BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

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IN THE MATTER OF THE APPLICATION OF)
PUBLIC SERVICE COMPANY OF COLORADO) DOCKET NO. 11A-869E
FOR APPROVAL OF ITS 2011 ELECTRIC)
RESOURCE PLAN)

REBUTTAL TESTIMONY AND EXHIBIT OF KURTIS J. HAEGER

ON

BEHALF OF

PUBLIC SERVICE COMPANY OF COLORADO

July 16, 2012

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OF THE STATE OF COLORADO

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1	I.	INTRODUCTION AND BACKGROUND		

- 2 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
- 3 A. My name is Kurtis J. Haeger. My business address is 1800 Larimer Street,
- 4 Denver, Colorado 80202.
- 5 Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT POSITION?
- 6 A. I am employed by Xcel Energy Services, Inc., a wholly-owned subsidiary of
- 7 Xcel Energy Inc., the parent company of Public Service Company of
- 8 Colorado. My job title is Managing Director, Wholesale Planning.
- 9 Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THE PROCEEDING?
- 10 A. I am testifying on behalf of Public Service Company of Colorado ("Public
 11 Service" or the "Company").
- 12 Q. DID YOU FILE DIRECT TESTIMONY IS THIS DOCKET?
- 13 A. Yes.
- 14 Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

The purpose of my rebuttal testimony is to address a number of issues, concerns, and recommendations that were put forth in Answer Testimony by numerous witnesses in this docket. Although I, along with a number of other Company witnesses, will specifically address each of these issues and recommendations, I believe it is beneficial to start by setting the record straight on a number of misconstrued facts and related concerns identified by Staff witness Ms. Fiona Sigalla and Colorado Independent Energy Association, Colorado Energy Consumers and Thermo Power & Electric LLC witness Mr. William Monsen.

Α.

To begin with I would like to affirm that the 2011 ERP set forth a resource planning process and resource acquisition process that is not only fair and equitable to existing and new independent power producer ("IPP") proposals, but is also transparent with numerous checks and balances throughout the process. Contrary to allegations raised by Mr. Monsen and (through innuendo) by Ms. Sigalla, the 2011 ERP clearly complies with all state legislative requirements and the Commission's Electric Resource Planning Rules.

In a number of instances, Mr. Monsen recommends the Commission order or require the Company to take a specific course of action, when the 2011 ERP already states the Company has agreed to take that course of action. His testimony leaves the impression that there are problems with our proposed plan, when in fact these issues have already been adequately addressed.

1 Q. CAN YOU PROVIDE SOME EXAMPLES OF THESE 2 RECOMMENDATIONS PUT FORTH BY MR. MONSEN?

Α.

- Yes, beginning on line 7 page 3 of his answer testimony, Mr. Monsen summarizes his ten recommendations to the Commission regarding the RFP evaluation and selection process. The Company had already committed, either in the 2011 ERP or supporting testimony, to take the course of action in five of the ten recommendations he proposes. The following is a list of the five recommendations the Company had already proposed in our 2011 ERP and testimony:
- Monsen Recommendation #1 Use competitive solicitations to make "opportunistic" resource acquisitions outside of the ERP process.

On page 1-49 of volume I, the Company stated, "Specifically, the Company requests Commission approval to issue RFP's, from time to time, and to evaluate bids for new renewable resources greater than 30 MW as well as consider unsolicited proposals, during the timeframe between this 2011 ERP and the 2015 ERP."

2) Monsen Recommendation #6 – Public Service should be required to procure all resources, including contingency alternatives, on a competitive basis.

In response, the Company already proposed: 1) an All-Source solicitation for the primary acquisition process for the 2011 ERP; 2) to use a competitive solicitation for the "opportunistic" acquisition of future renewable

energy; and 3) to exhaust the use of competitive solicited bids before we consider constructing a utility owned back-up bid or contingency proposal.¹

3) Monsen Recommendation # 7 – The Commission should not penalize IPPs for unknown or potential lease accounting standards which may or may not be issued.

On page 2-41 of Volume II of the ERP and in the Supplemental Direct Testimony of Mr. Christopher Haworth, beginning on line 1 page 4, the Company states: "Public Service will assess power purchase agreement ("PPA")s during **negotiations** with the currently applicable standard." I note that negotiations take place after the Commission approves a portfolio of resources in Phase 2 of the ERP, so quite a while after bids are evaluated. Mr. Haworth also stated that Public Service will only utilize standards that have been adopted, and we will not use "unknown or potential lease accounting standards" in our assessments of PPAs during bid evaluation or negotiations.

4) Monsen Recommendation #8 – The Commission should require Public Service to submit an application that specifies in detail how Public Service plans to apply any new lease accounting standards in its evaluation of PPAs.

As explained by Mr. Haworth in his supplemental direct testimony, the Company will not take into account any changes in the accounting standards

¹ See the list of "Contingency Plan Options", options 1 through 5 presented on page 1-60, and on Table 1.8-1, "Hierarchy of Contingency Plan Alternatives" page 1-62 of Volume I of the 2011 ERP.

until they are finalized (not expected until sometime in 2013) and only in the negotiations of contracts. As a result, the Company will not modify the IPP bids during the evaluation phase nor will these accounting standards affect the bid evaluation. The Company will take the new accounting standards into account when negotiating the PPAs to structure the contracts to avoid possible capital lease treatment. The likely outcome of the delayed issuance of the new accounting standards is that they will not impact the evaluation and selection process, but they may become a negotiation item where Public Service will work with the winning bidders to minimize the likelihood that their bids will trigger a problematic lease accounting issue.

5) Monsen Recommendation # 9 – The Company should fully implement the Legislature's intent to ensure transparency and accuracy in bid evaluation by providing the bidders with the model inputs and assumptions for the bids.

On page 1-52 of Volume I, the Company clearly states that we will provide the bidder the modeling inputs and assumptions as required pursuant to Commission Rules 3613 (a) and (b). In addition, as described by Mr. Hill, the Company has designed the bid forms to essentially provide the bidders a Levelized Energy Cost (LEC) for their bids along with a form of documentation of the assumptions the Company will use in its evaluation.

Q. ARE THERE OTHER MAJOR UNDERLYING THEMES PRESENTED BY
MR. MONSEN OR MS. SIGALLA THAT APPEAR TO BE MISDIRECTED?

Yes, the underlying premise of our 2011 ERP is there is an opportunity for the Company to acquire low cost resources from existing IPP generators whose current contracts with Public Service expire before the Company has additional resource needs in 2017. Mr. Monsen and Ms. Sigalla appear to overlook the Company's efforts to focus our acquisition efforts on these uncontracted IPPs; instead they each insinuate that the Company is attempting to gain an advantage for self-build projects in the 2011 ERP process. Nothing can be further from the truth. The 2011 ERP was drafted specifically to give these existing IPP's generators the best possible chance of obtaining a power purchase agreement with Public Service before new generation is constructed. By stating "a preference" for short-term bids, the Company was clearly communicating to the existing IPP generation community that we are looking to these generators to step up and offer attractive proposals to fill the resource needs for 2017 and 2018, out through 2023.

Q. WILL THE COMPANY ACCEPT LONGER TERM BIDS?

A.

Α.

Yes. Contrary to allegations made by Ms. Sigalla, nowhere did the Company suggest that we would limit new IPP projects or limit the term of IPP bids to only short-term bids. As clearly stated on page 1-46 of Volume I of the 2011 ERP, Public Service states that we will accept IPP bids up to a 25 year term. Public Service also stated on page 1-45 that we expected the longer-term IPP bids to discipline the shorter-term IPP bids, clearly anticipating an open and robust All-Source solicitation.

1 Q. WHY STATE A PREFERENCE FOR SHORT-TERM BIDS IF THAT 2 PREFERENCE WILL NOT BE USED TO REJECT LONGER-TERM BIDS?

Α.

A.

We were trying to tell the existing IPP generation community that we believe that since these generators are on their second round of PPAs, they should be able to bid lower prices than would a new generation project. We share the OCC's concerns, as expressed by Dr. Schechter in his answer testimony, that existing IPPs with greatly reduced debt service payments do not always offer to us a lower price that reflects their current revenue requirements but rather bid to try to capture the economies of new build, which they view to be the marginal bidder and therefore their competition. By stating that we preferred short-term contracts we were stating that we prefer to buy from existing generators and we hope they will "sharpen their pencils" and give us their best price.

