BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

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IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO FOR APPROVAL OF ITS 2011 ELECTRIC RESOURCE PLAN	))))	**DOCKET NO. 11A-869E**
IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO FOR APPROVAL OF THE ACQUISITION OF THE BRUSH 1, 3, AND 4 GENERATION FACILITIES AND IN CONNECTION THEREWITH THE GRANT OF A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY IF REQUIRED AND THE APPROVAL OF COST RECOVERY THROUGH A GENERAL RATE SCHEDULE ADJUSTMENT	))))))))))	**DOCKET NO. 12A-782E**
IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO FOR APPROVAL OF THE POWER PURCHASE AGREEMENT FOR 118.8 MW OF NATURAL GAS GENERATION, EARLY RETIREMENT OF ARAPAHOE UNIT 4, AND A GAS SALES AGREEMENT.	)))))))	**DOCKET NO. 12A-785E**

THIRD SUPPLEMENTAL DIRECT TESTIMONY OF KURTIS J. HAEGER

ON BEHALF OF

PUBLIC SERVICE COMPANY OF COLORADO

August 7, 2012

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

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<u>THIRD SUPPLEMENTAL DIRECT TESTIMONY OF KURTIS J. HAEGER</u>

I. <u>INTRODUCTION</u>

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. Kurtis J. Haeger, 1800 Larimer Street, Denver, Colorado 80202.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT POSITION?

A. I am employed by Xcel Energy Services, Inc., a wholly-owned subsidiary of Xcel Energy Inc., the parent company of Public Service Company of Colorado. My position is Managing Director, Resource Planning.

Q ON WHOSE BEHALF ARE YOU TESTIFYING?

A. I am testifying on behalf of the Public Service Company of Colorado ("Public Service", "PSCo", or "Company").

Q. HAVE YOU PROVIDED DIRECT TESTIMONY IN THIS DOCKET?

A. Yes, both Direct and Supplemental Direct testimony. Because witnesses other than me filed testimony with the Company's Second Supplemental Direct Testimony, I am labeling this my "Third" Supplemental Direct Testimony, because this the third round of supplemental testimony supporting the Company's direct case.

Q. WHAT IS THE PURPOSE OF YOUR THIRD SUPPLEMENTAL DIRECT TESTIMONY?

A. My testimony provides the Commission with information requested in Decision No. C12-0882-I regarding the consolidation of Docket No. 11A-869E ("2011 ERP"), Docket No. 12A-782E ("Brush") and Docket No. 12A-785E ("Arapahoe/SWG"). I also directly address the public interest rationale for alternative forms of resource acquisition proposed in the Brush and Arapahoe/SWG Dockets as required in Decision No. C12-0882-I (¶ 23) and how the Company's proposed alternative method of resource acquisition comports with the requirements of Rule 3611.

Q. WHAT ARE THE SPECIFIC TOPICS YOU WILL COVER IN THIS THIRD SUPPLEMENTAL DIRECT TESTIMONY?

A. I will specifically address 1) the resource need that is being proposed to be "carved out" in Phase 1 of the 2011 ERP proceeding and the remaining resource need that will be acquired through the Company's proposed All-Source solicitation in Phase 2 of the 2011 ERP; 2) why it is in the public interest to approve the Brush and Arapahoe/SWG applications in Phase 1 of the 2011 ERP proceedings; 3) how the Company would intend to re-incorporate, back into Phase 2, the resource need that is being proposed to be carved out in the Phase 1 proceeding if the Commission denies the Company's applications; and 4) whether the transactions that underlie the Brush and Arapahoe/SWG applications have been fully negotiated and how the Company would incorporate any changes or modifications to those agreements required by the Commission.

II. <u>DELINEATION OF PHASE 1 AND PHASE 2 RESOURCE NEED ACQUISITIONS</u>

Q. PLEASE SUMMARIZE THE COMMISSION'S REQUEST RELATED TO THE IDENTIFICATION OF THE RESOURCE NEEDS TO BE ADDRESSED IN PHASE 1 AND PHASE 2 OF THE 2011 ERP PROCEEDING.

