

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

**\* \* \* \* \***

**IN THE MATTER OF THE )  
APPLICATION OF PUBLIC SERVICE )  
COMPANY OF COLORADO ) DOCKET NO. 14A-0102E  
TO ADDRESS VOLUNTARY )  
SERVICE OFFERINGS IN THE )  
CITY OF BOULDER )**

**ANSWER TESTIMONY OF JONATHAN B. KOEHN**

**ON**

**BEHALF OF**

**THE CITY OF BOULDER**

**June 13, 2014**

**BEFORE THE PUBLIC UTILITIES COMMISSION  
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## LIST OF ATTACHMENTS

JBK-1	<u>Statement of Qualifications for Jonathan B. Koehn</u>
JBK-2	Public Service Response to Boulder Discovery Request BLDR 4-4
JBK-3	Letter from Tom Carr to Paula Connelly dated September 9, 2013
JBK-4	Letter from Tom Carr to Paula Connelly dated September 23, 2013

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**ANSWER TESTIMONY OF JONATHAN B. KOEHN**

**I. INTRODUCTION AND QUALIFICATIONS**

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

2 A. My name is Jonathan B. Koehn. My business address is 1720 14<sup>th</sup> Street, Boulder,  
3 Colorado, 80302.

4 **Q. BY WHOM ARE YOU EMPLOYED AND WHAT IS YOUR POSITION?**

5 A. I am employed by the City of Boulder (“Boulder”) as the Regional Sustainability  
6 Coordinator.

7 **Q. WHOM ARE YOU REPRESENTING IN THIS PROCEEDING?**

8 A. I am testifying on behalf of Boulder.

9 **Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND.**

10 A. I hold a Master of Science degree in Environmental Science and Biology from the  
11 University of Northern Arizona, which I received in 1996. I also received a  
12 Bachelor of Science degree in Marine Sciences from the University of Florida.

1 **Q. AS THE REGIONAL SUSTAINABILITY COORDINATOR FOR**  
2 **BOULDER, WHAT ARE YOUR PRIMARY AREAS OF**  
3 **RESPONSIBILITY?**

4 A. I advise Boulder regarding energy initiatives that support its efforts to achieve its  
5 Climate Action Plan’s emissions reduction targets. This includes the  
6 implementation of carbon reduction strategies that address emissions in Boulder’s  
7 built environment, energy procurement, distributed generation initiatives and  
8 policy decisions. I have been involved in the development of Boulder’s  
9 SmartGridCity™ efforts and ongoing discussions related to Boulder’s franchise  
10 agreement along with ongoing associations with Public Service Company of  
11 Colorado (“Public Service”). I am a member of the energy future staff that is  
12 exploring the possible acquisition of the Public Service electric system in the city  
13 as one approach to reaching the city’s Energy Future goals.

14 **Q. DO YOU HAVE A STATEMENT OF QUALIFICATIONS THAT PRESENTS**  
15 **YOUR EDUCATIONAL AND PROFESSIONAL QUALIFICATIONS AND**  
16 **EXPERIENCE IN MORE DETAIL?**

17 A. A copy of my Statement of Qualifications is included as **Attachment JBK-1**.

18 **II. PURPOSE OF ANSWER TESTIMONY**

19 **Q. WHAT IS THE PURPOSE OF YOUR ANSWER TESTIMONY?**

20 A. In my testimony, I will address (1) Public Service’s proposal regarding Boulder  
21 customers’ future participation in the Solar\*Rewards program; (2) Public  
22 Service’s request that no community solar gardens (CSG) be sited in Boulder; and  
23 (3) Public Service’s proposal that Boulder customers be prohibited from

1 participating in CSGs. I will also suggest alternative proposals for both programs  
2 that, Boulder believes, will not inhibit participation in the programs and will  
3 protect both Boulder and other Public Service ratepayers by maintaining Public  
4 Service's ownership of the Renewable Energy Credits (RECs) it has acquired  
5 over the course of the past eight years, thereby maintaining the status quo and  
6 ensuring that all parties receive the benefit of their bargain.

7 For Solar\*Rewards, Boulder would not object to Public Service's proposal  
8 of making explicit a term that Boulder has believed has always been implicit in  
9 the Solar\*Rewards contracts: that the contract terminates once the customer is no  
10 longer a Public Service customer. However, if the Commission approves of  
11 Boulder's proposal regarding RECs, Boulder recommends that the contract not be  
12 terminated, but rather, amended as discussed below. As an aside, Boulder does  
13 question, however, whether adequate notice has been provided to other parties  
14 given Public Service's proposal to make this change in all of its Solar\*Rewards  
15 contracts.

16 Boulder does oppose Public Service's proposal that for all small, customer-  
17 owned systems, customers be paid on a pay-for-performance basis, as Boulder  
18 believes that revision will unnecessarily curtail participation in the Solar\*Rewards  
19 program.

20 In order to resolve these issues fully, Boulder proposes that Public Service  
21 retain the RECs associated with the Solar\*Rewards contracts with its Boulder  
22 customers. Boulder is willing to aggregate the RECs from the rooftop solar in the  
23 city and to pay the Western Renewable Energy Generation Information System

1 (WREGIS) the associated accounting fee. Boulder may also consider selling the  
2 energy associated with those systems to Public Service through a power purchase  
3 agreement with the company.

4 Boulder further proposes that at the “cut-over date,” Public Service  
5 provide Boulder with the value of customers’ banked credits at the then-current  
6 retail rate and the Boulder municipal utility would credit those customers’  
7 accounts on a one-for one basis so that Boulder could continue to provide  
8 customers with net metering bill credits going forward.

9 Finally, for Community Solar Gardens (CSGs), Boulder believes that the  
10 Public Service proposal is unnecessary with respect to individual subscribers,  
11 since the law currently permits subscribers to transfer their interest in a CSG if  
12 they are no longer eligible. Boulder further believes that the Public Service  
13 proposal is unjustly discriminatory towards individual subscribers and subscriber  
14 organizations. That said, Boulder is willing to commit to transferring subscribers’  
15 participation in a CSG outside the service territory of the new electric utility to a  
16 CSG within the city of Boulder as soon as possible after the cut-over date. In  
17 addition, to support the development of community solar gardens, Boulder would  
18 be willing to assume the contract between Public Service and the subscriber  
19 organization of a CSG located within the city if the Boulder has approved the  
20 terms of that contract prior to execution.

21 **Q. ARE YOU SPONSORING ANY ATTACHMENTS AS PART OF YOUR**  
22 **DIRECT TESTIMONY?**

1 A. Yes. Please see JBK-1, my Statement of Qualifications, JBK-2, Public Service  
2 Response to Boulder Discovery Request BLDR 4-4; and JBK-3 and -4, two letters  
3 from Boulder City Attorney Tom Carr to Public Service Managing Attorney  
4 Paula Connelly.

5 **III. BOULDER RECOMMENDS AMENDING THE**  
6 **SOLAR\*REWARDS CONTRACT TERMINATION**  
7 **PROVISION TO PERMIT PUBLIC SERVICE TO RETAIN THE**  
8 **RECS FOR WHICH IT HAS BARGAINED**

9 **Q. PUBLIC SERVICE HAS PROPOSED MODIFICATIONS TO ITS**  
10 **SOLAR\*REWARDS CUSTOMER CONTRACTS. IS THE CITY**  
11 **OPPOSED TO CHANGING THESE CONTRACTS?**

12 A. Not necessarily. On page 10, line 21, of Ms. Kittel’s Direct Testimony, Public  
13 Service proposes the inclusion of a termination provision in all new  
14 Solar\*Rewards contracts that would allow the Company to terminate the  
15 company’s obligation to purchase energy and renewable energy credits when it is  
16 no longer providing electric service to the customer. For Boulder customers,  
17 specifically, the company’s service would terminate “when and if a cut-over date  
18 to a Boulder municipal utility occurs.”<sup>1</sup> The cut-over date would be the date that  
19 the City of Boulder assumes load serving responsibility and begins collecting  
20 revenue from Boulder customers.

21 Boulder has always believed that implicit within Solar\*Rewards contracts  
22 is a provision that the contract terminates when the customer is no longer a Public  
23 Service customer. In discovery, Public Service has explained that this provision

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<sup>1</sup> Direct Testimony of Robin L. Kittel.

1 would apply to all of its Solar\*Rewards contracts, not just those with Boulder  
2 customers. Please see **Attachment JBK-2**, Public Service Response to Boulder  
3 Discovery Request BLDR 4-4. Boulder questions whether notice has been  
4 adequately provided to other potential parties to allow such a revision to all  
5 Solar\*Rewards contracts since those contracts are generally reviewed as part of  
6 Public Service’s Renewable Energy Standard (RES) compliance plan  
7 applications.

8 Boulder recommends, as a way for the Commission to address Public  
9 Service’s concerns, that future Solar\*Rewards contracts be amended rather than  
10 terminated. These amended contracts would provide that Public Service would no  
11 longer be obligated to purchase energy from those systems after the cutover date;  
12 however, Public Service would continue to acquire and pay for associated RECs  
13 pursuant to an agreement with Boulder.

14 **IV. BOULDER OBJECTS TO PUBLIC SERVICE’S PROPOSAL**  
15 **THAT SMALL, CUSTOMER-OWNED SYSTEMS BE**  
16 **PAID BASED ON PERFORMANCE**

17 **Q. PUBLIC SERVICE HAS ALSO PROPOSED MODIFYING THE**  
18 **CUSTOMER-OWNED SMALL SOLAR\*REWARDS OFFERING FOR**  
19 **BOULDER CUSTOMERS BY AWARDING REC PAYMENTS TO THESE**  
20 **CUSTOMERS ON A FULL “PAY FOR PERFORMANCE” BASIS. DOES**  
21 **BOULDER OBJECT TO THAT MODIFICATION?**

22 **A.** Yes, it does, out of concern that this modification could make it more difficult for  
23 anyone other than the wealthiest customers to acquire rooftop solar systems.

1           Solar\*Rewards contracts for small, customer-owned systems include a  
2           provision by which the customer receives higher REC payments for a 10-year  
3           period, as opposed to receiving lower payments for a 20-year period like third-  
4           party systems receive. Public Service has proposed to remove this incentive for  
5           Boulder customers.

6           If Boulder is able to transfer RECs to Public Service, Boulder would agree  
7           to transfer 20 years' worth of RECs even though the payments are made over 10  
8           years. This ensures that Public Service continues to receive its RECs and that  
9           small, customer-owned systems continue to be a financially sound option for  
10          prospective solar customers.

11          **V. BOULDER'S PROPOSAL REGARDING THE TRACKING AND**  
12          **TRANSFER OF RECS MAINTAINS THE STATUS QUO**

13          **Q. PLEASE DESCRIBE BOULDER'S PROPOSAL WITH REGARD TO THE**  
14          **TRACKING AND TRANSFER OF RECS.**

15          A. In order to resolve these issues fully, Boulder is proposing a fairly simple option  
16          that would allow Public Service to retain the RECs associated with the  
17          Solar\*Rewards contracts with its Boulder customers. In essence, Boulder is  
18          willing to assume a facilitator role by aggregating the RECs generated by all  
19          small, customer-owned systems in Boulder for which RECs are paid over time for  
20          actual production. Public Service would continue paying for 20 years of RECs in  
21          10 years, and Boulder would agree to transfer those 20 years of RECs to Public  
22          Service, resulting in no change in the REC balance from Boulder customers. This  
23          transfer would be performed via the Western Renewable Energy Generation

1 Information System (WREGIS), for which Boulder would pay the associated  
2 accounting fee. Public Service would then provide Boulder with the associated  
3 REC payments and Boulder would pass the payments on to customers through the  
4 new electric utility's billing system. This relatively simple solution achieves the  
5 goal of leaving Public Service, Boulder solar customers and other ratepayers in  
6 essentially the same financial position they would have been had the city not  
7 municipalized its electric utility.

