

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF COLORADO

DOCKET NO. 11A-869E

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IN THE MATTER OF THE APPLICATION OF THE APPLICATION OF PUBLIC  
SERVICE COMPANY OF COLORADO FOR APPROVAL OF ITS 2011 ELECTRIC  
RESOURCE PLAN.

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**ANSWER TESTIMONY OF FIONA SIGALLA  
STAFF OF THE COLORADO PUBLIC UTILITIES COMMISSION**

June 4, 2012

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**I. INTRODUCTION AND PURPOSE OF TESTIMONY**

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**Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

**A.** My name is Fiona Sigalla. My business address is 1560 Broadway, Suite 250, Denver, Colorado 80202.

**Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

**A.** I am employed by the Public Utilities Commission of the State of Colorado (Commission) as an Economist.

**Q. HAVE YOU PREPARED A STATEMENT OF YOUR EXPERIENCE AND QUALIFICATIONS?**

**A.** Yes. It is attached as Appendix A to this testimony.

**Q. ARE YOU GENERALLY FAMILIAR WITH THE FILINGS IN DOCKET NO. 11A-869E?**

**A.** Yes. Docket No. 11A-869E is the Commission proceeding that was opened to examine Public Service Company of Colorado’s (Public Service or the “Company”) 2011 Electric Resource Plan (ERP).

**Q. WHAT SHOULD THE COMMISSION TAKE AWAY FROM PUBLIC SERVICE’S 2011 ELECTRIC RESOURCE PLAN?**

1    **A.**    The first thing the Commission will notice is that, unlike previous solicitations, Public  
2           Service’s 2011 ERP has no immediate need for additional generation capacity. Even  
3           towards the end of the proposed Resource Acquisition Period (RAP), the plan does not  
4           call for any large capacity additions. At the same time, stranded assets in Public  
5           Service’s territory far outnumber the proposed resource need.

6                         Some of the most important decisions that the Commission will entertain in this  
7           docket will be centered on process changes requested by Public Service, and how those  
8           changes will impact bidder response to the competitive solicitation. Staff believes that it  
9           is essential that all bids are evaluated in a fair, transparent and independent manner.

10                        Staff has examined the requested ERP process changes and found the proposed  
11           changes result in less transparency and additional uncertainty in the bid process, and thus  
12           a significant potential for increased cost.

13

14    **Q.    PLEASE SUMMARIZE YOUR RECOMMENDATIONS FOR THE**  
15    **COMMISSION IN THIS DOCKET.**

16    **A.**    My recommendation for the Commission in this docket is to preserve a level playing field  
17           for bids, eliminate conflict of interest and protect the integrity of the all-source  
18           solicitation. I recommend that the Commission:

19

20    **Ensure a Level Playing Field for Bids**

- 21           •    Send a message to bidders that all contracts will be evaluated fairly to obtain the most  
22           cost-effective resources available. Public Service should be directed to evaluate all

1 bids equally, to not give a preference to short-term contracts and to evaluate  
2 alternatives for Arapahoe 4 and Cherokee 4 as part of the all-source process.

- 3 • Require that Independent Power Producers (IPPs) be given timely access to modeling  
4 inputs and assumptions used to evaluate their bids.
- 5 • Approve standard contracts as part of the Phase I decision, after soliciting comments  
6 from interested parties, while retaining flexibility where appropriate. Then, authorize  
7 a limited window for contract negotiations, no longer than 90 days.
- 8 • Require Public Service to provide firm prices for any self-build proposals rather than  
9 allowing for the possibility of full cost recovery with no fixed limit.

10  
11 **Eliminate Conflict of Interest**

- 12 • Remove self-build generation from the bid hierarchy for contingency resources.
- 13 • Require the use of generic resources instead of self-build estimates for calculating the  
14 tail in computer modeling.
- 15 • Reject “forcing” the model to develop a portfolio of only Company self-build  
16 resources or projects.

17  
18 **Protect the Integrity of the All-Source ERP Process**

- 19 • Direct Public Service to include the Independent Evaluator in all contract  
20 negotiations.

- Direct the Independent Evaluator to scrutinize and critique how the Company self-build projects are represented in bid evaluation, being careful to look for bias affecting the outcome and to protect the level playing field for all bidders.
- Do not pre-authorize Public Service to engage in opportunistic acquisition outside the ERP process, allowing acquisition of resources only as permitted under current rules.

## II. MARKET FORCES IN UTILITY REGULATION

### Q. WHAT IS A MONOPOLY?

A. A firm is a monopoly if it is the sole seller of its product and if its product does not have close substitutes.<sup>1</sup> Monopolies are generally protected from competition by barriers to entry; a monopoly remains the only seller in its market because other firms cannot enter the market and compete with it.

### Q. IS PUBLIC SERVICE COMPANY OF COLORADO A MONOPOLY?

A. Yes. Public Service Company of Colorado is the sole seller of electricity in its certificated service area, and Colorado statute protects this monopoly power.

### Q. HOW DOES MONOPOLY POWER AFFECT THE OPERATIONS OF COMPANIES SUCH AS PUBLIC SERVICE?

A. Electric utility resource acquisition is governed by the Colorado Public Utilities Commission under Commission Rules 3600-3624. The Commission is tasked with

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<sup>1</sup> Principles of Economics, N. Gregory Mankiw, Fifth Edition, Instructor's Edition, pg. 312.

1 providing checks and balances to ensure the opportunity for profit with reliable electric  
2 service at fair prices for ratepayers in the utility’s service area.  
3

4 **Q. HOW CAN REGULATION AFFECT THE BEHAVIOR OF MONOPOLIES?**

5 **A.** Because regulators set the rates received by electric utilities, there is less of an incentive  
6 to reduce costs. In a competitive market, firms try to reduce costs because this increases  
7 profits. Regulated monopolies know that, in the long run, they will not benefit from  
8 cutting costs because regulators will reduce rates when costs fall.  
9

10 **Q. CAN REGULATION ENCOURAGE MONOPOLIES TO MAKE DECISIONS**  
11 **BASED ON MARKET INCENTIVES?**

12 **A.** Yes. Regulatory bodies can set rules and regulations that preserve market forces in the  
13 decision-making process. For example, by protecting a competitive environment for the  
14 acquisition of resources, the Commission helps to ensure that ratepayers will not be  
15 burdened with undue costs. In Colorado, the competitive acquisition process introduces  
16 alternatives to utility self-builds as the standard method for obtaining resources. The  
17 competitive acquisition process has provided the Commission with a means of  
18 determining the prudence of resources which require a large capital investment and helps  
19 to ensure that costs are reasonable.  
20

21 **Q. DO THE RULES SET BY THE COMMISSION STATE A PREFERENCE FOR**  
22 **PROTECTING MARKET FORCES IN THE RESOURCE ACQUISITION**  
23 **PROCESS?**

1    **A.**    Yes. As stated in Rule 3611(a), it is the Commission’s policy that normally a  
2            competitive acquisition process will be used to acquire new utility resources. The  
3            competitive bid process should afford all resources an opportunity to bid, and all new  
4            utility resources will be compared in an overall evaluation in order to determine a cost-  
5            effective plan. Rule 3616 (a) affirms that proposed RFP(s) filed by the utility shall be  
6            designed to solicit competitive bids to acquire additional resources.

7

8    **Q.    HAVE RECENT LAWS AND REGULATIONS BEEN DESIGNED TO**  
9            **ENCOURAGE A COMPETITIVE BID PROCESS?**

10   **A.**    Yes. There has been a clear trend towards increased transparency in the competitive bid  
11            process, with recent changes to both legislation and Commission rules. For example,  
12            House Bill 11-1262 modified Colorado Revised Statutes Section 40-6-107 (2)(a):

13                    To ensure transparency in the acquisition of power generation  
14                    resources for the benefit of Colorado ratepayers and to promote  
15                    fairness in electric utility competitive bidding processes, the  
16                    Commission shall...

17

18            The bill modified existing statutes to require that IPPs be provided timely access to  
19            modeling inputs and assumptions used to evaluate their bids during resource acquisition  
20            bidding. This law change is:

21                    ‘to confirm that electric generating facilities are fairly and  
22                    accurately represented in the results of any computer modeling  
23                    performed by the investor-owned public utility’, and to ‘assure that  
24                    ratepayers receive the benefits of competition and transparency.’<sup>2</sup>  
25

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<sup>2</sup> C.R.S., Section 40-6-107 (2)(a) and (b)



1 Rules 3613 and 3616 were modified in 2011 to provide regulations governing this  
2 movement towards improved transparency and competition.  
3

### 4 **III. PROCESS FOR ACQUIRING NEW UTILITY RESOURCES**

#### 5 **A. Commission Rules**

#### 6 **Q. BRIEFLY EXPLAIN THE ELECTRIC RESOURCE PLANNING PROCESS?**

7 **A.** The Electric Resource Planning process is conducted in two phases. This proceeding is  
8 currently in Phase I, which prescribes the utility's plan for evaluating and acquiring any  
9 major resource addition. Phase I entails a full discussion of the assumptions that will be  
10 used to evaluate the projects bid into the ERP. At the end of Phase I the Commission  
11 approves the assumptions, criteria and models used to solicit and evaluate bids in a fair  
12 and reasonable manner thereby avoiding the necessity for a litigated docket in Phase II.  
13

#### 14 **Q. WHAT ARE THE COMMISSION RULES GOVERNING THE PHASE I** 15 **PROCESS?**

16 **A.** Rules 3600 through 3615, known as the Electric Resource Planning Rules, address  
17 generation resource planning by investor-owned utilities. Rule 3611 provides rules for  
18 meeting the resource need:

19 It is the Commission's policy that a competitive acquisition  
20 process will normally be used to acquire new utility resources.  
21 The competitive bid process should afford all resources an  
22 opportunity to bid, and all new utility resources will be compared  
23 in order to determine a cost-effective resource plan (i.e., an all-  
24 source solicitation).

1 Rule 3604 provides that the utility must propose the necessary bid policies,  
2 Requests for Proposals (RFPs) and model contracts necessary to satisfy the resource need  
3 for all-source competitive bidding and alternative resource acquisition.  
4

5 **Q. WHAT OCCURS DURING PHASE II?**

6 **A.** In Phase II of the ERP proceeding, the utility solicits bids for the capacity amount that is  
7 approved by the Commission in its Phase I decision. The Company evaluates both third-  
8 party bids and utility self-build proposals using a computerized optimization model;  
9 Public Service uses software with the trademarked name Strategist. The model is  
10 technology-neutral, grouping portfolios of resources based solely on cost. The process is  
11 referred to as an “all-source solicitation” because all technologies—i.e., coal, natural gas,  
12 solar and wind—are compared.

13 Within 120 days following the receipt of the bids, the Company files a report of  
14 its findings presenting its preferred portfolio, and alternative portfolios, for Commission  
15 approval, modification or denial.  
16

17 **Q. WHAT IS THE BENEFIT OF USING AN “ALL-SOURCE” EVALUATION?**

18 **A.** Evaluating all resources at the same time allows the Company to alter the mix of  
19 technology based on the prices available for each resource. For example, if the price of a  
20 technology falls, the computer model will increase the amount of that technology used in  
21 the portfolio. An “all-source” solicitation provides a resource evaluation based on cost  
22 which can then be tweaked in order to obtain the most cost-effective portfolio of  
23 resources based on Commission goals.

1 **Q. WHAT ARE THE COMMISSION RULES GOVERNING THE PHASE II**  
2 **PROCESS?**

3 **A.** Rule 3613 outlines the bid evaluation and selection process used in Phase II. The initial  
4 outcome of Phase II is a complete assessment of the costs and benefits from various  
5 portfolios of potential resources.

6  
7 **Q. IS THE RESOURCE ACQUISITION PROCESS COMPLETED WITH PHASE II?**

8 **A.** No, the competitive acquisition process is completed according to Rule 3613(i) with the  
9 utility executing contracts for potential resources.

