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 2009 RENEWABLE ENERGY STANDARD COMPLIANCE PLAN

Docket No. 08A-5 12E

APPLICATION FOR APPROVAL OF PUBLIC SERVICE 2009 RES COMPLIANCE PLAN

Public Service Company of Colorado hereby applies to the Commission for approval of its 2009 Renewable Energy Standard Compliance Plan ("Compliance Plan" or "Plan"). This Plan is timely filed in accord with Decision No. C08-1115 granting Public Service an extension of time to file its 2009 RES Compliance Plan.

In the Plan, Public Service projects the Eligible Energy that the Company is required to obtain to meet the Renewable Energy Standard ("RES") over the RES Planning Period of 2009 through 2020. The Plan uses the Company's October 2008 retail electricity sales forecast with Commission DSM Goals¹ to estimate the Renewable Energy Standard requirements for Solar Renewable Energy Credits ("S-RECs"), On-Site Solar RECs ("SO-RECs"), and Non-Solar RECs ("NS-RECs"). The Plan sets forth the Company's specific plans to acquire sufficient Eligible Energy to meet the requirements of the Renewable Energy Standard for 2009 and the Company's plans to fund additional Eligible Energy Resources for the years 2009 through 2020.

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¹ Commission Decision No. C08-0560 (June 5, 2008), Docket No. 07A-420E; ENTERED ENTERED

deferred balance. In 2009 and henceforth, as explained by Mr. Ahrens in his testimony, the Company believes the more appropriate balancing account for truing up projected costs to actual costs would be the ECA, given the large amount of intermittent Eligible

Energy that will be added our system.

Second, as described by Mr. Ahrens, the Company proposes to resolve the "time fence" disputes from earlier dockets by locking down the incremental costs that will hit the RESA at the time of the Compliance Report filing or at the time of contracting (for the larger contracts). This will protect the RESA dollars from wide swings due to changes in gas prices over time and will allow for better planning for the acquisition of Eligible Energy Resources.

Third, the Plan shows how the Company's new proposed Windsource program, pending in Docket No. 08A-260E, would be incorporated into the annual RES Compliance Plan filings; the Plan projects how growth in Windsource subscriptions will provide more dollars for the acquisition of additional Eligible Energy.

Finally, Public Service responds to the Commission's request to address the issue of whether external AC disconnects need to be provided. Public Service is proposing to relieve 10 kW and smaller PV systems of the requirement to have an external AC disconnect switch ("EDS"). Upon reviewing a number of papers, OSHA regulations, and activities that have recently transpired in other states, Public Service believes that there is no longer a need to require an AC EDS for solar systems below 10 kW, so long as the solar system has an Underwriters Laboratory ("UL") 1741 standard certified inverter. This is further discussed in Section 9 of the Plan

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	Exhibit A - part 1 Decision No. C09-0557	
-	DOCKET NO. 08R-424E Page 3 of 90	-
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Resources in the RES Plan to meet the Company's capacity and energy requirements.

In developing the RES Plan for this 2009 RES Compliance Plan, Public Service included all of the Eligible Energy Resources that were included in the Company's 2007 Colorado Resource Plan. In developing the No RES Plan, the Company removed all of the new Eligible Energy Resources in the RES Plan that the Company will acquire after 2008. 200 MW of Concentrating Solar Power with Storage, with an in-service date of 2013 was assumed to be a Section 123 resource. As such, it was included in both the RES Plan and the No RES Plan, so that its costs would not impact the incremental cost calculation used to determine the retail rate impact.

The results of our Base Case are set forth on Tables 6-1 and 6-3.

In Docket No. 06A-478E, a concept called the "time fence" was brought up by Commission Staff. The time fence concept suggested that the Commission should determine a time after which the costs and benefits of renewable resources would be counted as new resources and before which all the costs and benefits would be considered as sunk resources. Only the costs and benefits of the new non Section 123 resources would factor into the retail rate impact calculation. Public Service agreed with the concept of the time fence so long as the four renewable resources that were winning bids in the 2005 All Source RFP were considered sunk resources. Public Service believes this time fence needs to be established to ensure the benefits of the Eligible Energy Resources at the time the acquisition decision is made are recognized in future years.

Time Fence

To assure that both costs and benefits are included in the RES scenario when they are compared to the No-RES scenario in determining the retail rate impact, the Company proposes that a "time fence" be set or "locked down" once the net costs and benefits for a particular year have been quantified; those locked down net costs or benefits will be used from that point forward to assure that both the costs and the benefits are included in the RES Modeling.

Each time the RES/No RES modeling is performed there are new sets of assumptions, which if they had been the assumptions used at the time of earlier resource acquisition, could have altered the acquisition decision. It is not appropriate to continue to revisit acquisition decisions based upon later updated assumptions. The Company makes the best acquisitions it can, based upon the assumptions that are used at the time of acquisition. By locking down the costs and benefits of a new Eligible Energy resource at the time the acquisition decision is made, later changes in the modeling assumptions will not cause unintended consequences. When the Commission approves a RES Compliance Plan, acquisitions in accord with that plan are deemed prudent. Therefore, the assumed incremental costs or benefits associated with those acquisitions should remain constant over the life of that facility for purposes of calculating the incremental costs that must be charged against the RESA.

This "locking down" of net costs or net benefits is only performed to determine which Eligible Energy costs are recovered through the RESA and which costs are recovered through the ECA. Public Service will recover, through the combination of these two adjustment clauses, only the actual costs incurred. The only issue here is how much of the actual costs are charged against the RESA deferred account – an account that is limited by law to accumulations of no more than two percent annually on each customer's bill. Public Service suggests that the RESA impacts should be determined at the time of resource acquisition, or at the time of the next compliance plan report, rather than have the RESA impacts revisited every year with each compliance plan.

To implement this new proposal, for the 2009 RES Plan, the ongoing net incremental costs (and net benefits) of the Eligible Energy Resources that have impacted the retail rate impact calculations in earlier RES Compliance Plans, namely the SunE Alamosa central solar facility and the on-site solar facilities were determined separately and "locked down". The incremental costs of these resources will not be recalculated next year. These costs will impact the retail rate impact calculation by being collected through the RESA, but they were not "recalculated" based upon the updated assumptions next year.

Modeling the RES and No RES Plans

The modeling output of the RES Plan costs minus the No RES Plan costs provides the incremental cost of the New Eligible Energy Resources. These costs are shown on Tables 6-1, the Company's Base Case and 6-2, the Windsource Case in the column labeled "Incremental Costs." The avoided costs that matches the costs of the non-renewables is then "estimated" by subtracting the incremental costs from the projected total costs of the new Eligible Energy Resources.

The 2009 Compliance Plan consists of the resources identified in the 2007 Colorado Resource Plan as the Company's preferred plan which the Commission approved with modification, including the on-site solar facilities projected by Ms. Newell in her rebuttal testimony in Docket No. 07A-447E, updated to reflect the increased small program applications received by Public Service in the fourth quarter of 2008.

The following tables illustrate the resources in the RES and No RES models.

_	Exhibit A - part 1 Decision No. C09-0557 DOCKET NO. 08R-424E Page 7 of 90
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DEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

IN THE MATTER OF THE APPLICATION OF)
PUBLIC SERVICE COMPANY OF) DOCKET NO. 08A-__E
COLORADO FOR APPROVAL OF ITS 2009)
RENEWABLE ENERGY STANDARD)
COMPLIANCE PLAN)

DIRECT TESTIMONY OF DANIEL S. AHRENS

1		I. <u>INTRODUCTION</u>
2	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
· 3	A.	My name is Daniel S. Ahrens. My business address is 1225 Seventeenth
4		Street, Suite 1000, Denver, Colorado 80202.
5	Q.	BY WHOM ARE YOU EMPLOYED AND IN WHAT POSITION?
6	A.	I am employed by Xcel Energy Services, Inc., a wholly-owned subsidiary
7		of Xcel Energy Inc., the parent company of Public Service Company of
8		Colorado. My job title is Pricing Consultant, Pricing and Planning.
9	Q.	ON WHOSE BEHALF ARE YOU TESTIFYING IN THE PROCEEDING?
10	A.	I am testifying on behalf of Public Service Company of Colorado ("Public
11		Service" or the "Company").
12	Q.	HAVE YOU INCLUDED A DESCRIPTION OF YOUR QUALIFICATIONS
13		DUTIES, AND RESPONSIBILITIES?
14	A.	Yes. A description of my qualifications, duties, and responsibilities is
15		included as Attachment A.