8 **Q. WOULD THIS IMPOSE A SIGNIFICANT OR NEW ADMINISTRATIVE**  
9 **BURDEN ON PUBLIC SERVICE?**

10 A. No, it would not. Boulder is willing to perform all administrative tasks, including  
11 aggregating the RECs from the rooftop solar in the city.

12 **Q: WHO WOULD PAY THE COSTS ASSOCIATED WITH THIS**  
13 **PROPOSAL?**

14 A: In order to avoid any impact to Public Service or its ratepayers outside of  
15 Boulder, Boulder would pay the administrative costs of aggregating solar  
16 production data, entering it into WREGIS, and paying the fee to transfer the  
17 associated RECs to Public Service. Boulder would also absorb the costs of  
18 developing the necessary business processes to track and verify this data as part of  
19 its transition plan to form a municipal utility.

20 **Q. YOU SAID BOULDER IS WILLING TO AGGREGATE THE RECS**  
21 **FROM ROOFTOP SOLAR IN THE CITY AND TRANSFER THOSE**  
22 **RECS TO PUBLIC SERVICE. HOW WOULD THAT WORK?**

1 A: A Boulder electric utility would become a member of the Western Renewable  
2 Energy Generation Information System (“WREGIS”), a system for tracking  
3 renewable energy for the Western Electricity Coordinating Council (“WECC”).  
4 Boulder would collect solar production data from all production-based distributed  
5 solar systems, aggregate it, enter it into WREGIS, and transfer the associated  
6 renewable energy credits (“RECs”) to Public Service. Once Boulder completed  
7 that transfer, Public Service would transfer back to Boulder the production-based  
8 incentive (“PBI”) payments associated with that generation under its current  
9 contracts with Boulder customers. Boulder would pass those PBI payments on to  
10 the individual solar customers through bill credits or separate payments,  
11 depending on the electric utility’s business processes.

12 This would position a Boulder utility as the facilitator in a REC transfer to  
13 ensure that both solar customers and Public Service remain whole based on their  
14 original contract commitments. Public Service would still receive the RECs it  
15 contracted to purchase and customers would receive the payment for the RECs  
16 associated with their systems that they contracted to sell to Public Service.

17 Beyond the transfer of RECs in WREGIS, Boulder would provide Public  
18 Service with additional system-specific information so that Public Service could  
19 transfer back the correct amount for PBI payments. This is important because the  
20 PBIs can vary significantly by customer.

21 **Q: IS THERE ANY CONCERN THAT THE COMMISSION AND WREGIS**  
22 **MIGHT DEFINE “RENEWABLE ENERGY CREDITS” DIFFERENTLY?**

1           **HOW DOES THE COMMISSION DEFINE A “RENEWABLE ENERGY**  
2           **CREDIT”?**

3    A:     Rule 3652(t) of 4 C.C.R. 723-3 defines a “renewable energy credit” or “REC” as  
4           “a contractual right to the full set of non-energy attributes, including any and all  
5           credits, benefits, emissions reductions, offsets, and allowances, howsoever  
6           entitled, directly attributable to a specific amount of electric energy generated  
7           from a renewable energy resource. One REC results from one megawatt-hour of  
8           electric energy generated from an eligible energy resource.”

9    **Q:     HOW DOES WREGIS DEFINE A “RENEWABLE ENERGY**  
10           **CERTIFICATE”?**

11   A:     According to the WREGIS Operating Rules, “A WREGIS Certificate (also called  
12           a renewable energy credit) represents all Renewable and Environmental  
13           Attributes from MWh of electricity generation from a renewable energy  
14           Generating Unit registered with WREGIS . . . .”<sup>2</sup> The Commission rules and  
15           WREGIS rules are compatible, and indeed, the Commission rules require all  
16           renewable energy resources greater than 1 MW to be registered in WREGIS.<sup>3</sup>

17   **Q:     DOES PUBLIC SERVICE CURRENTLY TRACK SOLAR DISTRIBUTED**  
18           **GENERATION RECS IN WREGIS?**

19   A:     No, it does not currently do this. However, as I noted, Public Service is a  
20           WREGIS member because of Commission rules.

21   **Q:     YOU SAID THAT THE COMMISSION RULES ONLY REQUIRE**  
22           **RENEWABLE RESOURCES GREATER THAN 1 MW TO REGISTER IN**

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<sup>2</sup> WREGIS Operating Rules, at p. 2:  
<http://www.wecc.biz/WREGIS/Documents/WREGIS%20Operating%20Rules.pdf>  
<sup>3</sup> See Rule 3659(j)-(l) and Direct Testimony of Kari Chilcott Clark in 13A-0836E.

1           **WREGIS. ARE SYSTEMS SMALLER THAN 1 MW—SUCH AS THE**  
2           **SOLAR CONTRACTS UNDER DISCUSSION HERE—REPORTABLE TO**  
3           **WREGIS?**

4    A:    Yes, they are. WREGIS allows for reporting of “customer-sited distributed  
5           generation” for systems with nameplate capacity of greater than 360 kW (Class  
6           H) or less than 360 kW (Classes I and J).<sup>4</sup> These installations must have a  
7           revenue-quality meter and meet certain other basic requirements to ensure the  
8           accuracy of production data. Therefore, this approach should apply to any on-site  
9           solar system with a production meter. In Volume 1 of its 2014 Renewable Energy  
10          Standard Compliance Plan, Public Service noted that “WREGIS currently  
11          requires revenue-quality meter data for all classes of generators, including  
12          customer-sited distribution generation; therefore, the on-site solar systems  
13          installed before March 23, 2011 of 10 kW or less that are customer owned cannot  
14          currently be registered in WREGIS.”<sup>1</sup> The only solar installations that would not  
15          be eligible would appear to be small, customer-owned systems that do not have  
16          production meters. (p. 4-5)

17   **Q:    WHICH SOLAR INSTALLATIONS WOULD BE ELIGIBLE?**

18   A:    This approach could be applied to all solar installations that have a revenue-  
19          quality production meter and receive PBIs based on actual output. That means  
20          virtually all solar installations at this point, including small, medium, large  
21          rooftop installations, as well as solar community gardens. Additionally, this  
22          approach could extend backward to any existing system that receives PBI

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<sup>4</sup> See WREGIS Operating Rules at p.27,  
<http://www.wecc.biz/WREGIS/Documents/WREGIS%20Operating%20Rules.pdf>.

1 payments, including most small, customer-owned solar contracts since 2011, all  
 2 small, third-party solar contracts, and all medium solar contracts since the start of  
 3 the Solar\*Rewards program. In other words, production from a significant  
 4 number of the solar installations in Boulder could be aggregated and reported to  
 5 WREGIS and transferred from Boulder to Public Service. As shown in table 1  
 6 below, this process could maintain the status quo for 532 solar installations with 8  
 7 MW.

8 **Table 1: Characterization of Solar Installations in Boulder<sup>5</sup>**  
 9

	Number of Systems	Installed Capacity	Proposed Mode of REC Transfer
Production-Metered	532	8.0 MW	WREGIS
Non-Metered	1,478	6.7 MW	Contractual
<b>Total</b>	<b>2,010</b>	<b>14.7 MW</b>	

10  
 11 **Q: YOU MENTION THAT ONLY CONTRACTS ASSOCIATED WITH**  
 12 **PRODUCTION METERS CAN BE TRACKED USING WREGIS. COULD**  
 13 **THIS APPROACH APPLY TO OLDER SOLAR CONTRACTS FOR**  
 14 **SMALL SYSTEMS, WHICH RELIED ON ESTIMATES RATHER THAN**  
 15 **PRODUCTION METERS TO DETERMINE THE LEVEL OF RECS PAID**  
 16 **FOR?**

17 **A:** Conceptually, yes. We would not be able to use WREGIS to track and transfer  
 18 RECs for systems where RECs were paid for upfront because those systems do  
 19 not have revenue-quality production meters. But we do think that the same  
 20 general theory could be applied to older systems by contract. According to  
 21 Commission Rule 3659(i): “If an on-site solar systems of ten kW or below has

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<sup>5</sup> Response to Discovery BLDR 4-1.A1.

1 received a one-time REC payment from a QRU under rule 3658, the QRU shall  
2 be entitled to count the anticipated RECs purchased by the one-time REC  
3 payment for compliance with the renewable energy standard even if the on-site  
4 solar systems is removed or becomes inoperable.” If Boulder forms a municipal  
5 utility, on-site solar systems could be treated as “removed or . . . inoperable.”  
6 Should Public Service agree to the WREGIS approach, Boulder also is willing to  
7 contractually agree that the RECs that were estimated to have been created by  
8 those systems would continue to be owned by Public Service and could be  
9 counted for Renewable Energy Standard compliance. Referencing Table 1, this  
10 would impact approximately 6.7 MW of solar installations.

11 **Q: UNDER BOULDER’S PROPOSAL, WHAT WOULD HAPPEN TO**  
12 **CUSTOMERS’ ABILITY TO NET METER?**

13 A: A Boulder electric utility would take over the responsibility of providing net  
14 metering services to these customers, and would therefore provide them with bill  
15 credits going forward. While Public Service would continue to pay customers a  
16 production-based incentive for solar production and would receive the  
17 corresponding RECs toward its Renewable Energy Standard compliance  
18 requirements, it would no longer be offering net metering to those customers.

19 **Q: WHY IS IT BENEFICIAL TO SEPARATE THE PBI PAYMENTS FROM**  
20 **THE NET METERING BILL CREDITS?**

21 A: Public Service has recently indicated that it does not think that on-site solar offers  
22 value to its system that is as high as the bill credits customers receive for solar

1 production.<sup>6</sup> If the Commission changes the value proposition for net metering by  
2 reducing the credit a customer can receive on his or her bill, it may not affect  
3 existing solar systems—in fact, it shouldn’t, out of fairness to customers who  
4 have made this investment. Boulder would take on a large number of these  
5 “legacy” systems and would continue to provide them with net metering service,  
6 thereby reducing the cost to the Public Service system.

7 **Q: UNDER BOULDER’S PROPOSAL, WOULD THE BOULDER UTILITY**  
8 **RECEIVE THE ENERGY FROM THE SYSTEMS WHOSE RECS WERE**  
9 **BEING TRANSFERRED TO PUBLIC SERVICE?**

10 A: Yes, a Boulder utility would be receiving any excess solar energy that was not  
11 consumed on-site. However, Public Service would own the associated RECs. This  
12 means that Public Service would own the environmental attributes of that energy.

13 **Q: DOESN’T BOULDER WANT RECS?**

14 A: Boulder recognizes the consequences of giving them up—it means that a Boulder  
15 utility would not be able to claim the environmental attributes of some solar  
16 generation within the community. However, this is a sacrifice that we are willing  
17 to make to ensure that solar customers are “kept whole” in the transition process,  
18 and to provide Public Service with the benefit of its bargain as well.

19 **Q: HOW DOES THIS PROPOSAL IMPACT PUBLIC SERVICE’S**  
20 **APPLICATION?**

21 A: It impacts both the request to add an explicit contract termination provision and  
22 the request to transfer small, customer-owned contracts from 10-year to 20-year  
23 PBIs.

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<sup>6</sup> See Proceeding No. 13A-0836E, 2014 Renewable Energy Standard Plan, Volume 1, Section 9.

1 **Q: PLEASE EXPLAIN THE IMPACT TO THE CONTRACT TERMINATION**  
2 **PROVISION PUBLIC SERVICE HAS REQUESTED.**

3 A: If the Commission favors the proposal Boulder makes here, the REC payment  
4 provision could stay intact and the provision to purchase energy could be assigned  
5 to a Boulder utility. The contracts should be amended to reflect that Public  
6 Service would remain obligated to purchase RECs, but not the energy from those  
7 systems, which would be purchased by Boulder upon its assumption of electric  
8 service to that customer. Terminating the obligation to purchase RECs would  
9 prevent Boulder from being able to transfer RECs to Public Service using  
10 WREGIS. Boulder would be willing to work with Public Service to draft contract  
11 amendment language for the Commission’s review and approval.