10 The utility must complete the competitive acquisition process by  
11 executing contracts for potential resources within 18 months after  
12 the utility's receipt of bids in its competitive acquisition process.  
13 The utility may file a motion in the resource plan proceeding  
14 requesting to extend this deadline for good cause.  
15

16 **Q. HOW DOES THE PROCESS CURRENTLY WORK AFTER PHASE II?**

17 **A.** After a final Commission decision in Phase II, the Company notifies bidders as to their  
18 status regarding a potential contract. The Company keeps a list of the first and second  
19 tier of bidders for possible contract negotiation. The first tier bidders are those that are  
20 included in the portfolio approved by the Commission. The second tier bidders represent  
21 low-cost options to the technologies and capacity requirements in the portfolio chosen by  
22 the Commission.

23  
24 **Q. WHAT HAPPENS TO BIDS THAT DO NOT MAKE IT THROUGH EITHER**  
25 **THE FIRST OR SECOND TIER BIDS?**

1    **A.**    All bids that do not make it through either the first or second tier bids, including  
2            Company self-build proposals, are no longer active.  
3

4    **Q.**    **WHAT HAPPENS IF THE COMPANY FAILS TO COMPLETE CONTRACT**  
5            **NEGOTIATIONS WITH ANY OF THE ACTIVE BIDDERS?**

6    **A.**    Should the Company fail to complete contract negotiations with any of the active bidders,  
7            it would be required by Rule 3609(c) to come before the Commission for approval of a  
8            contingency plan. Staff would expect the Company to provide an explanation of why  
9            contract negotiations failed. The Company would need to request a Certificate of Public  
10           Convenience and Necessity (CPCN) to self-build resources or conduct another  
11           solicitation if there was a reasonable expectation of changed circumstances.  
12

13   **Q.**    **WHY MUST THE COMPANY COME BACK TO THE COMMISSION TO**  
14            **PURSUE A SELF-BUILD PROPOSAL?**

15   **A.**    Requiring Public Service to come before the Commission before proceeding with a non-  
16            active self-build proposal provides a check and balance to the conflict of interest present  
17            with the Company being both a bidder and being in charge of contract negotiations.  
18

19                    **B. Public Service’s Proposed 2011 Resource Acquisition Process**

20   **Q.**    **WHAT IS THE IDENTIFIED NEED IN THE 2011 ERP?**

21   **A.**    The Company has proposed a seven-year RAP, obtaining resources through October  
22            2018. Public Service has determined that it needs an additional 292 MW of generation

1 during that period. The Company needs additional capacity in 2019 but prefers to obtain  
2 that generation with a 2015 ERP.

3  
4 **Q. HOW DOES PUBLIC SERVICE PROPOSE TO ACQUIRE RESOURCES**  
5 **UNDER PHASE II OF THE 2011 ERP?**

6 **A.** Public Service proposes a process similar to the one used by the Company and the  
7 Independent Evaluator in the 2007 ERP, with some important modifications.<sup>3</sup>

- 8 • An all-source competitive solicitation will be issued, allowing all resource  
9 technologies to bid against one another. All forms of renewable energy will  
10 compete in the all-source solicitation against all of the other bids.
- 11 • While the Company states they will accept short-term and long-term bids, the  
12 ERP application indicates that the Company wants to only use short-term  
13 resource proposals.
- 14 • Utility-owned self-build proposals will be submitted to meet the entire  
15 resource need. These proposals are expected to be brownfield sites—  
16 expanding generation capacity at existing sites.
- 17 • Self-build proposals will be submitted with price estimates that are **expected**  
18 to be within 20 percent of the final construction, operation and maintenance  
19 cost. However, the Company’s proposal should not be viewed as a fixed price  
20 bid because the Company has not proposed to limit cost recovery.

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<sup>3</sup> The bid process is explained in Mr. Hill’s testimony and detailed in Sections 1.7 of ERP Volume 1 and Section 2.9 of ERP Volume 2.

- 1                   • Portfolio evaluation will use the Strategist computer model but, unlike the  
2                   2007 ERP, the Company intends to use self-build proposals to backfill bids  
3                   that expire before the end of the planning period.  
4

5   **Q.   WHAT DO COMMISSION RULES ALLOW FOR THE RESOURCE**  
6   **ACQUISITION PERIOD?**

7   **A.**   As defined in the Code of Colorado Regulations, 3602(n), the RAP means the first six to  
8   ten years of the planning period in which the utility acquires specific resources to meet  
9   projected electric system demand and energy requirements. The resource acquisition  
10   period begins from the date the utility files its plan with the Commission.  
11

12   **Q.   WHAT IS THE RESOURCE ACQUISITION PERIOD REQUESTED IN THIS**  
13   **APPLICATION?**

14   **A.**   As explained on page 2 of James F. Hill’s testimony, Public Service is requesting a  
15   seven-year RAP that starts October 2011 and runs through October 2018.  
16

17   **Q.   WHY IS THE COMPANY REQUESTING A SEVEN-YEAR RAP?**

18   **A.**   Mr. Hill indicates that it is not necessary for Public Service to obtain resources beyond  
19   2018 because a 2015 ERP process would be used to obtain the resources necessary to  
20   meet the additional capacity that would be needed by 2019.

21               Company witness Kurtis J. Haeger provides additional explanation for the choice  
22   of a seven-year RAP. Mr. Haeger argues that the Company wants to avoid long-term  
23   commitments because “this era of economic and regulatory uncertainty” requires a plan

1 that is very flexible to adapt to changing conditions.<sup>4</sup> Mr. Haeger on page 6, lines 14-22  
2 of his direct testimony lists a number of uncertainties facing the industry and resource  
3 planning, including the timing of the economic rebound, the potential departure of the  
4 City of Boulder from the Public Service system, carbon dioxide regulation, significant  
5 technological advancements in generation technologies, and changing accounting  
6 standards for long-term power purchase agreements. Mr. Haeger on page 3 of his  
7 supplemental testimony adds uncertainty when it comes to long-term fuel cost estimates  
8 and their impact on the cost of alternative sources of generation as another reason for a  
9 seven year RAP.

10 In addition, Mr. Haeger suggests that the Company has made commitments  
11 through the 2007 ERP and the 2010 Clean Air Clean Jobs Act that will “significantly  
12 alter the makeup of our power supply system.”<sup>5</sup> Mr. Haeger believes the operational  
13 impacts of the changing resource mix will require Public Service’s system operators to  
14 operate a “fundamentally different” integrated Colorado electric system. He concludes  
15 that the Company wants to make sure they fully understand all of the ramifications of  
16 these changes before making additional long-term resource commitments.

17 **Q. DO YOU AGREE THAT IT IS IN THE BEST INTEREST OF RATEPAYERS TO**  
18 **DELAY RESOURCE ACQUISITION?**

---

<sup>4</sup> Direct Testimony and Exhibits of Kurtis J. Haeger on behalf of Public Service Company of Colorado, October 31, 2011, page 5.

<sup>5</sup> Lines 10 and 11, page 7, Direct Testimony of Mr. Haeger.

1    **A.**    It’s not clear. The economy, and the energy industry, is always facing uncertainty, and it  
2           is doubtful there will be more certainty in the future than there is today.

3                   Low natural gas prices and overcapacity of energy generation in Colorado appears  
4           to make this a favorable time to obtain resources. Locking in contracts in a competitive  
5           market can help the Company reduce uncertainty.

7    **Q.    WHAT WOULD BE THE IMPLICATIONS OF SELECTING A LONGER RAP?**

8    **A.**    The Company’s Generic Expansion Plan <sup>6</sup> suggests that Public Service will need  
9           significant peaking capacity between 2018 and 2021. The modeling indicates the  
10           Company will need over **500 MW** of additional capacity in the three years following the  
11           end of the requested seven-year RAP.

12                   In addition, as mentioned on page 5 of Mr. Haeger’s direct testimony, capacity  
13           markets in the front range of Colorado are “overbuilt.” Public Service reports that 1,191  
14           MW of contracts will expire during the Company’s requested RAP, and discovery  
15           response CPUC14-1, details these resources, as summarized in Table 1 below.

16                   Finally, an additional 152 MW of contracts will expire in the three years  
17           following the Company’s requested RAP.<sup>7</sup> The result is that significant capacity is  
18           available in the Colorado market leading to ample competition in the bidding process that  
19           should result in favorable prices for ratepayers.

---

<sup>6</sup> As detailed in Table 2.8-4 on Page 2-231 of Volume 2-Technical Appendix of the 2011 Resource Plan (attached as **Exhibit No. FDS-1**)

<sup>7</sup> See Table 2.



1  
 2

**Table 1**  
**Power Purchase Agreements Expected to Expire between 2012 and 2018**

Facility	Resource Type	Capacity (1)	PPA Expiration Year
Tri-State 5	System	100	2011
Ponnequin (2)	Wind	0.7	2012
SWG Valmont 7&8	Gas	78	2012
SWG Arapahoe 5,6&7	Gas	121	2012
SWG Fountain Valley	Gas	243	2012
Thermo UNC	Gas	65	2013
Alstom NWTC (2)	Wind	0.4	2015
Amonix SolarTAC (2)	Solar	0.3	2015
NREL (2)	Wind	0.5	2015
Siemens NWTC (2)	Wind	0.3	2015
Basin 1	System	100	2016
Basin 2	System	75	2016
Tri-State Limon	Gas	68	2016
Tri-State Knudson	Gas	136	2016
Tri-State 3	System	25	2016
Brush 1&3	Gas	78	2017
Tri-State 2	System	100	2017
<b>Total</b>		<b>1191.2</b>	

3  
 4  
 5  
 6

(1) Current summer capacity rating.  
 (2) ELCC capacity value.  
 Source: Discovery Response CPUC14-1, author’s calculation

7 **Q. WILL A SEVEN-YEAR RAP LEAVE A LOT OF STRANDED CAPACITY?**

8 **A.** Yes. A seven-year RAP will leave a substantial amount of capacity without a contract.

9 As shown in Table 2, a seven-year RAP will leave nearly 900 MW of stranded capacity  
 10 assuming the entire resource need is met without building new generation. Even with a  
 11 ten-year RAP, there will be roughly 551 MW of stranded capacity. Stranded capacity  
 12 will be higher if generation need is met with new construction.

1 **Table 2**  
2 **Stranded Capacity Estimates with Seven- and Ten-Year Resource Acquisition Period**

	Time Period	Capacity MW
<b>Public Service Estimated Need</b>	<b>2012-2018</b>	292
	<b>2018-2021</b>	500
	<b>2012-2021</b>	792
<b>Estimated Expiring PPAs</b>	<b>2012-2018</b>	1191.2
	<b>2018-2021</b>	152.3
	<b>2012-2021</b>	1343.5
<b>Estimated Stranded Assets</b>	<b>Seven-Year RAP</b>	<b>899.2 MW</b>
	<b>Ten-Year RAP</b>	<b>551.5 MW</b>

3 Source: Discovery Responses CPUC14-1, CPUC24-1, Volume 2-Technical Appendix of 2011 Resource  
4 Plan Table 2.8-4, author's calculation  
5

6 **Q. HOW WILL THE COMPANY OBTAIN BIDS?**

7 **A.** The Company intends to issue the all-source request for proposals (RFPs) 90 days prior  
8 to the bid receipt date. Volume 3 of the 2011 ERP contains draft RFPs targeting three  
9 different minimum bid eligibility requirements corresponding to the different  
10 technologies targeted by the Company. Each bid will be screened to determine if it meets  
11 the conditions of the RFP, and the Company will conduct an initial due diligence review  
12 of the bids.

13  
14 **Q. HOW DOES THE COMPANY PLAN TO COMPARE ELIGIBLE BIDS?**

15 **A.** Eligible bids and Company self-build proposals will be compared using pricing and  
16 performance attributes of the power supplies.

- 17 • Pricing attributes include facility construction costs/capacity payments,  
18 transmission interconnection and delivery-related costs, and fixed O&M costs.

- 1           • Performance attributes include heat rate, unit availability, fuel costs and non-fuel  
2           variable O&M costs.

3           Bids will receive an initial economic screening calculating an “all-in” levelized cost  
4           of energy (LEC).