14 Q. WHAT ROLE DOES NEW CONSTRUCTION PLAY IN THE BID 15 PROCESS?

New construction will discipline the competition and essentially cap the bids for contract renewals. We agree with Mr. Monsen that the *highest* bid we get from existing IPP's bids should be based on the cost of new entrants. However, the Company wanted to place additional pressure on these existing facilities to provide good bids, so Public Service has proposed that we use the cost of new Public Service-owned generation built on existing plant sites where economies can be achieved. The cost of these projects should be below many greenfield construction projects and should therefore

provide additional discipline to the market. Mr. Hill shows in his rebuttal testimony that Ms. Sigalla is overestimating the depth of the existing IPP market and the self-build alternatives are very much needed to provide that additional discipline to the market. The fact that we are providing a competitive discipline to lower the bar for the IPP bidders should not be interpreted as a form of self-build preference. Certainly by stating a preference for shorter term PPA proposals, the Company was placing these existing generators at the head of the line, based on the hope that the existing generators could be incorporated back into the Company's portfolio before any additional new generation is constructed.

A.

Q. DID THE COMPANY OFFER OTHER OPPORTUNITIES TO TRY TO FIT THE EXISTING IPP PROJECTS INTO THE PORTFOLIO?

Yes. The Company went further in our efforts to find a home for these existing IPP generators by proposing to allow these generators to compete against the continued operation of Arapahoe 4 and Cherokee 4 on natural gas. The Company is quite surprised that both CIEA and the Staff have misconstrued these efforts to suggest Public Service is attempting to stack the deck against either the existing IPP generators or potential new IPP projects.

Let me state categorically: Public Service is looking for the best deal for our customers. We believe that the best deal, now, is to see if existing generators are willing to provide us with a fair price for short term contracts

until the many uncertainties that I addressed in my Direct Testimony are better resolved.

3 Q. PLEASE SUMMARIZE THE REST OF YOUR TESTIMONY.

4 Α. The remainder of my testimony focuses 1) on a more in depth discussion of 5 the issues and recommendations raised by Mr. Monsen and Ms. Sigalla 6 concerning the Company's resource solicitation and evaluation process, 2) 7 Dr. Schechter's recommendation that the Company be required to complete a study to evaluate the utilization of our remaining coal fleet as more of a 8 9 capacity resource with less dependence on these resources for energy, 3) 10 Interwest's witness Mr. Cox's suggestion that the Commission must approve a new tariff before the Company can apply the findings of the Coal Cycling 11 12 Study in the resource evaluation process.

13 Q. IS THE COMPANY PRESENTING OTHER WITNESSES IN ITS REBUTTAL 14 CASE?

15 A. In addition to my testimony, the following Public Service witnesses will specifically address:

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Mr. Jim Hill – 1) numerous issued raised regarding key modeling assumptions, 2) the appropriate Resource Acquisition Period, 3) misrepresentations made by Staff regarding the resources acquired as a result of the 2007 ERP, 4) proposed changes to the evaluation process of bids in the Phase 2, and 5) misrepresentations made by Staff regarding the Company's proposed contingency plan.

Ms. Deb Sundin – 1) the recommendations of WRA and OCC that the Company should solicit demand-side resources as well as supply-side resources as part in the All-Source solicitation and 2) Staff witness Mr. Hay's recommendation that the Company be required to perform a new or expanded study of demand response potential, and 3) the criticisms raised by Staff witness, Mr. Hay and RUC witness, Ms. Hardin, regarding the energy savings and demand reduction levels assumed for purposes of the ERP relative to the energy savings goals approved by the Commission in Docket No. 10A-554EG.

Mr. Jeff Klein – 1) the concerns raised by Mr. Monsen and Mr. Michael A. Hamilton on behalf of Southwest Generation concerning the alleged limitations of the portfolio financing contract language in the model PPAs included in the ERP, 2) the issues raised by Ms. Sigalla regarding the completion of the negotiations from the 2009 All-Source and the benefits that accrue to the customers as a result of the Company's pragmatic approach to this resource solicitation, 3) Ms. Sigalla's recommendations for the Commission to narrowly limit to a few areas the PPA terms and conditions that are negotiable; authorize a limited time window for contract negotiations; and direct Public Service to include the independent evaluator in all contract negotiations.

Mr. Chris Haworth – the confusion CEC witness Mr. Monsen has relative to the Company's use of proposed accounting standards in the evaluation of

RFP bids. Mr. Haworth also provides an update on the anticipated timing of the issuance of new accounting standards associated with lease accounting and reiterates that this new information will only be used in the negotiations of new PPAs.

Ms. Jannell Marks - the Answer Testimonies of PUC Staff witnesses Mr. Harris and Mr. Hay regarding the Company's sales and peak demand forecasts and DSM forecasts, including the timeliness of the assumptions used in the Company's forecasts, the alleged excessive use of binary variables, and how DSM was accounted for in the Company's forecast.

Mr. Jack Ihle – the concerns raised by a number of interveners that the risk analysis of carbon policy is not adequate in the 2011 ERP. In doing so Mr. Ihle reiterates the Company's plan to present a full range of carbon policy assumptions and resulting modeling analysis in the bid evaluation.

Mr. Mark Roberts – the issues Ms. Glustrom, Mr. Sanzillo and Dr. Selvans raise relative to the Company's projection of coal availability and coal price forecasts.

Mr. Curt Dallinger – given the concerns expressed by Staff witness Brown with the Company's Winter Generation Adequacy Study, how the Company will assess transportation costs to the various bids in the RFP evaluation, based on the location and gas pipeline interconnection proposed by the bidder.

1 Mr. John Welch – recommendations made by Staff witness Mr. Stephen 2 Brown regarding the Winter Generation Adequacy Study we filed on 3 February 13, 2012 and Mr. Cox's contention that the Company has not taken 4 the necessary steps to economically integrate variable energy resources. 5 Mr. Drake Bartlett – the concerns raised by Southwest Generation witness 6 Mr. Norman and other witnesses regarding the availability and the 7 appropriate level of flexible generation resources necessary for the Company 8 to manage wind ramping events on our system. 9 Mr. Sean Connolly – the issues raised by Interwest witnesses Mr. 10 Falkenberg and Mr. Cox regarding the development and the application of 11 the Company's Coal Cycling Study and the concerns about the Company's 12 gas price forecasts raised by Colorado Gas Producers witness Mr. Fishman. 13 Mr. Timothy Carter - the concerns raised by Colorado Gas Producers 14 witness Mr. Fishman regarding the Company's proposed use of the Price 15 Volatility Mitigation Adder. 16 Mr. Timothy Sheesley - the recommendation by Dr. Bardwell on behalf of 17 Ratepayers United and Mr. Cox on behalf of Interwest to use more than a

single discount rate in the bid evaluation.

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1		II. RESOURCE ACQUISITION PROCESS
2	Q.	PLEASE IDENTIFY THE ISSUES PRESENTED IN ANSWER TESTIMONY
3		RELATED TO THE COMPANY'S PROPOSED ACQUISITION PROCESS
4		THAT YOU ARE ADDRESSING.
5	A.	The following is a list of issues that were presented or commented on by a
6		number of intervenors regarding the Company's Resource Acquisition
7		Process:
8		A. Transparent, fair and equitable RFP and evaluation process
9		B. Preference for short-term bids
10		C. Evaluation of utility build projects versus PPAs
11		D. Opportunistic renewable acquisition process
12		E. Identification of Section 123 resources
13		F. Set-aside for specified resource types
14		G. Inclusion of DSM and Demand Response opportunities
15		H. Timeliness of the acquisition process
16		I. Contingency hierarchy
17		My testimony will address the policy related issues of items A through G,
18		while Mr. Klein will address item H and Mr. Hill will address item I. In
19		addition, the Company's subject matter experts will provide supporting
20		specific details in response to all of the items listed above.

II.-A. TRANSPARENT, FAIR AND EQUITABLE RFP EVALUATION PROCESS

Α.

- Q. THERE APPEARS TO BE A FAIR AMOUNT OF DISCUSSION AND
 CONJECTURE IN THE ANSWER TESTIMONY PROVIDED BY MR.
 MONSEN AND MS. SIGALLA THAT SUGGESTS THERE IS A NEED FOR
 A MORE FAIR AND EQUITABLE RFP AND EVALUATION PROCESS.
 DID THE COMPANY PROPOSE AN RFP PROCESS THAT COMPLIES
 WITH ALL OF THE COMMISSION'S RESOURCE PLANNING RULES IN A
 FAIR AND EQUITABLE MANNER?
 - Yes, the 2011 ERP defines a planning and acquisition process that is consistent with all of the Commission's resource planning rules. The proposed RFP process takes advantage of an all-source solicitation methodology for the Company's primary acquisition efforts to fill the resource needs through 2018, while also providing the opportunity to use more targeted solicitation efforts in situations where the Company can possibly be more "opportunistic" in our acquisition of future renewable resources or Section 123 resources. As stated on page 7 of Volume I of the 2011 ERP, the Company's overall goal of the 2011 ERP is "a resource plan that is targeting low-cost resources that will fill the resource needs through 2018" and "an opportunistic approach for acquiring additional renewable generation resources an approach that provides the Company with the needed flexibility to acquire these resources when market conditions are most favorable for customers."