7	Q.	WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?
2	A.	The purpose of my direct testimony is to:
3		1) Provide an overview of Public Service's 2009 Renewable Energy
4		Standard Compliance Plan ("Compliance Plan" or "Plan") which I am
5		sponsoring as Exhibit No. DSA-1;
6		2) Introduce the witnesses responsible for certain sections of the
7		Compliance Plan;
8		3) Support the Company's proposed cost recovery mechanism;
9		4) Describe the Company's proposed "time fence", which is how the
10		Company proposes to measure the incremental costs (costs less benefits)
11		of acquiring eligible energy resources for purposes of compliance with the
12		statutory retail rate impact cap; and
13		4) Describe how the Windsource program would affect the Renewable
14		Energy Standard Adjustment ("RESA") should the Commission approve
15		the Company's pending Windsource proposal in Docket No. 08A-260E.
16		II. PLAN OVERVIEW
17	0	COULD YOU PLEASE DESCRIBE THE RENEWABLE ENERGY
	Q.	STANDARD ("RES") RULES?
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19	Α.	Yes. The Commission enacted the Renewable Energy Standard Rules, 4
20		CCR 723-3-3650 et. seq, ("RES Rules") to implement Amendment 37 as
21		amended, most recently by House Bill 07-1281 (codified at C.R.S. §40-2-
22		124). The Commission issued its current RES Rules on July 23, 2007 in
23		Decision No. C07-0622.

1	Q.	LOOKING AT TABLE 6-4, IT APPEARS IN THE EARLY YEARS THAT
2		THE WINDSOURCE COSTS ARE AT TIMES GREATER THAN THE
3		PREMIUMS. IS THAT CORRECT?
4	A.	The Windsource costs in Column F1 identify the estimated total
5		Windsource revenue requirement for the existing Windsource portfolio,
6		whereas the premiums are based on the incremental renewable costs (on
7		a \$/kWh basis) times the projected. It is not an apples-to-apples
8		comparison.
9		V. TIME FENCE
10	Q.	IN THE PAST TWO PLANS, THE ISSUE OF A TIME FENCE HAS BEEN
11		RAISED. PLEASE DESCRIBE THIS TIME FENCE ISSUE.
12	A.	The current rules on not treat the costs and the benefits symmetrically
13		between RES and No-Res scenarios. Specifically:
14		The last sentence of Rule 3661(h)(l) states:
15 16 17 18		For purposes of this rule, new eligible renewable energy means eligible energy from resources, which are not commercially operational at the time these two modeling scenarios are performed.
19		The last sentence of Rule 3661(h) (II) provides:
20 21 22 23 24 25 26 27		in calculating the annual net retail rate impact in each compliance plan of the first compliance year of the RES planning period, the QRU shall take into account the on-going annual costs of all eligible energy that the QRU has contracted to acquire under the standard rebate offer under rule 3658 and all eligible energy from resources that were constructed by the QRU or contracted for by the QRU after the effective date of these rules.

Exhibit A - part 1 Decision No. C09-0557 DOCKET NO. 08R-424E

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Exhibit A - part 1 Decision No. C09-0557 DOCKET NO. 08R-424E Page 12 of 90

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Report or at the time we sign a contract. The purpose of allowing for these two options is administrative feasibility. For the smaller additions, it does not make sense to continually re-run computer models to identify the net benefits of each small resource addition. For larger projects, the Company may wish to lock the net costs or net benefits at the time we sign a power purchase agreement or contract for the major components of a self-build project. Irrespective of whether the lock-in occurs at the time of the annual compliance report of earlier, the calculations supporting the lock-ins will be provided with the annual compliance reports.

10 Q. DOES THIS 2009 COMPLIANCE PLAN FILING INCLUDE ANY 11 LOCKED-IN NET COSTS OR NET BENEFITS?

Yes. As Mr. Art Warren describes, he projected the net costs (costs over benefits) of the SunE Alamosa facility and the on-site solar projects that the Company will acquire through December 31, 2008. These are shown on his Tables 6-1 and 6-2 in the last column of each exhibit. These net costs are then imported into Mr. Walsh's Tables 6-3 and 6-4 and are recovered with RESA dollars.

18 VI. <u>WINDSOURCE</u>

Q. IN DOCKET NO. 08A-260E THE COMPANY FILED WITH THE COMMISSION AN APPLICATION TO CHANGE THE PRICING AND ACCOUNTING OF OUR VOLUNTARY RENEWABLE ENERGY RATE, BETTER KNOWN AS WINDSOURCE. COULD YOU PLEASE SUMMARIZE THE COMPANY'S PROPOSAL IN THAT DOCKET?

Exhibit A - part 1 Decision No. C09-0557 DOCKET NO. 08R-424E Page 14 of 90

	
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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)	DOCKET NO. 08A- 532E
COLORADO FOR APPROVAL OF ITS 2009)	
RENEWABLE ENERGY STANDARD)	
COMPLIANCE PLAN)	

REBUTTAL TESTIMONY AND EXHIBITS OF DANIEL S. AHRENS

1		I. <u>INTRODUCTION</u>
2	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
3	A.	My name is Daniel S. Ahrens. My business address is 1225 Seventeenth
4		Street, Suite 1000, Denver, Colorado 80202.
5	Q.	BY WHOM ARE YOU EMPLOYED AND IN WHAT POSITION?
6	A.	I am employed by Xcel Energy Services, Inc., a wholly-owned subsidiary
7		of Xcel Energy Inc., the parent company of Public Service Company of
8		Colorado. My job title is Pricing Consultant, Rates and Regulatory Affairs.
9	Q.	ON WHOSE BEHALF ARE YOU TESTIFYING IN THE PROCEEDING?
10	A.	I am testifying on behalf of Public Service Company of Colorado ("Public
11		Service" or the "Company").
12	Q.	HAVE YOU FILED DIRECT TESTIMONY IN THIS CASE?
13	A.	Yes.

or to contact customers about HomeSmart's solar offering. HomeSmart 1 2 has access to CRS only for the following limited purposes: 3 To assure customers are paying their HomeSmart Service 4 charges or Appliance Repair service portion of a 5 HomeSmart customer's bill, 6 To Issue HomeSmart-related credits to customer bills, and 7 Cancel HomeSmart charges for customers who cancel 8 HomeSmart services. 9 To verify a HomeSmart customer's account status prior to 10 making a service call. 11 ON PAGE 5, LINE 1, OCC WITNESS MR. SHAFER SUGGESTS THAT Q. CARBON COSTS SHOULD BE EXCLUDED FROM THE "LOCK 12 DOWN" CALCULATION THAT YOU HAVE PROPOSED. WHAT IS HIS 13 **REASONING?** 14 15 Α. Mr. Shafer is concerned that by adding the carbon to the "lock down" 16 calculation, that the benefits of the renewable resources are over-stated. 17 Since the lockdown calculation is identifying the benefits by comparing the 18 RES and No-RES, including the carbon, Mr. Shafer is concerned that a 19 larger delta between the two scenarios would result. Mr. Shafer 20 acknowledges that the RES Rules require the utility to use the same 21 methodologies and assumption used in the most recent approved 22 resource plan when calculating the retail rate impact (again, the difference

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between the RES and No-RES), unless otherwise approved by the Commission. He suggests that the Commission exercise the option to approve something other than the same assumptions that were used in the least-cost plan since customers do not pay for carbon costs.