12 **Q. HOW DOES BOULDER PROPOSE HANDLING LARGER SYSTEMS ?**

13 A. I understand that there are currently no large Solar\*Rewards installations in the  
14 City. Further, Public Service has not made a proposal regarding large systems in  
15 its application in the proceeding. However, Boulder would voluntarily offer to  
16 provide net metering bill credits as of the “cut-over date” for any systems in the  
17 larger tier (>500kW), if developed through an RFP process and installed in  
18 Boulder prior to Boulder’s acquisition of Public Service facilities, as long as  
19 Boulder is able to review and approve the terms of any new winning bids within  
20 the city of Boulder.

21 **Q. WHAT DOES BOULDER RECOMMEND THE COMMISSION FIND**  
22 **WITH REGARD TO THE PUBLIC SERVICE PROPOSAL FOR**  
23 **SOLAR\*REWARDS CONTRACTS?**

1 A. Boulder requests that, given the ability to maintain the status quo without any cost  
2 to Public Service or its ratepayers, the Commission should deny Public Service’s  
3 requests with regard to Solar\*Rewards and order Public Service to work with  
4 Boulder to develop appropriate contract language that would permit Public  
5 Service to receive the contracted-for RECs from Boulder after they are aggregated  
6 and reported to WREGIS. Boulder also requests that, if Public Service is  
7 interested in receiving the energy from the Solar\*Rewards systems in Boulder, the  
8 Commission order Public Service and Boulder to work together to develop  
9 appropriate contract language that would permit Public Service to receive that  
10 energy through a power purchase agreement or another, appropriate method.

11 **VI. THE PUBLIC SERVICE PROPOSAL REGARDING COMMUNITY**  
12 **SOLAR GARDENS IS BOTH UNJUSTLY DISCRIMINATORY**  
13 **AND UNNECESSARY**

14 **Q. BOULDER BELIEVES THAT PUBLIC SERVICE’S PROPOSAL**  
15 **CONCERNING COMMUNITY SOLAR GARDENS IS UNNECESSARY.**  
16 **WHY IS THAT?**

17 A. Public Service proposed in its Verified Application that it be permitted “to defer  
18 offering our Solar\*Rewards Community (community solar gardens) program to  
19 Boulder customers unless and until such time as Boulder determines not to  
20 proceed with the formation of a municipal electric utility.”<sup>7</sup> The Verified  
21 Application also suggests that no community solar garden (CSG) be located  
22 within the city of Boulder.<sup>8</sup> Finally, the Verified Application proposes that Public

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<sup>7</sup> Verified Application, p. 2.

<sup>8</sup> *Id.* at, p. 15.

1 Service be permitted to defer contracting with any CSG that has subscribers who  
2 live within Boulder.<sup>9</sup> Public Service has suggested that because of the threat that  
3 Boulder might terminate its retail relationship with Public Service, the company  
4 should be able to treat Boulder and the company's customers located in Boulder  
5 differently than it treats its other customers.<sup>10</sup>

6 In her Direct Testimony, Public Service witness Robin Kittel explained  
7 the company's rationale for these proposals. By statute, the CSG must sell its  
8 output to the qualifying retail utility serving the geographic area in which the  
9 CSG is located. That utility is then required to compensate the CSG's subscribers  
10 for the energy produced through bill credits.<sup>11</sup>

11 **Q. IS THERE SOME IRONY IN NOT ALLOWING COMMUNITY SOLAR**  
12 **GARDENS IN BOULDER AND IN NOT ALLOWING BOULDER**  
13 **CUSTOMERS TO PARTICIPATE IN CSG?**

14 A. Yes, quite a bit. Boulder was a driving force in drafting the statute permitting  
15 community solar gardens. I, along with our consultant at the time, Jeff Pearson,  
16 developed the concept and worked directly with Public Service and the bill  
17 sponsor, Clair Levy, to draft the legislation. House Bill 10-1342 was signed into  
18 law by Governor Ritter on top of a Boulder public parking structure, an intended  
19 location of a community solar garden comprised of downtown businesses and  
20 residents. Given Public Service's actions to block the development of solar  
21 gardens situated within the city of Boulder, the plans for that project have been  
22 postponed.

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<sup>9</sup> *Id.*

<sup>10</sup> *Id.* at pp. 2-

<sup>11</sup> Direct Testimony of Robin L. Kittel, p. 8, ll. 5-11.

1                    Additionally, the City of Boulder convened and facilitated a number of  
2 stake-holder meetings along the front-range aimed at supporting the  
3 Commission’s rule making process. The stakeholder group identified a number of  
4 critical issues in advance, and provided support to the Commission and  
5 administrative law judge in completing the rule-making process. Boulder has  
6 made a significant investment in developing a highly creative and successful solar  
7 gardens program for the state of Colorado.

8 **Q.    WHAT ABOUT THE PUBLIC SERVICE PROPOSAL FAILS TO MAKE**  
9 **SENSE?**

10                    The Public Service proposal would make sense if those were the only rules that  
11 applied to CSGs. Fortunately, both the CSG statute, C.R.S. § 40-2-127 and the  
12 Commission’s CSG rule, Rule 3665, anticipated the subscribers might move or  
13 otherwise become ineligible to participate in a particular solar garden.  
14                    The statute provides that if a subscriber ceases to be a customer at the premises on  
15 which the subscription is based, but within a reasonable time as set by the  
16 Commission, becomes a customer at another location in the service territory of  
17 the utility and within the geographic area served by the CSG, the subscription  
18 may continue in effect. Thus, if one of the 48 Boulder customers with a  
19 subscription to the Cowdrey Meadows CSG in Boulder County were to move to  
20 Louisville or Lafayette, also in Boulder County, that subscription could follow the  
21 customer to the new location with certain adjustments for classification and  
22 annual consumption of electricity.

1 Commission Rule 3665 also addresses share transfer and portability.  
2 Subsection (a)(II)(A) states: “A CSG subscription may be transferred or assigned  
3 to the associated CSG subscriber organization or to any person or entity who  
4 qualifies to be a subscriber in the CSG. Thus, if Boulder customers purchase an  
5 interest in the Cowdrey Meadows CSG, then even if Boulder acquires the Public  
6 Service system serving Boulder, those customers will be able to sell their interests  
7 in the CSG to a subscriber organization or to other customers in Boulder County.  
8 This is not to say that there is not some amount of risk involved in the transaction  
9 for those customers, but as the Commission neither regulates the subscriber  
10 organization nor the individual subscribers,<sup>12</sup> those individuals should not be  
11 prohibited from making that determination on their own., and thus Boulder  
12 residents be able to participate in CSG’s.

13 **Q. HOW DOES BOULDER PROPOSE PARTICIPATION IN COMMUNITY**  
14 **SOLAR GARDENS BE HANDLED GOING FORWARD?**

15 A. Boulder proposes that the Commission simply deny Public Service’s proposals  
16 regarding CSGs. Customers that become subscribers in a Boulder County CSG  
17 will be able to sell their interest in the CSG pursuant to Commission rule, so both  
18 the prohibition on Boulder customers and on CSGs with Boulder subscribers are  
19 without merit and in potential violation of the Commission’s rules.

20 **Q. WHAT ABOUT THE PROPOSED PROHIBITION ON LOCATING CSGs**  
21 **WITHIN THE CITY OF BOULDER?**

22 A. Boulder would be willing to assume the contracts with subscriber organizations  
23 that locate within the city, so long as it was able to review and approve those

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<sup>12</sup> C.R.S. § 40-2-127(a)(4).

1 contracts prior to their execution. In fact, Boulder would be willing to be a party  
2 to those contracts and to include a provision that assigned the contract to Boulder  
3 upon Boulder's acquisition of the Public Service system that serves Boulder.  
4 Additionally, if the subscriber organization that located a CSG within the City  
5 also had a CSG in Boulder County, Boulder would be willing to work with that  
6 subscriber organization to transfer then-current subscribers to the CSG located in  
7 Boulder County to the CSG located in the city of Boulder.

8 **Q. IS BOULDER SUGGESTING THAT THE COMMISSION ISSUE AN**  
9 **ORDER TO THAT EFFECT?**

10 A. No, Boulder is only asking the Commission to deny the Public Service request  
11 that it be permitted to discriminate against Boulder and the Public Service  
12 customers within Boulder. However, Boulder's proposals with regard to the  
13 Solar\*Rewards program and community solar gardens are good-faith, publicly-  
14 made offers that it is willing to stand by.

15 **VII. BOULDER HAS EXPRESSED A DESIRE TO REACH**  
16 **AGREEMENT WITH PUBLIC SERVICE, BUT CANNOT DO SO**  
17 **WITHOUT COMPLETE INFORMATION**

18 **Q. IN HER ANSWER TESTIMONY, PUBLIC SERVICE WITNESS ROBIN**  
19 **KITTEL SUGGESTED THAT BOULDER HAS NOT BEEN WILLING TO**  
20 **TALK WITH PUBLIC SERVICE ABOUT RESOLVING THESE ISSUES**  
21 **WITHOUT THE COMPANY FILING AN APPLICATION WITH THE**  
22 **COMMISSION. IS THAT TRUE?**

1 A. No, it is not. Ms. Kittel attached to her testimony two letters sent from Public  
2 Service to Boulder City Attorney Tom Carr. What they did not attach were Mr.  
3 Carr's letters back to Public Service Managing Attorney Paula Connelly. In order  
4 to clarify the record, I am providing those responses here as **Attachments JBK-3**  
5 **and JBK-4.**

6 **Q. WHAT WAS BOULDER'S RESPONSE TO THE FIRST LETTER FROM**  
7 **PUBLIC SERVICE?**

8 A. As you can see from the September 9, 2013 response from the City Attorney to  
9 the August 22, 2013, letter from Public Service, Boulder expressed a desire to  
10 engage in settlement discussions with Public Service, but needed additional  
11 information to understand the company's proposal. Discovery requests that were  
12 sent to Public Service during the first "Boulder Docket," Docket No. 12A-155E,  
13 were attached in an effort to let Public Service know what information it thought  
14 important to have to make an informed decision about Public Service's proposal.

15 **Q. PUBLIC SERVICE REPLIED TO THE CITY ATTORNEY THAT SAME**  
16 **DAY. WAS IT WILLING TO PROVIDE THE ADDITIONAL**  
17 **INFORMATION REQUESTED?**

18 A. No, it was not. It claimed that because the docket was closed, it was not legally  
19 required to provide the information. However, upon investigation, we saw that  
20 the docket was still open. It was closed shortly after this exchange.

21 **Q. DID PUBLIC SERVICE PROVIDE ANOTHER REASON FOR NOT**  
22 **PROVIDING THE INFORMATION?**

23 A. Yes, it claimed that the requested information had nothing to do with its proposal.

1 **Q. THE CITY RESPONDED THE FOLLOWING DAY. DID BOULDER**  
2 **AGREE WITH THAT ASSESSMENT?**

3 A. No, Boulder did not agree. Several times, Public Service had suggested that  
4 Boulder take over the company's obligations without providing adequate  
5 information for Boulder staff to determine whether such an assumption would be  
6 prudent. Staff could not recommend entering into an agreement without knowing  
7 the details of the proposal.

8 **Q. DID BOULDER OFFER TO MEET AGAIN WITH PUBLIC SERVICE?**

9 A. Yes, the City Attorney suggested that city staff would like to meet with Public  
10 Service the following week.

11 **Q. WHAT WAS THE PUBLIC SERVICE RESPONSE?**

12 A. There was no further communication from Public Service. It simply filed this  
13 proceeding three months later.

14 **Q. WHAT IS BOULDER'S OBJECTION TO ASSUMING THE PUBLIC**  
15 **SERVICE CONTRACTS?**

16 A. Boulder's primary concern has been Public Service's unwillingness to provide the  
17 detail the city needs to make an informed decision about the proposal. It finally  
18 provided that information two days ago on June 11, 2014.