5  
6   **Q.   WHICH BIDS WILL BE PASSED FROM THE INITIAL SCREENING TO**  
7   **COMPUTER MODELING FOR PORTFOLIO DEVELOPMENT?**

- 8   **A.** All bids from existing generation resources currently under contract with the Company  
9           and all Company self-build projects will be passed through screening to portfolio  
10          development.

11           Bids that are not existing contracts or Company self-build proposals will be  
12          selected for inclusion in computer modeling based on their LEC. ERP Rule 3616(d)  
13          requires the Company to include sufficient bids in the portfolio development phase such  
14          that resource plans can be created that conform to the range of scenarios for assessing the  
15          costs and benefits from the potential acquisition of increasing amounts of renewable  
16          energy resources or Section 123 Resources as specified in the Commission’s Phase I  
17          decision.

18  
19   **Q.   HOW HAS COMPUTER MODELING BEEN USED TO DETERMINE THE**  
20   **RESOURCE NEED IN PHASE I?**

- 21   **A.** As part of the Phase I submission, the Company has already developed a least-cost  
22          baseline case and eight alternative plans. The least-cost baseline case meets the  
23          Company’s generation needs at the lowest cost. The alternate plans meet the same

1 resource needs using increasing amounts of renewable energy resources and Section 123  
2 Resources.

3 The plans are modeled in a forecast of the Public Service electric system for years  
4 2011-2050. As shown in Figure 2.8-2 on page 2-219 of the 2011 Resource Plan, attached  
5 as **Exhibit No. FDS-2**, the computer software evaluates Public Service’s existing and  
6 planned generation resources (owned and purchased).

7 Public Service does not have enough generation to serve forecasted demand (firm  
8 load and reserve margin) through 2050. In Phase I, the Company uses generic resources  
9 to model generation that Public Service expects it will need to meet demand beyond the  
10 2011 RAP through 2050. The purpose of the modeling is to provide bidders with  
11 information about the needs on the Company’s system.

12  
13 **Q. HOW DOES THE COMPANY BUILD LEAST-COST PORTFOLIOS AFTER**  
14 **RECEIVING BIDS IN PHASE II?**

15 **A.** After an initial screening, selected bids will be advanced for modeling in Strategist.  
16 Using an optimization algorithm, the model forms least-cost portfolios based on Public  
17 Service’s native load obligations. Development and analysis of these plans provides  
18 insight into which generation technologies are best suited to meet the RAP needs. Each  
19 portfolio is portrayed in terms of the net present value of revenue requirements (PVRR)  
20 so the Commission is able to determine the economic impact of differing alternatives.  
21 The Company will present the Commission with its preferred portfolio, as well as other  
22 top-ranked portfolios. The Commission will select the portfolio that it deems to be the  
23 most cost-effective for rate payers, given the policy goals of the Commission.

1 **Q. WHAT MODEL INPUT CHANGES HAS THE COMPANY PROPOSED THAT**  
2 **ARE A DEPARTURE FROM THE 2007 ERP?**

3 **A.** An important change from the 2007 ERP, Public Service proposes to use only Company  
4 self-build proposals to create a new “default” portfolio. This default portfolio will be  
5 used in place of the baseline generic expansion plan to extend IPP bids out for the  
6 duration of the 40 year planning period.<sup>8</sup> The “backfilling” of the IPP bids with  
7 Company self-build proposals is done in a manner that is consistent between the  
8 portfolios:

9 Since all non-Company bids are limited to a PPA term of 25 years,  
10 each portfolio will eventually include all of the self-build proposals  
11 included in the least-cost self-build portfolio by the end of the  
12 Planning Period.<sup>9</sup>  
13

14 **Q. THE COMMISSION ORDER APPROVING THE CLEAN AIR – CLEAN JOBS**  
15 **ACT FOR PUBLIC SERVICE REQUIRES THE COMPANY TO PRESENT**  
16 **ALTERNATIVES TO RUNNING ARAPAHOE 4 AND CHEROKEE 4 ON GAS.**  
17 **DOES PUBLIC SERVICE WANT THIS TO BE PART OF THE REGULAR**  
18 **PHASE 2 BID PROCESS?**

19 **A.** No. Public Service plans to compare the cost of all short-term bids from existing natural  
20 gas resources to the cost of continued operation of Arapahoe 4 and Cherokee 4 on natural  
21 gas as an initial evaluation outside the model. To the extent one or more of these short-  
22 term alternatives proves to be a more cost-effective alternative than continued operation  
23 of Arapahoe 4 or Cherokee 4 on gas, the Company will include those bids in the

---

<sup>8</sup> Page 2-328, 2011 Resource Plan.

1 Company's base computer model representation of the all-source bid evaluation  
2 process.<sup>10</sup>  
3

4 **Q. ARE ONLY SHORT-TERM CONTRACTS GOING TO BE USED FOR THE**  
5 **EVALUATION OF ALTERNATIVES FOR APRAPAHOE 4 AND CHEROKEE 4?**

6 **A.** Yes. Company witness Haeger states that Public Service is only allowing short-term bids  
7 from existing gas-fired generation units to be compared against the continued operation  
8 of Arapahoe 4 and Cherokee 4 because of future uncertainty. On page 12 lines 17-19 of  
9 Mr. Haeger's direct testimony, he states that "short-term commitments will preserve the  
10 opportunity to make longer-term resource decisions at a later date when some of the  
11 uncertainty should be resolved."  
12

13 **Q. DOES PUBLIC SERVICE PROPOSE INTRODUCING A NEW METHOD FOR**  
14 **ACQUIRING RESOURCES?**

15 **A.** Yes. The Company seeks Commission approval to employ an "opportunistic" approach  
16 for acquiring renewable generation resources greater than 30 MW during the time period  
17 between the 2011 ERP and the 2015 ERP, outside of an ERP or a Renewable Energy  
18 Standard (RES) docket. The Company could either take advantage of opportunities that

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<sup>9</sup> Page 2-329, 2011 Resource Plan.

<sup>10</sup> Haeger, pg 12, lines 4-12.

1 are presented or it could conduct targeted solicitations “from time to time.” Commission  
2 review and approval would be after the solicitation has been completed.<sup>11</sup>  
3

4 **Q. HAS THE COMPANY PROPOSED ANY OTHER CHANGES TO THE WAY IT**  
5 **WOULD ACQUIRE RESOURCES?**

6 **A.** Yes. The Company is proposing a hierarchy of contingency plan alternatives in the event  
7 that Public Service faces a capacity shortfall or cannot finalize contract negotiations. The  
8 proposed hierarchy can be found in Table 1.8-1 on page 1-62 of the 2011 ERP, and has  
9 been attached as **Exhibit No. FDS-3**. The hierarchy includes short-term capacity  
10 purchases, alternative bids that were received in the ERP bidding process, acceleration of  
11 in-service date for a resource planned for later in the acquisition period, and Public  
12 Service self-build facilities.  
13

14 **C. The 2007 Electric Resource Plan**

15 **Q. HOW DOES PUBLIC SERVICE’S PROPOSED 2011 ERP BID EVALUATION**  
16 **PROCESS COMPARE TO THE PROCESS USED IN THE 2007 ERP (DOCKET**  
17 **NO. 07A-447E)?**

18 **A.** According to Company Witness James Hill, “The overall process will be the same as that  
19 employed by the Company and Independent Evaluator in the 2007 ERP.”<sup>12</sup> However, the  
20 Company is adding an additional bid evaluation step to provide bidders with information  
21 about the modeling process, in accordance with new Commission Rule 3613(a).

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<sup>11</sup> 2011 Electric Resource Plan, Public Service Company of Colorado, Volume 1, Page 1-47.

1 **Q. SINCE PUBLIC SERVICE INDICATES THE PROPOSED 2011 ERP PROCESS**  
2 **IS THE SAME AS THE ONE USED IN THE 2007 ERP, WHAT WERE THE**  
3 **RESULTS OF THAT PROCESS?**

4 **A.** The Commission approved, with modifications, the generation resource plan proposed by  
5 Public Service with a RAP from 2008 through 2015 and a planning period from 2008  
6 through 2046. The Company received numerous bids and used Strategist software to  
7 evaluate the costs of the bids and utility self-build proposals. The Commission required  
8 the Company to model four scenarios, and the Company submitted a 120-day report with  
9 modeling results that allowed the Commission to compare the costs and benefits of the  
10 various resource proposals. At the end of Phase II, with the assistance of the results from  
11 the computer modeling, the Commission approved a portfolio of resources that was  
12 selected as the most cost-effective given the goals of the Commission. That portfolio of  
13 resources is listed in Table 3.

14

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<sup>12</sup> Direct Testimony of James F. Hill, October 31, 2011, Page 14, lines 5-7.



**Table 3**  
**Commission Approved Portfolio of Resources**  
 Public Service 2007 ERP, Portfolio 5, Resource Acquisition Period 2008-2015

Commercial Operation Date	Facility	Technology	Nameplate Capacity MW
2011	W034	Wind	250
2012	SP03	HCPV	30
	W035	Wind	250
2013	G006 <sup>1</sup>	Gas	310
	W005	Wind	201
2014	G005 <sup>1</sup>	Gas	611
	SC04	Solar TES	250
	SP06	PV	75
<b>Total</b>		Solar	355
<b>Total</b>		Gas	921
<b>Total</b>		Wind	701
<b>Grand Total</b>			<b>1977</b>

Source: Public Service 2009 All Source Solicitation 120-Day Report, CPUC Docket No. 07A-447E. Strategist Model CPUC 4-4, Baseline. <sup>1</sup>Blue Spruce and Rocky Mountain Energy Center were purchased by Public Service after Commission approval of the portfolio.

**Table 4**  
**Portfolio of Resources Acquired by the Company**  
 Resource Acquisition Period 2008-2015

Commercial Operation Date	Facility	Technology	Nameplate Capacity MW
2010	Public Service-Blue Spruce	Gas	310
	Public Service-RMEC	Gas	611
2011	BP-Cedar Creek II	Wind	250
2012	Iberdola	PV	30
	Cogentrix	HCPV	30
	RES-Cedar Point	Wind	250
2013	Limon I	Wind	200
	Limon II <sup>1</sup>	Wind	200
<b>Total</b>		Solar	60
<b>Total</b>		Gas	921
<b>Total</b>		Wind	900
<b>Grand Total</b>			<b>1881</b>

Source: Public Service 2009 All Source Solicitation 120-Day Report, CPUC Docket No. 07A-447E. Strategist Model CPUC 4-4, Baseline. Attachment 2.4-2 Owned Generation Unit Descriptions, 2011 ERP Volume 2, Page 2-70. <sup>1</sup>Limon II was acquired by Public Service within the Resource Acquisition Period after the ERP portfolio was approved in Phase II. Docket

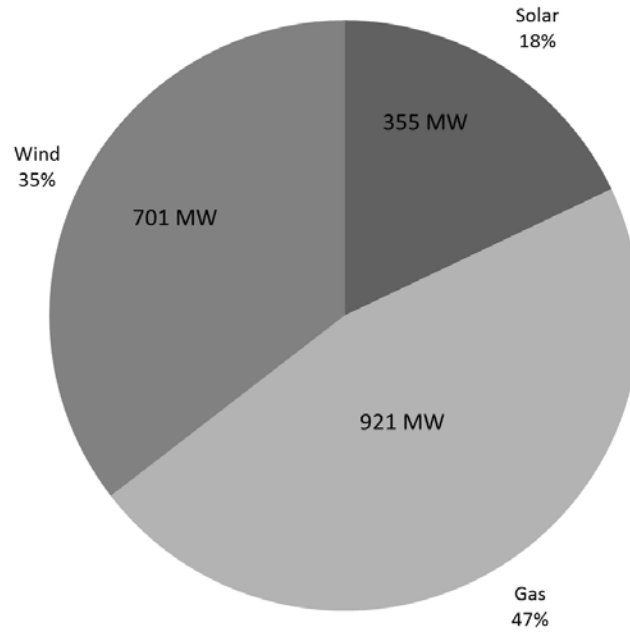
1 **Q. WAS PUBLIC SERVICE ABLE TO SECURE CONTRACTS WITH BIDDERS IN**  
2 **THE PORTFOLIO SELECTED BY THE COMMISSION IN PHASE II?**

3 **A.** Not entirely. While the Company received firm bids in Phase II, the Commission  
4 approved a specific level or range of resources for each technology rather than approving  
5 specific bids. The final details of contract terms for individual bids were still to be  
6 negotiated. The portfolio of resources that was acquired by the Company is listed in  
7 Table 4.