DO THE RECOMMENDATIONS PUT FORTH BY MR. MONSEN TO ELIMINATE THE OPPORTUNITY FOR THE COMPANY TO OFFER UTILITY-OWNED PROJECTS AND BY MS. SIGALLA TO NOT ALLOW THE COMPANY TO OPPORTUNISTICALLY ACQUIRE ADDITIONAL RENEWABLE RESOURCES IN THE FUTURE COMPORT WITH THEIR STATED GOALS OF PROVIDING A HIGHLY COMPETITIVE ACQUISITION PROCESS FOR THE BENEFIT OF THE CUSTOMER?

Q.

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Α.

No, both of these proposed restrictions appear to put either the financial wellbeing of the IPPs or Staff's apparent desire for a more regimented process in front of the needs of our customers. Mr. Monsen's proposal to ban the Company from offering utility-owned projects or to artificially disadvantage utility-owned projects clearly eliminates an additional source of competition to the IPPs in the resource selection process. Handicapping the evaluation of Company proposals in the unfair ways suggested by Mr. Monsen is clearly self-serving on behalf of the IPPs and could potentially lead to the situation where an IPP would not have to bid as aggressively in the RFP process. In addition, his suggestion that having utility participation in the solicitation process somehow will chill bidder participation or reduce the desire for IPPs to compete is completely unfounded. In our 2007 ERP the Company clearly communicated that we had a desire to own new generation and that we were planning to participate in the solicitation process with utility-owned options. In the resulting 2009 All-Source solicitation, the Company received 113 bids for a total of 21,150 MW. As opposed to all of the rhetoric that has been

provided in answer testimony about the fear of chilling bidder participation, the facts suggest that this "fear" is unfounded in Colorado.

Q.

Α.

Ms. Sigalla's recommendation to deny the Company's request to be more opportunistic in our approach for acquiring more renewable energy resources appears to suggest that Staff's desire for a regimented process is more important than getting the lowest cost energy resources for our customers.

DOES THE 2011 ERP PROPOSE THE PARTICIPATION OF AN INDEPENDENT EVALUATOR TO OVERSEE THE RFP PROCESS AND ENSURE A FAIR AND EQUITABLE EVALUATION AND SELECTION PROCESS?

Yes. While Staff and CIEA both suggest the need for a fair and equitable resource evaluation and selection process, they seem to dismiss the fact that the PUC approves the modeling assumptions and methodologies to be used in the evaluation and selection process in Phase I of the resource planning docket, while the Independent Evaluator ("IE") has the responsibility to oversee the evaluation process in Phase II of the resource planning docket. The sole purpose of the IE is to make sure the RFP evaluation and selection process is fair to all parties including Public Service. The Commission's resource planning rules have been reviewed and modified numerous times to make sure this process is fair and equitable. It is not clear why Staff or CIEA find the rules and the established process inadequate. Certainly both of these parties (although perhaps not these specific witnesses) have had the

opportunity to participate in the development of these rules over the last ten years.

3 Q. HOW IS THE INDEPENDENT EVALUATOR SELECTED?

Α.

- A. As identified in section 3612 of the Commission's Resource Planning Rules, the Staff, the Office of Consumer Counsel (OCC) and the Company jointly propose the selection of the IE, and the Commission approves the IE. As a result, Staff, the OCC, and ultimately the Commission have ample opportunity to ensure the IE who is selected will be able to ensure a fair and equitable RFP evaluation and selection process.
- 10 Q. DO MR. MONSEN AND MS. SIGALLA APPEAR TO HAVE AN

 11 EXPECTATION THE COMPANY CANNOT, OR WILL NOT, CONDUCT A

 12 FAIR AND OPEN BID EVALUATION?
 - Yes, contrary to Commission rules, Mr. Monsen goes as far as to recommend that the Company not even be allowed to submit self-build proposals (recommendation # 3) and that the Commission limit rate recovery a priori of Company-built projects in a manner never before used in Colorado and of questionable legality (recommendation #4). Beginning on line 9 of page 36 and again on line 14 of page 37, Ms. Sigalla reveals her bias by suggesting that she believes the Company has a profit motive for not wanting to select an IPP bid and that the Commission should consider removing the Company from the role of evaluating bids altogether. Both of these witnesses have ignored the clear Commission rules that 1) permit the

- 1 Company to offer self-build projects in the All-Source RFP; and 2) provide for 2 a workable process to ensure that all bids are evaluated fairly.
- Q. DID EITHER OF THESE WITNESSES PROVIDE ANY EVIDENCE THAT

 THE COMPANY HAS UNFAIRLY ADVANTAGED SELF-BUILD

 PROPOSALS IN PAST RESOURCE SOLICITATIONS?
- 6 Α. No, neither Mr. Monsen nor Ms. Sigalla provide any evidence to suggest the 7 Company has inappropriately favored utility owned projects in any RFP solicitation. All past resource plans, resource solicitations and resources 8 9 acquired by the Company have been thoroughly reviewed by the 10 Commission through open public processes where the Staff and Mr. 11 Monsen's clients have been able to participate. While providing no evidence, 12 whatsoever, of any impropriety, we found it particularly disconcerting that Ms. 13 Sigalla attempts to suggest, by innuendo, that the Company did not comply 14 with the Commission's rules and orders in connection with our 2009 All-15 Source solicitation.

16 Q. WHAT PART OF MS. SIGALLA'S TESTIMONY ARE YOU 17 REFERENCING?

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A. On pages 24-28 of her testimony, including her Graphs 1 and 2 on page 25, Ms. Sigalla tries to leave the impression that Public Service did not comply with the Commission-approved 2007 resource plan in Docket No. 07A-447E. Nowhere does she mention that the Commission specifically approved an amendment to the 2007 resource plan in Consolidated Dockets No. 10A-377E and 10A-905E, amendments that created significant savings for our

- 1 Company and our customers. Public Service acquired resources in full
 2 compliance with the amended 2007 Resource Plan and those resources are
 3 reflected in Ms. Sigalla's Graph 2. Mr. Hill provides more explanation of the
 4 Company's acquisitions under the amended resource plan.
- 5 Q. HAS THE COMPANY SUBMITTED SELF-BUILD BIDS IN PAST
 6 RESOURCE PLANS?
- 7 A. Yes, in the 2009 All-Source, the Company submitted two bids into the RFP process.
- 9 Q. WHAT RESULTED FROM THE COMPANY'S BIDS IN THE 2009 ALL10 SOURCE?
- 11 A. Neither of the two utility bids were selected and there were no issues or
 12 concerns raised regarding the Company's evaluation of the utility self-build
 13 projects relative to the other bids received in the RFP. Moreover the
 14 Independent Evaluator certified that the Company had conducted a fair bid
 15 evaluation.
- 16 Q. ARE THE RECOMMENDATIONS PRESENTED BY MR. MONSEN AND
 17 MS. SIGALLA CONSISTENT WITH THE COMMISSION'S RULES?
- A. No. Mr. Monsen's recommendations, to limit or eliminate utility involvement in future generation planning, directly contradict the Commission's Electric Resource Planning Rules. Mr. Monsen's recommendations #3, #4 and #5 appear to be a carry over from his experience in California and completely ignore the Colorado rules. Certainly these restrictions on electric resource planning, energy policy, and market design brought from his California

experience have no bearing on the activities in Colorado. Colorado's electric resource planning rules have been developed through a lengthy and well thought-out process in Colorado. To suggest wholesale changes to these rules or to completely ignore them in this proceeding is inappropriate.

Q.

Α.

The Company is also quite surprised by Ms. Sigalla's testimony, where she also appears to make recommendations that are not consistent with the Commission's rules. Certainly Staff has participated in the numerous rule making efforts over the last ten years and should be in a position to support the implementation of these now. To suggest changes to the Commission's rules, in a specific utility resource plan proceeding, based primarily on unsupported conjecture, is very concerning to the Company.

MR. MONSEN AND MS. SIGALLA PROVIDE RECOMMENDATIONS REGARDING THE TIMELY ACCESS TO MODELING ASSUMPTIONS USED TO EVALUATE IPP BIDS. DOES THE COMPANY'S 2011 ERP COMPLY WITH THE COMMISSION'S RULES REGARDING THE DESIRE FOR GREATER BID EVALUATION TRANSPARENCY?

Yes. The 2011 ERP complies with all of the requirements of section 3613 of the Commission's Resource Planning Rules. On page 1-52 of Volume 1, the Company specifically states that within the 45 days of bid receipt, we will communicate with each bidder why its bid was not forwarded to computer modeling, or alternatively what modeling assumptions will be applied to a specific bid for those bids that are advanced to computer modeling, in compliance with the requirements of Commission Rule 3613. As a result, the

2011 ERP already complies with the recommendation put forth by Ms. Sigalla on page 3 of her testimony to provide timely access to IPP's regarding the modeling assumptions used in the evaluation. Mr. Hill provides a more in depth answer to Mr. Monsen's recommendation to modify the Commission's Planning Rules with regard to providing bidders access to modeling assumptions for all bids. Mr. Hill explains that through the bid forms developed for this RFP, the Company makes available to each bidder essentially the full set of assumptions used to evaluate its bid. In addition, as explained by Mr. Hill, to the extent a bid requires the Company to assess any additional costs in a bid evaluation process (such as would be the case in analyzing gas connection costs), the Company will provide that modeling data to the bidder before the Company identifies the bids that have been selected to move forward to modeling in Strategist.