A. Paragraph 3611(b) requires a utility to specifically identify the resource need that it intends to acquire through an all-source competitive solicitation and the portion of the resource need it intends to carve out and acquire through an alternative method of resource acquisition. In his Second Supplemental Direct Testimony of July 5, 2012, Mr. James Hill provided a summary of the changes in the

Company's resource needs as a result of the Brush and the Arapahoe/SWG applications, Tables JFH-4 to JFH-6. To more clearly communicate the resource needs that the Company is proposing to "carve out" of the all-source solicitation and acquire in Phase 1 of the ERP proceeding, I have restated the information presented by Mr. Hill, in Tables KJH-1 through KJH-4. Table KJH-1 presents the same information as presented in Table JFH-4 and is the starting total resource need based on the Company's updated forecast and the inclusion of the PacifiCorp transaction. Negative numbers show surplus generation and positive numbers show the level of need for additional resources.

Table KJH-1

Row		2012	2013	2014	2015	2016	2017	2018
A	Existing Generation	7,662	7,485	7,388	7,335	7,364	7,197	7,014
B	Firm Obligation Load	5,994	6,071	6,107	6,173	6,251	6,309	6,368
C	Planning Reserve Margin	1,017	1,030	1,035	1,046	1,059	1,068	1,078
(B+C)-A	**Capacity Need**	**(651)**	**(384)**	**(246)**	**(116)**	**(55)**	**181**	**432**

The total resource need presented in Table KJH-1 is also the resource need that would be acquired through the all-source solicitation, absent the Brush and Arapahoe/SWG applications. The total resource need for 2017 is 181 MW and 432 MW in 2018.

Table KJH-2 is a restatement of Table JFH-5, identifying the impact on the Company's resource needs as a result of the Arapahoe/SWG application. The Arapahoe/SWG proposal adds a new 10 MW to the Company's generation supply beginning in 2013, thereby reducing the Company's net resource needs by 10 MW in the years of 2017 and 2018.

Table KJH-2

Row		2012	2013	2014	2015	2016	2017	2018
	Existing Generation	7,662	7,485	7,388	7,335	7,364	7,197	7,014
	Arapahoe 4 Retirement			(109)	(109)	(109)	(109)	(109)
	Arapahoe 5,6,7 New PPA			119	119	119	119	119
A	Net Generation	7,662	7,485	7,398	7,345	7,374	7,207	7,024
B	Firm Obligation Load	5,994	6,071	6,107	6,173	6,251	6,309	6,368
C	Planning Reserve Margin	1,017	1,030	1,035	1,046	1,059	1,068	1,078
(B+C)-A	**Capacity Need**	**(651)**	**(384)**	**(256)**	**(126)**	**(65)**	**171**	**422**

Table KJH-3 isolates the impact of the Company's proposed Brush application and is based on the information contained in Table JFH-6. While Table JFH-6 demonstrated the combined impact of the Arapahoe/SWG and Brush applications on the Company's resource needs, Table KJH-3 shows the isolated impact of only the Brush transaction on the Company's updated resource needs presented in Table KJH-1. Table KJH-3 shows the Brush transaction carves out 78 MW of resource need, in 2017 and 2018, from the all-source solicitation.

Table KJH-3

Row		2012	2013	2014	2015	2016	2017	2018
	Existing Generation	7,662	7,485	7,388	7,335	7,364	7,197	7,014
	Brush 1,3 PPA		(78)	(78)	(78)	(78)		
	Brush 4 PPA Termination		(133)	(133)	(133)	(133)	(133)	(133)
	Brush 1,3,4 Purchase		211	211	211	211	211	211
A	Net Generation	7,662	7,485	7,388	7,335	7,364	7,275	7,092
B	Firm Obligation Load	5,994	6,071	6,107	6,173	6,251	6,309	6,368
C	Planning Reserve Margin	1,017	1,030	1,035	1,046	1,059	1,068	1,078
(B+C)-A	**Capacity Need**	**(651)**	**(384)**	**(246)**	**(116)**	**(55)**	**103**	**354**

Table KJH-4 summarizes the combined impact of the Arapahoe/SWG and Brush applications on the Company's resource needs that will be acquired through the all-source solicitation and is the same information presented in Table JFH-6. This table demonstrates the combined resource need that is being proposed to be "carved out" of Phase 2 and acquired in Phase 1 is equal to 88 MW in 2017 and 2018. (Note that the Capacity Need rounds to 345 MW, whereas the simple math in Table KJH-4 would lead to a Capacity Need of 344 MW.)