8 Table 4 includes Limon II, which was acquired during the RAP of the 2007 ERP,  
9 but was not officially part of the 2007 ERP process. Limon II was acquired, with  
10 Commission approval, after Public Service failed to secure contracts from the bids  
11 received in Phase II. I have included Limon II in this analysis because it was acquired  
12 during the RAP of the 2007 ERP. However, the addition of Limon II was outside the all-  
13 source evaluation of bids.

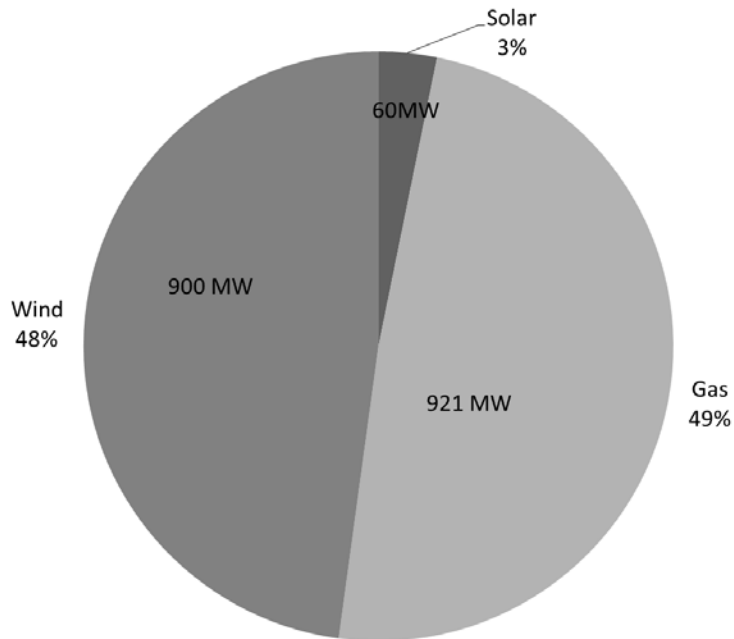
**Graph 1**

**Commission Approved 2007 ERP Winning Portfolio**



**Graph 2**

**Final 2007 Company Acquisition During Resource Acquisition Period**



1 **Q. CAN YOU SUMMARIZE HOW THE GENERATION ACQUIRED BY THE**  
2 **COMPANY DIFFERED FROM THE RESOURCES IN THE PORTFOLIO**  
3 **APPROVED BY THE COMMISSION?**

4 **A.** Prior to the Limon II acquisition, the Company had acquired just 85 percent of the  
5 Commission-approved portfolio. After Limon II, Public Service acquired 95 percent of  
6 the Commission-approved resources.

7 While Public Service obtained nearly all the resources that were approved by the  
8 Commission in Phase II after the Limon II acquisition, the mix of resources was different  
9 than the portfolio approved by the Commission in Phase II. The winning portfolio  
10 contained 18 percent solar, 47 percent gas, and 35 percent wind, as shown in Graph 1.  
11 The final portfolio acquired by Public Service was 3 percent solar, 49 percent gas, and 48  
12 percent wind as shown in Graph 2.

13 The Commission approved portfolio contained 280 MW of Section 123 resources,  
14 which represented 14 percent of the portfolio. The final portfolio acquired by Public  
15 Service contained 30 MW of Section 123 resources, which represented 2 percent of the  
16 portfolio.

17  
18 **Q. CAN YOU EXPLAIN SOME OF THE REASONS WHY THE PORTFOLIO OF**  
19 **RESOURCES ACQUIRED BY THE COMPANY DIFFERED FROM THE**  
20 **WINNING PORTFOLIO OF RESOURCES APPROVED BY THE COMMISSION?**

21 **A.** The Company has represented that there were a number of problems with contract  
22 negotiations that led the Company to acquire a different portfolio of resources than  
23 initially approved by the Commission at the end of Phase II. The Company indicated that

1 it was unable to secure contracts from many of the firms listed in the winning portfolio  
2 approved by the Commission. The final portfolio of resources acquired by the Company  
3 included only two of the bids that had been included in the winning Commission  
4 approved portfolio.

- 5 • Two gas facilities that were owned by Calpine (Blue Spruce and Rocky  
6 Mountain Energy Center (RMEC)) received Commission approval for a  
7 Company purchase of the units with commercial operation dates of 2013 and  
8 2014, but Public Service purchased the units and put them into operation in  
9 2010.
- 10 • The Company failed to contract with a wind-generation bidder in the  
11 Commission-approved portfolio after the Company argued that transmission  
12 line issues were insurmountable. After delays in contract negotiation, the  
13 Company chose to re-bid wind generation because there was a drop in the  
14 price of energy from that technology.
- 15 • The solar bids in the winning portfolio were pooled together with other solar  
16 bids with similar size and pricing to compete against each other. The  
17 Company contracted with bidders that were not in the Commission-approved  
18 portfolio and acquired a smaller amount of solar resources than had been  
19 approved in the winning portfolio of resources at the end of Phase II after  
20 contract negotiations broke down around differences surrounding risk  
21 allocation.

22

1 **Q. ARE THERE OTHER REASONS THAT MAY HAVE CONTRIBUTED TO THE**  
 2 **COMPANY’S DIFFICULTY SIGNING CONTRACTS WITH THE BIDDERS IN**  
 3 **THE PORTFOLIO THAT THE COMMISSION APPROVED IN PHASE II?**

4 **A.** There is a long period of time between bid submission and the signing of contracts.  
 5 Commission rules now allow the Company 18 months to execute contracts, with the  
 6 opportunity for this deadline to be extended for good cause.<sup>13</sup> A timeline of the 2007  
 7 ERP Docket is provided in Table 5. As shown in Table 5, the Company did not sign  
 8 contracts until a year or more after the bids were received.

10 **Table 5**  
 11 **2007 ERP TIMELINE: DOCKET No. 07A-447E**

		<u>Date</u>	<u>Elapsed Time from Filing</u>	<u>Elapsed Time from Receipt of Bids</u>
Phase I	ERP Filed	November 15, 2007		
	Commission Approval of Phase I	September 19, 2008	10 months	
Phase II	Bids Due	April 10, 2009	17 months	
	120 Day Bid Evaluation Reports Due (Initial Deadline)	August 10, 2009	21 months	120 Days
	120 Day Report Due (Extended Deadline) <sup>1</sup>	August 24, 2009	21 months	134 Days
	Questions on 120 Day Reports Due	September 9, 2009	22 months	5 months
	Company and IE Responses to Questions on 120 Day Reports	September 28, 2009	22 months	5.5 months
	Intervenor Comments on 120 Day Reports Due	October 8, 2009	23 months	6 months
	Company Reply to Comments	October 13, 2009	23 months	6 months
	Commission Approval of Phase II	November 6, 2009	2 years	7 months
	Contracts Signed	March 29, 2010 – August 10, 2010	2 years 4 months – 2 years 9 months	1 year – 1 year 4 months

12 <sup>1</sup>The Commission extended the deadline for the IE to file the dynamic modeling portion of its bid evaluation report due to the  
 13 robust bidder response and the magnitude of the variables that needed to be analyzed. (Decision No. C09-0824)  
 14 Sources: Commission Decision No. C09-0824, Discovery response Attachment CPUC27-1.A1

<sup>13</sup> The Commission imposed time limit for signing contracts is new. There was no time limit imposed by rule for the 2007 ERP.

1 **IV. IMPROVING MARKET FORCES IN THE 2011 ERP PROCESS**

2  
3 **Q. ARE THERE ASPECTS OF THE 2011 ELECTRIC RESOURCE PLAN**  
4 **SUBMITTED BY PUBLIC SERVICE COMPANY OF COLORADO THAT GO**  
5 **BEYOND COMMISSION RULES AND RESTRICT THE INFLUENCE OF**  
6 **MARKET FORCES ON DECISION-MAKING?**

7 **A.** Yes. There are five areas of the 2011 Electric Resource Plan proposed by Public Service  
8 Company of Colorado that could restrict transparency, introduce potential conflict of  
9 interest and impair the influence of market forces on decision-making. Those areas are:

- 10 a) Short-term contracts;  
11 b) Self-build proposals;  
12 c) Extended contract negotiations;  
13 d) Contingency hierarchy; and  
14 e) Opportunistic acquisition.

15  
16 **A. Short-Term Contracts**

17 **Q. DOES THE COMPANY EXPLICITLY STATE A DESIRE FOR SHORT-TERM**  
18 **CONTRACTS?**

19 **A.** Yes. Volume 1, page 1-45, of the 2011 ERP states that the Company intends to utilize  
20 short-term bids to help serve the capacity needs that will be sought in the all-source  
21 solicitation. Mr. Haeger on page 7, lines 2-3, of his direct testimony confirms that Public  
22 Service believes they should make only short-term resource decisions in this 2011 ERP.

23

1 **Q. DOES THE COMPANY PROVIDE THE LENGTH OF CONTRACT THAT**  
2 **THEY CONSIDER SHORT-TERM?**

3 **A.** Yes. “For the facilities owned by IPPs or other utilities, short-term bids would take the  
4 form of a power purchase agreement that begins prior to May 1, 2018 and continues at  
5 least through the end of the RAP (October 31, 2018) but not beyond December 2025.”<sup>14</sup>  
6 That would put the expected length of a short-term contract at less than 8 years.

7  
8 **Q. WHAT IS THE COMPANY’S RATIONALE FOR STATING A PREFERENCE**  
9 **FOR SHORT-TERM CONTRACTS?**

10 **A.** The Company indicates that short-term commitments add flexibility in future ERPs.<sup>15</sup>  
11 The Company explained that stating a preference for short-term power supplies better  
12 ensures that power suppliers will offer short-term bids.<sup>16</sup>

13  
14 **Q. DOES THE COMPANY EXPRESS CONCERN ABOUT THE RISK OF USING**  
15 **SHORT-TERM CONTRACTS?**

16 **A.** Yes. Company witness Haeger explains that the cost of recontracting or replacing the  
17 generation at the end of the term of a PPA is a risk worthy of concern. As he states on  
18 page 7 of his supplemental testimony: “the customer also bears risk if future generation  
19 costs, at the time of PPA term expiration, are higher than the Company’s estimate, or  
20 receives the benefit if future generation costs are lower than the Company estimate.

---

<sup>14</sup> Page 1-45, 2011 ERP, Volume 1.

<sup>15</sup> 2011 ERP, Volume 1, Page 1-45.



1 Since PPAs offer no protection against the future cost of replacement generation beyond  
2 the PPA term, PPAs inherently have more future cost risk in comparison to utility-owned  
3 assets that are being depreciated over their 40 to 50 year life.”<sup>17</sup>

4 Staff notes that long-term PPAs would reduce the risk that Mr. Haeger is  
5 addressing.

6  
7 **Q. WILL THE COMPANY SELF-BUILD PROPOSALS ALSO BE SHORT-TERM?**

8 **A.** No. The Company self-build proposals will be for the life of the facility, which is  
9 typically 40 years.

10  
11 **Q. WILL THE COMPANY ACCEPT LONG-TERM BIDS?**

12 **A.** Yes, although not for as long as the life of the facility. The Company says that it will  
13 accept bids that extend beyond December 2025 to a maximum twenty-five year term “to  
14 help provide pricing discipline to the short-term bids.”<sup>18</sup> The Company will also permit  
15 bidders of existing facilities to offer the sale of those assets to Public Service if the  
16 acquisition will provide additional generation capacity that can meet a portion of the RAP  
17 resource need.<sup>19</sup>

18  

---

<sup>16</sup> In discovery response No. CPUC1-33

<sup>17</sup> Haeger supplemental testimony, page 7, lines 17-18.