Q.

Α.

II.-B. PREFERENCE FOR SHORT-TERM BIDS

DO YOU AGREE WITH MS. SIGALLA'S RECOMMENDATION TO HAVE
THE COMMISSION DIRECT THE COMPANY NOT TO GIVE A
PREFERENCE TO SHORT-TERM CONTRACTS AND TO EVALUATE THE
ALTERNATIVES TO THE CONTINUED OPERATION OF ARAPAHOE 4
AND CHEROKEE IN THE ALL-SOURCE SOLICITATION?

No. While the 2011 ERP clearly laid out the concerns the Company has regarding the high degree of uncertainty that exists in the near future, which explains why it is beneficial to acquire short-term resources, the Company

clearly states that *all* bids, of any length up to 25 years, are welcome and will be evaluated on a level playing field. As stated on pages 1-45 and 1-46 of Volume I of the 2011 ERP, the Company welcomes bids for new IPP projects and longer-term IPP bids. Ms. Sigalla has apparently misconstrued the Company's stated preference for short-term bids to suggest we are proposing to somehow disadvantage newly constructed projects or longer-term PPA bids. On page 1-45 the Company clearly stated: "To help provide pricing discipline to the short-term bids, the All-Source Solicitation will also seek power supply proposals offering PPA terms that extend beyond December 2025. Bidders will be allowed to offer PPAs up to a twenty five year term." As a result, Ms. Sigalla's recommendation that the Commission direct the Company not to give a preference to only short-term bids is not necessary, since the ERP already addresses that all bids will be treated equally.

Α.

Q. WHY THEN DID PUBLIC SERVICE STATE A PREFERENCE FOR SHORT-TERM BIDS?

Public Service, and many other interested parties, would like to see existing generators be used to fill the Company's needs in 2017 and 2018, before any new generation facilities are constructed. By stating a preference for shorter-term PPAs, the Company was hoping to encourage existing generators to bid competitively and focus the attention of the RFP process on utilizing existing generators and not the construction of new facilities. Realizing that both new utility build projects and new IPP projects would

likely be considered a longer-term resource, stating a preference for shorter-term resources could result in the situation where no new resources would have to be constructed. The 2011 ERP allows for all lengths of bids to be submitted and evaluated on a level playing field.

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WHY IS PUBLIC SERVICE PROPOSING TO EVALUATE POSSIBLE ALTERNATIVES TO ARAPAHOE 4 AND CHEROKEE 4 OPERATING ON NATURAL GAS OUTSIDE OF STRATEGIST BEFORE THE ALL-SOURCE EVALUATION IS COMPLETED?

In an effort to create more transparency and to limit the confusion over the use of the Strategist to evaluate all of the bids, the Company proposed a more simplified analysis for the Arapahoe 4 and Cherokee 4 replacement options. As we discussed in our direct case, it is likely that only existing generators will be able to displace these generators because of the relatively low revenue requirements associated with continuing to operate these greatly depreciated generation plants on natural gas. Given that economic reality, it made sense to determine first whether any bidder could displace Arapahoe 4 or Cherokee 4, and if one or more could do so, to use these replacement bids as the starting point for reviewing all other proposals to fill the incremental resource need. By sequencing the evaluation process as identified in the 2011 ERP, the Company has the opportunity to make sure that a replacement option for either plant is truly beneficial to customers on a stand alone basis. Mr. Hill provides a more in depth discussion on the benefits of performing the modeling analysis using the approach laid out in

the 2011 ERP, as opposed to lumping the analysis together in one large bucket. The Staff should take some solace that the Company will check all of the recommendations through the use of Strategist.

I do note that after the filing of the 2011 ERP last October, Public Service conducted a competitive solicitation among existing Independent Power Producers who were in a position to bid existing generation to displace Arapahoe 4, as we discuss in our Application recently filed in Commission Docket No. 12A-785E. If the Commission grants our Application in Docket No. 12A-785E, then the preliminary evaluation will be used for replacements for Cherokee 4 only.

II.-C. OPPORTUNISTIC APPROACH TO ACQUIRING ADDITIONAL

RENEWABLE RESOURCES

- Q. WHY IS THE COMPANY PROPOSING AN ALTERNATIVE ACQUISITION
 PROCESS FOR ACQUIRING ADDITIONAL RENEWABLE RESOURCES
 OR SECTION 123 RESOURCES AFTER PHASE 2 OF THE ERP IS
 CONCLUDED?
- A. Based on the recent historical swings in the market, including the dramatic shift in the cost of wind and the potential impact of changing federal subsidies for future renewables resources, the Company wants to position itself to be able to react quickly to changing market conditions and updated pricing signals. In an effort to obtain energy for our customers at the lowest

- expected price, Public Service believes it is critical to have the ability to act quickly, in between ERP filings, to the benefit of our customers.
- Q. DO YOU AGREE WITH MR. MONSEN'S RECOMMENDATION THAT THE
 COMMISSION SHOULD ENSURE THAT PUBLIC SERVICEUSES A
 COMPETITIVE SOLICITATION PROCESS TO OPPORTUNISTICALLY
 ACQUIRE ADDITIONAL RENEWABLE RESOURCES?
- 7 A. My concern is not so much with his recommendation, but that he is confused regarding the process the Company intends to use when opportunistically 8 9 acquiring future renewable resources. On page 1-49 of Volume I, the 10 Company clearly stated: "Specifically, the Company requests the 11 Commission approval to issues RFP's, from time to time, and to evaluate 12 bids for renewable resources greater than 30 MW ... "Clearly the Company's intent is to use a competitive solicitation and to bring the results to the 13 Commission for approval. 14
- 15 Q. DO YOU AGREE WITH MS. SIGALLA'S RECOMMENDATION THAT THE
 16 COMMISSION SHOULD COMPLETELY DENY THE COMPANY'S
 17 REQUEST TO OPPORTUNISTICALLY ACQUIRE ADDITONAL
 18 RENEWABLE RESOURCES?
- 19 A. No, Ms. Sigalla's recommendation amounts to reducing the Company's
 20 flexibility to take advantage of market opportunities that could reduce costs
 21 for our customers. It would appear that Ms. Sigalla is more interested in
 22 ensuring a rigid process than she is in finding the lowest cost of energy for
 23 our customers. As stated above, the Company proposes to use a fair and

transparent competitive solicitation process, which will comply with all of the Commission's Resource Planning Rules, if and when the opportunity to acquire additional renewable resources may present itself.

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4 Q. DOES THE FLEXIBILITY THAT YOU REQUEST PROVIDE BENEFITS TO 5 OUR CUSTOMERS?

Absolutely. It has the potential to provide substantial benefits to our As I mentioned, the costs of renewable resources can vary customers. dramatically from time to time, based upon the availability of federal tax incentives and other market forces. The Company's Resource Planning staff conducts solicitations not just for Public Service but also for the other Xcel Energy operating Companies. As a result we have the opportunity to see market trends as they are developing. If for example, the production tax credit is extended for a short time frame, we would seek to capture those economics for are customers through an opportunistic RFP. This has worked out well in the past and I remind the Commission of two examples of implementing this process -- the Limon I and II power purchase agreements, which were recently approved by the Commission in Dockets No. 10A-377E and 11A-689E. Because of the pending expiration of the federal production tax credit at the end of 2012, we were able to negotiate very low prices for 400 MW of wind, because we could act quickly to issue RFPs, negotiate contracts, and obtain Commission approvals for these facilities. These lowpriced contracts would not have been available to us if we had had to wait until our next quadrennial resource plan to acquire them. These are examples of the "opportunistic" acquisitions that we wish to be allowed to
explore between resource plans. In all cases, we will use competitive
procurements and we will bring the results to the Commission for review.

II.-D. EVALUATION OF COMPANY BUILD RESOURCES VERSUS PPA'S

5 Q. PLEASE SUMMARIZE MR. MONSEN'S RECOMMENDATIONS
6 REGARDING UTILITY OWNED GENERATION ALTERNATIVES?

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A. Mr. Monsen recommends that the Commission should either: 1) eliminate the utility-owned option in the Company's power solicitations and only allow a utility-owned option if the IPP RFP process fails; or 2) require the rate recovery of for a utility-owned project be set for a ten year period based on the cost and performance assumptions used in the evaluation; or 3) account for an alleged differential in ratepayer risk between utility-owned projects and IPP projects.