19 **Q. IS THE CITY STILL ATTEMPTING TO RESOLVE THE**  
20 **SOLAR\*REWARDS AND COMMUNITY SOLAR GARDENS ISSUES**  
21 **WITH THE COMPANY?**

22 A. Yes, it is. We would like to be able to settle these issues globally, that is, both on  
23 a going forward basis and looking back to the beginning of the programs.

1 **VIII. SUMMARY OF POSITION**

2 **Q. COULD YOU SUMMARIZE BOULDER’S POSITION WITH REGARD**  
3 **TO PUBLIC SERVICE’S PROPOSAL CONCERNING**  
4 **SOLAR\*REWARDS AND COMMUNITY SOLAR GARDENS?**

5 A. 1. While Boulder has always assumed that Solar\*Rewards contracts include  
6 an implicit provision that the contract would terminate if the customer was no  
7 longer a Public Service customer, Boulder recommends that Solar\*Rewards  
8 contracts with Boulder customers be amended to provide that pursuant to an  
9 agreement with the city of Boulder, should Boulder acquire the Public Service  
10 electric system that serves Boulder, Public Service will continue to purchase  
11 RECs, but that Boulder will purchase any excess energy produced by the  
12 customer’s system. If Public Service wishes to revise all its Solar\*Rewards  
13 contracts to provide that the contract terminates if the customer is no longer a  
14 Public Service customer, Boulder suggests that that revision take place when all  
15 affected parties have received notice of that intent.

16 2. Boulder objects to Public Service’s proposal that RECs generated by  
17 small, customer-owned installations be paid as those RECs are generated. This  
18 proposal would make acquiring rooftop solar more difficult for many customers.

19 3. Boulder objects to Public Service’s proposal that (a) Boulder customers  
20 not be able to participate in community solar gardens, (b) no community solar  
21 gardens be located in Boulder, and (c) Public Service not contract with any  
22 community solar garden with subscribers who are Boulder customers and asks the  
23 Commission to deny this request for the reasons stated above.

1           4.       Finally, while the Commission's Order in this proceeding would not  
2 include direction to Boulder, Boulder is willing to publicly commit to aggregating  
3 RECs associated with the Solar\*Rewards program and transferring those RECs to  
4 Public Service, possibly along with the energy associated with those customer-  
5 owned systems through a power purchase agreement with the company. This  
6 would ensure that all parties would receive the benefit of their bargain, thereby  
7 keeping Public Service, Boulder customers and other ratepayers whole.

8 **Q.    DOES THIS CONCLUDE YOUR TESTIMONY?**

9 **A.    Yes, thank you.**

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

**\* \* \* \* \***

**IN THE MATTER OF THE )  
APPLICATION OF PUBLIC SERVICE )  
COMPANY OF COLORADO TO ) DOCKET NO. 14A-0102E  
ADDRESS VOLUNTARY SERVICE )  
OFFERINGS IN THE CITY OF )  
BOULDER )**

**ANSWER TESTIMONY OF KELLY B. CRANDALL**

**ON**

**BEHALF OF**

**THE CITY OF BOULDER**

**June 13, 2014**

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

\* \* \* \* \*

<b>IN THE MATTER OF THE</b>	)	
<b>APPLICATION OF PUBLIC SERVICE</b>	)	
<b>COMPANY OF COLORADO FOR TO</b>	)	
<b>ADDRESS VOLUNTARY</b>	)	<b>DOCKET NO. 14A-0102E</b>
<b>SERVICE OFFERINGS IN THE CITY</b>	)	
<b>OF BOULDER</b>	)	

**ANSWER TESTIMONY OF KELLY B. CRANDALL**

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**LIST OF ATTACHMENTS**

KBC-1	Comparison of Total DSM Revenues to Total DSM Expenditures in Boulder
KBC-2	Corrections to Exh. SMW-2 and Response to Discovery BLDR 1-7.A1
KBC-3	Discovery Responses on DSM Product Oversubscription, BLDR 1-14 and BLDR 3-11
KBC-4	Public Service responses to discovery requests BLDR 1-14 and BLDR 3-11
KBC-5	Docket U-101217, Order 3, Final Order Approving and Adopting Settlement Agreement; Granting Petition for Declaratory Judgment
KBC-6	Letter from Tom DeBoer to Mr. David Danner
KBC-7	Docket UE-120807, Order 01, Complaint and Order Suspending Tariff Revisions, with memorandum dated June 28, 2012, prepared by staff of the WUTC
KBC-8	Docket UE-120807, Order 02, Order Accepting Settlement Agreement and Allowing Withdrawal of Tariff Revisions
KBC-9	Boulder/Public Service 1993 Franchise Agreement, Article 12, Underground Construction and Overhead Conversion
KBC-10	Boulder Undergrounding Fund Spreadsheet
KBC-11	Discovery Responses on Market Transformation Products, BLDR 1-12, BLDR 3-10, BLDR 5-4, and BLDR 5-6

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

\* \* \* \* \*

<b>IN THE MATTER OF THE</b>	)	
<b>APPLICATION OF PUBLIC SERVICE</b>	)	
<b>COMPANY OF COLORADO FOR TO</b>	)	<b>DOCKET NO. 14A-0102E</b>
<b>ADDRESS VOLUNTARY</b>	)	
<b>SERVICE OFFERINGS IN THE CITY</b>	)	
<b>OF BOULDER</b>	)	

**ANSWER TESTIMONY OF KELLY B. CRANDALL**

**I. INTRODUCTION AND QUALIFICATIONS**

- 1
- 2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**
- 3 A. My name is Kelly Crandall. My business address is 1720 14<sup>th</sup> Street, Suite 101, Boulder,
- 4 Colorado, 80302.
- 5 **Q. BY WHOM ARE YOU EMPLOYED AND WHAT IS YOUR POSITION?**
- 6 A. I am employed by the City of Boulder as an Energy Strategy Coordinator.
- 7 **Q. WHOM ARE YOU REPRESENTING IN THIS PROCEEDING?**
- 8 A. I am testifying on behalf of the City of Boulder.
- 9 **Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND.**
- 10 A. I received a Bachelor of Arts from the University of Florida in 2006 and a J.D. from the
- 11 University of Colorado Law School in 2010.
- 12 **Q. AS AN ENERGY STRATEGY COORDINATOR FOR THE CITY OF BOULDER,**
- 13 **WHAT ARE YOUR PRIMARY AREAS OF RESPONSIBILITY?**

1 A. I support the city’s Energy Future and Climate Action Plan efforts through research,  
2 analysis, project management, and stakeholder outreach. I am a member of the city’s  
3 Municipalization Exploration Project, where I provide technical and policy guidance for  
4 diverse areas, including energy resources, financial modeling, customer programs, and  
5 risk analysis. I have provided testimony before the Colorado Public Utilities  
6 Commission (the “Commission”) on SmartGridCity cost recovery (11A-1001E), data  
7 access for local governments (12A-155E), and demand-side management strategic issues  
8 (13A-0686EG), and provide policy and technical support on proceedings involving  
9 renewable energy and energy efficiency, with a focus on energy data access and privacy.

10 **Q. DO YOU HAVE A STATEMENT OF QUALIFICATIONS THAT PRESENTS**  
11 **YOUR EDUCATIONAL AND PROFESSIONAL QUALIFICATIONS AND**  
12 **EXPERIENCE IN MORE DETAIL?**

13 A. A copy of my Statement of Qualifications is included as **Attachment KBC-1**.

14 **II. PURPOSE OF ANSWER TESTIMONY**

15 **Q. WHAT IS THE PURPOSE OF YOUR ANSWER TESTIMONY?**

16 A. In this proceeding, Public Service has proposed that the Commission limit Boulder  
17 customers’ participation in the demand-side management (“DSM”) programs to which  
18 those customers contribute, both through base rates and through the DSMCA rider.  
19 Boulder believes this proposal is wrong-headed and will lead to less DSM overall in the  
20 state. First, Boulder customers are, and will continue to be, customers of Public Service  
21 for some time yet, even should Boulder succeed in its efforts to acquire the Public  
22 Service electric system that serves the city. Second, Public Service’s conclusions that  
23 Boulder consumers always take more DSM funds than they contribute are not supported

1 by data once inaccuracies are corrected. Third, there is no authority under Colorado law  
2 for limiting participation in these programs. I will present evidence from a similar  
3 situation in Washington State in which the staff of the Washington State Utilities and  
4 Transportation Commission argued against the treatment of departing customers, similar  
5 to what Public Service is proposing here, even when the actual date of departure was  
6 known. Fourth, the Public Service proposal violates standard ratemaking principles and  
7 ignores other areas in which Boulder customers may be overpaying. Finally, the proposal  
8 from Public Service has failed to explain with specificity how it would implement its  
9 proposed limitation on Boulder customers' participation in DSM programs.

10 **Q: WHY IS THIS ISSUE SO IMPORTANT TO BOULDER?**

11 A: Residents and businesses in Boulder care so much about energy efficiency and  
12 conservation that the community has twice voted to tax its own electricity consumption to  
13 support additional local investments in those programs. Between 2011-2013, Boulder  
14 invested \$2.4 million of tax funding in advising services and rebates for residents and  
15 businesses through the EnergySmart and SmartRegs programs, with advising services  
16 driving some of the nation's highest audit-to-action rates: about 70% of owner-occupied  
17 residences and 40% of businesses that receive EnergySmart advising implement energy  
18 efficiency measures. I appreciate the opportunity to discuss our concerns about how  
19 Public Service's proposal is not only inappropriate from a practical and policy  
20 perspective, but risks broader harm in the form of less overall energy efficiency  
21 investment occurring in Colorado.

22 **Q. ARE YOU SPONSORING ANY ATTACHMENTS AS PART OF YOUR DIRECT**  
23 **TESTIMONY?**

1 A. Yes. Please see Attachments KBC-1 – KBC-11.

2 **III. THE COMMISSION SHOULD REJECT THE PROPOSED LIMITATION**  
3 **ON DSM PARTICIPATION**

4 **Q: WHAT HAS PUBLIC SERVICE PROPOSED WITH REGARD TO BOULDER**  
5 **CUSTOMERS' PARTICIPATION IN DSM PROGRAMS?**

6 A: According to the direct testimony of Shawn White, beginning at p. 10, Public Service's  
7 proposal is to create a limitation on rebate dollars specific to Boulder by applying the  
8 percentage of Boulder customers' contribution to the overall dollars collected under the  
9 Demand-Side Management Cost Adjustment rider ("DSMCA") to the budgeted amount  
10 of rebates and incentives for a given year. This "budget" rebate cap would limit rebates  
11 and incentives flowing to Boulder customers, except for those from mid- or up-stream  
12 rebates or "market transformation" programs. Once the rebate cap is reached, queued  
13 rebate applications would be held until the next program year's budget became available.

14 **Q: HOW WOULD PUBLIC SERVICE PERFORM THE PROPOSED "TRUE-UP?"**

15 A: At the end of the year, Public Service would apply the proportion of Boulder's  
16 contribution to DSMCA revenues to the actual total DSM rebates and incentives spent to  
17 create an "actual" cap. If the "actual" cap is greater than the "budget" cap, the difference  
18 would be added to Boulder's budget cap for the following year. If the actual cap was less  
19 than the budget cap, the difference would be subtracted from Boulder's budget cap for  
20 the following year. For ease of reference, as I refer to the true-up process in subsequent  
21 sections, I will use the terms "budget cap" and "actual cap," and "rebate cap" if I am  
22 referring to the cap generically.