<sup>18</sup> 2011 ERP, Volume 1, Page 1-45.

<sup>19</sup> Volume 1, Page 1-46

1 **Q. IS IT A LEVEL PLAYING FIELD IF THE COMPANY PROPOSALS ARE**  
2 **EVALUATED OVER A LONGER TIME PERIOD THAN IPP BIDS?**

3 **A.** No. Constraining the term of an IPP contract to 25 years means that, for modeling  
4 purposes, IPP bids will require “backfilling” to meet the generation needs of the entire  
5 planning period. This is not true for a self-build project. Public Service is proposing to  
6 backfill the IPP bids with self-build new construction.<sup>20</sup> By assuming a backfilled bid to  
7 be new construction, the useful life of the facility is not taken into consideration. It  
8 assumes a worst-case scenario where the bidder always prices capacity just below the  
9 cost of a new entrant into the market. While this may be true in a period where the  
10 demand for new resources is on a steep growth curve, it does not reflect the Company’s  
11 expectations for the upcoming solicitation and the number of stranded assets on the  
12 Company’s system.

13 Furthermore, the Company will have an advantage over private developers  
14 because they can spread fixed investment across a longer time period. The Company  
15 brownfield sites (built next to existing generation) already have a cost advantage over  
16 greenfield sites that would be built at a new location. Forcing developers to absorb those  
17 costs in a contract having a term limit that is shorter than necessary will make it difficult  
18 for bids to be competitive. To the extent possible, bidders should be allowed to bid their  
19 best price, letting market forces determine the term of the contract.

20

---

<sup>20</sup> Although the new construction would be on a brownfield site with an expected cost saving, it would still be new construction with escalating costs up to thirty years.

1 **Q. WHAT IS YOUR CONCERN ABOUT THE COMPANY’S STATED**  
2 **PREFERENCE FOR SHORT-TERM BIDS?**

3 **A.** I am concerned that, by stating a preference for short-term bids, the Company could  
4 discourage the least expensive bid from being submitted and evaluated. It is important to  
5 send a signal to bidders that they need to produce the lowest cost bid even if that bid is  
6 not a short term bid. Rather than placing undue constraints on the market, the solicitation  
7 of bids should be unencumbered by a preference for short-term bidding and bidders  
8 should be left to their own devices in order to produce the best bid possible.

9 With the price competition that we are expecting to see, it appears to be in the  
10 best interest of ratepayers to secure long-term contracts because it locks in the price of  
11 generation and provides a hedge against unexpected costs and inflation. Given the  
12 amount of potentially stranded investment, now may be the ideal time to lock in highly  
13 competitive prices for the long term.

14

15 **Q. WHAT IS YOUR RECOMMENDATION FOR THE COMMISSION WITH**  
16 **REGARD TO THE COMPANY’S EXPLICIT PREFERENCE FOR SHORT-**  
17 **TERM CONTRACTS?**

18 **A.** The Commission should direct Public Service to evaluate all bids equally, using  
19 Strategist and send a message to bidders that all contracts will be evaluated to obtain the  
20 most cost-effective resources.

1                                   **B. Lack of Transparency and Level Playing Field for All Bids**

2   **Q.   DO YOU BELIEVE THE COMPANY’S USE OF SELF-BUILD OR COMPANY-**  
3           **OWNED GENERATION IN THE BID EVALUATION PROCESS WILL**  
4           **OBSTRUCT MARKET FORCES FROM CHOOSING THE OPTIMAL BIDDER?**

5   **A.**   Yes. There are four ways that the Company intends to treat third-party bids differently  
6           from self-build or Company-owned generation, distorting bid selection and likely raising  
7           costs for ratepayers. These four ways will be discussed in more detail below.

- 8           1. Public Service’s proposal will allow the Company to be both a player—submitting  
9                 bids—and the referee—picking the winning bidder. This is an inherent conflict of  
10           interest.
- 11          2. The Company is asking to provide flexible price quotes for self-build units that they  
12                 believe will be accurate to within 20 percent, yet the Company has not committed to  
13                 using even this inexact level of accuracy in a cost recovery docket. Providing price  
14                 quotes that Public Service acknowledges will not reflect the true cost of the facility  
15                 provides no information to the bid selection process and is not a fair comparison to  
16                 IPP bids that must be a fixed price, even if costs are higher.
- 17          3. Public Service is proposing to use Company self-build estimates in computer  
18                 modeling for backfilling third-party bids in the computer evaluation. In past ERPs,  
19                 the Company has used generic resources for this analysis. Company self-build  
20                 estimates used to backfill bids with uneven contract lives will not necessarily result in  
21                 the least-cost portfolio for Commission review and approval.

1 4. The Company plans to evaluate bids for replacement of Arapahoe 4 and Cherokee 4  
2 outside of Strategist thereby obscuring the decision-making and providing the  
3 opportunity for bias.  
4

5 **1. Inherent Conflict of Interest with Company Self-Build Proposals**

6 **Q. DOES THE COMPANY BELIEVE THERE ARE ADEQUATE EXISTING**  
7 **GENERATION RESOURCES TO FULFILL THE PROJECTED 2018**  
8 **RESOURCE NEED OF 292 MW?**

9 **A.** Yes. There is overcapacity of existing generation resources that will result in roughly  
10 900 MW of stranded capacity with a seven-year RAP.  
11

12 **Q. IF THERE IS OVERCAPACITY OF EXISTING GENERATION RESOURCES,**  
13 **WHY IS THE COMPANY PROPOSING SELF-BUILD GENERATION?**

14 **A.** The Company believes it must provide sufficient self-build proposals in the Phase II  
15 process to meet the entire resource need as a means to “insure adequate competitiveness”  
16 among existing generators. The self-build proposals will be compared against bids  
17 offered from other entities.<sup>21</sup>  
18

19 **Q. DOES THE COMPANY HAVE EVIDENCE TO CONCLUDE THAT EXISTING**  
20 **GENERATORS ARE IN A POSITION TO OFFER PRICING BELOW THAT OF**  
21 **A NEWLY CONSTRUCTED UNIT?**

---

<sup>21</sup> Haeger supplemental pg 3, line 12.

1    **A.**    As stated on page 1-45 of ERP Volume 1, and reiterated in response to CPUC1-35, the  
2           Company believes it to be *logical* that IPP’s would be in a position to offer pricing below  
3           that of a newly constructed generation facilities. The Company apparently did not rely  
4           on any specific document in forming this belief.

5  
6    **Q.    DOES THE COMPANY HAVE A PREFERENCE FOR SELF-BUILD  
7           CAPACITY?**

8    **A.**    While the Company has not expressed a specific preference for self-build capacity over  
9           any other capacity, there clearly is a profit motive for electric utilities to build additional  
10          Company-owned capacity. The assets of an IPP are not included in rate base for the  
11          utility, but the Company can earn a return on equity on the cost of self-build capacity.

12  
13   **Q.    DOES THIS FINANCIAL INCENTIVE FOR SELF-BUILD CAPACITY  
14          CONCERN STAFF?**

15   **A.**    Yes. The Company is proposing to be a player in the bid process—submitting bids—and  
16          to also be the referee—selecting the winning bidder. Given the Company’s financial  
17          incentive for self-build generation, this conflict of interest may lead the Company to  
18          show preference for their own bids. This is an uneven playing field and not the  
19          competitive bid process that the Commission requires for acquiring resources.

20  
21   **Q.    WHAT IS YOUR RECOMMENDATION FOR THE COMMISSION WITH  
22          REGARD TO COMPANY SELF-BUILD PROPOSALS?**

1           A.     I recommend that the Commission instruct the Independent Evaluator to  
2 scrutinize and critique how Company self-build projects are represented in bid  
3 evaluation, being careful to look for self-interested bias affecting the outcome and  
4 protecting the level playing field for all bidders.

5           In addition, subsequent to a Phase II decision, the IE should continue assisting the  
6 Commission to ensure the Company is conducting contract negotiations in good faith. In  
7 the past, the Commission has relied on the IE to perform this function but has met with  
8 limited success. <sup>22</sup> Since the idea of having an IE monitor contract negotiations was new  
9 in the last ERP, Staff favors another try at using the IE for ensuring that the Company has  
10 the proper incentive to negotiate in good faith. At the end of contract negotiations,  
11 should the IE find that Public Service is not negotiating in good faith, then the Company  
12 should choose between being a player or a referee and remove itself from the bid  
13 selection process.

14           In future rule-making, the Commission might consider having the Company  
15 relinquish bid selection to an independent party if it wishes to submit self-build  
16 proposals. Other states, such as Georgia, have implemented a process where the utility  
17 does not evaluate the bids. Further, in a future docket, the Commission might consider  
18 allowing private developers to bid to the brownfield sites identified by Public Service.  
19 Permitting a competitive bid process for these brownfield sites will ensure the best  
20 pricing and the lowest costs for ratepayers.

21

1 **2. Flexible Price Quotes for Company Self-Build Bids**

2 **Q. WILL PRICES FOR COMPANY SELF-BUILD PROPOSALS BE COMPARED**  
3 **TO OTHER BIDS ON A LEVEL PLAYING FIELD?**

4 **A.** No. Public Service is proposing that estimates for self-build projects will not be a firm  
5 price quote like the bids being offered by the IPPs. The Company indicates that the cost  
6 for constructing the proposed facilities will be “sufficiently vetted” such that the actual  
7 cost for constructing the proposed facilities is estimated to be within 20 percent of the  
8 cost contained in the proposals.<sup>23</sup> The operating and maintenance costs for the facilities  
9 are also estimated to be within 20 percent or more of the costs contained in the proposal.  
10 However, the Company would not be precluded from seeking full recovery of costs.

11  
12 **Q. WHY DOES THE COMPANY BELIEVE IT IS APPROPRIATE FOR A SELF-**  
13 **BUILD RESOURCE TO BE EVALUATED AT ONE PRICE, YET HAVE THE**  
14 **OPTION TO RECOVER THE ACTUAL COST IN A RATE CASE?**

15 **A.** The Company believes that it would receive asymmetrical treatment if it were not  
16 allowed to recover cost over-runs from ratepayers because customers will realize the  
17 benefits of reduced costs. The Company indicates that it will justify any increased cost at  
18 the time that it seeks to recover the costs through rates, if questioned.<sup>24</sup>  
19

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<sup>22</sup> As detailed later in this testimony, in the last ERP the Commission ordered the IE to sit in on contract negotiations for the sale of the Calpine units. In its report to the Commission, the IE stated that at the onset of negotiations it was never notified of the scheduled meetings.

<sup>23</sup> 2011 ERP. Volume 1 Page 1-49

<sup>24</sup> In response to Discovery request No. CPUC1-28, (Attached as **Exhibit No. FDS-4**).



1 **Q. ARE YOU SYMPATHETIC WITH THE COMPANY’S ASSERTION THAT**  
2 **THEY WOULD RECEIVE ASYMMETRIAL TREATMENT IF THEY ARE NOT**  
3 **ALLOWED TO RECOVER COST OVER-RUNS FROM RATEPAYERS?**

4 **A.** No. The Company has argued that it should be able to recover additional costs because  
5 rate payers will benefit from cost savings in the event that construction costs are lower  
6 than the bid price. Effectively, the Company argues that ratepayers benefit from cost  
7 savings and should bear the cost of overruns. I am not sympathetic to this argument.  
8 Public Service is a regulated monopoly. As such, they are provided with the opportunity  
9 to earn a rate of return on their capital assets.

10  
11 **Q. HAVE ANY INTERVENORS COMMENTED ON THE COMPANY’S REQUEST**  
12 **FOR THE OPTION TO RECOVER ACTUAL COSTS RATHER THAN THE**  
13 **ESTIMATED COST?**

14 **A.** Yes. The joint comments presented by CIEA, CEC and Thermo Power Electric LLC  
15 recommend that the Company be held to a cap on the amount of cost that can be  
16 recovered through rates because ratepayer cost is capped when a PPA is selected. The  
17 joint respondents also state that Public Service has a long history of under-estimating  
18 projects and then requiring ratepayers to pick up cost overruns.