Table KJH-4

Row		2012	2013	2014	2015	2016	2017	2018
	Existing Generation	7,662	7,485	7,388	7,335	7,364	7,197	7,014
	Arapahoe 4 Retirement			(109)	(109)	(109)	(109)	(109)
	Arapahoe 5,6,7 New PPA			119	119	119	119	119
	Brush 1,3 PPA		(78)	(78)	(78)	(78)		
	Brush 4 PPA Termination		(133)	(133)	(133)	(133)	(133)	(133)
	Brush 1,3,4 Purchase		211	211	211	211	211	211
A	Net Generation	7,662	7,485	7,398	7,345	7,374	7,285	7,102
B	Firm Obligation Load	5,994	6,071	6,107	6,173	6,251	6,309	6,368
C	Planning Reserve Margin	1,017	1,030	1,035	1,046	1,059	1,068	1,078
(B+C)-A	**Capacity Need**	**(651)**	**(384)**	**(256)**	**(126)**	**(65)**	**93**	**345**

III. COST AND BENEFIT ANALYSIS OF A PHASE 1 CARVE OUT

Q. PLEASE SUMMARIZE THE COST/BENEFIT INFORMATION THAT PUBLIC SERVICE PRESENTED REGARDING THE COMPANY'S PROPOSAL TO CARVE OUT AND ACQUIRE 88 MW OF RESOURCE NEED IN PHASE 1?

A. As presented by Karen Hyde and Jim Hill in the Docket No. 12A-782E, the "Brush docket" and by Jim Hill and me in Docket No. 12A-785E, the "Arapahoe/SWG docket", the Company identified a number of qualitative and net economic benefits of completing these proposed transactions in Phase 1. These qualitative benefits include:

1) Providing the Company and the employees of Arapahoe 4 the best opportunity to make well informed employment and workforce planning decisions as soon as possible. Forcing the employees to wait another year to find out the fate of their employment will make it difficult to retain employees at the plant now

that they know that there is a significant chance of the plant being permanently retired.

2) Allow Arapahoe 4, an older and inefficient steam boiler designed to operate more in a baseload configuration, to be retired and replaced by a more cost effective, flexible, and efficient set of units possibly 18 months earlier than if we are ordered to wait until Phase 2.

3) Take advantage of what could be considered a current "buyer's" generation market. The prices offered by the owners of the Brush Units and for generation from Arapahoe 5, 6 and 7 to be considered in Phase 1 of the ERP proceeding suggest there is a real cost benefit from acquiring these resources now in what may be considered a buyer's market. The Company's resource need presented in the 2011 ERP indicated a possible abundance of generation. With the recent up-tick in overall demand at Public Service and in the entire Colorado region, these changing demand conditions suggest the generation market may be significantly tighter in another year than it is now or has been in over the last six months.

Q. WHY DID THE COMPANY DECIDE NOT TO WAIT UNTIL PHASE 2?

A. Waiting another year may introduce a much greater degree of uncertainty and more cost, as opposed to the known economic benefits of the two proposed transactions being offered now.

The sellers of the Brush Units approached us with a time-sensitive proposal that we were concerned may not be available if we waited until Phase 2. The Company recognized that this was a unique situation due to the parent company bankruptcy of the seller. Since we determined that the price being offered now is advantageous compared to continuing with the existing PPAs we have for these units, we thought it prudent to move forward now rather than risk losing the transaction due to delay.

Similarly as discussed below, a substantial benefit to the Arapahoe/SWG proposal is that it provides significant customer savings in 2013. This benefit will be lost if the transaction is deferred to Phase 2. We also have no guarantees that the transaction will be available to us during Phase 2.

Q. CAN YOU EXPAND ON THE KNOWN ECONOMIC BENEFITS OF THE PROPOSED TRANSACTIONS?

A. As presented by Ms. Hyde beginning on page 19 and continuing on page 20 of her Direct Testimony in the Brush docket, and as discussed by me beginning on page 14 of my Direct Testimony in the Arapahoe/SWG docket, the proposed transactions are expected to provide significant customer savings. The near term **net** economic benefits of completing each of these transactions in Phase 1 of the ERP is expected to be approximately $3 million in 2013 and 2014 for the Arapahoe/SWG proposal and about $2 million for the Brush transaction. In addition, over the proposed term of the SWG PPA and the terms of the existing Brush PPA's, the **net** customer savings expected for the Arapahoe/SWG transaction is nearly $18 (PVRR) and $12 million (PVRR) for the Brush proposal. These significant **net** economic benefits will only be realized if the Commission approves the requested carve out of the resource acquisitions in Phase 1 of the 2011 ERP process.

