

---

<b>In The Matter Of The Application Of Public Service Company Of Colorado For Approval Of Its 2011 Electric Resource Plan</b>	) ) ) )	<b>Second Set of Discovery Requests of CEC/CIEA/Thermo Power Served on Public Service Company</b>
---	------------------	---

<b>Docket No. 11A-869E</b>	)	<b>April 5, 2012</b>
----------------------------	---	----------------------

---

**II.** The following requests relate to the Supplemental Direct Testimony of Kurtis J. Haeger. Mr. Haeger argues that PSCo’s proposed bid evaluation methodology adequately considers project-related risks for both utility and IPP generation projects, and that there is no need to risk-adjust bids received through its RFOs. Mr. Haeger also opposes CIEA’s recommendation that the Colorado Public Utilities Commission cap cost recovery for utility-owned projects at the company’s bid cost.

**DISCOVERY REQUEST NO. CIEA/CEC/Thermo2-9:**

Table KJH-1 on page 6 of Mr. Haeger’s Supplemental Testimony lists “Risks of Generation Alternatives.”

- a. Please define with specificity each risk denoted in Table KJH-1 and provide an example of each.
- b. Please provide any and all documents presenting PSCo’s assessment of the impact of these risks on ratepayers’ costs.
- c. Does PSCo contend that IPPs selling power under PPAs have a greater risk of failure to meet its assumed online date than utility-owned projects? If your response is anything except for an unqualified “no,” please answer the following questions:
  - i. Please provide any and all documents and studies supporting this contention.
  - ii. Please provide quantitative evidence of the impact of this effect on ratepayers.
  - iii. Would an IPP that fails to meet its expected online date have to pay damages pursuant to its PPA? If your response is anything except for an unqualified “no,” please discuss those damage payments, the basis for those damages, and whether those damage payments mitigate ratepayer harm related to an IPP coming online after its expected online date.
- d. Does PSCo contend that IPPs selling power under PPAs have a greater risk of failure to operate on critical days than utility-owned generation? If your response is anything except for an unqualified “no,” please answer the following questions:

**DISCOVERY REQUEST NO. CIEA/CEC/Thermo2-9 continued:**

- i. Please provide any and all documents and studies supporting this contention.
  - ii. Please provide quantitative evidence of the impact of this effect on ratepayers.
  - iii. Would an IPP that fails to operate on critical days have to pay damages pursuant to its PPA? If your response is anything except for an unqualified “no,” please discuss those damage payments, the basis for those damages, and whether those damage payments mitigate ratepayer harm related to an IPP failing to operate on critical days.
- e. Please provide any and all documents related to the “accuracy of cost estimates” or lack of accuracy of cost estimate for utility-owned power projects.
  - f. Does PSCo contend that the risks for ratepayers related to capital costs, capital additions, and operating costs of utility-owned generation are symmetric (i.e., ratepayers are as likely to benefit as to pay more for utility ownership of power projects)? If so, please provide all documents supporting this contention.
  - g. Does PSCo contend that actual installed costs, capital additions, and operating costs of utility-owned generation are as likely to be lower than expected as higher than expected relative to the assumed costs and operating characteristics of the utility-owned generation project at the time a utility-owned generation project is first proposed and evaluated in bid evaluations? If so, please provide all documents and studies supporting this contention.
  - h. On pages 6-7 of Mr. Haeger’s Supplemental Testimony, he outlines how PSCo plans to “incorporate [the risks of IPPs] into the evaluation process.” Does PSCo plan to incorporate the risks of utility-owned generation into the evaluation process? If your response is anything except for an unqualified “no,” please explain how PSCo plans to account for the risks associated with utility-owned generation projects.

**RESPONSE:**

- a. Risks identified in Table KJH – 1

PPA Risks

Performance – the risk associated with the timely completion of new generations alternatives within the parameters of the original bid (Squirrel Creek project)

Operations on critical days - risk associated with operations of new or existing generation and their performance on critical operational days (Calpine Rocky Mountain Energy Center)

Replacement cost at the end of the PPA - cost risk associated with cost estimates and key modeling assumptions related to the future replacement costs at the end of a purchase power agreement

Finance/Accounting treatment of PPA’s – possible financial risks associated with accounting rules relating to purchase power agreements

**RESPONSE TO DISCOVERY REQUEST NO. CIEA/CEC/Thermo2-9 continued:****Utility Ownership Risks**

Accuracy of cost estimates – cost risk associated the completion of a utility owned generation project within the estimated cost

Operations – risk associated with continuing availability and operations of a utility owned plant (PSCo owned units)

Future financing risk – cost risk associated with the possibility of financing costs in the future that are higher or lower than what is being modeled, as debt matures and is replaced by new debt issuances

- b. The Company has not developed a specific assessment of the impacts of these risks on ratepayers cost.
- c. Public Service contends that based on the historical performance of IPP's in previous RFP processes, there may be a significant risk that an IPP cannot or will not complete a project offered in the RFP. Our contention is based upon the fact that in the past some IPP projects have either not been completed in the timeframe proposed or within the bid price offered. See response to 2-9.C.i for a listing of the situations where the IPP was not able or willing to complete the project as bid into the RFP.