19  
20 **Q. DO YOU BELIEVE THE COMPANY SHOULD HAVE THE OPTION TO**  
21 **RECOVER MORE THAN THE ESTIMATED COST FOR SELF-BUILD**  
22 **CAPACITY?**

1    **A.**    No. Company self-build estimates that are potentially 20 percent or more below the final  
2           cost would have preference over other bidders that must bid the full cost of recovery. A  
3           competitive bid process requires transparency in the price of all bids. Allowing Public  
4           Service to offer self-build proposals that can increase or decrease by 20 percent or more  
5           is essentially offering a price that provides no certainty about the ultimate cost for rate  
6           payers.

7

8    **Q.    ASIDE FROM A COMPETITIVE MARKET, ARE THERE OTHER BENEFITS**  
9           **FOR RATEPAYERS FROM REQUIRING FIRM PRICES FOR COMPANY**  
10          **SELF-BUILD PROPOSALS?**

11   **A.**    Yes. It is important for rate payers that the Company be held to the same incentive to  
12          control construction costs that is faced by IPPs and other non-regulated firms.

13

14   **Q.    IS THE UNCERTAINTY OF THE COST OF THE SELF-BUILD RESOURCES**  
15          **INTRODUCING RISK FOR RATEPAYERS IN AN ENVIRONMENT THAT THE**  
16          **COMPANY HAS ALREADY CHARACTERIZED AS HAVING HIGH**  
17          **UNCERTAINTY?**

18   **A.**    Yes.

19

20   **Q.    WHAT IS STAFF’S RECOMMENDATION FOR THE COMMISSION**  
21          **REGARDING THE PRICING OF COMPANY SELF-BUILD PROPOSALS?**

1    **A.**    Public Service should be required to provide a firm price for any Company self-build. It  
2           is impossible to have a competitive market when one bidder is permitted to obscure their  
3           price.

4

5                            **3. Company Self-Build Estimates in Computer Modeling**

6    **Q.    HOW WILL THE COMPANY BE USING SELF-BUILD ESTIMATES IN**  
7           **COMPUTER MODELING?**

8    **A.**    The Company intends to use the self-build estimates in two ways: 1) as a default  
9           portfolio consisting entirely of self-build generation, and 2) to backfill the PPA bids in  
10          the portfolio evaluation.

11

12   **Q.    IS BUILDING A DEFAULT PORTFOLIO CONSISTENT WITH THE**  
13          **TREATMENT AFFORDED COMPANY SELF-BUILD PROPOSALS IN THE**  
14          **PAST?**

15   **A.**    No.<sup>25</sup> Artificially forcing the model to choose only Company self-build proposals in  
16          order to establish a default portfolio is new to the 2011 ERP. Past evaluations did not  
17          constrain the model for the purpose of producing a portfolio of Company-owned  
18          resources but rather allowed the model to select either Company estimates or IPP bids  
19          indiscriminately, with no inherent bias. If the model is not constrained, it is entirely

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<sup>25</sup> The idea of a contingency plan that includes some or all utility owned resources is not new to the 2011 ERP, however, the Company's request that its resources be packaged into a portfolio for consideration is new to the 2011 ERP.

1 possible that it will pick all, none, or any number of the self-build estimates as one of  
2 several portfolios presented for Commission consideration.<sup>26</sup>  
3

4 **Q. WHAT ARE STAFF’S THOUGHTS ON THE COMPANY’S PROPOSAL TO**  
5 **CREATE A PORTFOLIO OF COMPANY OWNED RESOURCES?**

6 A. In reviewing the Company’s proposal, Staff looked at the issue with the following  
7 questions in mind.

8 Is creating the portfolio relevant?

9 Is creating the portfolio fair to other bidders?

10 Is creating the portfolio transparent? and

11 Does creating the portfolio introduce a conflict of interest?

12 The Company does have an obligation to ensure an adequate power supply to its  
13 customers, and Rule 3609(c) requires that the utility develop a contingency plan and file  
14 it under seal with the Commission. Rule 3609(c) goes on to state “[T]he Commission  
15 will consider approval of contingency plans only after the utility receives bids.”  
16 However, having a contingency plan in place is quite different than elevating the plan to  
17 the level of a modeled portfolio presented for Commission consideration prior to  
18 circumstances requiring such consideration.

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<sup>26</sup> The model creates portfolios that are ranked by cost, i.e. PVRR, starting with the least cost portfolio. Because the model is limited as to the number of portfolios it can create it is possible that even though there are hundreds of portfolios created and ranked not one of these portfolios will include a scenario where the entire resource need is met by Company owned resources.

1           Given the amount of stranded assets on the Company’s system, it is doubtful that  
2 there will be the necessity to add resources that cannot meet an economic threshold  
3 established by the unbiased modeling.

4           Additionally, after considering the timeframe necessary for resource acquisition  
5 and the limited amount of new capacity needed in the 2011 ERP, Staff believes sufficient  
6 alternatives exist which would preclude relying on a self-build default plan to the degree  
7 the Company has proposed. Staff notes that if the solicitation did not produce a  
8 satisfactory result it would be possible to rebid the solicitation before relying on the  
9 Company’s proposed “default” plan. Therefore, Staff believes that the proposed default  
10 portfolio has no relevance in this proceeding.

11  
12 **Q.    COULD YOU GO OVER THE OTHER ISSUES WHICH PERTAIN MORE TO**  
13 **MAINTAINING    A    COMPETITIVE    MARKET    FOR    RESOURCE**  
14 **ACQUISITION?**

15 **A.**    Yes. Maintaining a market that creates an opportunity for all bidders and that is  
16 perceived to be fair and transparent is paramount to receiving the lowest possible pricing.  
17 Creating a portfolio for Commission consideration that consists of only utility owned  
18 resources, given the lack of relevance of that portfolio in the 2011 ERP, could appear  
19 unfair and discriminatory to other bidders. There is simply no basis presented by the  
20 Company that would suggest the Commission should allow such a plan to be considered,  
21 nor has the Company sought a waiver of Rule 3609(c) which allows consideration of  
22 such a plan only after bids are received and where circumstances demand such  
23 consideration.

1 Transparency is also a concern for Staff. Submission of the Company default  
2 portfolio would not occur until Phase II of the acquisition process. Interested parties  
3 would not have the opportunity to comment on the portfolio determined by the Company  
4 to be the least cost self-build portfolio.

5 Additionally, if the Commission considers a portfolio of self-build resources as a  
6 default option, it would call into question whether the Company was conducting contract  
7 negotiations in good faith. Once again the Company’s dual role in the resource  
8 acquisition process is called into question—being both a bidder and referee. Any conflicts  
9 of interest should be avoided whenever possible, therefore for the above stated reasons  
10 Staff concludes that there is no good reason to artificially select and present a Company-  
11 owned portfolio of default resources.

12  
13 **Q. WHY DOES THE COMPANY REQUEST COMMISSION APPROVAL FOR**  
14 **USING SELF-BUILD PROPOSALS FOR “BACKFILLING”?**

15 **A.** Staff asked the question in CPUC 1-30 and was provided the following response:

16 Since the annual cost of each portfolio eventually reverts back to the cost  
17 of the least-cost self build portfolio(once each bid added in the RAP  
18 expires), the resulting PVRR differences among portfolios will be driven  
19 by differences between the price and performance of bids versus that of  
20 self-build options and not the cost of more speculative generic resources.

21  
22 **Q. CAN YOU EXPLAIN THE IMPORTANCE OF THE CHOICE FOR**  
23 **BACKFILLING BIDS?**

24 **A.** The ERP uses a planning horizon of 40 years, from 2011–2050. While Company self-  
25 build proposals can be expected to fill the entire planning horizon, the Company has

1 restricted third-party bidders such that their bids will not fill the planning horizon. It is  
2 important to understand that the issue of backfilling bids with unequal lives is an issue  
3 that impacts only IPP bids.

4 The choice of the backfill could significantly affect the competitiveness of a bid.  
5 For example, given the Company's stated preference for short-term bids of no longer than  
6 eight years, the backfill will be weighted over four times as heavily as the actual bid  
7 price. A seven year bid will have 33 years of backfill.<sup>27</sup> The more expensive the backfill,  
8 the more it will disadvantage short-term bids and vice versa.

9  
10 **Q. WHAT HAS HISTORICALLY BEEN USED TO BACKFILL IPP BIDS?**

11 **A.** Historically, generic resources have been used to backfill contracts with uneven lives for  
12 the purpose of modeling throughout the forty year planning period.<sup>28</sup> Using generic  
13 resources allows the model to optimize over a greater range of resources thereby creating  
14 a future scenario which is more realistic than simply limiting the model selection to that  
15 of Company self-build proposals.<sup>29</sup>

16 Additionally the use of generic resources to backfill IPP bids provides a  
17 transparent modeling input as opposed to the proposed use of Company self-build  
18 proposals which will not be available until Phase II of the ERP. Transferring another

---

<sup>27</sup> Discounting of future years mitigates this somewhat.

<sup>28</sup> An example of Public Service's use of generic resources is the expansion plan seen in Volume 2, Table 2.8-4, of the 2011 ERP. The selection of resources on Public Service's system has been optimized on the basis of cost. However, to create a realistic optimization a sufficiently varied resource selection must be provided establishing choice in the modeling.

<sup>29</sup> The generic resources used by Public Service can be found in Volume 2, pages 221-223 of the 2011 ERP

1 element of the decision making process into Phase II where there is no visibility and no  
2 Commission input is problematic.

3  
4 **Q. DO YOU CONSIDER GENERIC RESOURCES TO BE “MORE SPECULATIVE”**  
5 **THAN COMPANY SELF-BUILD OPTIONS?**

6 **A.** No. Projecting costs 30 years into the future is by its nature very speculative, particularly  
7 given changes in technology for generation and energy extraction. However, Company  
8 self-build options are no less speculative than an attempt to estimate generic resources.  
9 In fact, it is possible that the Company is projecting costs for a brownfield plant when the  
10 ability to further build-out existing brownfield sites in the future is anything but certain.

11  
12 **Q. REGARDING THE TWO NEW WAYS THAT THE COMPANY INTENDS TO**  
13 **USE SELF-BUILD PROPOSALS, WHAT IS YOUR RECOMMENDATION?**

14 **A.** First, I recommend the Commission reject the Company’s proposal to submit a default  
15 self-build portfolio because there is no valid use for such a portfolio in this proceeding.

16 Second, I recommend the Commission direct Public Service to use an estimate of  
17 the cost of generic resources for backfilling bids as a more realistic and transparent  
18 alternative to Company self-builds. This estimate is more likely to be a neutral  
19 evaluation tool that cannot be biased by Public Service’s potential conflict of interest in  
20 the bid evaluation process.



1                                    **4. Separate Evaluation for Arapahoe 4 and Cherokee 4**

2    **Q.    HOW WILL PUBLIC SERVICE EVALUATE BIDS FOR REPLACEMENT OF**  
3                    **ARAPAHOE 4 AND CHEROKEE 4?**

4    A.    The Company is allowing only short-term bids from existing gas-fired generation units to  
5            be compared against the continued operation of Arapahoe 4 and Cherokee 4. These bids  
6            will be evaluated against Company estimates for operating Arapahoe 4 and Cherokee 4  
7            using a spreadsheet outside the Strategist computer modeling. This will not consider how  
8            the entire generation fleet may dispatch differently based on economics.

9                    To the extent one or more of these short-term alternatives proves to be a more  
10            cost-effective alternative than continued operation of Arapahoe 4 or Cherokee 4 on gas,  
11            the Company will include those bids in the Company’s base computer model  
12            representation of the all-source bid evaluation process.