Q. DO YOU AGREE?

I believe it is appropriate to incorporate carbon costs in the "lock-down" calculations. Public Service believes that there will be carbon costs in the future and that the Commission approved carbon cost proxy of \$20 per ton starting in 2010 is a reasonable proxy for what that cost is likely to be. I don't believe it would be consistent to include a carbon cost for purposes of determining the retail rate impact, but ignore the same cost for purposes of calculating the "lock down".

The Commission has agreed with the Company that we should be making future resource acquisition decisions based upon assumptions of future carbon emission costs, even though the form these costs will take is yet unknown. As such, it is appropriate to use these expected costs in the RES- No RES modeling, which determines the retail rate impact of the acquisition of renewable resources. Further, it is appropriate to use these expected costs in the lock-down of the costs that are charged against the RESA, as the Company proposes. Otherwise, there will be uncertainty as to how many RESA dollars are available for future resource acquisitions, thereby hampering utility resource planning.

Q. HAVE YOU INCLUDED A CORRECTED TABLE 4-4?

_	Exhibit A - part 1 Decision No. C09-0557 DOCKET NO. 08R-424E Page 18 of 90
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OF THE STATE OF COLORADO

IN THE MATTER OF THE APPLICATION OF)	<i>~</i> 00
PUBLIC SERVICE COMPANY OF)	DOCKET NO. 08A- <u>53</u>
COLORADO FOR APPROVAL OF ITS 2009)	
RENEWABLE ENERGY STANDARD)	
COMPLIANCE PLAN)	

DIRECT TESTIMONY OF KENNAN J. WALSH

1	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
2	A.	My name is Kennan J. Walsh. My business address is 1225 17 th Street,
3		Denver, Colorado 80202.
4	Q.	BY WHOM ARE YOU EMPLOYED AND IN WHAT POSITION?
5	A.	I am employed by Xcel Energy Services, Inc., a wholly-owned subsidiary
6		of Xcel Energy Inc., the parent company of Public Service Company of
7		Colorado. My job title is Senior Rate Analyst.
8	Q.	ON WHOSE BEHALF ARE YOU TESTIFYING IN THE PROCEEDING?
9	A.	I am testifying on behalf of Public Service Company of Colorado ("Public
10		Service" or the "Company").
11	Q.	HAVE YOU INCLUDED A DESCRIPTION OF YOUR QUALIFICATIONS,
12		DUTIES, AND RESPONSIBILITIES?
3	A.	Yes. A description of my qualifications, duties, and responsibilities is
4		included as Attachment A.
5	Q.	WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

including the Solar Thermal with gas backup. Column D, "Wind Energy Costs," sets forth the projected costs of wind energy resources. Column E, "Other Renewable Costs," includes the costs of the non-solar, non wind "new" Renewable Resources, in this case the expected 4 MW biomass, 3 MW Erie Landfill and 20 MW Geothermal facility. Column F reflects the costs for the Company owned PV described in Section 5. Column F1 on Table 6-4 represents Windsource costs.

Column G, "Total Renewable Energy Costs," is the summation of the costs included in Columns B, C, D, E and F. The costs shown in Column G represent the total costs to the Company of the "new" Eligible Energy Resources that are in the RES Plan, and not in the No RES Plan.

Column H, "Modeled Incremental Costs" are the cost differences in each year between the RES Plan and the No RES Plan, as determined by the Strategist modeling and as set forth on Tables 6-1 and 6-2.

Column I, "Estimated ECA Costs" are the differences between the Total Renewable Energy Costs in the RES Plan found in Column G and the "Modeled Incremental Costs" from Column H. They are the avoided costs of the non-renewable resources that are in the No RES Plan that are displaced by renewable resources in the RES Plan.

Column J, "Ongoing Incremental Costs," shows the net costs and benefits of the New Eligible Energy Resources that is locked down under the "time fence" process. Column J reflects the accumulation of time fence net costs and benefits each annual Eligible Energy Resource portfolio from year to year.

Exhibit A - part 1
Decision No. C09-0557
DOCKET NO. 08R-424E
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1 Q. HAS THE OCC DEVELOPED A METHOD TO ALLOCATE THE COSTS

- 2 CREATED BY VARIANCES IN PROJECTED GENERATION VERSE ACTUAL
- 3 GENERATION AS YOU HAVE SUGGESTED?
- 4 A. No, but if the Commission agrees with the concept, then it could require Public
- 5 Service to include a method which assigns some of the costs due to variances in Eligible
- 6 Energy production to both the RESA and ECA in its next Compliance Plan filing.
- 7 C. Request to Use Resource Planning Assumptions in the Calculation of the Retail Rate Impact and the "Lock Down" Calculation
- 9 Q. PLEASE DESCRIBE THE COMPANY'S LOCK DOWN PROPOSAL.
- 10 A. Starting on page 19, line 9 of his Direct Testimony, Mr. Ahrens describes the concept
- of a time fence and how it factors into the determination of the costs and benefits of Eligible
- 12 Energy resources. He explains that at the time of acquisition of an Eligible Energy resource,
- the Company estimates the associated net incremental cost. However, without a "lock down."
- 14 this resource's net incremental cost will likely change in the future Compliance Plans due to
- 15 the fluctuations in natural gas prices. Mr. Ahrens contends that if the Company is forced to
- 16 continually recalculate incremental costs that are driven by unavoidably imprecise gas price
- forecasts, there could be a situation where the RESA funds will be inadequate to pay for those
- incremental costs. To avoid the possible changes in the net costs or net benefits, it proposes
- 19 to lock down for each Eligible Energy resource—at either the time it files its Compliance
- 20 Report or at the time it signs a contract—that resource's net cost or net benefit.

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A.

Q. WHAT IS THE OCC'S CONCERN WITH THE LOCK DOWN PROPOSAL?

We are concerned that the resource acquisition planning assumption regarding the

2 carbon cost adder should not be included in the lock down calculation until the actual carbon 3 costs become "known and measurable." To help better explain this concept, I have prepared 4 three diagrams as Exhibit FCS-1. I should first mention that the values shown on pages 2 and 5 3 of these diagrams are not based on actual numbers nor are the relative changes between the 6 two scenarios (with and without a carbon cost adder) intended to be reflective of actual 7 differences between the two. However, I think they reasonably represent how carbon costs 8 factor into the determination of what has been called "headroom," which is the amount of 9 Eligible Energy resources that can be added before the two percent retail rate cap is reached. 10 However, I would like to start with Page 1 of 3 of Exhibit FCS-1 to provide an overview of how a carbon adder affects the retail rate impact calculation. This bar graph 12 begins with the first green bar on the left-hand-side and it represents the No-RES plan with a 13 carbon adder. It has a height of 100 units. The second green bar is the RES plan with a 14 carbon adder. It has a height of 102 units. Under the retail rate impact cap, the RES plan can be up to two percent greater in cost than the No-RES plan's cost. that is why it has a height 16 of 102 units (100 units X 1.02). The first blue bar is the No-RES plan without a carbon adder. 17 It has a height of 98 units. I arbitrarily picked a value of two units to represent the lower cost 18 of the portfolio when there is no carbon adder. The second blue bar is the RES plan without a 19 carbon adder. It has a height of 99.96 units. Its height is the product of 98 units times the 20 1.02 factor explain previously. The red arrow between the top of the second blue bar (the

¹ The associated RESA program administrative costs are in both scenarios, but have been ignored for this explanation.

RES Plan without a carbon adder) and the dashed green line, which represents the top of the

second green bar (the RES Plan with a carbon adder) indicates that 2.04 units of headroom is

2 created by including a carbon adder in the determination of the retail rate impact calculation.

The practical effect of this additional headroom is that more Eligible Energy resources can be

acquired when a carbon adder is included in the retail rate impact calculation.