- i. 1998 RFP – One gas-fired resource selected for negotiation of a PPA did not perform in the manner outlined in their RFP bid. The bidder withdrew from PPA negotiations and, hence, did not meet their projected COD of May 2000.

Fulton Cogeneration Associates, L.P. failed to meet its COD of May 1, 2000 for its Manchief gas-fired generating unit that was specified in its PPA executed on May 13, 1999. See Confidential Attachment CIEA/CEC/Thermo2-9.A1.

Plains End LLC failed to meet its COD of May 1, 2002 for its Plains End gas-fired generating units that was specified in its PPA executed on February 22, 2001. See Confidential Attachment CIEA/CEC/Thermo2-9.A2.

Black Hills Colorado LLC failed to meet its COD of May 1, 2002 for its Arapahoe 5, 6, 7 gas-fired generating units that was specified in its PPA executed on January 26, 2001. See Confidential Attachment CIEA/CEC/Thermo2-9.A3.

2001 All-Source Solicitation - Two resources selected for negotiation of PPAs did not perform in the manner outlined in their RFP bid. The two bidders withdrew from PPA negotiations and, hence, did not meet their projected CODs.

2004 Renewable Energy RFP – Two wind resources selected for negotiation of PPAs did not perform in the manner outlined in their RFP bid. The first bidder withdrew from PPA negotiations and, hence, did not meet its projected COD. The second bidder defaulted on its REPA executed on March 1, 2005 before it began construction on its wind farm and did not meet its December 31, 2005 COD. See Confidential Attachments CIEA/CEC/Thermo2-9.A4 and .A5.

**RESPONSE TO DISCOVERY REQUEST NO. CIEA/CEC/Thermo2-9 continued:**

2005 All-Source Solicitation - Two gas-fired generating resources selected for negotiation of PPAs did not perform in the manner outlined in their RFP bid. The two bidders withdrew from PPA negotiations and, hence, did not meet their projected CODs. See Confidential Attachments CIEA/CEC/Thermo2-9.A6 and .A7. In addition, Squirrel Creek Energy LLC defaulted on its PPA executed on October 23, 2006 before it began construction on its gas-fired generating unit and did not meet its May 1, 2009 and March 15, 2010 CODs. See Confidential Attachment CIEA/CEC/Thermo2-9.A8.

2008 Wind Resource RFP – One of two wind resources selected for negotiation of PPAs did not perform in the manner outlined in their RFP bid and, hence, did not meet its projected COD. One of the two bidders sought a substantial price increase from their bid price. Public Service discontinued formal PPA negotiations after notifying the bidder that the proposed price increase was unacceptable. See Confidential Attachment CIEA/CEC/Thermo2-9.A9.

2009 All-Source Solicitation – One of three solar PV resources selected for negotiation of PPAs did not perform in the manner outlined in their RFP bid. One of the three bidders sought a substantial price increase. Public Service discontinued PPA negotiations and the bidder did not meet its projected COD. See Confidential Attachment CIEA/CEC/Thermo2-9.A10.

- ii. Public Service has not completed a quantitative analysis of the impact on customers of an IPP failing to complete the development of a generation project identified in its bid.
- iii. Yes. The current Public Service model (Dispatchable) PPA (Attachment 3.1-3 in Volume III of the 2011 ERP) states in Article 12, Default and Remedies, Section 12.1 (G), that it shall be an Event of Default for

Seller's failure to achieve Commercial Operation more than 60 Days after the Commercial Operation Milestone, *provided, however, that* if during such period Seller provides a written opinion from a mutually-agreeable independent engineer that the COD can reasonably be achieved within an additional 60 Day period, then Seller shall be allowed a total period not to exceed 120 Days after the Commercial Operation Milestone to achieve Commercial Operation, *provided further that* Liquidated Delay Damages shall have been paid throughout the entire period of delay and that no additional cure period for such default shall be required.

**RESPONSE TO DISCOVERY REQUEST NO. CIEA/CEC/Thermo2-9 continued:**

Article 12.2 (B) Liquidated Delay Damages, states that

Prior to the COD, Seller shall be liable to pay Company Liquidated Delay Damages as a liquidated damage and not a penalty for any delay in meeting the Commercial Operation Milestone...

Liquidated Damage payments provide customers the opportunity to recover the cost of damages that may have resulted due to an IPP not meeting its COD.