13  
14   **Q.    DO YOU BELIEVE PUBLIC SERVICE’S PLANNED EVALUATION FOR**  
15                    **ARAPAHOE 4 AND CHEROKEE 4 ALTERNATIVES PROVIDES A LEVEL**  
16                    **PLAYING FIELD FOR ALL BIDDERS?**

17   A.    No. There will be no transparency to the bid evaluation process and it sets an  
18            unwarranted precedent that the Commission will allow bids to be evaluated outside the  
19            all-source process.

20  
21   **Q.    WHAT IS YOUR RECOMMENDATION FOR THE EVALUATION OF**  
22                    **ALTERNATIVES FOR APRAPAHOE 4 AND CHEROKEE 4?**



1 **Q. WHAT CONCERNS STAFF ABOUT CONTRACT NEGOTIATIONS AND THE**  
2 **LENGTH OF TIME THAT THE COMMISSION ALLOWS THE COMPANY TO**  
3 **EXECUTE CONTRACTS?**

4 **A.** At the end of Phase II, the Commission approves the most cost-effective portfolio for  
5 ratepayers. This decision is based on computer modeling that uses bid prices for each  
6 technology.

7 If an extended period of time between the submission of these bids and signing of  
8 contracts occur, technological and market changes can radically change the result of the  
9 cost effectiveness evaluation. It is possible that, during long delays in negotiations, a  
10 particular resource that was determined to be not the most cost-effective in modeling  
11 could become the preferred economic resource. Changing terms of a bid could also alter  
12 the cost-effectiveness of a technology. These changes would invalidate the conclusions  
13 of the Strategist modeling runs and would likely result in a different cost-effective  
14 portfolio selection.

15  
16 **Q. CAN EXTENDED CONTRACT NEGOTIATIONS RESULT IN BID SELECTION**  
17 **THAT IS DIFFERENT FROM THE OUTCOME THAT WOULD OCCUR IN A**  
18 **COMPETITIVE MARKET?**

19 **A.** Yes. Contract modifications after the RFP has been issued are, in some instances,  
20 changing the terms of the bid. This could result in the exclusion of a bidder that may be  
21 willing to offer a lower-cost bid on the modified contract. Modifications to contracts  
22 allow Public Service significant influence over the selection process because the

1 Company may choose to request contract modifications that are repugnant to the lowest-  
2 cost bidder.

3 Although bid pricing is a major component of a finalized contract, it is not the  
4 pricing terms that tend to change most frequently in negotiations. All terms of the  
5 contract represent an allocation of risk and when risk is reallocated it affects the value of  
6 the contract.

7

8 **Q. CAN DELAYS IN BID SELECTION BE EXPENSIVE FOR IPPS, THE**  
9 **COMPANY AND RATEPAYERS?**

10 **A.** Yes. Delays in the bid selection process are expensive for IPPs and the Public Service.  
11 Aside from the expense of consuming staff time for both sides of the negotiation, finalist  
12 must keep their bids open during the selection process and either risk locking in  
13 equipment pricing or be susceptible to changes in market pricing. Additionally, some of  
14 the IPPs would be hesitant to pursue alternative contracts until it is clear that their  
15 resource will not be selected.

16 IPPs have difficulty guaranteeing prices for such a long time since material costs  
17 can change significantly. Vendors may withdraw a bid because they are unwilling to  
18 hold their bid open while waiting for contract negotiations. This limits the generation  
19 choices available to the Company, and possibly the lowest-cost bid available to offer  
20 service to ratepayers.

21

22 **Q. ARE THERE OTHER WAYS THAT CONTRACT MODIFICATIONS CAN**  
23 **RAISE COSTS FOR RATEPAYERS?**

1    **A.**    Yes. Contract modifications can raise costs for the IPPs by asking them to assume risk  
2           that was not included in the original RFP. In specific instances, it is in the interest of  
3           ratepayers to have the Company assume risk unless it can be pooled, such as through  
4           insurance. If an IPP is being asked to assume risk, such as for environmental risk, then  
5           the IPP will likely raise its price and ratepayers will have to pay a cost, even if the  
6           negative event does not occur. Leaving risk with the Company results in ratepayers only  
7           paying higher costs if the negative event occurs.

8                     Ultimately, the Commission should decide which party should assume risk or  
9           other costs.

10

11   **Q.    CAN DELAYS IN CONTRACT NEGOTIATION DISRUPT THE ALL-SOURCE**  
12   **ACQUISITION PROCESS?**

13   **A.**    Yes. As detailed in my testimony at Section III C, delays in contract negotiations led to  
14           changes in market condition that resulted in the Company moving away from the  
15           portfolio selected by the Commission in the 2007 Electric Resource Plan. Public Service  
16           pursued wind resources instead of solar resources, as approved in the Phase II  
17           Commission decision, resulting in the need for the Commission to modify its original  
18           decision. These changes were justified absent the extensive all-source computer  
19           modeling that accompanies an ERP to ensure that ratepayers benefit from a least-cost  
20           portfolio of resources, and essentially renders the ERP process an expensive but  
21           somewhat meaningless endeavor.

1 **Q. WHAT DO YOU SUGGEST TO SPEED UP THE BID PROCESS AND ENSURE**  
2 **A COMPETITIVE BID PROCESS?**

3 **A.** I recommend the Commission require Public Service to utilize the contracts that have  
4 been submitted in Volume 3 of the Technical Appendix, with only certain areas subject to  
5 negotiation with the bidder, such as financing. After public review and comment by  
6 potential bidders about the provisions in these proposed contracts, as part of the Phase 1  
7 decision the Commission can approve standard contracts and narrowly limit the few areas  
8 that are negotiable.

9 An open, transparent process will allow the Commission to make important  
10 decisions about how contracts are structured and which party is being asked to bear  
11 various costs and risks. These are issues best decided by the Commission because they  
12 are entrusted with the public interest.

13  
14 **Q. HOW WILL STANDARD ACQUISITION CONTRACTS BENEFIT**  
15 **RATEPAYERS?**

16 **A.** If contract terms have been set prior to bidding then all bidders will have the opportunity  
17 to offer their lowest-cost bid for the same contract. In addition, expensive delays will be  
18 eliminated for Public Service and the IPPs by reducing the complexity of the post-bid  
19 negotiation process. Further, speeding up the bid process will enable more of the bids to  
20 remain open because delays could result in bidders exiting the bid process.

21  
22 **Q. ARE THERE OTHER STATES THAT UTILIZE A STANDARD ACQUISITION**  
23 **CONTRACT?**



1           A.     As explained earlier, the Company is proposing a hierarchy of  
2 contingency plan alternatives in the event Public Service faces a capacity shortfall. The  
3 proposed hierarchy can be found in Table 1.8-1 on page 1-62 of the 2011 ERP, and has  
4 been attached as **Exhibit No. FDS-3**. The hierarchy includes short-term capacity  
5 purchases, alternative bids that were received in the ERP bidding process, acceleration of  
6 in-service date for a resource planned for later in the acquisition period, and Public  
7 Service self-build facilities.

8           The hierarchy is of particular importance given the testimony of Staff Witness  
9 William Harris, who casts doubt on the accuracy of the Company’s demand forecasts.

10  
11 **Q.     WILL THE BID HIERARCHY REDUCE THE COMMISSION’S AUTHORITY**  
12 **OVER THE RESOURCE ACQUISITION PROCESS?**

13 **A.**    It is possible. Staff is unclear about the Company’s intent and has served discovery to  
14 clarify this issue. Regardless of their intent, the Commission should be clear that the  
15 Company is not being given new discretion to obtain resources outside of current rules.  
16 Should the Company fail to complete contract negotiations or need more resources than  
17 originally estimated, it would be required by Rule 3609(c) to come before the  
18 Commission for approval of a contingency plan. Staff would expect the Company to  
19 provide an explanation of why contract negotiations failed. The Company would need to  
20 request a Certificate of Public Convenience and Necessity (CPCN) to self-build resources  
21 or conduct another solicitation if there was a reasonable expectation of changed  
22 circumstances.



1           If the Company intends to use the hierarchy without Commission approval, then  
2           the proposed hierarchy appears to transfer significant Commission authority for resource  
3           acquisition to the Company in a process with little transparency.  
4

5   **Q.    ARE THERE ASPECTS OF THE BID HIERARCHY THAT YOU BELIEVE**  
6   **WILL DISRUPT MARKET FORCES FROM INFLUNCEING THE BID**  
7   **PROCESS?**

8   **A.**   Yes. I am concerned that the Company’s self-build bids will introduce a conflict of  
9           interest in the evaluation process for contingency resources. As presented by the  
10          Company, the hierarchy allows Public Service to choose a method for obtaining  
11          generation in the event there is a capacity shortfall situation. The proposed hierarchy  
12          would instill an incentive for the Company to reject third party bids for capacity by  
13          releasing bidders or failing to reach successful contract completion. Should this situation  
14          arise the next step in the hierarchy would be for the Company to build its own facility.

15               Essentially, Public Service will have a perverse incentive to not reach successful  
16               contraction negotiations with alternative bidders, allowing the Company to move through  
17               the hierarchy to pick themselves as the successful resource. This is an uneven playing  
18               field and precludes all bids from being considered equally as contingency plan  
19               alternatives.  
20

**E. Opportunistic Acquisition**

1  
2 **Q. DO COMMISSION RULES ALLOW FOR THE REQUESTED**  
3 **“OPPORTUNISTIC” APPROACH FOR ACQUIRING RENEWABLE**  
4 **GENERATION RESOURCES?**

5 **A.** No. The exemptions listed under Rule 3615 allow for the acquisition of resources outside  
6 the resource plan, including for capacity and/or energy from generation facilities for  
7 agreements not more than a two year term or for not more than 30 megawatts of capacity.

8 Rule 3656(c) allows the Company to apply to the Commission for larger resource  
9 acquisitions, as an amendment to an approved compliance plan, such as when Public  
10 Service was able to purchase Limon II after the end of Phase II of the 2007 ERP.<sup>30</sup>  
11 Under current Commission rules, Public Service is required to obtain Commission  
12 approval for resource acquisition, which is typically within a competitive bid process.

13 The Company is requesting pre-approval of a resource acquisition process beyond  
14 what is already permitted in Commission rules. The Company is asking for permission to  
15 obtain resources greater than 30 megawatts or for more than two years, perhaps without a  
16 competitive bid process. Commission approval would occur after soliciting these  
17 resources.

18  
19 **Q. WHAT ARE YOUR THOUGHTS ON USING AN OPPORTUNISTIC**  
20 **APPROACH FOR THE ACQUISITION OF RENEWABLE RESOURCES?**

---

<sup>30</sup> Docket 10A-905E

1    **A.**    While I appreciate the Company’s efforts to obtain renewable resources at optimal  
2           pricing, I fail to see sufficient grounds for undermining the Commission’s authority in the  
3           selection of renewable resources.  Although the Company offers to come before the  
4           Commission for contract approval, evaluating the resource in isolation without a  
5           contextual framework would be difficult.  Furthermore, the proposed opportunistic  
6           approach lacks sufficient justification, given that the Commission has previously  
7           accommodated renewable resource acquisition outside the normal ERP or RES processes.

8                         The Company has not conditioned its use of the suggested opportunistic approach.  
9           Commission approval of the Company’s proposed approach would be tantamount to  
10          removing the selection of renewable resources from Commission jurisdiction.  The  
11          Commission’s authority would be severely limited to a simple yes or no vote somewhat  
12          after the fact.

13  
14    **Q.**    **HOW COULD OPPORTUNISTIC ACQUISITION HAVE AN OUTCOME**  
15          **DIFFERENT FROM WHAT WOULD OCCUR IN A COMPETITIVE MARKET?**

16    **A.**    Opportunistic acquisition would remove resource acquisition decisions from a full  
17          evaluation of the impact on Company cost and generation need.  For example, as  
18          discussed by Staff Witness Inez Dominguez, the acquisition of additional wind resources  
19          may impact the reliability and cost of the electric system.  The unpredictable nature of  
20          wind generation creates challenges for the balancing authority.  High loads of wind  
21          generation often require curtailing of base load generation that typically is the most  
22          economic generation on Public Service’s system.