Q. WHAT IS YOUR RESPONSE TO MR. MONSEN'S RECOMMENDATIONS?

In general, I note that these issues have been debated in front of the Commission before in the 2007 ERP and the Commission decided it was not appropriate to adopt similar recommendations offered by CIEA. As I stated earlier, there is no evidence to suggest the Company's actions in the 2009 All-Source solicitation, regarding the evaluation of utility-owned alternatives, warrant any change to the Commission's prior decisions on how utility-owned alternatives should be evaluated.

More specifically, the Commission's Resource Planning Rules specifically allow the Company to offer utility-owned proposals into the solicitation process. Mr. Monsen has offered no justification to depart from the Commission rules and therefore the Commission should deny Mr. Monsen's first recommendation. As I indicated the Company's brownfield generation plants are likely to be lower cost than greenfield construction and I can see why Mr. Monsen and his clients would want to keep those alternatives out of the bidding process.

Mr. Monsen's second recommendation, proposing to radically change the traditional regulatory compact in Colorado by allowing the Company to recover the estimated cost of a project for the first ten year of the life of the project, as opposed to the actual costs incurred by the Company, should likewise be rejected by the Commission. It is true that IPPs receive the amounts set forth in their power purchase agreements, no more and no less. They receive these amounts because they have contracted to do so and they have factored into their prices a return on their investment that is commensurate with the risks that they are assuming given that contracted price. The IPPs are held to the contract price, because the Commission has no jurisdiction over them and cannot regulate them directly. Mr. Monsen makes his proposal to remedy a problem of his own invention — his unfounded allegation that the Company has a pattern of bringing low estimates to the Commission so that its project is picked and then puts cost

overruns into rates. I will show that customers have benefited significantly by having the Company put only actual costs into ratebase.

Q. HOW DOES MR. MONSEN'S PROPOSAL RADICALLY CHANGE REGULATION IN COLORADO?

Α.

Today, the Commission has direct regulatory jurisdiction over Public Service and can review all costs for which we seek recovery through electric rates to assure that they have been prudently incurred. Today, Public Service is not entitled to retain the full benefit of our bid price if we actually construct a self-build facility for less than the anticipated construction costs assumed in our bid pricing. We can only pass through rates our actual prudently-incurred costs. So there would be no upside to the Company if we brought the plant in for a lower construction cost; by contrast, the IPPs get to retain that upside to counterbalance the risk of cost overruns. If Public Service has cost overruns, we must justify them; if we cannot justify them, they can be disallowed.

This regulatory regime and its attendant risks are reflected in the returns on equity that Public Service is entitled to use in setting electric rates. These returns do *not* reflect the one-way assumption of risk that Mr. Monsen seeks to impose on our Company. As Southwest Generation's witness Mr. Norman testifies on page 33 of his Answer Testimony: "[r]egulated utilities generally have lower return on equity requirements than non-utility capacity owners and are able to obtain lower interest rates as compared to equity

investors in independent power producing projects." These lower costs of capital benefit our customers, obviously.

Q.

Α.

While Mr. Monsen proposes that the Company be entitled to recover its estimate even if its costs are higher or lower than bid, Public Service is concerned about whether that recovery would actually take place. Recently the Commission debated how to allow recovery of a construction bonus allowed to Black Hills as part of a CPCN to build new gas-fired generation. The Commission rejected the idea of including the bonus in rate base. Mr. Monsen's proposal would be the equivalent of recovering a bonus for ten years if the Company was able to successfully bring a project in under budget.

WHAT IF THE COMMISSION IMPOSED A CAP ON COST RECOVERY BUT STILL ALLOWED ONLY ACTUAL COSTS TO BE INCLUDED IN RATES?

That is essentially what Ms. Sigalla of Staff proposed – a "Heads I win, Tails you lose" proposition. Clearly there either needs to be symmetrical risk and reward treatment of utilities and IPPs or the Commission needs to recognize that the different levels of regulation and allowed returns lead to different cost recovery regimes.

While the Company may be able to bid under a regime where it is entitled to recover its estimated costs even if its actual costs are lower, it could not bid under the regime proposed by Staff. The result of adopting this recommendation would be that Public Service's projects would not be

		Ratepayer Risk for Existing Ratepayer Risk for New Ratepayer Risk for			
20		Projects			
19		Table1A: Public ServiceComparison of Ratepayer Risks from IPP and Utility			
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17					
16		risks based on the specific regulatory paradigm in Colorado.			
15		below. My Table 1A more appropriately identifies the differences in ratepayer			
14		in his Table 1. I have included revisions to his summary in Table 1A shown			
13	A.	No, I do not agree with Mr. Monsen's opinion on the ratepayer risks identified			
12		ALTERNATIVES?			
11		DIFFERENCES IN RATEPAYER RISK OF THE VARIOUS			
10	Q.	DO YOU AGREE WITH MR. MONSEN'S OPINION ON THE			
9		Supplemental Direct Testimony.			
8		projects and utility owned projects. I addressed this topic in my			
7		opinion of the ratepayer risks associated with existing IPP projects, new IPP			
6	A.	Yes, in Table 1 on page 23 of his answer testimony Mr. Monsen presents his			
5		ASSOCIATED WITH UTILITY-OWNED PROJECTS AND IPP PPAS?			
4	Q.	DOES MR. MONSEN PRESENT HIS VIEW OF THE RATEPAYER RISKS			
3		we receive thereby allowing IPPs to propose higher bids.			
2		assumption of risk inherent in that proposal for the low regulated return that			
1		available to discipline the IPP prices, because we could not justify the			

	Ratepayer Risk for Existing IPP Project Recontracting?	Ratepayer Risk for New IPP Projects	Ratepayer Risk for UOG Projects
Fuel Prices	Yes	Yes	Yes

Cost of operations	Maybe, but depends on term and structure of the contract: ratepayers may bear recovery of operational costs in future PPA period.	Same as existing IPP.	May be, subject to prudence determination.
Plant performance	IPP is at some risk under the PPA based on heat rate, Capacity Availability Factor adjustment, and long-term replacement energy but amounts are unlikely to fully compensate ratepayers for cost of replacement energy.	Same as existing IPP.	May be, subject to prudence determination.
Potential for non- operations on critical days	IPP is at some risk under the PPA based on the negative ESC Event Adjustment but the amounts of the penalty are unlikely to fully compensate customers for replacement energy. To date, a number of IPPs have rejected this specific model PPA clause.	Same as existing IPP	May be, subject to prudence determination.
	Ratepayer Risk for Existing IPP Project Recontracting?	Ratepayer Risk for New IPP Projects	Ratepayer Risk for UOG Projects
Unanticipated capital additions	Maybe, but possibly on a delayed basis, subject to recontracting.	Maybe, but possibly on a delayed basis, subject to recontracting.	Maybe, subject to prudence determination and regulatory lag.
Risk associated with term of commitment	Yes, risk from uncertainty in the cost of replacement power at the end of the PPA, also risk of technology obsolescence and changes in the value of generation during the term of the PPA.	Yes, similar to the existing IPP, subject to the term of the PPA.	Not under current regulation.
Accounting risk	Maybe, depending on the potential impact of changes to lease accounting and imputed debt related accounting standards.	Similar to existing IPP, depending on the length of term of the PPA and the remaining life of the asset.	No, because the asset is already on the balance sheet.
Cost of initial construction	NA	Yes subject to bid submittal and security provisions in the PPA.	Yes, subject to conditions of CPCN and prudence determination.

Rate of return	Maybe, as PPA recontracting	Maybe, as PPA	Yes, subject to
over time bids migrate to new entrants		recontracting bids migrate	Commission approval.
	pricing.	to new entrants pricing.	

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In comparing Table 1 in Mr. Monsen's testimony to Table 1A shown above, there are three major differences between the two tables: 1) the recognition that as a regulated utility Public Service is not free to charge its customer whatever it wants; 2) Mr. Monsen tends to ignore the fact that IPPs have the opportunity to make up increased costs or cost overruns in future solicitations; and 3) the fact that many times the IPP will not accept the language in the model agreement and negotiates contract changes that result in additional risk being borne by the Company and our customers. Mr. Monsen assumes that the Commission and parties are powerless in assessing the prudence of investments and operating costs. This is not true. Rate cases in Colorado are based on the premise that the utility is entitled to recover its prudently incurred costs, and that recovery of these costs can be challenged in a regulatory proceeding. Mr. Monsen simply dismisses this fundamental regulatory protection, stating that is highly unlikely the Staff, the OCC or any other party could ever really impose controls on Public Service or influence the cost recovery requested by the Company.

Q. IS HIS FUNDAMENTAL ASSUMPTION, THAT A UTILITY CAN ALWAYS COLLECT ITS COSTS, CORRECT?

19 A. No, Mr. Monsen's fundamental assumption is flawed. First, from my 30 years of utility experience, there are many instances where the Commission

has not approved the full revenue requirements requested by the Company.