- d. The testimony presented by Mr. Haeger in this docket does not make a comparison as to which of the risks identified in Table KJH-1 are greater than or less than the other risks identified in Table KJH-1. The purpose of Mr. Haeger's testimony is to address statements by other parties that suggest that only utility owned projects result in risk to customers and that IPP projects internalize all of those risks.

Regarding the risk of failure to operate on critical days, in the Model Dispatchable PPA, unless the Seller's conduct and/or the failure to perform otherwise constitutes an Event of Default under the terms of the agreement, the failure to perform on a critical day is not differentiated from failing to perform on any other day. As a result, IPP's may not have the same incentive to ensure their plant is fully operational on critical days as does the Company. In addition, Public Service's Model Dispatchable PPA contains provision for payment of a bonus to Seller if the Seller's plant is available and a financial penalty if the plant is not available during an Escalated System Condition ("ESC") event. To date, many Sellers' have taken exception to this clause during contract negotiations as representing an additional unacceptable financial risk. Public Service has one PPA with this ESC provision.

- i. See Attachment 3.1-3 in Volume III of the 2011 ERP, which is the Default and Remedies section of the model PPA referred to in the answer to c.iii.
- ii. Public Service did not complete a study quantifying the cost impact on ratepayers of the risk associated with the failure of IPP's to operate on critical days.
- iii. In the Model Dispatchable PPA, unless the Seller's conduct and/or the failure to perform otherwise constituted an Event of Default under the terms of the agreement, the failure to perform on any one particular day would result in Seller becoming unavailable for purposes of payment for capacity, dispatchability and energy. For the purpose of being paid the full contract price for capacity, the performance of the Seller is normally judged over a twelve-month rolling average. As a result, a Seller being unavailable on a critical day may not result in a reduction in capacity payments to that IPP. In such cases, ratepayers may be harmed and have no way to mitigate the harm caused by the IPP's failure to perform on critical operational days. In addition, Public Service's Model Dispatchable PPA contains provision for payment of a bonus to Seller if the Seller's plant is available and a financial penalty if the plant is not available during an Escalated System Condition ("ESC") event.

**RESPONSE TO DISCOVERY REQUEST NO. CIEA/CEC/Thermo2-9 continued:**

- e. Attachment CIEA/CEC/Thermo2-9.B1 outlines the Xcel Energy view of accuracy of cost estimates as applicable to capital projects. Also see Chapter 2 of the EPA Cost Control Manual, 6<sup>th</sup> Edition for a detailed discussion of cost estimates, accuracy, and contingency. The Xcel Energy approach is similar to but not identical to the EPA outline. Accuracy is related to contingency, but not the same. Contingency (sometimes referred to as allowance for unknowns) is a line item value in project cost estimates to allow for uncertainties in costs for estimate line items and for other items that are not fully identified or known. As a project develops through design, procurement, and installation the contingency is reduced and becomes 0 at project close-out.
- f. Public Service believes that under utility ownership, the impact on the customer is symmetrical and slightly tilted towards benefits for the customer. In cases where the cost is less than the estimate, the customer gets the benefit. In cases where the cost is greater than the utility's estimate, the utility may request recovery, but that recovery is subject to approval by the PUC. Moreover, as the information presented in response to CEC 2-9 (g) demonstrates, the Company has a track record of constructing new gas fired generation at a cost that is less than its estimate. This fact reflects additional benefits to the customer.
- g. Based on its prior demonstrated experience, Xcel Energy is of the opinion that future projects will more likely than not be completed at less than estimated values. For the seven gas fired generating facilities completed by Xcel Energy since 2002, six were completed for less than the initial estimates. See Exhibit GLF-6 and further details provided in response to CEC2-1, 2-2, and 2-2. No specific studies or documents beyond those listed above have been developed.
- h. See Page 4, Line 7 through Page 8, Line 9. of Mr. Haeger's Supplemental Direct testimony.

**Attachments:**

Confidential Attachment CIEA/CEC/Thermo2-9.A1  
Confidential Attachment CIEA/CEC/Thermo2-9.A2  
Confidential Attachment CIEA/CEC/Thermo2-9.A3  
Confidential Attachment CIEA/CEC/Thermo2-9.A4  
Confidential Attachment CIEA/CEC/Thermo2-9.A5  
Confidential Attachment CIEA/CEC/Thermo2-9.A6  
Confidential Attachment CIEA/CEC/Thermo2-9.A7  
Confidential Attachment CIEA/CEC/Thermo2-9.A8  
Confidential Attachment CIEA/CEC/Thermo2-9.A9  
Confidential Attachment CIEA/CEC/Thermo2-9.A10  
Attachment CIEA/CEC/Thermo2-9.B1

**Sponsor:** Kurt Haeger  
(e) Jim Vader  
(f) Haeger/Greg Ford

**Response Date:** April 24, 2012