Page 2 of 3 of Exhibit FCS-1 shows the additional headroom concept and the additional Eligible Energy resources available when a carbon adder is included in a line graph format. Beginning on the left-hand-side (in green text) of Page 2 of 3, Exhibit FCS-1 shows that the No-RES costs with a carbon cost adder is 26 on the hypothetical scale. The same starting point on the right-hand-side (in blue text) for the No-RES costs without a carbon cost adder is 24. In both scenarios, the cost of the resource portfolio after some fossil fuel resources are removed results in either a value of 21 under the carbon cost adder scenario or a value of 22 under the without a carbon cost adder scenario. In the final step, Eligible Energy resources are added until the two percent retail rate cap is reached. Again focusing on the hypothetical scale, the RES costs with a carbon cost adder reaches a cost of 29, while the RES costs without a carbon cost adder reaches a cost of 27. Therefore the headroom created by the carbon cost adder is 8 units (29 - 21), while the headroom created without a carbon cost adder is 5 units (27 - 22).

On page 3 of 3 of Exhibit FCS-1, I develop the same type of comparative diagram for the development of the lock down. On the left-had-side, in green text, the No-RES with a carbon cost adder scenario starts at 28, while on the right-hand-side, in blue text, the No-RES without a carbon cost adder scenario starts at 27. Once the equivalent sized fossil fuel resource is removed the cost of the portfolio drops to 24 under the scenario with a carbon cost adder, while the cost of the portfolio without a carbon cost adder drops to 25. Thus the ability

- 1 for an Eligible Energy resource to achieve net benefits is greater since there is more
- 2 "distance" when a carbon cost adder is included (4 units or 28 24) as compared to the
- 3 scenario when no carbon cost adder is included (2 units or 27 25).

4 Q. SO WHY DOES IT MATTER THAT MORE HEADROOM IS BEING

5 CREATED BY THE CARBON ADDER?

- 6 A. Because imputing a carbon cost when no actual carbon costs are currently being paid
- 7 for by the customers on their bills artificially creates headroom that does not exist in the "real
- 8 world." The OCC believes that the method used to calculate the retail rate impact and the
- 9 associated lock down amount should be based on assumptions which are more closely tied to
- what is actually impacting customer bills and not on resource planning assumptions which are
- used in the selection process of resources.

12 Q. MR. SHAFER PLEASE DESCRIBE RES RULE 3661(E).

- 13 A. This RES Rule² provides that for purposes of calculating the retail rate impact, the
- 14 utility shall use the same methodologies and assumptions it used in its most recently approved
- least-cost planning³ case unless otherwise approved by the Commission.

16 Q. DO YOU KNOW WHAT CARBON COSTS WERE RECENTLY APPROVED

17 BY THE COMMISSION IN PUBLIC SERVICE'S MOST RECENT ELECTRIC

18 RESOURCE PLANNING PROCESS?

- 19 A. I believe the Commission approved a carbon tax of \$20 per ton starting in 2010 and
- 20 escalating at seven percent per year.⁴

² The RES Rules are found at 4 Code of Colorado Regulations 723-3-3650 to 723-3-3665.

³ There is a pending RES Rulemaking case, Docket No. 08R-424E, where the reference to the Commission's least-cost planning process is changed to the current electric resource planning process.

⁴ See, Decision No. C08-0929, paragraph 270.

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- 1 Q. IS THE OCC BASING ITS POSITION ON EXCLUDING THE CARBON
- 2 COST ADDER FROM THE RETAIL RATE IMPACT CALCULATION ON THE
- 3 LAST PHRASE IN YOUR EARLIER ANSWER REGARDING 'UNLESS
- 4 OTHERWISE APPROVED BY THE COMMISSION'?

5 A. Yes and let me explain why. To help put this into context, I want to discuss how the

6 Electric Resource Planning ("ERP") assumption regarding natural gas prices differ from a

carbon cost adder assumption. In the ERP process, the Commission does not approve specific

natural gas prices, but instead approves a methodology, which is updated at the time the utility

begins it resource selection process after it has received bids. While it is unlikely that the

updated natural gas prices will reflect actual prices when the resource comes on-line, it does

not matter because customers ultimately pay whatever the actual natural gas prices are

through the ECA and not the updated natural gas price that was used in the selection resource

process. However, carbon costs are not analogous to updated natural gas prices because, at

least as of today, customers do not ultimately pay for the carbon costs that were used in the

screening process or pay for the carbon costs included on their bills.

I am aware of a similar situation where an imputed value was used in the resource selection process, but when the actual costs of the wind resources were included in the RES/No-RES modeling it had the unintentional consequence of increasing the incremental energy costs recovered through the RESA.⁵ The imputed value was an \$8.75 per MWh Renewable Energy Credit ("REC") for all renewable resources. Attached as Exhibit FCS- 2 is OCC Discovery Question 2-1 where I asked Public Service to confirm my understanding of

this outcome. This exchange is presented in sub-part G of OCC Discovery Question 2-1. In

⁵ Docket No 07A-462E.

- 1 my opinion, this demonstrates why using imputed value or costs which are not being
- 2 recovered through actual customer bills can present problems.
- 3 O. WHAT DOES THE OCC PROPOSE THE COMPANY DO FOR ITS 2009 RES
- 4 COMPLIANCE PLAN AS IT RELATES TO THE LOCK DOWN CALCULATION OF
- 5 NET COSTS OR NET BENEFITS OF ELIGIBLE ENERGY RESOURCES?
- 6 A. Public Service should be allowed to calculate an associated lock down for an Eligible
- 7 Energy resource's net cost or net benefits as it has proposed with the exception that no carbon
- 8 cost adder be included in the analysis. We would also suggest that the Company be required
- 9 to retain the associated data and modeling files used in these net cost or net benefit lock down
- 10 calculations such that when carbon costs become more known and measurable, the associated
- lock downs can be recalculated for all prior Eligible Energy resources. Then the updated lock
- down figures can be factored into future Compliance Plans.
- 13 Q. IS THE OCC OPPOSED TO A UTILITY GETTING MORE ELIGIBLE
- 14 ENERGY RESOURCES FOR CUSTOMERS?
- 15 A. No. We are concerned that the carbon cost adder should remain as a planning
- assumption for resource modeling purposes and should not be included in a net cost/benefit
- calculation until it becomes a known and measurable cost which customers pay.
- 18 Q. ARE CARBON COSTS INCLUDED IN OTHER ANALYSES WITHIN
- 19 PUBLIC SERVICE 2009 COMPLIANCE PLAN?
- 20 A. Yes. The use of the carbon cost adder in also factored into the revenue figures Public
- 21 Service presents in Table 6-3. Exhibit FCS-3 is OCC Discovery Question 1-12. It shows that
- starting in 2010, the Company has estimated an additional \$2,621,000 of additional RESA

- 1 revenues attributable to the additional carbon dioxide costs above the 20 percent level and the
- 2 additional carbon cost related revenues continue through the RES Planning Period of 2020.
- 3 O. IS THE OCC TAKING ISSUE WITH THIS ASPECT OF THE COMPANY'S
- 4 2009 COMPLIANCE PLAN?
- 5 A. No. Because the effects of this inclusion does not start until 2010. I believe the 2010
- 6 Compliance Plan docket is the proper venue to discuss this issue.
- 7 O. IN ONE OF YOUR EARLIER ANSWERS YOU MENTIONED THAT
- 8 BECAUSE THE CARBON ADDER IS NOT PART OF THE "REAL WORLD" IN
- 9 TERMS OF CUSTOMERS' BILLS THEN IT SHOULD NOT BE INCLUDED IN THE
- 10 RETAIL RATE IMPACT CALCULATION. DID I ACCURATELY REPRESENT
- 11 YOUR POSITION ON THIS POINT?
- 12 **A.** Yes.
- 13 Q. MAY I TAKE THIS NEXT PORTION OF OUR DISCUSSION INTO THE
- 14 REAL WORLD, AS YOU USE THAT TERM?
- 15 **A.** Fair enough.
- 16 Q. ISN'T THE COLLECTION OF ACTUAL RESA FUNDS SIMPLY THE RESA
- 17 RIDER PERCENTAGE TIMES THE TOTAL VALUE OF A CUSTOMER'S
- 18 ELECTRIC BILL?
- 19 **A.** Yes.