Not only has the Commission routinely scaled back rate increase requests and imposed performance standards based on positions raised by other parties, the Commission has occasionally required specific disallowances.

When Public Service's Fort St. Vrain nuclear facility did not perform as expected, there were significant cost disallowances ordered by the Commission. I believe the Staff and the OCC have the ability to adequately monitor the Company's performance and bring to the Commission's attention any claims that they may have of utility imprudence.

Α.

Q. DO YOU AGREE WITH MR. MONSEN'S SECOND ALLEGATION THAT RATEPAYERS ARE ESSENTIALLY INSULATED FROM THE PERFORMANCE RISK OF IPPS?

No, ratepayers are not insulated from the biggest and most important risk of all when it comes to IPP facilities, namely, the ability of an IPP to walk away from a project if there are unanticipated increases in project costs that make the project uneconomic for the IPPs's investors. By contrast, a regulated utility has the legal obligation to provide reliable service. There have been several occasions over the last few years where IPPs have decided to not to continue with the project they bid. I have included the Company's discovery response to CEC/CIEA/Thermo Power 2-9 as Exhibit No. KJH-2, which details the instances where the IPPs have failed to complete the project they bid.

Q. WHAT ELSE DOES MR. MONSEN IGNORE?

A. In the development of Table 1 in his testimony Mr. Monsen also ignores the fact that at time of contract renewal the IPP has a significant opportunity to recover in the PPA renewal period any cost overruns, or increased cost of operation, that may have been incurred during the original PPA period. Since IPPs generally will compete against the cost of new entrants, and those new entrants will likely have to make similar capital improvements that may be necessary due to environmental or regulatory requirements, or the new entrants' costs will have risen commensurate with a level of inflation, the existing IPPs stand a good chance of recovering these additional costs through a contract renewal. As a result, when viewing an IPP from this perspective, it is clear that ratepayers are not fully insulated from potential cost increases from a PPA.

Q.

Α.

BUT ISN'T IT TRUE THAT THE IPP CONTRACT RENEWAL IS A COMPETITIVE SOLICITATION AND THEREFORE THE IPPS' ABILITY TO COLLECT OR RECOVER INCREASED COSTS IN THE FUTURE WILL BE LIMITED?

I don't think so because the IPP's primary competitors' costs, the costs of new entrants, will have also increased, and there is generally room for the IPP to make an adequate return while also recovering their full current and any delayed costs. So although it sounds good to suggest the IPP contract will protect ratepayers from the risk of increased cost, in reality, IPPs will have the opportunity to collect all of their costs. In fact, Dr. Schechter

discusses his concern that IPPs often have the ability to recover their capital costs more than once if they obtain contract renewals.

Q. CAN YOU PLEASE REVIEW SPECIFIC SECTIONS IN TABLE 1 AND TABLE 1A THAT YOU DISAGREE WITH MR. MONSEN?

- 5 A. Yes, the following are a summary of some of the differences I have identified between Table 1 and Table 1A.
- Fuel Prices Under tolling arrangements, the fuel price related risk is the same under all three alternatives.

Cost of Operation – Since a large portion of operation costs, other than the original capital cost of the project, are labor-related or inflation-related, if the actual inflation is less than predicted (modeled in Strategist) the IPP gets to keep these additional profits. For utility-owned projects, the customer sees the benefits of these reduced costs. In the case of increased costs, the Company has the opportunity to request the recovery of these potential costs over time, while the IPP must wait to recover its increased operating costs until the next contract renewal period. In either case, PPA or utility-owned, it is likely that ratepayers will bear some form of the burden of increased labor and costs of operation over the life of these assets.

Plant Performance – Mr. Monsen suggests that ratepayers are insulated from poor plant performance through provisions in the PPA. It is fair to say that the PPA provides some relief to ratepayers because of incentives and penalties to encourage good performance, these incentives and penalties does not entirely protect the ratepayer. To provide a full insulation for

ratepayers of the risk of performance of an IPP, the PPA terms would have to be so onerous that no IPP would be able to finance the PPA. While the Company may not be assessed a direct penalty for non-performance at the time of the incident, Public Service is at risk for prudence review. Moreover the Company has a legal obligation to have sufficient generation available to meet our customers' electric load; the IPP has no obligation to our customers, whatsoever.

Operation on Critical Days – The Company has just begun to include a penalty and incentive language in the Model PPAs that reflect the increased need for IPPs to be available on Critical Operational Days. Realizing that the CAF incentive is limited in the amount of pressure it can bring to bear on the IPP to have its plant fully operational, the Company has been attempting to bring more risk coverage into the PPA for operation on critical days. So again it is fair to say that IPPs do bear some of the risk of being unavailable at key points of the year, but it is likely that these contractual provisions do not fully compensate ratepayers for the cost of replacement energy. From past experience, a number of IPPs have found this additional operational requirement not to be acceptable in the PPA and have rejected this new clause.

Q. WHAT IS YOUR CONCLUSION REGARDING THE DIFFERENT VIEWS
ON RATEPAYER RISK UNDER PPAS AND UTILITY OWNED
PROJECTS?

Α. Certainly, the picture presented by Mr. Monsen was heavily biased toward benefiting his clients, the IPPs. He discounted the reality of the situation in a number of instances. As I stated in my supplemental direct testimony, both IPPs and utility-owned projects introduce ratepayer risk. On a utility-owned project, the Commission has the authority to monitor the Company's costs and performance and to disallow the costs of any imprudent action that the Commission finds the Company has taken. Because the Commission has no direct jurisdiction over IPPs, the Commission and the Company must rely on the contractual terms of the PPAs to protect the ratepayers from the cost and performance risk of the IPP. Although neither mechanism shields ratepayers 100 % from these risks, the Company believes that the historical paradigm of reasonable PPAs and reasonable treatment of utility owned projects is an appropriate balance of risk protection for all parties. Company has developed contract provisions that protect ratepayers and that allow IPPs to make money along the way. While I have criticized Mr. Monsen's analysis, the Company is comfortable that it can both contract with IPPs to reasonably protect ratepayer interests and provide an opportunity for IPP investors to make money.

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19 Q. HAS THE COMPANY PROVIDED LOW ESTIMATES TO THE 20 COMMISSION FOR ITS PROJECTS IN THE PAST?

No. As Mr. Ford testified in his Supplemental Direct Testimony, Public Service and our affiliated Xcel Energy operating companies have an excellent track record of constructing gas-fired facilities on time and under

budget, so it is not necessary for the Commission to even consider changing this well-established regulatory compact. On gas combustion turbine and gas combined cycle projects, Xcel Energy Service's actual performance suggests that projects have come in more than 15% below the forecast, on a MW weighted average basis, or in excess of 20% below the forecast on a simple average basis. Xcel Energy operating companies have had only one gas combustion turbine or gas combined cycle project that ended up having an actual cost in excess of the Company's estimated cost. In the case of the Riverside combined cycle unit, the actual cost of the project was 7.6 % or \$16 million over the estimated cost. Over the last ten years, if all Xcel Energy operating companies had been utilizing the regulatory paradigm suggested by Mr. Monsen, where the utility was capped but allowed to recover its estimated cost in lieu of its actual cost, the utilities would have billed customers an incremental \$187 million over actual cost. In my opinion our customers have been better served by being charged the actual cost of utility construction, rather than a bid price, in conjunction with regulatory oversight in the rare circumstance where the utility is unable to construct the facility within project estimates. So therefore while we think Mr. Monsen's suggestion could be lucrative for the Company, we are not advocating its adoption.

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Q. MS. SIGALLA'S SUGGESTED CHANGE RESOLVES THE PROBLEM INTRODUCED BY MR. MONSEN. ISN'T THAT TRUE?

A. Yes, but unlike Mr. Monsen, whose recommendation would at least maintain a level of symmetry regarding the treatment of costs above and below the cap or set amount, Ms. Sigalla's proposal has no symmetry. Beginning on line 1 of page 39 of her testimony, Ms. Sigalla states she is not sympathetic to maintaining a symmetrical treatment of risk and reward for the utility and suggests the Company should be at risk for all costs above its estimate, but not be allowed to keep the benefit if the actual cost is less then the estimate. She also states that this type of treatment would provide the Public Service the same incentive that IPPS have to control construction costs.

Α.

10 Q. DO YOU AGREE WITH MS. SIGALLA'S VIEWS AND 11 RECOMMENDATION ON THIS ISSUE?

No and I do not think any IPP would accept the conditions suggested by Ms. Sigalla. Currently the IPPs have the risk if a project is over budget, and get to keep any benefit if the project comes in under budget. Since they are not rate regulated, they have the opportunity to bid future prices that compensate them for under earning in early years if there are project over-runs. The Company would have no such opportunity, because the Company's cost recovery would be forever capped. What Ms. Sigalla is suggesting is for the Commission to impose the upside risk provisions on the shareholders of the Company but give our customers, not our shareholders, the benefit of any savings. This would amount to telling an IPP that it would have to refund any profit to the customers that exceeded their original estimates and that future

bids would be forever constrained by their original estimate of the cost of the
 project. I am sure no IPP would agree to this structure.

