 W GRANDRIDGE BLVD KENNEWICK WA 99336 dennis.haider@mdu.com
MICHAEL PARVINEN **(W)** MANAGER - REGULATORY AFFAIRS & GAS SUPPLY	8113 W GRANDRIDGE BLVD KENNEWICK WA 99336 michael.parvinen@cngc.com
CITIZENS' UTILITY BOARD OF OREGON	
GORDON FEIGHNER **(C) (W)** ENERGY ANALYST	610 SW BROADWAY, STE 400 PORTLAND OR 97205 gordon@oregoncub.org
ROBERT JENKS **(C) (W)** EXECUTIVE DIRECTOR	610 SW BROADWAY, STE 400 PORTLAND OR 97205 bob@oregoncub.org
G. CATRIONA MCCRACKEN **(C) (W)** LEGAL COUNSEL/STAFF ATTY	610 SW BROADWAY, STE 400 PORTLAND OR 97205 catriona@oregoncub.org
DAVISON VAN CLEVE	
IRION A SANGER **(C) (W)** ASSOCIATE ATTORNEY	333 SW TAYLOR - STE 400 PORTLAND OR 97204 ias@dvclaw.com

DAVISON VAN CLEVE PC	
S BRADLEY VAN CLEVE **(C)** **(W)**	333 SW TAYLOR - STE 400 PORTLAND OR 97204 bvc@dvclaw.com
ESLER STEPHENS & BUCKLEY	
JOHN W STEPHENS**(W)**	888 SW FIFTH AVE STE 700 PORTLAND OR 97204-2021 stephens@eslerstephens.com; mec@eslerstephens.com
IDAHO POWER COMPANY	
REGULATORY DOCKETS**(W)**	PO BOX 70 BOISE ID 83707-0070 dockets@idahopower.com
LISA D NORDSTROM **(C)** **(W)**	PO BOX 70 BOISE ID 83707-0070 lnordstrom@idahopower.com
LEGAL & CONSULTING SERVICES	
ANN L FISHER**(W)**	PO BOX 25302 PORTLAND OR 97298-0302 ann@annfisherlaw.com
MCDOWELL RACKNER & GIBSON PC	
LISA F RACKNER **(C)** **(W)**	419 SW 11TH AVE., SUITE 400 PORTLAND OR 97205 dockets@mcd-law.com
MRW & ASSOCIATES, LLC	
WILLIAM A MONSEN **(C)** **(W)**	1814 FRANKLIN ST SUITE 720 OAKLAND CA 94612 wam@mrwassoc.com
NORRIS & STEVENS	
DAVID E HAMILTON **(W)**	621 SW MORRISON ST STE 800 PORTLAND OR 97205-3825 davidh@norrstev.com
NORTHWEST NATURAL GAS COMPANY	
ALEX MILLER **(W)**	220 NW SECOND AVE PORTLAND OR 97209-3991 alex.miller@nwnatural.com
NW & INTERMOUTAIN POWER PRODUCERS COALITION	
ROBERT D KAHN **(W)**	1117 MINOR AVENUE, SUITE 300 SEATTLE WA 98101 rkahn@nippc.org;rkahn@rdkco.com
NW ENERGY COALITION	
WENDY GERLITZ **(W)**	1205 SE FLAVEL PORTLAND OR 97202 wendy@nwenergy.org

PACIFIC POWER	
MARY WIENCKE **(C) (W)**	825 NE MULTNOMAH ST, STE 1800 PORTLAND OR 97232-2149 mary.wiencke@pacificorp.com
PACIFICORP, DBA PACIFIC POWER	
OREGON DOCKETS **(W)**	825 NE MULTNOMAH ST, STE 2000 PORTLAND OR 97232 oregondockets@pacificorp.com
PORTLAND GENERAL ELECTRIC	
STEFAN BROWN **(C) (W)**	121 SW SALMON ST - 1WTC1711 PORTLAND OR 97204 stefan.brown@pgn.com
RATES & REGULATORY AFFAIRS - PATRICK HAGER **(C) (W)**	121 SW SALMON ST 1WTC-0702 PORTLAND OR 97204 pge.opuc.filings@pgn.com
PORTLAND GENERAL ELECTRIC COMPANY	
DAVID F WHITE **(C) (W)**	121 SW SALMON ST., 1WTC1301 PORTLAND OR 97204 david.white@pgn.com
PUBLIC UTILITY COMMISSION	
ROBERT PROCTER **(C) (W)**	PO BOX 2148 SALEM OR 97308-2148 robert.procter@state.or.us
PUC STAFF--DEPARTMENT OF JUSTICE	
MICHAEL T WEIRICH **(C) (W)**	BUSINESS ACTIVITIES SECTION 1162 COURT ST NE SALEM OR 97301-4096 michael.weirich@state.or.us
RENEWABLE NORTHWEST PROJECT	
MEGAN WALSETH DECKER **(W)**	421 SW 6TH AVE #1125 PORTLAND OR 97204-1629 megan@rnp.org
RICHARDSON & O'LEARY	
GREGORY M. ADAMS **(C) (W)**	PO BOX 7218 BOISE ID 83702 greg@richardsonandoleary.com