Exhibit A - part 1 Decision No. C09-0557 DOCKET NO. 08R-424E Page 29 of 90

Answer Testimony of Frank Shafer Docket No. 08A-532E Page 11 of 16

Q. SO WHY DOES IT MATTER THAT THERE COULD BE MORE HEADROOM AND THUS MORE ELIGIBLE ENERGY RESOURCES DEPLOYED UNDER A SCENARIO WHEN A CARBON ADDER IS INCLUDED IF THE MAXIMUM RESA CHARGE ON A CUSTOMER'S BILL IS FIXED AT TWO PERCENT?

1 Described below is my current working theory of the interplay between the RESA A. 2 modeling headroom and actual RESA collection through customer bills. Using Page 1 of 3 of 3 Exhibit FCS-1 as a way to put this into a visual context, although the differences between 4 both the blue bars (1.96 units) and both the green bars (2 units) is two percent of the 5 respective scenarios the relevant difference is between the two RES scenarios which is 2.04 6 units. For purposes of the retail rate impact calculation with a carbon adder, we are using a 7 larger base upon which to measure two percent from and to acquire more Eligible Energy 8 resources. However, in the real world that larger base does not exist because customers are 9 not paying the associated carbon costs which made the green RES bar higher. My suspicion 10 is that by allowing more Eligible Energy resources to be acquired because carbon costs have 11 been included, that in subsequent RESA Account reconciliations (comparing actual RESA 12 collections from customers to the modeled incremental costs shown in Column H of Table 6-13 3) it might turn out that actual RESA collections will fall short of the model incremental costs 14 of the Eligible Energy resources. This would mean that the retail rate impact cap has been 15 exceeded. This is visually demonstrated on Page 1 of 3 with the modeling headroom of 2.04 16 units, but with the real world headroom (because carbon costs are not currently being charged 17 to customers) of only 1.96 units.

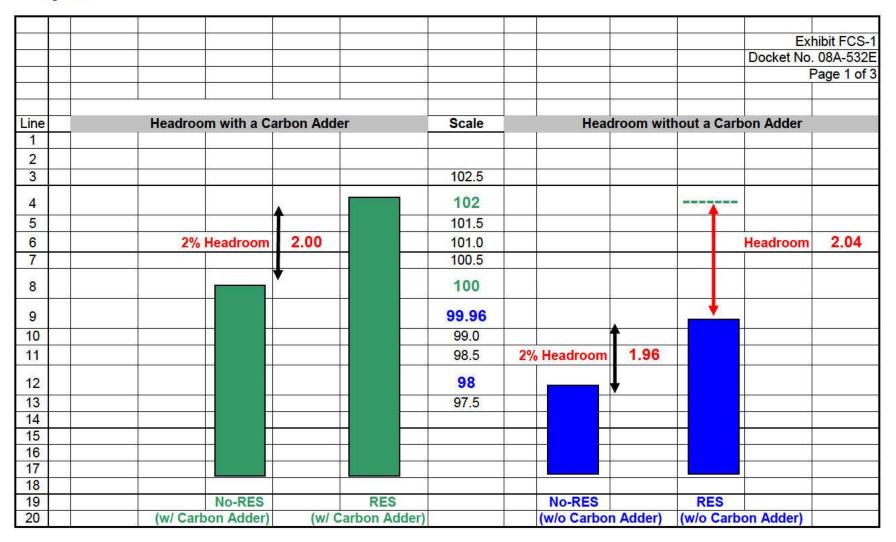
We are also concerned that the allocation percentages for the WiP between the Xcel operating companies is being fixed as of the 2008 values. The OCC believes that it would be appropriate to update the allocation percentages at some future point in time during the WiP's useful life. The Company has indicated that the WiP Forecasting Tool has a five-year useful life. The OCC recommends that the allocation percentages to Xcel's operating companies be recomputed in third year of the WiP's useful life based on a more current relative penetration rate of wind on each of the Xcel operating companies' system or based on whichever method the Commission adopts in this proceeding. Under this recommendation years four and five of the WiP's useful life would use updated allocation percentages.

E. Concluding Comment

Q. IS THERE SOMETHING ELSE YOU WANT TO SAY?

A. Yes. The common theme through my testimony is that I am challenging proposals that Public Service has made in this Compliance Plan filing which helps the RESA and the retail rate impact cap calculation. I contended that: 1) the variations in generation between forecasts and actual need to be shared between the deferred accounts for the RESA and the ECA instead of being exclusively assigned only to the ECA; and 2) that carbon costs should not be included in the retail rate impact calculation or the lock down calculation until they are known and measurable and being charged to customers, instead of using the estimated carbon costs from Public Service's most recent ERP case;

The OCC believes that in order for the retail rate cap to have meaning, costs that should appropriately be "charged" to the RESA should not be charged to the ECA and that estimated carbon costs should not be included in the determination of rates until carbon costs



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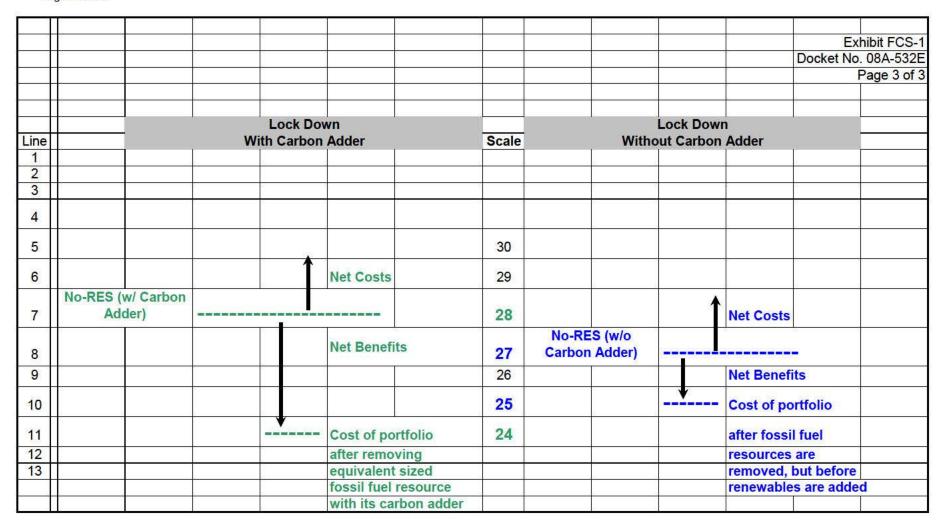


Exhibit A - part 1 Decision No. C09-0557 DOCKET NO. 08R-424E Page 34 of 90

Re: The Application of Public Service Company) Second 3 of Colorado for Approval of its 2009 Renewable) Of the Off Energy Standard Compliance Plan) Served On Docket No. 08A-532E)

Second Set of Discovery Requests Of the Office of Consumer Counsel Served On Public Service Company February 6, 2009

DISCOVERY REQUEST NO. OCC2-1:

In this docket, Public Service is proposing to be allowed to "lock down" the incremental costs of a new Eligible Energy Resources.

- a) Under Public Service's proposal, will this lock down calculation include a value for the "carbon savings" of the Eligible Energy Resource?
- b) Under Public Service's proposal, will this lock down calculation include a value for the "carbon costs" of the fossil fuel equivalent resource used in the No-RES scenario?
- c) Under Public Service's proposal, which Eligible Energy Resources will use the carbon prices approved in the Company 2007 Colorado Resource Plan case, Docket No. 07A-447E for the lock down calculation?
- d) Mr. Warren explains on page 5 of his Direct Testimony, lines 3 to 5 that in the last column of Table 6-1 is the on-going costs of the SunE Alamosa and all On-Site solar installed as of the as of the end of 2008. Please break out by year this column into two sets—one attributable to SunE Alamosa and one attributable to all On-Site solar resources. Please provide the spreadsheet, with cell references intact, which performs these lock down calculations.
- e) Please provide the on-going costs shown in the last column of Table 6-1, but without including any carbon costs being included in the analysis. Please break out by year the values into two sets—one attributable to SunE Alamosa and one attributable to all On-Site solar resources. Please provide the spreadsheet, with cell references intact, which performs these lock down calculations.
- f) Should future carbon costs/taxes legislation be approved which establishes known costs for carbon, would Public Service agree to recalculate the prior years' lock down amounts based on actual carbon costs/taxes and true-up the RESA account for the difference between estimated carbon costs and known costs for carbon?