1 **Q: DO YOU AGREE THAT THIS PROPOSAL IS THE BEST WAY TO HANDLE**  
2 **THE TRANSITION OF BOULDER CUSTOMERS?**

3 A: No, I do not. Public Service’s request is likely to lead to less energy efficiency ultimately  
4 being installed in Colorado. It risks creating significant disruptions in Boulder, a  
5 community that values energy efficiency, by creating a complicated administrative  
6 process despite the relatively small proportion of money that is at issue. For the  
7 following reasons, Public Service’s request to limit Boulder customers’ participation in  
8 DSM programs should be rejected:

- 9 • Boulder customers are customers until they’re not.
- 10 • The conclusions that underpin Public Service’s proposal are inaccurate, and once  
11 inaccuracies in the data have been corrected, it becomes evident that the proposal  
12 is flawed because Boulder customers often receive back in DSM expenditures less  
13 than they contribute in DSM funding. A rebate cap is unnecessary and the  
14 proposal should be rejected.
- 15 • The proposal is contrary to state statutes that support DSM programs because  
16 investing in energy efficiency benefits the entire population.
- 17 • The proposal conflicts with general ratemaking principles. If we were to identify  
18 every area of potential subsidy, we would also need to look at areas where  
19 Boulder customers overpay—an impractical task.

20 If, despite this substantial evidence, the Commission grants the proposal, it should be modified.

21 As it has been presented, it would create implementation challenges that, among other problems,  
22 would serve to limit the amount of DSM that would ultimately be invested in Colorado.

1           **A. BOULDER CUSTOMERS ARE CUSTOMERS OF PUBLIC**  
2           **SERVICE UNTIL THEY ARE NOT**

3 **Q. BOULDER CUSTOMERS WILL REMAIN PUBLIC SERVICE CUSTOMERS**  
4 **FOR SOME NUMBER OF YEARS YET. WHY IS THAT IMPORTANT HERE?**

5           A.     Although there are many reasons to reject Public Service’s request based  
6           on data and precedent, a key consideration is that customers in Boulder are still Public  
7           Service’s customers. While Boulder has given Public Service notice that it wishes to  
8           acquire the electric facilities that serve the city, my understanding is that the process for  
9           completing that transition may take years to complete. Public Service employee Shawn  
10          White acknowledged this on page 14 at line 5 of his Direct Testimony. Boulder  
11          customers will continue to pay for Public Service’s DSM programs through both base  
12          rates and the DSMCA until the date Boulder assumes ownership of the system.

13           **B. WHEN THE INACCURACIES IN PUBLIC SERVICE’S ANALYSIS**  
14           **ARE CORRECTED, THE ANALYSIS DOES NOT SUPPORT ITS**  
15           **PROPOSAL**

16 **Q: YOU SAID THAT PUBLIC SERVICE’S APPLICATION SHOULD BE**  
17 **REJECTED DUE TO INACCURACIES IN ITS ANALYSIS. PLEASE EXPLAIN**  
18 **WHAT PROBLEMS YOU FOUND WITH THE ANALYSIS.**

19 A:     Public Service provided an executable spreadsheet as an attachment to its response to  
20     Boulder’s discovery request, BLDR 1-7.A1. That same spreadsheet was also attached to  
21     Shawn White’s Direct Testimony as SMW-2. This spreadsheet contained numerous

1 errors that Boulder had to correct. Most of the changes were minor, but they included the  
2 following general errors:

- 3 • Incorrect column and row references in the spreadsheet;
- 4 • Data that did not match the actual data presented in the 2013 DSM Annual Status  
5 Report;
- 6 • Assignment of pilot programs to the residential sector for Boulder customers,  
7 while these costs are assigned to DSM Product Development for the broader  
8 portfolio; and
- 9 • Misallocation of rebate and administrative costs for products, such as the Home  
10 Lighting & Recycling Product, that are not tracked by location.

11 The corrected spreadsheet forms the basis for my subsequent analysis.

12 **Q: WERE ANY OF THESE ERRORS SIGNIFICANT?**

13 A: Yes, there was one set of errors in particular that is extremely significant. Public  
14 Service's attribution of costs for the Residential Energy Feedback Pilot in 2012 and 2013  
15 included several cell formula errors that misattribute hundreds of thousands of dollars in  
16 rebates and incentives to Boulder.

17 **Q: PLEASE EXPLAIN THE NATURE OF THE ERROR AND ITS IMPACT.**

18 A: BLDR 1-7.A1 and Exhibit SMW-2 included DSM costs for the years 2010-2013. The  
19 error occurs in years 2012 and 2013 when costs were attributed to Boulder for the  
20 residential Energy Feedback Pilot. As you can see in Table 1, below, although the Public  
21 Service system showed \$0 in the "Product Rebate" column for 2012 and 2013, there are  
22 large dollar amounts attributed to Boulder for rebates.

23

1 **Table 1: Energy Feedback Pilot Results Provided by Public Service for 2012 and 2013**

	Product Participants	Product Gross Installed Cust kWh	Product Rebate	Product Net Gen kWh	Product Admin	Product Total Costs
2012 – PSCo	46,082	14,629,112	\$0	15,849,525	\$603,179	\$603,179
2012 – Boulder	1,782	565,746	\$612,943	23,327	\$0	\$612,943
2013 – PSCo	92,004	17,054,274	\$0	17,606,612	\$553,501	\$553,501
2013 – Boulder	3,872	717,787	\$741,034	23,296	\$0	\$741,034

2 When I looked at the spreadsheet more closely, I identified that the problem was  
3 that the Boulder attributions for “Product Net Gen kWh” and “Product Admin” had been  
4 moved over one cell to the left from where they should be. In other words, the \$612,943  
5 in rebates attributed to Boulder in 2012 were actually the net generator kWh that should  
6 have been attributed to Boulder. The corrected Boulder data is provided in Table 2 below.  
7 SMW-2 has been corrected and is attached as **Attachment KBC-2**. Additionally, the  
8 kWh savings have been adjusted in Table 2 below to reflect the gross and net savings that  
9 were reported for the Energy Feedback Pilot in the 2012 and 2013 DSM Annual Status  
10 Reports, and the other attribution errors mentioned above.

11 **Table 2: Energy Feedback Pilot Results As Corrected by Boulder for 2012 and 2013**

	Product Participants	Product Gross Installed Cust kWh	Product Rebate	Product Net Gen kWh	Product Admin	Product Total Costs
2012 – PSCo	46,082	15,849,525	\$0	15,849,525	\$603,179	\$603,179
2012 – Boulder	1,585	545,175	\$0	545,175	\$20,748	\$20,748
2013 – PSCo	92,004	18,477,003	\$0	18,477,003	\$553,501	\$553,501
2013 – Boulder	3,211	644,820	\$0	644,820	\$19,316	\$19,316

12 **Q: DID YOU FIND ADDITIONAL ERRORS?**

13 A: Yes. While the other errors were not as substantial as the one I described for the Energy  
14 Feedback pilot, overall there were errors in eight programs. While most of the corrections  
15 decreased costs attributable to Boulder, some increased Boulder’s costs. Depending on  
16 the year, the errors overstated total DSM expenditures for Boulder customers by

1 \$127,000 to \$962,000, and rebate expenditures by \$129,000 to \$938,000. Table 3,  
 2 below, demonstrates that these corrections have a significant impact on Mr. White’s  
 3 analysis and conclusions, lowering the Boulder rebate percentage allocations by between  
 4 0.4% and 2.1%, depending on the year. For 2010 and 2013, these corrections also drop  
 5 the Boulder rebate allocation percentages below the Boulder DSM revenue percentages;  
 6 in other words, with the corrected data, it is now apparent that Boulder customers  
 7 “subsidized” other customers in these years.

8 **Table 3: Effect of Corrections on Boulder Rebate Attribution**

	<b>Total Rebate Expenditure</b>	<b>Allocation to Boulder by Public Service</b>	<b>Original Boulder %</b>	<b>Boulder Allocation with Error Corrected</b>	<b>Corrected Boulder %</b>
<b>2010</b>	\$25,745,089	\$1,336,693	5.2%	\$1,071,661	4.2%
<b>2011</b>	\$32,619,318	\$1,793,016	5.5%	\$1,663,772	5.1%
<b>2012</b>	\$44,719,894	\$3,026,245	6.8%	\$2,238,214	5.0%
<b>2013</b>	\$42,927,494	\$2,637,704	6.1%	\$1,699,268	4.0%

9  
 10 **Q: NOW THAT THE SPREADSHEET ERRORS HAVE BEEN CORRECTED, HOW**  
 11 **DO THE DSM REVENUES COLLECTED FROM BOULDER CUSTOMERS**  
 12 **COMPARE TO THE DSM COSTS OR EXPENDITURES ATTRIBUTED TO**  
 13 **BOULDER CUSTOMERS?**

14 **A:** Ultimately, although Boulder customers receive a disproportionate percentage of DSM  
 15 rebate dollars in some years, the conclusion that Boulder customers are always net  
 16 beneficiaries of DSM is incorrect. Indeed, in both 2010 and 2013, Boulder customers  
 17 contributed more in total DSM revenues than they received back in rebates, associated  
 18 administrative expenses, and other attributable costs, such as Public Service’s  
 19 performance incentive. Table 4, below, is provided as a summary with a more detailed  
 20 table in **Attachment KBC-3**.

**Table 4: Comparison of Total DSM Revenues to Total DSM Expenditures in Boulder (millions of dollars)**

	2010	2011	2012	2013
DSM Electric Revenues	\$5.1	\$4.4	\$4.8	\$5.7
DSM Expenditures	\$4.4	\$4.9	\$6.3	\$5.3
Over/(Under) Collection	\$0.7	(\$0.6)	(\$1.5)	\$0.4

**Q: DOES BOULDER RECEIVE MORE DSM REBATES THAN IT WOULD UNDER THE CAP?**

A: Boulder customers do not consistently receive more rebates than they would have if the cap had been applied. Table 5, below, applies the budget cap process that Mr. White described, in which Boulder’s contribution to the DSMCA in the prior year is applied to the rebate budget for the next year (I assumed that the 2009 percentage was the same as 2010 in the absence of data). It was compiled using data from BLDR 1-7.A1, as corrected by Boulder (Attachment KBC-2); Mr. White’s testimony; and Public Service’s filed DSM annual status reports. Boulder customers did not receive “excess” rebates in 2010 or 2013, and in the years where they did receive excess rebates, it was by a fraction of the overall rebate budget.

**Table 5: Application of Budget Cap to Boulder**

	2010	2011	2012	2013
Prior-Year DSMCA Contribution	4.4%	4.4%	4.2%	4.2%
Rebate Budget	\$29,722,158	\$33,740,729	\$40,666,114	\$45,248,100
Boulder Rebate Cap	\$1,307,775	\$1,484,592	\$1,707,977	\$1,900,420
Boulder Actual Rebates Received	\$1,071,661	\$1,663,772	\$2,238,214	\$1,699,268
Rebates Received Over/(Under) Cap	(\$236,114)	\$179,180	\$530,238	(\$201,153)

**Q: HOW DO YOU EXPLAIN THE HIGH LEVELS OF DSM REBATES PROVIDED TO BOULDER IN 2011 AND 2012?**

A: In 2010, Boulder joined with Boulder County and the City and County of Denver to win a \$25 million American Recovery and Reinvestment Act (“ARRA”) grant that funded Boulder County EnergySmart and the Denver Energy Challenge. Boulder worked with

1 those sister local governments to advertise local government energy efficiency programs  
2 that provided advising services and rebates. EnergySmart rebates were also offered to  
3 encourage voluntary compliance with Boulder's SmartRegs regulations, which went into  
4 effect in 2011 and require residential rental units (about 50% of residential units in  
5 Boulder) to meet base energy efficiency standards as a condition of rental licensing by  
6 2019. Those additional funds served to make 2011 and 2012 outlier years. While another  
7 grant like that would be nice, we do not anticipate it in the near future.

8 **Q: WAS 2013 ALSO AN UNUSUAL YEAR?**

9 A: Unfortunately, yes. The Boulder community, and our neighboring communities, were all  
10 sharply impacted by the September 2013 floods. In Proceeding No. 13M-1152EG,  
11 Public Service received approval for a Flood Victim DSM Rebate Program that budgeted  
12 \$1.6 million in additional rebates for flood victims in 2013 and \$1 million in 2014. We  
13 appreciate that flood victims who are forced to rebuild their homes and businesses will be  
14 able to do so in an energy-efficient way. I am providing this example only to note that in  
15 2013, despite this extra funding available specifically to flood victims, many of whom  
16 were in Boulder, Boulder customers did not receive more in DSM expenditures than they  
17 contributed. I believe this strengthens the correlation of 2011 and 2012 to the availability  
18 of Recovery Act funding. Boulder expects that future DSM expenditures in the city will  
19 more closely resemble the expenditures in 2010 or 2013.