Q. WOULD PUBLIC SERVICE'S CURRENT RETURN ON EQUITY BE COMMENSURATE WITH THE EXPECTED RETURN ON SUCH A PROJECT?

A.

Α.

No. When one considers that an IPP's expected return on equity is already greater than the Company's current return and that an IPP would most likely need to raise its expected return to accept a project with the risk profile suggested by Ms. Sigalla, the Company's current return on equity is not adequate to incorporate the risks that she proposes. Ms. Sigalla is suggesting that the utility take a risk that an IPP would not take – earn your regulated ROE on actual investments below a cap and forever forgo recovery of costs above a cap.

Q. WHAT EVIDENCE DOES MS. SIGALLA PROVIDE TO SUPPORT SUCH A RADICAL CHANGE IN THE REGULATORY PARADIGM IN COLORADO?

Unfortunately the only evidence she provides in support of her recommendation, other than just simply her opinion, is a reference to the joint comments of CIEA, CEC, and Thermo Power Electric LLC that allege, incorrectly, that the Company had a long history of under-estimating projects and then requiring ratepayers to pick up the cost overruns. These three parties did not provide any factual support for this erroneous allegation. What is even more concerning is Staff's outright disregard for the supplemental testimony of Mr. Ford, where he provided the real facts,

namely that Xcel Energy Services has an excellent track record in bringing on-line new gas facilities on-time and under-budget. Even our recent coal plant addition Comanche 3 was brought on-line within the cost parameters that the Commission agreed would be prudent. Clearly Staff's proposal is unjustified and unfair to the Company.

Α.

- Q. IF THE COMPANY IS SO GOOD AT PERFORMING BETTER THAN ITS ESTIMATES, WHY DOESN'T THE COMPANY ACCEPT MR. MONSEN'S RECOMMENDATION TO RECOVER THE COSTS USED IN THE ESTIMATE VERSUS THE ACTUAL COSTS?
 - Although it may look attractive to accept Mr. Monsen's recommendation, Public Service believes changing the regulatory compact is much more complex than what Mr. Monsen suggests. In the end, I think many parties would oppose Mr. Monsen's recommendation and Mr. Monsen's IPP s would not be willing to accept Ms. Sigalla's recommendations for their own projects. The bottom line to this discussion is that when you look at the facts and the Company's history of constructing gas-fired generation, our customers have benefited significantly from the current state of regulation.

II.-E. IDENTIFICATION OF SECTION 123 RESOURCES

Q. PLEASE SUMMARIZE THE MAIN ISSUES AND CONCERNS RELATED

TO THE IDENTIFICATION OF SECTION 123 RESOURCES THAT WERE

RAISED IN ANSWER TESTIMONY.

1	A.	Two parties discuss their opinions that their proposed technologies or
2		projects qualify for Section 123 status. They want this status confirmed and
3		seek a Section 123 set-aside in the Commission's Phase I order, because
4		otherwise they fear they cannot compete on the basis of price alone.

5 Q. WHICH INTERVENORS PRESENT TECHNOLOGIES THEY BELIEVE 6 QUALIFY AS SECTION 123 RESOURCES?

7 A. C12 witness Mr. Justin Dawe and SolarReserve witness Mr. Tom Georgis.

Α.

Q. WHAT HAVE PRIOR COMMISSIONS DETERMINED RELATIVE TO THE DEFINITION OF SECTION 123 RESOURCES?

In Decision No. C08-0929 of Docket No. 07A-447E, the Commission determined that concentrating solar power with storage, and wind with compressed air storage, qualified as Section 123 Resources. In Decision No. 08-1153 of Docket No. 07A-447E, the Commission adopted the following definition for a Section 123 Resource:

"An eligible energy resource will be considered a new clean energy, or energy efficient technology, or a demonstration project if it is clean and incorporates one or more technologies, representing a substantial portion of its overall installed cost, that have not been regularly commercially demonstrated, up to the point in time that the resource is formally bid, or if not bid, acquired."

- Q. DOES THE COMPANY BELIEVE THAT A TECHNOLOGY THAT WAS
 FOUND IN PREVIOUS DOCKETS TO BE A SECTION 123 RESOURCE
 SHOULD CONTINUE TO BE A SECTION 123 RESOURCE IN ALL
- 4 **FUTURE DOCKETS?**
- 5 A. This is a difficult question and really should be analyzed on a case by case
 6 basis. At some point, sufficient quantities of a "new" technology will be
 7 installed and thus should be "commercially demonstrated" and the
 8 technology should then no longer be considered "new" and thus no longer
 9 considered a Section 123 resource.
- 10 Q. IS THE COMPANY SPECIFICALLY ASKING THE COMMISSION TO
 11 DETERMINE IN ADVANCE OF THE PROPOSED ALL-SOURCE
 12 SOLICITIATION WHETHER OR NOT CONCENTRATING SOLAR POWER
 13 WITH STORAGE IS A SECTION 123 RESOURCE FOR PURPOSES OF
 14 EVALUATING ANY BIDS FROM THIS TECHNOLOGY IN THE
 15 PROPOSED ALL-SOURCE SOLICITATION?
- 16 A. Yes. Although more Concentrating Solar Power (CSP) with thermal storage
 17 projects are either operating, in the construction phase, or are under
 18 consideration in comparison to the last time the Company evaluated this
 19 technology, Public Service still believes CSP with thermal storage should
 20 qualify as a Section 123 resource in the 2011 ERP docket.
- Q. DOES THE COMPANY HAVE AN OPINION AS TO WHETHER THE "C12

 REFERENCE PROJECT" QUALIFIES AS A SECTION 123 RESOURCE?

Α. As a straight natural gas-fired power plant, it does not qualify as an eligible energy resource and thus does not meet the Section 123 definition adopted by the Commission in Decision No. 08-1153. By including the proposed carbon capture and sequestration technology into the project, the project would appear to meet the definition of a Section 123 resource for the purpose of the 2011 ERP. Although C12 clearly states that the technology that it is proposing to use is commercially available, the application of this technology in the power sector has "not been regularly commercially demonstrated". One concern the Company has is specific to the costeffectiveness of the project at possibly a very high load factor. Based on the testimony of Mr. Dawe, C12 indicates that their Reference Project would be expected to exhibit an annual energy capacity factor on the order of 80%. Although the C12 project would appear to qualify for Section 123 status, the cost-effectiveness of such a resource will be very dependent on the final bids offered into the All-Source RFP and it would be premature to impose a set aside.

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Q. ARE THERE ANY OTHER ISSUES OF WHICH THE COMMISSION SHOULD BE AWARE REGARDING THE IDENTIFICATION OF SECTION 123 RESOURCES?

To develop alternative portfolios the Company might present in our 120 day report, it is necessary for the Company to know which bids qualify as Section 123 resources before Strategist modeling. For the 2009 All-Source solicitation, the Commission directed bidders to explain in their bid packages

why they believed that their resource qualified for Section 123 treatment, and directed the Company and the IE to jointly determine which bids should be granted Section 123 status and model them appropriately. In the event the Company and the IE could not agree, they were to bring the issue to the Commission for resolution. That process worked well in our last solicitation and we recommend that the Commission approve a similar process for our Phase 2 All-Source solicitation.

II.-F. <u>SET-ASIDE FOR SPECIFIC RESOURCES</u>

- 9 Q. WHICH INTERVENORS REQUEST THAT THE COMMISSION DIRECT

 10 THE COMPANY TO INCLUDE A SECTION 123 SET-ASIDE IN THE

 11 PROPOSED ALL-SOURCE SOLICITATION?
 - Colorado Energy Office witness Worley advocates for a 120 MW Section 123
 carve out that is not technology specific and purports to support "any Section
 123 Resource project" that results from a robust RFP process.
 - Western Resource Advocates witness Farnsworth recommends the Commission require a "soft target" set-aside of at least 100 MW for Section 123 resources.
- City of Boulder witness Koehn advocates that the Commission "renew its approval of 250 MW of PV Solar with storage, originally approved in the 2007 ERP."