Exhibit A - part 1 Decision No. C09-0557 DOCKET NO. 08R-424E Page 35 of 90 Exhibit FCS-2 Docket No. 08A-532E Page 2 of 2

g) Does Public Service agree with the following statements. As a result of the settlement reached in its 2003 LCP, it agreed to impute a Renewable Energy Credit value of \$8.75 per MWh in the resource selection process for renewable resources. This imputed REC value was used in the selection process for the 2005 All-Source RFP. The use of the imputed REC value contributed in part to the selection of four wind resources because they were shown to be cost effective, due in part to the \$8.75 per MWh imputed REC value. Contracts were signed for four wind resources and the facilities went into service. However, when their actual costs were included in the RES/No-RES modeling in Docket No. 06A-478E, they had the unintentional consequence of increasing the incremental energy costs recovered through the RESA. If the Public Service disagrees with any of the above statement, please identify which statements the Company disagrees with and why.

RESPONSE:

- a) Yes.
- b) Yes.
- c) All eligible renewable resources are compared to thermal resources in the No RES model and therefore include the carbon prices when considering the lock down calculation.
- d) See Attachment OCC2-1.
- e) Unavailable. The RES and No RES modeling, and Ongoing Costs calculations were not performed without Carbon Costs.
- f) No. The purpose of the lock-down provision is to lock in expected incremental costs (or incremental savings) at the time that the resource is procured. Therefore, Public Service does not agree that the RESA balance should be changed if carbon costs are different in the future from the Commission-approved carbon estimates that are used at the time of resource procurement. The same is true for all other cost estimates in the STRATEGIST model.
- g) Public Service agrees with all of these statements.

Sponsor: Art Warren (a - e)

Response Date: February 12, 2009

Dan Ahrens (f & g)

Exhibit A - part 1 Decision No. C09-0557 DOCKET NO. 08R-424E Page 36 of 90 Exhibit FCS-3 Docket No. 08A-532E Page 1 of 2

Re: The Application of Public Service Company of Colorado for Approval of its 2009 Renewable)	First Set of Discovery Requests Of the Office of Consumer Counsel
Energy Standard Compliance Plan)	Served On Public Service Company
Docket No. 08A-532E)	January 15, 2009

DISCOVERY REQUEST NO. OCC1-12:

On page 7 lines 1 to 12 of Mr. Warren's Direct Testimony, he indicates that Public Service has included the cost of carbon emissions above the 20% reduction for purposes of calculating the RESA beginning in the year 2010. Please identify the yearly amount of carbon costs above the 20% level for the years 2010 to 2020 included in the RESA calculations.

RESPONSE:

See Attachment OCC1-12.

Sponsor: Art Warren **Response Date:** February 9, 2009

Docket No. 08A-532E Page 2 of 2

Year	Wholesale LRS	Retail	CO2 \$000 above 20%	CO2 \$000 added to Retail Revenue Forecast	CO2 RESA \$000 @ 2% RESA
2010	14%	86%	\$152,464	\$131,042	\$2,621
2011	14%	86%	\$158,786	\$136,221	\$2,724
2012	9%	91%	\$133,884	\$122,202	\$2,444
2013	9%	91%	\$126,158	\$114,753	\$2,295
2014	9%	91%	\$133,365	\$121,003	\$2,420
2015	9%	91%	\$154,213	\$139,582	\$2,792
2016	10%	90%	\$154,013	\$139,094	\$2,782
2017	10%	90%	\$145,915	\$131,580	\$2,632
2018	10%	90%	\$166,613	\$150,037	\$3,001
2019	10%	90%	\$179,283	\$161,228	\$3,225
2020	10%	90%	\$189,136	\$169,880	\$3,398

Exhibit A - part 1 Decision No. C09-0557 DOCKET NO. 08R-424E Page 38 of 90

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Exhibit A - part 1 Decision No. C09-0557 DOCKET NO. 08R-424E Page 42 of 90 Exhibit A - part 1 Decision No. C09-0557 DOCKET NO. 08R-424E Page 43 of 90

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Exhibit A - part 1 Decision No. C09-0557 DOCKET NO. 08R-424E Page 47 of 90

Exhibit A - part 1 Decision No. C09-0557 DOCKET NO. 08R-424E Page 48 of 90

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Year	Wholesale LRS	Retail	CO2 \$000 above 20%	CO2 \$000 added to Retail Revenue Forecast	CO2 RESA \$000 @ 2% RESA
2010	14%	86%	\$152,464	\$131,042	\$2,621
2011	14%	86%	\$158,786	\$136,221	\$2,724
2012	9%	91%	\$133,884	\$122,202	\$2,444
2013	9%	91%	\$126,158	\$114,753	\$2,295
2014	9%	91%	\$133,365	\$121,003	\$2,420
2015	9%	91%	\$154,213	\$139,582	\$2,792
2016	10%	90%	\$154,013	\$139,094	\$2,782
2017	10%	90%	\$145,915	\$131,580	\$2,632
2018	10%	90%	\$166,613	\$150,037	\$3,001
2019	10%	90%	\$179,283	\$161,228	\$3,225
2020	10%	90%	\$189,136	\$169,880	\$3,398

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COMPLIANCE PLAN

BEFORE THE PUBLIC UTILITIES COMMISSION 2009 APR 17 Pil 4: 09

IN THE MATTER OF THE APPLICATION OF)
PUBLIC SERVICE COMPANY OF)
COLORADO FOR APPROVAL OF ITS 2009)
RENEWABLE ENERGY STANDARD)

DOCKET NO. 08A-532E

THE STATE OF COLORAD

STATEMENT OF POSITION OF PUBLIC SERVICE COMPANY OF COLORADO

OF THE STATE OF COLORADO

Public Service Company of Colorado respectfully requests that the Commission approve Public Service's 2009 Renewable Energy Standard Compliance Plan (the "2009 RES Plan"). The 2009 RES Plan is set forth in Hearing Exhibits 1 and 2 and is further discussed in the testimony provided by Public Service's witnesses. The 2009 RES Plan fully complies with Commission Rule 3657. The 2009 RES Plan meets and exceeds the Renewable Energy Standards.

In this Statement of Position, Public Service will address the major disputed issues raised in this Docket. To the extent we do not address an issue, Public Service requests that the Commission adopt the position articulated by the Company in our testimony and exhibits.

Disputed Issues

I. Determining the Retail Rate Impact

Commission Rules 3660 and 3661 address the issues of utility cost recovery for Eligible Energy Resources and the determination of the retail rate impact of these resource acquisitions. There were several disputed issues that were raised concerning the Company's proposed calculation of the retail rate impact of our 2009 RES Plan and subsequent plans. We address each of these issues in turn.

incremental v. actual non-incremental costs than the accounting transfers we used in past years.

The Staff has argued that this issue should be deferred until the Company's next Phase II rate case when the ECA is discussed. We disagree. There is nothing about the ECA design that will impact this decision. There needs to be one account for truing up estimated to actual costs. We have explained why we want to switch that account from the RESA to the ECA. There is no need to wait for the Phase II to make this decision. Plus, the Company needs to know which dollars are going to hit the RESA deferred balance when we prepare our 2010 RES Plan, due to be filed on July 1, 2009. It is very unlikely that there will be a Phase II rate case decision by that date.