20 **Q: DID PUBLIC SERVICE BENEFIT FROM THIS FEDERAL GRANT FUNDING  
21 BEING AVAILABLE?**

22 A: Yes. In 2011 and 2012, Boulder customers, and customers in Boulder County and  
23 Denver, made significant energy efficiency investments. Public Service benefited as well.

1 In 2011, it exceeded its electric energy savings goals by 33% and received a performance  
2 incentive of \$20.3 million.<sup>1</sup> In 2012, it exceeded its electric energy savings goals by 21%  
3 and received a performance incentive of \$17.7 million.<sup>2</sup>

4 **Q: DID BOULDER’S PARTICIPATION PREVENT OTHER CUSTOMERS FROM**  
5 **PARTICIPATING IN DSM PROGRAMS?**

6 A: No, it did not. In responses to discovery, attached as **Attachment KBC-4**, Public Service  
7 acknowledged that it only ever “closed” one DSM product due to budget overruns. This  
8 was the ENERGY STAR New Homes product, which it is more difficult for Boulder  
9 customers to participate in because of Boulder’s high-performance building codes. This  
10 means that Boulder customers’ participation in DSM does not prevent other customers  
11 from participating.

12 **Q. HAS PUBLIC SERVICE PROPOSED HOW BOULDER CUSTOMERS WOULD**  
13 **BE MADE WHOLE IF BOULDER’S ACQUISITION OF THE ELECTRIC**  
14 **SYSTEM IS NOT COMPLETED?**

15 A. None of Public Service’s proposals provide for retroactively restoring any dollars lost  
16 through the cap process if Boulder does not municipalize.

17 **Q: GIVEN YOUR CONCLUSIONS FROM THE DATA, WHAT DO YOU**  
18 **RECOMMEND?**

19 A: I recommend that the Commission reject Public Service’s application to cap Boulder  
20 customers’ participation in DSM programs. Public Service is relying on an inaccurate  
21 analysis to propose an administratively burdensome process. Once those inaccuracies are  
22 corrected, it can no longer be said with certainty that Boulder is or will be a net consumer

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<sup>1</sup> 2011 Demand-Side Management Annual Status Report, Proceeding No. 10A-471EG (April 2, 2012), at p. 25-26.

<sup>2</sup> 2012 Demand-Side Management Annual Status Report, Proceeding No. 11A-631EG (April 1, 2013), at p.25-26.

1 of DSM funding. Because DSM incentives are intended to be set at levels to encourage  
2 investments in efficiency that would not otherwise be made, the specter of a cap could  
3 cause Boulder customers to delay making DSM investments for fear they will not receive  
4 rebates. Below, I present several other reasons why DSM spending should not be capped  
5 in Boulder.

6 **C. THERE IS NO AUTHORITY UNDER COLORADO LAW FOR**  
7 **LIMITING PARTICIPATION IN DSM PROGRAMS**

8 **Q. IN YOUR INTRODUCTION, YOU STATED THAT THERE IS NO AUTHORITY**  
9 **UNDER COLORADO LAW FOR LIMITING PARTICIPATION IN DSM**  
10 **PROGRAMS BASED ON THE AMOUNT CONTRIBUTED. WHAT IS THE**  
11 **BASIS FOR THAT STATEMENT?**

12 A. Though I am not a practicing attorney, I do have a law degree from the University of  
13 Colorado and, based on my independent review of C.R.S. § 40-3.2-104, entitled  
14 “Electricity utility demand-side management programs – rules – annual report,” as well  
15 as the Commission’s Rules, and my discussion with legal counsel, I have seen nothing in  
16 the law that permits any distinction between customers based on their contribution to  
17 DSM programs.

18 **Q. WHAT IS THE PURPOSE OF THE STATUTE GOVERNING ELECTRIC**  
19 **UTILITY DEMAND-SIDE MANAGEMENT PROGRAMS?**

20 A. Part 2 of the Public Utility Law’s Article 3.2 is entitled, “Coordinated Utility Plan to  
21 Reduce Air Emissions.” I think sometimes we get so lost in the trees of particular  
22 program proposals that it’s easy to forget the reason the legislation was passed in the first  
23 place was to reduce air pollution. Section 40-3.2-1-1 states that “cost-effective natural

1 gas and electricity demand-side management programs will save money for consumers  
2 and utilities and protect Colorado’s environment.” The specific mention of “consumers,”  
3 as opposed to “ratepayers,” is an indication that the General Assembly considered far  
4 more in passing this legislation than just the costs and benefits to utilities in the state.  
5 The General Assembly was focused on improving “the quality of life and health of  
6 Colorado citizens and increasing the attractiveness of Colorado as a place to live and  
7 conduct business.” The demand-side management law, C.R.S. § 40-3.2-104, lays out the  
8 rules applicable to investor-owned utilities for implementing the General Assembly’s  
9 policy.

10 **Q. IS THERE ANYTHING IN THE DEMAND-SIDE MANAGEMENT STATUTE**  
11 **THAT PERMITS UTILITIES TO DISCRIMINATE AGAINST RATEPAYERS**  
12 **BASED ON THEIR CONTRIBUTION TO DSM?**

13 A. Not to my knowledge. Public Service is basing its request on another, more general  
14 statute that says that “a public utility, as to rates, charges, service, or facilities, or in any  
15 other respect, shall not make or grant any preference or advantage to a corporation or  
16 person or subject a corporation or person to any prejudice or disadvantage. A public  
17 utility shall not establish or maintain any unreasonable difference as to rates, charges,  
18 service, facilities, or between localities or class of service.”<sup>3</sup>

19 **Q. IS IT THE CASE THAT OTHER RATEPAYERS WILL NOT RECEIVE THE**  
20 **FULL BENEFIT OF THE DSM PROGRAM IF BOULDER CUSTOMERS**  
21 **LEAVE THE PUBLIC SERVICE SYSTEM?**

22 A. That’s an interesting question. A major reason for DSM in Colorado is the decrease in  
23 the need for additional generation. That has certainly already taken place as a result of

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<sup>3</sup> C.R.S. § 40-3-106

1 Boulder's and other communities' participation in DSM programs. Boulder's leaving the  
2 Public Service system will not negate that. In fact, Public Service and its remaining  
3 ratepayers should not have to acquire additional generation for quite some time once  
4 Boulder and its demand leave the system.

5 **Q. YOU ALSO STATED THAT YOU WOULD PROVIDE EVIDENCE FROM A**  
6 **SIMILAR SITUATION IN WASHINGTON STATE ON THIS TOPIC. WHAT**  
7 **WERE THE FACTS IN THAT SITUATION?**

8 A. In November 2008, the citizens of Jefferson County, Washington, approved a proposition  
9 authorizing the Jefferson County Public Utility District (JPUD) to construct or acquire  
10 electric power facilities in Jefferson County. After negotiations to resolve the threatened  
11 condemnation action, JPUD entered into an Asset Purchase Agreement to acquire  
12 transmission and distribution assets within Jefferson County with its electric utility  
13 provider, Puget Sound Electric ("PSE"), on June 11, 2010. That agreement was approved  
14 by the Washington State Utilities and Transportation Commission (WUTC) on February  
15 1, 2011. Please see **Attachment KBC-5**, Docket U-101217, Order 3, Final Order  
16 Approving and Adopting Settlement Agreement; Granting Petition for Declaratory  
17 Judgment, dated February 1, 2011.

18 On June 1, 2012, PSE filed proposed revisions to its tariff for electric service.  
19 Please see **Attachment KBC-6**, Letter from Tom DeBoer, Director, Federal & State  
20 Regulatory Affairs for PSE, to Mr. David Danner, Executive Director and Secretary of  
21 the Washington Utilities and Transportation Commission. According to the second  
22 paragraph of that letter, the purpose of the filing was to "cease all non-cost effective  
23 conservation programs in the Jefferson County portion of PSE's electric service territory,

1 and for cessation of charging PSE's Jefferson County customers the charges under  
2 Schedule 120 Electricity Conservation Rider." On page 2 of 7, Mr. DeBoer discusses the  
3 fact that JPUD had announced six weeks earlier that it had secured a loan guarantee to  
4 purchase certain electric facilities from PSE and that April 1, 2013, was the "expected  
5 transaction date for Jefferson PUD to own selected assets of that part of PSE's system."  
6 The application was filed by PSE just 10 months before the planned transfer date.

7 **Q. WHAT DID PSE PROPOSE IN THAT FILING?**

8 A. PSE proposed that the customers within the utility that would be operated in the future by  
9 JPUD should not be allowed to participate in electric conservation programs in the  
10 remaining 10 months that they would be customers of PSE.

11 **Q. WHAT WAS THE BASIS FOR THAT POSITION?**

12 A. PSE provided information that showed the life of its program measures for both  
13 residential and commercial energy management programs. This indicated that only  
14 Home Energy Reports had an expected life (in years) that was limited to the period  
15 before the expected transaction date. PSE reasoned that it was "no longer cost-effective  
16 to PSE and *all* PSE's customers to continue offering conservation programs in Jefferson  
17 County."

18 **Q. DID THE WUTC STAFF ANALYZE THE PROPOSED TARIFF CHANGE?**

19 A. Yes, please see **Attachment KBC-7**, Docket UE-120807, Order 01, Complaint and  
20 Order Suspending Tariff Revisions, to which is attached a memorandum dated June 28,  
21 2012, that was prepared by David Nightingale, Senior Regulatory Engineering Specialist  
22 and Julianna Williams, Regulatory Analyst. This memorandum was submitted by  
23 Commission Staff at the Commission's Open Meeting on June 28, 2012.

1 **Q. WHAT DID THE WUTC STAFF FIND?**

2 A. The Commission Staff found that PSE’s approach to measure life and cost effectiveness  
3 for Jefferson County ratepayers was incorrect. They stated on page 2, “PSE’s  
4 justification for terminating conservation programs in Jefferson County is that the  
5 transfer of ownership makes the programs no longer cost-effective because ‘there is less  
6 than one year of life left for conservation programs to achieve savings in Jefferson  
7 County.’” PSE had argued that that very short measure life timeframe meant that the  
8 conservation programs were no longer cost-effective. Staff reviewed the accepted  
9 definitions and practice for measure life (the length of time over which a measure  
10 produces conservation savings) and cost-effective (project or measure is forecast to be  
11 “reliable and available within the time it is needed” and “meet(s) or reduce(s) the electric  
12 power demand of the intended consumers at an estimated incremental system cost no  
13 greater than that of the least-cost similarly reliable and available alternative project or  
14 resource or any combination thereof”). They then looked at how PSE determined cost-  
15 effectiveness of its conservation programs, using the Total Resource Cost (TRC) test  
16 methodology provided by the Northwest Power and Conservation Council.

17 The WUTC Staff disputed PSE’s application of accepted measure life and cost-  
18 effectiveness concepts to Jefferson County, given that “measure lives are determined by  
19 the effective useful life, e.g., how long the measure produces conservation savings for the  
20 customer, not PSE’s tenure as the owner of the electric system assets in Jefferson  
21 County.” WUTC staff further stated:

- 22 • There was no precedent for cessation of conservation programs due to asset  
23 ownership changes;

- 1 • While many pieces of the transaction had reportedly been put in place, the
- 2 transaction may or may not occur as anticipated;
- 3 • PSE had cited no precedent for such an unusual proactive elimination of the
- 4 conservation program and tariff as it was requesting;
- 5 • The proposal was unfair to Jefferson County customers;
- 6 • Jefferson County customers pay for conservation services on an ongoing basis;
- 7 • PSE would still meet its conservation target;
- 8 • The transition plan would be appropriate if implemented when the transfer of
- 9 ownership took place; and
- 10 • Public policy is served by a continuous conservation program.