Q. ARE YOU SAYING THAT THESE ECONOMIC BENEFITS WILL NOT BE REALIZED IF THE COMMISSION DELAYS THE PROPOSED ACQUISITIONS TO PHASE 2 OF THE 2011 ERP?

A. Yes. Due to the expected timing of the Phase 2 all-source process, (final results not expected until late 2013) the customer savings expected in 2013 from both of these transactions (estimated to be $4.4 million) would certainly be lost. In addition, due to the need to finalize and/or close the transactions, a large portion of the savings in 2014 (nearly $1 million) will also likely to be lost. More importantly, the current owners of the Brush units have notified the Company they are not interested in a transaction with a closing date in late 2013 or early 2014. As a result, waiting until the Phase 2 process would 1) increase customer costs by up to $5.5 million, 2) likely eliminate the Brush ownership opportunity entirely, and 3) introduce significant additional uncertainty into the entire process.

Q. WHAT ARE THE OFFSETTING BENEFITS OF WAITING UNTIL PHASE 2 TO ACQUIRE THESE POSSBILE RESOURCES?

A. Under the unique circumstances presented by these opportunities, I see no offsetting benefit of waiting until Phase 2.

Q. ISN’T THERE A POSSIBILITY THAT THE PRICES OFFERED IN PHASE 2 COULD BE LOWER THAN WHAT IS BEING PROPOSED NOW?

A. I do not believe that situation is likely. With the general increase in demand and what appears to be a move away from a buyer’s market, I think all of the signs in the market suggest that generation prices have likely bottomed out and it is unlikely we will see even lower prices in the future. Moreover, as we discussed in the Arapahoe/SWG Docket and that Brush Docket direct testimonies, the prices that we have been offered for this generation are lower than recent market prices.

Q. WHY IS THE COMPANY CERTAIN THAT THE PRICE PAID FOR THE BRUSH UNITS IS IN THE PUBLIC INTEREST?

A. We analyzed the purchase from several different perspectives and determined that the acquisition was in the public interest. First, we compared the $75 million purchase price against the cost of energy purchases from these facilities under PPAs or other market purchases and found the acquisition to be more cost effective. Second, the $75 million price represents only 64% of the seller's book value in the property and the purchase price is somewhat lower than the estimated net book value under FERC accounting requirements. At $316/kW, the acquisition price is much lower than the cost of constructing new capacity ($829-$1,076/kW).

The transaction also compared favorably to other recent market transactions of which we were aware for used natural gas generating equipment. The Company's Business Development group was able to gather data from public sources such as SNL Financial, the Wall Street Journal, Energy Central, SEC filings, and internet searches of buyer's and seller's web sites for seven transactions involving the purchase of combustion turbines with a mean selling price of $419/kW and a median price of $410/kW, and twenty eight transactions involving the purchase of combined cycles with a mean selling price of $525/kW and a median price of $479/kW. Of the 35 transactions we reviewed, only two had a lower cost/kW ($204/kW and $294/kW) than the Brush purchase we are proposing.

Our team also conducted detailed due diligence into the Brush units to confirm that the price was reasonable in light of the overall age and condition of the equipment. Several team members visited the facility, visually inspected the site and the equipment, and discussed historical and current operation of the facility with the existing operations and maintenance personnel. The due diligence did not identify any issues that would interfere with the acquisition.

Q. ARE YOU CONCERNED ABOUT THE AGE OF THE BRUSH UNITS AND THEIR ABILITY TO OPERATE RELIABLY AS PART OF PUBLIC SERVICE'S SYSTEM?

A. This was an important question that focused our due diligence effort. These are older units so it was important that we conduct a review to determine whether these particular units are worth the purchase price. Our due diligence review did not uncover any significant concerns to make us believe that the purchase price was unreasonable.

We conducted an analysis of the projected operations and maintenance costs on a going forward basis and found them to be reasonable. These units generally operate in more of a peaking mode so they have typically generated a relatively small amount of energy of any given year. We expect the units to be operable within normal parameters and have developed a planned overhauls schedule based on the projected frequency of dispatch and anticipated run hours. The next planned overhaul maintenance on Brush 1&3 is currently planned for 2018 and Brush 4 is planned for 2016. The operations and maintenance plans are reasonable under the circumstances.