The OCC argued that we should split the extra wind production between the ECA and the RESA. We believe this proposal is too complicated and unnecessary. Since the bulk of each wind MWh is non-incremental cost, the majority of the cost should hit the ECA anyway. In order to obtain the precision requested by the OCC, Public Service would have to run a RES-No RES Plan for each wind resource, each year – which is a large amount of work. This would probably yield only minor variations from what we propose. Public Service respectfully requests that the Commission adopt the Company's proposal.

f. The "lock down" proposal.

The difference between the RES Plan and the No RES Plan provides the estimate of the incremental costs of the renewable resources that must be within the retail rate impact cap. This issue involves which renewable resources in the utility's RES Plan are displaced by non-renewable resources in the utility's No RES Plan. This

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contracting to purchase the output from these renewable resources, or constructing these resources, based upon their passing the retail rate impact cap test. We do not want to have to revisit these decisions and reprice the incremental cost based upon later changes in the costs of either natural gas or carbon, because of the risk of substantial decreases in the funds available in the RESA account.

It is standard regulatory practice to evaluate utility actions based upon what is known or projected at the time that the resource decision is made. This is test that is applied to determine whether a utility acted in a prudent manner. Utility actions are not judged based on hindsight. We believe that this same concept – judging renewable resource acquisition on the basis of the facts and projections at the time the resource acquisition decision is made – should apply to the calculation of the retail rate impact limit. The Commission has been authorized by C.R.S. §40-2-124 to interpret how to apply the retail rate impact cap. We urge the Commission to adopt an interpretation that is workable for the utilities, that avoids booms and busts in the renewables market, and that avoids retrospective loss of RESA funds.

2. Allocations of the On-site Solar Funds

COSEIA and the Interwest Energy Alliance dispute how the on-site solar funds should be allocated among the Company's small, medium and large programs. Public Service respectfully requests that the Company's 2009 plan for allocating these funds, set forth in Section 5 of the 2009 RES Plan and in the testimony of Ms. Newell, be approved. This allocation has been pretty much predetermined by the Company's proposal to honor all of the applications that were submitted in October 2008. As the Commission is aware, when the Company announced that it intended to reduce the So-

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Company's proposal will place the risk of changing gas prices wholly on rate payers for the purpose of providing a stable market for small renewable resource developers.

B. The Commission should defer the Company's proposed cost recovery through the Electric Commodity Adjustment ("ECA") to the upcoming docket which will examine all aspects of the mechanism.

In past Company Compliance Plans, the differences between the projected cost and the actual cost of Eligible Energy have been trued up by adjustments to the RESA deferred account. As part of this proceeding, Public Service seeks approval from the Commission to change the true up mechanism from the RESA to the ECA. As the basis for making this change, the Company argues that there are currently no wind costs recovered through the RESA. However, as wind comes on line, Public Service is concerned that there will be significant variation in the actual output compared to what was projected, which will create a significant impact on the RESA deferred balance. Public Service argues that the variations caused by increases or decreases in wind production should be accomplished through adjustments to the ECA. ¹² If the Commission approves the Company's proposal, it will have the effect of permanently moving incremental wind production costs from the RESA to the ECA.

There is no dispute that pursuant to Commission orders, by the end of this calendar year, Public Service will file an application for a docket in which all aspects of the ECA will be examined. In fact, the Company's witness Mr. Ahrens testified that the Company's new

¹² Exhibit 3, p. 12 through p. 14, l. 7.

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

N THE MATTER OF THE APPLICATION OF)	
PUBLIC SERVICE COMPANY OF COLORADO)	DOCKET NO. 08A-532E
FOR APPROVAL OF ITS 2009 RENEWABLE)	
ENERGY STANDARD COMPLIANCE PLAN.)	

STATEMENT OF POSITION OF THE COLORADO OFFICE OF CONSUMER COUNSEL

Pursuant to Decision No. R09-0125-I, Interim Order of Hearing Commissioner Matt Baker Establishing a Procedural Schedule and Addressing Scope of Issues, issued by the Hearing Commissioner on February 6, 2009, the Colorado Office of Consumer Counsel ("OCC"), by and through its counsel, hereby files its Post-Hearing Statement of Position in the above-captioned docket.

INTRODUCTION

On December 1, 2008, Public Service Company of Colorado ("Public Service") filed an application with the Colorado Public Utilities Commission ("Commission") requesting approval of its 2009 Renewable Energy Standard Compliance Plan. This is Public Service's third compliance plan filing under the Commission's Renewable Energy Standard ("RES") Rules. The OCC supports the Commission's approval of Public Service's 2009 RES Compliance Plan with the following modifications.

¹ The RES Rules are found at 4 Code of Colorado Regulations 723-3-3650 to 723-3-3665.

CARBON ADDER USED IN THE LOCKDOWN CALCULATION

The OCC advocated through both its pre-filed and oral testimonies that the resource acquisition planning assumption regarding the carbon cost adder should not be included in the lockdown calculation until the actual carbon costs become "known and measurable." The imputation of carbon costs when no actual carbon costs are currently being paid by the customers on their bills artificially creates headroom that does not exist in the "real world." The OCC believes that the method used to calculate the retail rate impact and the associated lockdown amount should be based on assumptions which are more closely tied to what is actually impacting customer bills and not on resource planning assumptions which are used in the selection process of resources. The OCC contends that its request to use assumptions different than those used for resource planning process is allowed under RES Rule 3611(e)³, which reads:

For purposes of calculating the retail rate impact, the investor owned QRU shall use the same methodologies and assumptions it used in its most recently approved least-cost planning case, *unless otherwise approved by the Commission*. Confidential information may be protected in accordance with rules 1100 through 1102 of the Commission's Rules of Practice and Procedure. (Emphasis Added)

The OCC maintains that carbon cost assumptions are uniquely different than other assumptions used in the resource planning process. Contrasting carbon assumptions with natural gas prices assumptions shows the distinction. In the Electric Resource Planning process, the Commission does not approve specific natural gas prices, but instead approves a methodology, which is updated at the time the utility begins the resource selection process after it has received bids. While it is unlikely that the updated natural gas prices will reflect actual prices when the resource

² See Hearing Exhibit Number 15, page 7, lines 4-11; and page 10, line 7 through page 11, line 17.

comes on-line, it does not matter because customers ultimately pay whatever the actual natural gas prices are through the Electric Commodity Adjustment ("ECA") and not the updated natural gas price that was used in the selection resource process. However, carbon costs are not analogous to updated natural gas prices because, at least as of today, customers do not pay for the carbon costs included on their bills nor is there a process to reconcile the projected values for carbon costs with actually incurred carbon costs as is done with natural gas prices through the ECA.⁴

The OCC recommends that Public Service be allowed to calculate an associated lockdown for an Eligible Energy resource's net cost or net benefits as it has proposed with the exception that no carbon cost adder be included in the analysis. Our recommendation would be a two-step calculation of the lockdown amount. The first step would calculate the net cost or net benefit for the SunE Alamosa project and the 2007 and 2008 On-Site Solar systems as part of this Compliance Plan without including a carbon cost adder. The second step would calculate the additional net benefit associated with the "carbon savings" for the SunE Alamosa project and the 2007 and 2008 On-Site Solar systems once carbon costs are known and measureable and once they are captured in bills which customers pay. These additional net benefits would be incorporated in a future Compliance Plan filing of Public Service. Under our recommendation, the Company would be required to retain the associated data and modeling files used to calculated the net cost or net benefit lockdown for this Compliance Plan. The OCC recommendation is a conservative approach to the calculation of net costs or net benefits since

³ See Hearing Exhibit Number 15, page 7, line 12 through page 9, line 2.

⁴ See Hearing Exhibit Number 15, page 8, lines 7-15.

there is currently uncertainty as to when and the magnitude of carbon costs that will be included in customer bills.