11 **Q: WHY IS THE LANGUAGE OF THAT LAST BULLET PARTICULARLY**  
12 **IMPORTANT?**

13 A: My takeaway is that the Commission should not, through this application, take steps that  
14 would lead to less energy efficiency being installed in Colorado. Energy efficiency is a  
15 least-cost resource and it provides air quality and environmental benefits that will last in  
16 the state, regardless of the utility providing service.

17 **Q. WHAT WAS THE ULTIMATE OUTCOME OF THAT APPLICATION?**

18 A. The Commission suspended the tariff filing pending public hearings to determine  
19 whether the proposed decreases in rates (since Jefferson County customers would not  
20 receive or pay for the service) were fair, just, reasonable and sufficient. However, on  
21 September 17, 2012, PSE filed a Full Settlement Re: Cessation of Conservation Programs  
22 and Charges for Customers in Jefferson County (the “Agreement”). Under the terms of  
23 the Agreement, which was signed by PSE, JPUD, Commission Staff, and other parties to

1 the proceeding, PSE continued to offer and charge for approved electricity conservation  
2 programs in its Jefferson County service territory until the Closing Date (which was  
3 defined as the date upon which JPUD assumed full and complete responsibility for  
4 providing electric service to customers in Jefferson County). It was also agreed that PSE  
5 would be allowed to count all energy savings in Jefferson County up to an including the  
6 Closing Date. The WUTC approved the settlement on October 11, 2012. Please see  
7 **Attachment KBC-8**, Docket UE-120807, Order 02, Order Accepting Settlement  
8 Agreement and Allowing Withdrawal of Tariff Revisions.

9 **Q. WHY IS THIS FILING IN WASHINGTON STATE INSTRUCTIVE IN THIS**  
10 **PROCEEDING?**

11 A. There are several reasons this is an important filing for the Commission to consider.  
12 First, the analyses offered in support of the applications are quite similar. Public Service  
13 has argued that it would be unfair to its remaining customers for Boulder customers to  
14 continue to monetarily benefit from the DSM programs in amounts greater than the  
15 amounts they pay for DSM programs (although I dispute that analysis). In his Direct  
16 Testimony, Shawn White spends considerable time discussing the average expected life  
17 of DSM measures in Public Service's portfolio and states that many of those measures  
18 have "useful lives that are likely longer than the City's projected cut-over date (in the  
19 2017 timeframe)." Direct Testimony of Shawn M. White, p. 14, ll. 4-5.

20 Second, the method for calculating cost-effectiveness in Washington State, which  
21 uses a modified TRC, is comparable to the method used in Colorado.

22 Third, in its Order Accepting Settlement Agreement and Allowing Withdrawal of  
23 Tariff Revisions, KBC-8, page 1, ¶ 3, the Washington Commission stated that "the cost-

1 effectiveness of conservation measures is dependent on measure life, and the life of the  
2 measures is not dependent on ownership.” Keep in mind, too, that Colorado’s DSM  
3 statute, C.R.S. § 40-3.2-104, at subsection (3), allows the Commission to “permit electric  
4 utilities to implement cost-effective electricity DSM programs to reduce the need for  
5 additional resources that would otherwise be met through a competitive acquisition  
6 process.” My understanding of this is that DSM programs across the state are primarily  
7 intended to decrease the need for new generation sources, which historically have  
8 negatively impacted air quality for all Coloradans. From that perspective, it seems  
9 foolish to limit anyone’s participation in DSM programs.

10 Further, as was noted by Commission Staff in Washington State, electric  
11 customers do not pre-pay for future conservation programs, but rather pay for current  
12 programs through the Electricity Conservation Service Rider. Conservation services are  
13 provided on an ongoing basis and customers pay for those services on an on-going basis  
14 through that rider. This is also the case in Colorado, where customers pay for  
15 conservation services through both their base rates and the DSMCA rider.

16 Finally, unlike the Jefferson PUD proceeding, there has been no agreed-upon  
17 transfer date, and even after the condemnation trial is complete, the actual transfer may  
18 not take place for a few years. As Mr. White stated, Boulder is hoping to pay for the  
19 electric system before the end of 2016, about 2½ years from now, but there is no date  
20 certain on which Boulder will assume the operation of the electric system.

21 Once the condemnation is complete, Boulder would be interested in reaching an  
22 agreement with Public Service regarding how best to discontinue DSM programs and  
23 changes, as was done in the Washington State case.

1 **D. PUBLIC SERVICE’S REQUEST CONFLICTS WITH GENERAL**  
2 **RATEMAKING PRINCIPLES**

3 **Q: WHAT ARE YOUR OTHER CONCERNS ABOUT LIMITING BOULDER**  
4 **CUSTOMERS’ ACCESS TO DSM PROGRAMS?**

5 A: Another concern is that Public Service’s proposal violates general ratemaking principles.  
6 Bonbright’s classic treatise, Principles of Public Utility Rates,<sup>4</sup> explains that cross-  
7 subsidization is generally frowned upon and that those who cause costs should pay for  
8 them. Yet cross-subsidization occurs in all sorts of ways: urban customers subsidize rural  
9 customers and higher-income customers subsidize lower-income customers. Although  
10 ratemakers strive to avoid cross-subsidization, there can be policy reasons for allowing it  
11 in some circumstances.

12 Indeed, it may be that Boulder is currently cross-subsidizing other parts of the  
13 system. Although line losses within Boulder are likely to be relatively low, due to the  
14 city’s compact design that has resulted from decades of effective growth management,  
15 Boulder customers pay for higher line losses that Public Service incurs on average  
16 throughout its system. Another example is that Boulder customers no longer have access  
17 to an undergrounding fund even though they continue to pay base rates that fund  
18 underground investments in other cities.

19 **Q: PLEASE EXPLAIN WHAT YOU MEAN BY AN “UNDERGROUNDING FUND.”**

20 A: Public Service’s franchise agreements with cities and towns include a provision that  
21 obligates it to make one percent of the preceding year’s electric revenues derived from  
22 customers within that municipality available for expenditure for the purpose of

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<sup>4</sup> JAMES C. BONBRIGHT, PRINCIPLES OF PUBLIC UTILITY RATES, 290-91 (1961).

1 undergrounding or reconfiguring electric distribution or transmission lines in streets and  
2 other public places within the municipality. I've attached Article 12, Underground  
3 Construction and Overhead Conversion, from Boulder's 1993 Franchise Agreement as  
4 **Attachment KBC-9.**

5 **Q. WAS BOULDER THE FIRST CITY TO RECEIVE THAT BENEFIT?**

6 A. That's my understanding. Boulder obtained that benefit through franchise negotiations.  
7 Other municipalities were able to obtain the same benefit through the "most favored  
8 nation" provision that used to be included in all Public Service franchise agreements.

9 **Q. WHAT IS THE SOURCE OF THE FUNDS USED FOR UNDERGROUNDING**  
10 **UNDER THAT PROVISION?**

11 A. As the Franchise Agreement explains, the amount of the fund is calculated based on  
12 electric revenues received from the municipality. However, as I understand it, the 1% for  
13 undergrounding, which goes only to cities that have franchises, is designated as a "capital  
14 expense" and is included in the rate base that is approved by the Commission. As such,  
15 the money is an "asset" once invested, and then gets the same treatment as other assets,  
16 like power plants—it is paid off by all ratepayers, whether they are in cities with  
17 franchises or not.

18 **Q. SO IN OTHER WORDS, BOULDER CUSTOMERS ARE STILL PAYING FOR**  
19 **UNDERGROUNDING?**

20 A. Yes, they are.

21 **Q. DOES BOULDER RECEIVE ANY UNDERGROUNDING BENEFIT?**

22 A. No, to my knowledge, Boulder has not received any undergrounding benefit since its  
23 Franchise Agreement with Public Service ended in 2010.

1 **Q. WHAT IS PUBLIC SERVICE'S RATIONALE FOR DENYING THAT BENEFIT?**

2 A. Public Service has stated their position in recent public presentations that the return of  
3 one-percent of electric revenues is a benefit that is exclusive for communities that  
4 exercise franchise agreements. Therefore, since Boulder no longer has a franchise  
5 agreement with Public Service, it is not entitled to receive that benefit.

6 **Q. HOW MUCH DID BOULDER TYPICALLY RECEIVE IN UNDERGROUNDING  
7 FUND BENEFITS?**

8 A. The amount received from the 1% franchise fee has increased over the years as Public  
9 Service's revenues from Boulder increased. I have provided spreadsheets that show the  
10 undergrounding funds attributable to Boulder since 1976. Please see **Attachment KBC-**  
11 **10**. The credits accrued in 2009 amounted to \$1,064,324.

12 **Q. DO OTHER LOCAL GOVERNMENTS THAT DO NOT HAVE FRANCHISE  
13 AGREEMENTS WITH PUBLIC SERVICE RECEIVE THAT  
14 UNDERGROUNDING BENEFIT?**

15 A. My understanding is that other local governments without franchises, such as counties, do  
16 not receive designated undergrounding funds. But I'd point out that the cost of serving  
17 rural customers may be much greater than that for urban customers and not providing  
18 undergrounding may even out expenditures.

19 **Q. SHOULD THAT SAME RATIONALE APPLY TO BOULDER?**

20 A. As I noted above, Boulder is a fairly compact city. I do not see how that rationale could  
21 apply to Boulder.

22 **Q. IF BOULDER'S UNDERGROUNDING BENEFIT ENDED IN 2010, WHY HAS  
23 BOULDER NOT RAISED THIS ISSUE EARLIER?**

1 A. We had hoped that we could reach an agreement with Public Service, short of  
2 municipalization, that would allow Boulder to meet its Energy Future Goals. However,  
3 given Public Service’s application in this proceeding, in which it is seeking approval to  
4 no longer provide its Boulder customers with the same benefits as its other customers,  
5 Boulder decided to take a closer look and examine how it was being treated by Public  
6 Service in other areas.

7 **Q: WHAT DOES THIS EXAMPLE LEAD YOU TO CONCLUDE?**

8 A: I do not believe that the Commission should approve Public Service’s request to cap  
9 Boulder customers’ participation in DSM programs. Boulder understands the complexity  
10 that its exploration of municipalization introduces with relation to ongoing efforts.  
11 However, we do not think it is productive to go category-by-category across Public  
12 Service’s costs to identify every instance in which Boulder may subsidize, or is  
13 subsidized by, other ratepayers. Public Service has simply selected some high-profile  
14 costs to attribute to Boulder in this proceeding. We are concerned about the precedent  
15 this would set for other communities or customers.

16 **E. IF THE COMMISSION APPROVES PUBLIC SERVICE’S REQUEST,**  
17 **IT CARRIES WITH IT SIGNIFICANT IMPLEMENTATION**  
18 **CHALLENGES THAT SHOULD BE RECTIFIED.**

19 **Q: IF THE COMMISSION WERE TO GRANT PUBLIC SERVICE’S REQUEST**  
20 **RELATED TO DSM, WHAT CHALLENGES DO YOU SEE ASSOCIATED**  
21 **WITH IT?**

22 A: I do not think there are grounds for Public Service’s request to be granted. However,  
23 should the Commission ultimately decide to approve it, I have identified six

1 implementation challenges associated with Public Service’s request that would need to be  
2 corrected.

3 **Q: WHAT IS THE FIRST IMPLEMENTATION CHALLENGE?**

4 A: The first challenge is that it is unclear whether Public Service would calculate Boulder’s  
5 actual contribution to DSM revenues through base rates and the DSMCA before it  
6 develops the actual rebate cap during its “true-up” process. Mr. White’s direct testimony,  
7 at p. 12, lines 13-14, indicates that the actual cap would be based on the same estimate of  
8 Boulder’s contribution to the DSMCA that was used to create the budget cap. But a true-  
9 up, by definition, should include actual numbers.