23

1 **Q. WHAT IS YOUR RECOMMENDATION REGARDING OPPORTUNISTIC**  
2 **ACQUISITION?**

3 A. I recommend the Commission deny the Company's request to broaden its ability to  
4 acquire resources through opportunistic acquisition, obtaining resources outside a  
5 competitive bid process. The Company should use existing rules and, if necessary, come  
6 back to the Commission for approval to pursue resource acquisition outside the normal  
7 ERP or RES dockets. Given potential changes in market conditions, it is appropriate for  
8 the Commission to determine the best course of action in the event that additional  
9 generation is needed.

10

11 **V. The Independent Evaluator**

12

13 **Q. DO THE RULES PROVIDE OVERSIGHT TO ENCOURAGE A FAIR AND**  
14 **COMPETITIVE BID PROCESS?**

15 A. Yes. Rule 3612 requires an independent evaluator (IE) to oversee the bid evaluation  
16 results and modeling runs to verify the results, investigate options and ensure that there  
17 are no problems or deficiencies in the bid evaluation process. Rule 3613(e) requires the  
18 IE to file a report that contains an analysis of whether the utility conducted a fair bid  
19 solicitation and bid evaluation process, with any deficiencies specifically reported.

20

21 **Q. IS THE COMPANY RELYING ON THE INDEPENDENT EVALUATOR TO**  
22 **ENSURE FAIRNESS IN THE BID PROCESS?**

1    **A.**    Yes. Company witness Mr. Haeger states that the IE will “ensure a fair and equitable  
2           evaluation of all generation alternatives.”<sup>31</sup> Mr. Haeger concludes that the evaluation  
3           process has worked well in the past.<sup>32</sup>

4  
5    **Q.**    **DO YOU HAVE CONCERNS ABOUT THE PRACTICAL LIMITATIONS**  
6           **FACING AN INDEPENDENT EVALUATOR OVERSEEING A BID PROCESS?**

7    **A.**    Yes. I think it’s important to be realistic about the transparency available to an IE and the  
8           ability of any individual to monitor a competitive market.

9  
10   **Q.**    **WHAT HAS BEEN THE COMMISSION’S DIRECTIVE TO THE IE?**

11   **A.**    In Decision No. C10-0019, Docket No. 07A-477E, the Commission clarified the IE’s role  
12           monitoring the negotiations for the resources contemplating utility ownership.

13                   By way of background, the IE’s general role in a Phase II resource acquisition  
14                   proceeding is to assist the Commission in determining whether the bid process  
15                   was executed fairly and in compliance with the Commission’s Rules.

16  
17           To achieve this role, the Commission reiterates that:

18                   The IE shall attend negotiation sessions, as needed, to enable the IE to report  
19                   eventually to the commission on the fairness and cost-effectiveness of the final  
20                   agreement. Public Service and the negotiating parties shall keep the IE informed  
21                   of the status of negotiations and endeavor to schedule negotiations to enable the  
22                   IE to attend, as appropriate.

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<sup>31</sup> Haeger, supplemental testimony, page 11, Lines 6 and 7.

1 **Q. HOW HAS THE IE PROVIDED OVERSIGHT IN THE PAST?**

2 **A.** In Docket No. 10A-327E, with respect to the proposed purchase of Calpine Assets by  
3 Public Service, the IE’s report (Attached as **Exhibit No. FDS-5**) concludes that “the  
4 negotiation process was fair.”<sup>33</sup> However, the IE was “not actually present for some  
5 substantial negotiations” and was instead “regularly briefed by the Company on the status  
6 of negotiations.”<sup>34</sup>

7 While the Commission Order, Decision No. C09-1257, directed that the IE ‘shall  
8 attend negotiation sessions, as needed...’ (page 32) the IE was not included on  
9 calls or meetings between the parties until December 2009, by which time many  
10 of the key commercial terms had been developed between the parties and some  
11 significant price movement had been established.<sup>35</sup>

12  
13 The Company discussed “the process, progress and direction of the negotiations” but “the  
14 IE was not present when the final terms were agreed upon.”<sup>36</sup>

15 Further, the IE notes that Calpine offered;

16 only the most general terms, specifically prices and date. No other deal terms  
17 were provided with the bid submission and no standard acquisition contract had  
18 been provided to bidders in the RFP process.<sup>37</sup>  
19

20 There were aspects of the contractual mechanisms that were a concern to the IE  
21 and reported to the Commission. For example, the IE noted that “the contract does not  
22 include a performance test prior to the closing date as a condition of closing”, and adds

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<sup>32</sup> Lines 18-22, page 11, Haeger supplemental testimony.

<sup>33</sup> Concentric Energy Advisors’ Independent Evaluator Report for Docket 10A-327E, May 19, 2010, Page 6.

<sup>34</sup> Ibid, page 2.

<sup>35</sup> Ibid.

<sup>36</sup> Ibid.

1 that “this term is common and would have been a useful term to have included.”

2 However, the Company “is comfortable with its rights.”

3

4 **Q. WHAT IS YOUR CONCERN REGARDING THE ROLE OF THE IE?**

5 **A.** It is very difficult for the IE to provide oversight for negotiations, particularly when he or  
6 she does not attend substantial negotiations. As the IE noted in Docket 10A-327E,  
7 without a standard acquisition contract, changing contract terms can have a significant  
8 impact on the risk being assumed by the parties and the actual price of the contract.

9 While the IE provides useful oversight to the resource acquisition process, it is  
10 essential that a transparent framework with the proper incentives be established to  
11 increase the influence of market forces and effectiveness of the IE.

12

13 **Q. DO YOU BELIEVE THE IE USED FOR THE 2011 ERP SHOULD HAVE ANY**  
14 **PARTICULAR QUALIFICATIONS?**

15 **A.** The IE should be free of the appearance of conflict of interest. The IE used in the 2003  
16 ERP, Concentric, has provided rate of return testimony for Public Service in rate cases,  
17 leading to the appearance of a conflict of interest. Staff is aware of firms specializing in  
18 overseeing energy generation negotiations that provide no conflicting services.

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<sup>37</sup> Ibid, page 3.

1 **Q. WHAT IS YOUR RECOMMENDATION FOR THE COMMISSION WITH**  
2 **REGARD TO THE IE?**

3 **A.** I recommend that the Commission select an IE that does not have the appearance of a  
4 conflict of interest. The Commission can help the IE provide the necessary oversight of  
5 the bid process by encouraging decisions to be affected by market forces; removing  
6 potential conflicts of interest and requiring as much transparency as possible. It is  
7 important for the Commission to structure incentives that ensure a fair bid process rather  
8 than challenging an IE to oversee a process that allows the Company to favor particular  
9 participants or themselves.

10

11 **VI. SUMMARY OF RECOMMENDATIONS**

12 **Q. PLEASE SUMMARIZE YOUR CONCERNS REGARDING THE RESOURCE**  
13 **ACQUISITION PROCESS BEING PROPOSED BY PUBLIC SERVICE IN THIS**  
14 **DOCKET.**

15 **A.** The Commission should be careful about the incentives that are in place for the  
16 Company's bid selection process. Public Service's proposal introduces conflict of  
17 interest and obscures transparency, reducing the likelihood that the Company will select  
18 the same generation that would occur in a market unencumbered by monopoly power.  
19 Allowing these provisions to be included in the 2011 ERP process would raise costs and  
20 not be in the best interest of rate payers.

21

22 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS REGARDING THE**  
23 **CONTRACTING PROCESS.**



1    **A.**    It is important to encourage a robust solicitation and fair bid evaluation to protect market  
2           forces in the resource acquisition process. I recommend the Commission:

3

4           **Ensure a Level Playing Field for Bids**

- 5           • Send a message to bidders that all contracts will be evaluated fairly to obtain the most  
6           cost-effective resources available. Public Service should be directed to evaluate all  
7           bids equally, to not give a preference to short-term contracts and to evaluate  
8           alternatives for Arapahoe 4 and Cherokee 4 as part of the all-source process.
- 9           • Require that Independent Power Producers (IPPs) be given timely access to modeling  
10          inputs and assumptions used to evaluate their bids.
- 11          • Approve standard contracts as part of the Phase I decision, after soliciting comments  
12          from interested parties, while retaining flexibility where appropriate. Then, authorize  
13          a limited window for contract negotiations, no longer than 90 days.
- 14          • Require Public Service to provide firm prices for any self-build proposals rather than  
15          allowing for the possibility of full cost recovery with no fixed limit.

16

17          **Eliminate Conflict of Interest**

- 18          • Remove self-build generation from the bid hierarchy for contingency resources.
- 19          • Require the use of generic resources instead of self-build estimates for calculating the  
20          tail in computer modeling.
- 21          • Reject “forcing” the model to develop a portfolio of only Company self-build  
22          resources or projects.

1           **Protect the Integrity of the All-Source ERP Process**

- 2           • Direct Public Service to include the Independent Evaluator in all contract  
3           negotiations.
- 4           • Direct the Independent Evaluator to scrutinize and critique how Company self-build  
5           projects are represented in bid evaluation, being careful to look for self-interested bias  
6           affecting the outcome and to protect the level playing field for all bidders.
- 7           • Do not pre-authorize Public Service to engage in opportunistic acquisition outside the  
8           ERP process, allowing acquisition of resources only as permitted under current rules.

9

10   **Q.    DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?**

11   **A.    Yes.**

## **APPENDIX A**

I have been employed as an Economist with the Colorado Public Utilities Commission since September 2011. My duties include providing technical and policy advice or testimony to the Commission.

Prior to joining the Commission, I worked for two years for the Colorado Legislative Council as an economist. While at the Legislative Council, I helped prepare economic and revenue forecasts, provided research and fiscal impact of pending legislation for the General Assembly. Prior to that, I worked for the Federal Reserve Bank of Dallas for twenty years as an economist. While at the Federal Reserve, I was in charge of the Beige Book, an anecdotal report of current business conditions, and the Texas Business Outlook Surveys and Indexes. I was also responsible for forecasting economic conditions and helping brief the Bank President prior to Federal Open Market Committee meetings. I conducted economic research on a wide range of topics, including measuring and measurement bias in cost-of-living indexes, research tax credits, the pension system, and insurance.

I have Bachelor of Science degrees in Economics and Political Science from the University of Washington and a Master's of Arts degree in Applied Economics from the University of Minnesota. I have published numerous articles in Federal Reserve publications and economic journals, including in the Journal of Economic Surveys, Journal of Business and Economic Statistics, and Journal of Commercial Lending. I have served as an officer for the Dallas/Fort Worth Association of Business Economics and am currently a board member of the Denver Association for Business Economists.

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF COLORADO**

DOCKET NO. 11A-869E

IN THE MATTER OF THE APPLICATION OF THE APPLICATION OF PUBLIC  
SERVICE COMPANY OF COLORADO FOR APPROVAL OF ITS 2011 ELECTRIC  
RESOURCE PLAN.

**AFFIDAVIT OF FIONA SIGALLA  
STAFF OF THE COLORADO PUBLIC UTILITIES COMMISSION**

I, Fiona Sigalla, being duly sworn, state that the attached testimony and exhibits were prepared by me or under my supervision, control, and direction; that the testimony and exhibits are true and correct to the best of my information, knowledge and belief; and that I would give the same testimony orally and would present the same exhibits if asked under oath.

*Fiona Sigalla*  
\_\_\_\_\_  
Fiona Sigalla

Subscribed and sworn to before me in the County of Denver, State of Colorado, this 4<sup>th</sup> of June, 2012

*Sarah Jazin*  
\_\_\_\_\_  
NOTARY PUBLIC

My Commission expires: 7/10/13

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF COLORADO

DOCKET NO. 11A-869E

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IN THE MATTER OF THE APPLICATION OF THE APPLICATION OF PUBLIC  
SERVICE COMPANY OF COLORADO FOR APPROVAL OF ITS 2011 ELECTRIC  
RESOURCE PLAN.

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**EXHIBITS OF FIONA SIGALLA  
STAFF OF THE COLORADO PUBLIC UTILITIES COMMISSION**

June 4, 2012