CHANGING FROM THE RESA TO THE ECA FOR DEFERRED ACCOUNTING TREATMENT

Currently the difference between the projected total costs of Eligible Energy and the actual total costs of Eligible Energy are "trued-up" by adjustments to the Renewable Energy Standard Adjustment ("RESA") deferred account. Public Service seeks Commission approval to change the true-up process of Eligible Energy resources from the RESA's deferred account to the ECA's deferred account. Company witness Mr. Ahrens explains that although currently no wind costs are recovered through the RESA, as more wind comes on-line to meet the RES requirements, Public Service is concerned that actual wind output may vary significantly from projected wind output.⁵ He contends that since the RESA is currently the "balancing" rate mechanism, the RESA deferred account will be impacted by the full costs of either the increased (actual greater than projected) or reduced (actual less than projected) production as opposed to only the incremental cost of that generation.⁶ Mr. Ahrens mentions that variations in solar resource generation would also impact the RESA at their full costs and not their incremental costs. He states in his Direct Testimony⁷ that in order to reflect only the incremental costs in the RESA, the variations caused by increases or decreases in Eligible Energy production should be accomplished through adjustments to the ECA and not the RESA.

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⁵ Hearing Exhibit Number 3, page 13, lines 7-9.

⁶ Hearing Exhibit Number 3, page 13, lines 11-15.

⁷ Hearing Exhibit Number 3, page 14, lines 1-7.

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

DOCKET NO. 08A-532E

IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO FOR APPROVAL OF ITS 2009 RENEWABLE ENERGY STANDARD COMPLIANCE PLAN.

STATEMENT OF POSITION INTERWEST ENERGY ALLIANCE

Interwest Energy Alliance ("Interwest") proposes more explicit and transparent funding mechanisms be used for compliance with Colorado statutes, rules and energy policy. PSCo has made significant gains and Interwest's members applaud its leadership towards achieving and in some areas exceeding clean energy goals. However, greater transparency is required due to public interest in the use of RESA funds.

I. SUMMARY OF RECOMMENDATIONS

A. Solar Program:

- 1. Subdivide the budget into budgets for the program categories. Use the residential electric revenue to fund the incentives for the less than 10 kW market segment. Use the remainder to fund incentive for the greater than 10kW segments of the market.
- 2. Establish consistent acquisitions of SORECs from the large category. Place caps on the twenty (20) year SOREC payment stream. Take applications four (4) to six (6) times per year. In this way, project development would be spread out throughout the year, reducing costs.

3. Establish an explicit budget for the annual acquisition of SORECs.

Designate two percent (2%) of retail electric revenue as the funding available.

4. Incorporate market discipline into the small category. Establish MW blocks for the small category, such that when certain installation MW targets are reached for the small category, the UFI would automatically step down.

5. Establish a transition period. The new models for funding and acquisition of SORECs should be fully in place by January 1, 2011, allowing two (2) years to adjust to the new paradigms.

B. Wind Forecasting Tool:

Deny cost recovery for the WiP wind forecasting tool because it was acquired in an imprudent manner. There is no evidence that the NCAR tool, based on technologies unrelated to power generation, will provide any benefit to Colorado Consumers. NCAR has never developed a wind forecasting tool. The cost recovery should be strictly limited as set forth herein and PSCo cautioned to use competitive bidding and transparent procedures to acquire this type of modeling in the future.

C. Time Fence:

Adopt PSCo's proposed time fence and lock-down of acquired generation costs.

II. SOLAR PROGRAM ADJUSTMENTS

A. Interwest recommends adjustment and reallocation of the revenues used to fund incentives in the solar program to provide a predictable, transparent program which supports orderly growth of the markets.

Interwest's witness Rick Gilliam has more than thirty (30) years of experience guiding energy regulation, including six (6) years at the Federal Energy Regulatory Commission (FERC),

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a wind forecasting tool to be used for energy generation.²⁶ NCAR's ability to model weather has little correlation to power generation. It is absurd that PSCo would ask the Commission to simply trust that NCAR's first attempt will be the best available product for Colorado consumers.

Second, even if the interviews produced a well-founded substantive decision about the available choices in the market, this Commission will never have the benefit of knowing that the tool is cost-effective. The same tool could have been made available at a lower cost to consumers as a result of a competitive bidding or more transparent process. Therefore, the cost recovery for the WiP contract should be limited by this Commission. An appropriate limit may be to tie cost recovery to actual savings PSCo can prove relate to the use of the tool.

This Commission is urged to caution PSCo against acquisition of this type of technology in the manner in the future. In addition, even if the WiP contract is approved and in no way acknowledging its usefulness, the data, modeling and all results should be published and made available for public use and peer-review upon completion at the end of the project period (about 18 months, according to Mr. Parks) at minimal cost.

IV. TIME FENCE

Interest joins the parties which prefer PSCo's use of a time fence and "lock down" of costs to provide a predictable planning environment.

Investment in and development of new energy facilities, including renewable energy projects, often requires several years' lead time.²⁷ Placing these projects and RESA budgeting at risk from year to year as recommended by Staff would create disincentives. Risk increases costs.

Interwest prefers PSCo's use of the ECA deferred account to true up the projected costs to the actual costs of eligible energy resources.²⁸ Interwest also supports PSCo's time fence

²⁶ Interwest Cross-Examination of Mr. Parks.

²⁷ See Western Resource Advocates witness Lowrey Brown, Cross-Ans. Test., pp.5-9

which avoids recalculation of the incremental costs of renewables after the resource acquisition decisions have been made and implemented.

The Staff proposal incorporates a facially attractive goal — to tie rates to actual costs rather than projected costs, especially costs which we know will be wrong since they are projected years in advance of when the RESA is paid by a consumer. However, this recalculation puts PSCo's investment at risk. In addition, the plan is contrary to many aspects of the Rules and Rule 3660, which allows forward-looking cost recovery mechanisms. The costs may be carried forward if they exceed the retail rate impact in any year. See Rule 3660(c). Interwest supports calculation and publication of figures comparing the projected costs to actual costs. This transparency is consistent with the overall requirements for publication of actual results which Interwest has supported in similar dockets, and supports the overall goals of the Office of Consumer Council and Staff to tie regulation to provable results. However, PSCo's expenditure of the RESA must be capable of certainty once the transaction is closed and consumer dollars spent in any given year.

V. CONCLUSION

In summary, Interwest commends PSCo for its significant renewable energy acquisitions. We have several modifications which Interwest urges the Commission to require as part of the 2009 Compliance Plan. First, Interwest urges the Commission to require that incentive funding be allocated between residential and non-residential markets in the proportions these market segments produce retail rate revenues. Second, we recommend that the Commission direct PSCo to modify its SOREC acquisition process for the large program to spread development out over the course of a year in "rolling reservations". This not only helps smooth fluctuating solar costs as described above, but allows more efficient project development by maintaining a more

²⁸ See Ahrens, Rebuttal test., p. 3, lines 10-11.

consistent level of work for installation crews. The Arizona approach, described in the testimony of witness Gilliam, is designed in this fashion. We recommend that the small program be modified to more systematically reduce rebate levels as appropriate as development occurs. There has been little discussion of the medium program in this docket. Here too, we would recommend that the REC payment (currently 11.5¢per kWh) be reduced as appropriate amounts of MWs are developed. Third, we recommend that the funding levels be increased to 2% of the retail rates, which excludes Windsource and the net savings from all eligible resources. Fourth, we urge the Commission to require that market discipline be imposed by stepping down incentives, as in the California program. Finally, we urge the Commission to transition to these new programs by January 1, 2011. This docket addresses the 2009 Compliance Plan for PSCo. We believe the transition should begin this year, if only in a small way, and that the 2010 Compliance Plan incorporate a significant shift in this direction.

As to the WiP contract, Interwest requests that the Commission limit cost recovery to what savings PSCo can reasonably prove result from use of the tool on a year to year basis. Finally, Interwest prefers the lock down mechanism suggested by PSCo as to acquired eligible energy generation resources.

We thank the Commission and parties for the opportunity to provide input.

Respectfully submitted this 17th day of April, 2009

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On Behalf of Interwest Energy Alliance

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