- Although Mr. Dawe and Mr. Redman (C12) discuss the benefits of Section
 123 resources and how these resources should be evaluated, they do not
 request a specific set-aside.
- SolarReserve witnesses Dr. Masiello and Mr. Georgis espouse the benefits
 of CSP with thermal storage and suggest the Commission support this
 technology in a way similar to how they evaluated solar thermal in the 2007
 ERP.
- 9 PARTIES BELIEVE A SPECIFIC SET-ASIDE FOR SECTION 123
 10 RESOURCES IS APPROPRIATE?
- 11 A. Yes, several of the witnesses advocate a set-aside for Section 123 resources
 12 due to their concerns that the Commission will not get the opportunity to
 13 review portfolios that include these bids. Their ultimate concern is that the
 14 Commission will not be able to fulfill the legislative direction to "give the
 15 fullest possible consideration" to Section 123 resources.
- 16 Q. IS THE COMPANY INTENDING TO EXCLUDE SECTION 123
 17 RESOURCES FROM THE PORTFOLIOS MADE AVAILABLE TO THE
 18 COMMISSION FOR REVIEW?
- A. No. As I have indicated earlier in my testimony and in the ERP filing, although the Company has a preference for short-term, low cost resources, Public Service is conducting an All-Source solicitation, inviting all forms of projects to bid. We intend to provide the Commission a complete analysis of Section 123 resources. In addition, if the Commission wants to see

additional portfolios of resources other than the Company's preferred plan which could include incremental levels of Section 123 and/or renewable resources, the Commission should explain its desires in its Phase I Order. But as we indicated in our proposed 2011 ERP, we do not recommend a set-aside for either Section 123 Resources or Renewable Resources in this All Source solicitation.

7 Q. WHAT IS THE COMPANY'S RATIONALE AGAINST A SET-ASIDE FOR 8 SECTION 123 RESOURCES?

Α.

Public Service believes that allowing Section 123 resources to be evaluated in conjunction with the evaluation of all other resource options will provide the Commission necessary information to determine the true cost and benefit of the Section 123 resource. This analysis will also provide the Commission the information to comply with the statute that specifically directs the Commission to give the fullest possible consideration to the "cost-effective" implementation of Section 123 Resources. Ultimately bringing the Section 123 resources into the general evaluation will provide more transparency and a more consistent review of the economic viability and potential customer impacts of these resources relative to more traditional resources. For the sake of a more rounded evaluation process, the Company recommends that requests for specific set-asides for given projects or technologies be denied.

II.-G. INCLUSION OF ENERGY EFFICIENCY AND DEMAND RESPONSE IN

2 THE ALL-SOURCE SOLICITATION

- Q. PLEASE SUMMARIZE THE ISSUES RAISED RELATED TO THE
 INCLUSION OF ENERGY EFFICIENCY AND DEMAND RESPONSE IN
- 5 THE ALL-SOURCE SOLICITATION?

Α.

A. WRA witness Ms. Farnsworth, OCC witness Dr. Schechter and Staff witness
 Mr. Hay suggest that energy efficiency and/or demand response be included
 in the Company's All-Source solicitation.

9 Q. WHAT IS YOUR RESPONSE TO THEIR REQUEST?

Although it may seem logical to include both energy efficiency and demand response in the All-Source solicitation, in reality experience has shown that evaluating these resources outside of the general All-Source solicitation, in a separate focused proceeding, is more appropriate. In the case of energy efficiency, the Company has used information obtained from the resource planning process to evaluate these resource options in a specific DSM docket. Likewise the results of the DSM docket have traditionally become the assumptions for future resource plan filings. The last time the Company included energy efficiency options in an All-Source solicitation, contracting with potential DSM projects was very problematic, resulting in no new DSM resources coming to fruition. In a specifically focused DSM proceeding, the parties have the latitude to analyze all of these complex issues, while not rushing the 120 day evaluation period. By having the resource planning process feed the DSM docket and in turn having the DSM docket set the

assumptions for the resource plan, the resource planning process gets the benefit of comparing DSM programs to supply side resources. As a result, the Company proposes that the consideration of additional energy efficiency be resolved in the DSM Strategic Issues filing in 2013. Ms. Sundin provides a more in depth discussion on the Company's response to the answer testimony and more thorough explanation on Public Service's proposal for the evaluation of energy efficiency options.

8 Q. IS THE SAME TRUE FOR THE EVALUATION OF DEMAND RESPONSE 9 ALTERNATIVES?

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Again from past experiences, the concept of requesting Not entirely. demand response bids in 2013 for a program that would fulfill a resource need beginning in 2017 creates a number of logistic issues. The ability for a demand response aggregator to provide a binding offer for a program that will fulfill a resource need that is five years in the future is problematic. In lieu of including the evaluation of demand response in this resource plan docket, the Company has included a 53 MW "place-holder" (the current contract with a demand response aggregator ENERNOC is for 44 MW at the customer's meter, which is equal to 53 MW after being grossed up to the generator level and for reserves) in the Company's loads and resources table (L&R) beginning at the end of 2016 (when the current ENERNOC contract expires). This placeholder leaves a spot for later competitive bidding of demand response proposals, closer to the period of time when this resource will be needed.

In addition, the Company would commit to including the evaluation of demand response alternatives in the 2015 resource planning process. Since the resource need that will be evaluated in the 2015 plan is expected to start closer to the evaluation timeframe, Public Service believes the next resource planning cycle may make more sense. Ms Sundin provides a more detailed discussion of the Company's plan for evaluating demand response alternatives.

Α.

9 WANTS TO GO AHEAD AND EVALUATE DEMAND RESPONSE 10 ALTERNATIVES IN THIS RESOURCE PLAN?

The Company will comply with the Commission order. Mr. Hill provides the specific details on how the Company would plan to evaluate demand response alternatives, which would require a minimum 10 MW bid, in this All-Source solicitation if that is what the Commission orders.

III. OCC RECOMMENDED MODIFIED COAL OPERATIONS STUDY

- 16 Q. PLEASE SUMMARIZE DR. SCHECHTER'S RECOMMENDATION FOR
 17 PUBLIC SERVICE TO STUDY THE COST EFFECTIVENESS OF
 18 MODIFYING ITS COAL PLANT OPERATIONS FOR THE PURPOSE OF
 19 REDUCING EMMISSIONS.
 - A. Dr. Schechter is proposing that Public Service complete a study where we would evaluate the cost and benefits of reducing the future operation of the Company's coal fleet that will remain after the completion of the Clean Air

Clean Job Act plan. Dr. Schechter's proposal includes replacing the reduced coal energy production with renewable energy. His recommendation is centered around the concept of keeping certain coal plants for capacity (reduced operation on coal) but less for reliance on the production of coal energy. Dr. Schechter proposes the study be completed in time to inform the 2015 resource plan filing.

7 Q. WHAT IS THE COMPANY'S RESPONSE TO DR. SCHECHTER 8 RECOMMENDATION?

A. Although the Company is generally not opposed to exploring new ways of looking at future emission reductions concepts or ideas, Public Service wants to make sure that the proposed study is well thought out, with a full listing of assumptions. Public Service believes it would be more productive to meet with the OCC after Phase II of the resource planning process to explore and discuss the specific assumptions, scope and relative economics of modifying the dispatch of the Company's remaining coal fleet.

IV. <u>INTRAWEST'S RECOMMENDATION FOR PUBLIC SERVICE TO FILE A</u>

TARIFF TO IMPLEMENT THE USE OF THE COAL CYCLING STUDY

- Q. PLEASE SUMMARIZE MR. COX'S RECOMMENDATION TO REQUIRE
 THE COMPANY TO FILE A TARIFF BEFORE IMPLEMENTING THE COAL
- **CYCLING STUDY**

A. Beginning on line 11 on page 3 of his testimony, Mr. Cox states: "We believe that Public Servicemust not add these costs to its analysis and modeling of

system costs and benefits without commission approval. Under well-established law, commission rules, and long-established practice, if a public utility wants to apply a cost, rate, or conditions of service, it should file a tariff, and must justify why the cost, rate, or tariff is just and reasonable."

5 Q. DO YOU AGREE WITH MR. COX'S RECOMMENDATION AND 6 INTERPRETATION OF THE COMMISSION'S RULES?

Α.

No. Although the Company is requesting the Commission approve the use of the Coal Cycling study in this and future resource plan evaluation and selection processes, Mr. Cox is not correct when he suggests that the Company needs to file and have the Commission approve a new tariff. Tariffs set forth retail rates and charges, not resource plan evaluation criteria. A tariff is an open offer to contract with customers who meet the applicability criteria in the tariff. Mr. Cox is simply mistaken when he suggests that a tariff is the appropriate legal vehicle to address this issue.

The use of the Coal Cycling study does not result in an additional direct cost to customers. It is used only in the evaluation and selection of resources and/or the allocation of costs between the Electric Commodity Adjustment ("ECA") and the Renewable Energy Standard Adjustment (RESA). The utilization of the Coal Cycling study in the evaluation and selection of resources in a resource planning process is akin to the Company imputing a carbon cost, a gas price volatility mitigation adder, or an imputed cost of NOx or SOx emissions in those same analyzes. Certainly the Company has not in the past and does not believe it is appropriate or

necessary to require the Company to file a tariff to allow it to include these costs and other costs in its resource evaluation and selection analysis. As a result, the Commission should deny Mr. Cox's recommendation on the need to file a tariff to implement the use of the Coal Cycling study.

5 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

6 A. Yes it does.