Since these units generally only operate a few hours of the year, it makes sense to obtain the capacity as cheaply as possible and then run the units only when necessary to satisfy our infrequent but important peak demand. We concluded that these older units could serve that function well and that it is unlikely we could obtain peaking capacity at the same price point if we waited until Phase II.

Q. WHY YOU ARE COMFORTABLE THAT THE ARAPAHOE/SWG PROPOSAL IS IN THE PUBLIC INTEREST?

A. As I explained in my testimony filed in the Arapahoe/SWG docket, we were looking for generation that would be more cost effective to operate than operating our currently coal-fired Arapahoe 4 unit as a natural gas peaker. Given the age of Arapahoe 4, it is almost fully depreciated. The only possible generation that could operate more cheaply than Arapahoe 4 would be existing, cost-effective natural gas facilities that are directly interconnected to the Public Service system. The number of existing units that fit that definition is very limited. We asked both of the Independent Power Producers with units that meet this description to give us their best offers for replacing Arapahoe 4. We chose the best one. I am confident that waiting until Phase 2 would not result in a better deal for us, given the very limited universe of potential competitors for Arapahoe 4 operation.

IV. <u>CONTINGENCY PLAN FOR A CONSOLIDATED PHASE 2 ACQUISITION PROCESS</u>

Q. PLEASE EXPLAIN HOW THE COMPANY WOULD ALTER ITS ACQUISITION PROCESS TO RE-INCORPORATE THE PROPOSED RESOURCE CARVE OUT BACK INTO PHASE 2 OF THE ERP PROCESS IF THE COMMISSION DENIES THE COMPANY'S APPLICATIONS.

A. If the Commission denies one or both of the Company's applications, the Company will revert back to the acquisition process that was described in the 2011 ERP. If the Commission denies the Brush application, 78 MW of resource need will be placed back into the All-Source RFP in Phase 2. If the Commission denies the Arapahoe/SWG application, the Company intends to allow alternatives offered in Phase 2 to compete against the continued operation of Arapahoe 4, although as I have explained, I doubt that we will receive any better bids for replacement of Arapahoe 4 than we have already solicited through the process that we described in the testimony that the Company filed in the Arapahoe/SWG docket. In summary, if the Commission denies one or both of the Company's applications, the Company will revert back to the acquisition processes originally identified in the 2011 ERP.

V. STATUS OF CONTRACT NEGOTIATIONS AND COMMISSION INVOLVEMENT

Q. WHAT IS THE STATUS OF THE CONTRACT NEGOTIATIONS OF THE TWO PROPOSALS?

A. Following our traditional approach, the Company has completed negotiations with both the owners of the Brush assets and SWG on the seminal deal agreements. As is our standard practice, the effectiveness of each of these agreements is contingent upon Commission approval. If the Commission does not approve a transaction, the Company will terminate the rejected agreements.

Q. WHAT HAPPENS IF THE COMMISION WANTS TO CHANGE OR MODIFY ANY OF THE DEAL AGREEMENTS BEFORE APPROVING THEM?

A. Usually the Commission has been reluctant to interpose itself into the specific terms and conditions of these detailed agreements negotiated by sophisticated parties, unless the Commission has a substantial concern about a term that adversely impacts the public interest. As in any commercial transaction of this magnitude, the parties to the agreements have negotiated the best deal that each can, and the agreements contain "give and take" and compromises on both sides. We strongly encourage the Commission not to "tinker" with the terms and conditions of these agreements.

Instead, the Commission should determine whether each deal, as negotiated in its entirety, is in the public interest. If the Commission believes one or both of the deals is not in the public interest, the deal will be terminated. If the Commission were to approve an application only if specified changes were made to one or more agreements, the Company and our counter party would each have to review the requested changes to determine whether the resulting new deal is satisfactory. However, a change to one term could cause changes to other terms, if the Commission-requested modification changes the risk/benefit profile negotiated by a party. If both the Company and the counter party can mutually agree to a revised agreement that incorporates the changes required by the Commission, the Company would notify the Commission of its intent to close the transaction and move forward consistent with the Commission's order. To the extent the Company and the counter party could not mutually agree to a revised agreement that would incorporate the Commission's changes, the Company will notify the Commission that it could not reach a mutual agreement and that the deal is going to be terminated. The end result of failing to mutually agree on a revised agreement would be for the Company to revert back to the acquisition process identified in the 2011 ERP.

Q. DOES THIS CONCLUDE YOUR THIRD SUPPLEMENTAL DIRECT TESTIMONY?

A. Yes.