10 **Q: WHAT IS THE SECOND IMPLEMENTATION CHALLENGE?**

11 A: The second challenge is that the attribution of mid- and up-stream rebates and market  
12 transformation products is unclear. Please see **Attachment KBC-11** for a series of  
13 responses to discovery that indicate that there is some ambiguity as to what a “market  
14 transformation program” is and whether it is different from a mid- or up-stream rebate  
15 product. Mr. White’s testimony states that market transformation programs and upstream  
16 rebate products would be excluded from the rebate cap for Boulder customers, but Public  
17 Service’s response to discovery request BLDR 5-6, included in Attachment KBC-11,  
18 suggests that there would be some “true-up” on those products. If the Commission  
19 approves the rebate cap, we would appreciate specificity as to which rebates and  
20 incentives are not included as part of the cap. Details like this are critical to understand  
21 the impact on Boulder residents and businesses.

22 Furthermore, we do not believe that Low-Income products, which impact low-  
23 income residents and non-profits, should be included within the rebate cap. Although

1 they can be attributed to Boulder customers, these programs provide crucial services and  
2 should not be placed at risk because of a dispute between Public Service and Boulder.

3 **Q: WHAT IS THE THIRD IMPLEMENTATION CHALLENGE?**

4 A: It has not been specified how we would know when Boulder is approaching the budgeted  
5 rebate cap. Boulder should be notified, and requests that the Boulder community be  
6 notified as well, when rebates are running low. The availability of rebates impacts not  
7 just Boulder city staff implementing SmartRegs but also Boulder County staff and  
8 contractors implementing EnergySmart advising services. Public Service's response to  
9 discovery request BLDR 3-11, provided earlier as part of Attachment KBC-4, describes  
10 the process that Public Service typically uses to notify prospective contractors that a  
11 rebate product budget is being approached. If Public Service's request is approved,  
12 Boulder expects that Public Service would work with the city and county to ensure that  
13 Boulder customers are notified if they are approaching rebate limits in a year.

14 **Q: WHAT IS THE FOURTH IMPLEMENTATION CHALLENGE?**

15 A: Unless Public Service is able to accurately assess and allocate rebate dollars in real time,  
16 there will be a lag time for the "true up" process to occur. I am concerned that it could be  
17 months between a new year's budget becoming available and the rebate cap for Boulder  
18 being trued-up. This means we will not know whether Boulder customers will have  
19 access to more or less money under the budget cap due to the prior year's over- or under-  
20 runs. This could create challenges for outreach associated with programs like  
21 EnergySmart and SmartRegs. If Public Service's request is granted, the data processing  
22 associated with it needs to happen expeditiously.

23 **Q: WHAT IS THE FIFTH IMPLEMENTATION CHALLENGE?**

1 A: Interestingly, the true-up process that Public Service proposed has a second-order effect  
2 of decreasing the ultimate amount of DSM funds that are available in Colorado beyond  
3 what was probably intended. Recall that Public Service has proposed to “true up” the  
4 budget cap to the actual cap at the end of each year. Logically, instituting a rebate cap  
5 will prevent some rebate expenditures that might otherwise have occurred without the  
6 cap. But because Public Service proposed to calculate Boulder’s actual rebate cap based  
7 on a total rebate expenditure that is less than it would have been because of the cap, some  
8 funding will be lost during the “true up” process. Furthermore, additional funds will be  
9 lost each subsequent year the rebate cap is trued-up.<sup>5</sup> Table 6, below, uses data from  
10 Public Service’s 2012 Annual DSM Status Report to show that Boulder customers would  
11 have received \$23,000 less during the true-up process due purely to the rebate cap itself.  
12 This may not be a large pool of money, but it is important to Boulder customers.  
13

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<sup>5</sup> A similar example is the “ratcheting effect” identified under the Colorado Taxpayer’s Bill of Rights (“TABOR”). BELL POLICY CENTER, TEN YEARS OF TABOR (2003) 60, *available at* <http://bellpolicy.org/sites/default/files/TABOR10.pdf> (defining “ratcheting effect”).

1 **Table 6: Loss of Rebate Dollars Attributable to Proposed True-Up Process**

Boulder “share” of DSMCA revenues from prior year (2011)	4.2%
Rebate Budget for 2012	\$40,666,114
Budget Cap for Boulder in 2012	\$1,707,977
Rebate Actual for 2012	\$44,719,894
Actual Cap for Boulder in 2012	\$1,878,236
Actual Rebates Received by Boulder in 2012	\$2,238,214
Rebates Received in Excess of Budget Cap	\$530,238
Reduction in Total Rebate Spend in 2012 due to Boulder Budget Cap	\$44,189,656
Effective Actual Cap for Boulder in 2012	\$1,855,966
<b>IMPACT ON TRUE-UP IN 2013</b>	
If the Budget Cap Is Subtracted From the Actual Cap	\$170,259
If the Budget Cap Is Subtracted From the Effective Actual Cap	\$147,989
Rebate Dollars Lost to Boulder	\$22,270

2           If the Commission were to approve Public Service’s request, it should ensure that  
3 this second-order effect is mitigated, perhaps by requiring Public Service to calculate the  
4 rebates that would have been awarded in that year in the absence of the cap (i.e., any  
5 rebates that are still in the queue), and adding that to the total rebate spend prior to setting  
6 Boulder’s actual cap in the true up process. This is analogous to grossing Public Service  
7 up for taxes when providing a performance disincentive offset and it would ultimately  
8 allow more DSM to occur in Colorado, even with a cap on Boulder.

9 **Q: WHAT IS THE SIXTH IMPLEMENTATION CHALLENGE?**

10 A: The sixth and final challenge that I have identified is the question of how Boulder  
11 customers would be made whole if Boulder chooses not to municipalize—for example, if  
12 Public Service is able to present an opportunity that would meet Boulder’s Energy Future  
13 goals. I do not have an immediate solution for this, but there should be a process to  
14 reverse any outcomes that limit DSM in Boulder and, consequently, in the state of  
15 Colorado.

1 **Q: IF THE COMMISSION APPROVES OF PUBLIC SERVICE’S REQUEST TO**  
2 **LIMIT BOULDER CUSTOMERS’ PARTICIPATION IN DSM, DOES THE CITY**  
3 **HAVE ANY REQUESTS IN ADDITION TO CLARIFYING AND RECTIFYING**  
4 **THE ISSUES DESCRIBED ABOVE?**

5 A: Yes, we do have an additional request. If Public Service’s proposal regarding DSM is  
6 approved and implemented, we would like the ability to audit Public Service’s numbers  
7 regularly, on an ongoing basis. I am concerned about the quality of data Boulder has  
8 received in this and prior proceedings on DSM, as discussed in earlier sections.

9 **IV. SUMMARY OF POSITION**

10 **Q. COULD YOU SUMMARIZE BOULDER’S POSITION WITH REGARD TO THE**  
11 **PUBLIC SERVICE PROPOSAL TO LIMIT BOULDER CUSTOMERS’**  
12 **PARTICIPATION IN DSM PROGRAMS?**

13 A. Boulder recommends that the Commission reject Public Service’s application to limit  
14 Boulder customers’ participation in DSM program for the following reasons:

- 15 • Boulder customers are customers until they are not.
- 16 • The conclusions that underpin Public Service’s proposal are inaccurate. Once  
17 inaccuracies in the data have been corrected, it becomes evident that the proposal  
18 is flawed because Boulder customers often receive back in DSM expenditures less  
19 than they contribute in DSM funding, making a rebate cap unnecessary.
- 20 • The proposal is contrary to state statutes that support DSM programs because  
21 investing in energy efficiency benefits the entire state.

1           • The proposal conflicts with general ratemaking principles. If we were to identify  
2           every area of potential subsidy, we would also need to look at areas where  
3           Boulder customers overpay—an impractical task.

4           • If, despite this substantial evidence, the Commission grants the proposal, it should  
5           be modified. As it has been presented, it would create implementation challenges  
6           that would serve to limit the amount of DSM that customers could invest in  
7           beyond what was intended under the rebate cap.

8   **Q.    DOES THIS CONCLUDE YOUR TESTIMONY?**

9   A.    Yes. I appreciate the opportunity to present this information to the Commission and  
10       parties in this docket.

11 \_\_\_\_\_

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**KELLY CRANDALL**  
**STATEMENT OF QUALIFICATIONS**

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Kelly Crandall is an Energy Strategy Coordinator in the City of Boulder's Local Environmental Action Division and Department of Energy Strategy and Electric Utility Development. Ms. Crandall began working for the City in April 2011. She provides subject matter expertise for city sustainability and energy staff in various dockets at the Colorado Public Utilities Commission related to demand-side management, renewable energy, resource planning, and customer energy data. As part of the city's Municipalization Exploration Project, she provides technical and policy guidance related to end-use customer programs, financial feasibility, resource planning, and probabilistic risk analysis. More broadly, she supports the city and community's Energy Future Goals and Climate Commitment (the next iteration of Boulder's Climate Action Plan) through public process facilitation, research, strategic planning, project management, and data analysis. Among her key work efforts include managing a third-party review of the cost-effectiveness of Boulder's Climate Action Plan tax-funded program and implementing a probabilistic decision analysis structure into Boulder's financial and resource feasibility modeling for the local electric utility.

Prior to working for the city, Ms. Crandall was a Smart Grid Analyst for the National Renewable Energy Laboratory (NREL). She researched data privacy, dynamic pricing, and other consumer issues for a 2010 report by the National Science and Technology Council's Smart Grid Subcommittee, titled "A Policy Framework for the 21<sup>st</sup> Century Grid: Enabling Our Secure Energy Future." In 2009, Ms. Crandall interned at the Colorado Public Utilities Commission, where she co-authored a policy paper on the applicability of solar feed-in tariffs in Colorado. With Steve Hauser, she co-authored a chapter in the 2011 text *Smart Grid: Integrating Renewable, Distributed, & Efficient Energy*. She has authored papers and presented on consumer protection in renewable energy credit markets and legal challenges to local government green building policies.

Ms. Crandall holds a J.D. from the University of Colorado Law School, where she focused on energy policy and utility regulation, and a Bachelor of Arts from the University of Florida, with majors in Political Science and History and a minor in Environmental Studies. She has an inactive Colorado law license and is a LEED Accredited Professional. She is on the board of Women in Sustainable Energy.

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Estimation Process	2013 - March 4th YE Estimate						
	Product	Participants	Gross Customer kWh	Rebate Spend	Net Generator kWh	Administration Spend	Total Spend
	<b>Business</b>						
A	Commercial Refrigeration Efficiency	17	54,552	\$4,115	57,420	\$14,612	\$18,727
A	Compressed Air Efficiency	1	9,345	\$4,500	8,695	\$692	\$5,192
A	Computer Efficiency	1	13,711	\$1,800	12,913	\$867	\$2,667
A	Cooling Efficiency	41	2,597,497	\$164,398	2,266,851	\$205,791	\$370,189
A	Custom Efficiency	5	129,085	\$10,481	120,111	\$62,613	\$73,094
A	Data Center Efficiency						
A	Energy Management Systems	3	49,854	\$4,119	46,388	\$3,039	\$7,158
A	Lighting Efficiency	140	2,904,928	\$419,339	2,718,143	\$90,981	\$510,319
A	Motor Efficiency	49	2,540,102	\$348,471	1,796,151	\$76,558	\$425,029
A	New Construction	7	1,103,067	\$181,200	974,945	\$109,203	\$290,402
A	Process Efficiency						
A	Recommissioning	3	215,794	\$12,448	207,716	\$14,964	\$27,412
A	Segment Efficiency						
A	Self-Direct						
A	Small Business Lighting	52	563,766	\$62,475	596,904	\$79,406	\$141,881
A	Standard Offer						
	<b>Residential</b>						
B	Energy Feedback Pilot	3,211	644,820	\$0	644,820	\$19,316	\$19,316
A	Energy Star New Homes	5	3,087	\$812	3,077	\$471	\$1,283
B	Energy Star Retailer Incentive						
A	Evaporative Cooling Rebates	135	152,847	\$91,910	99,826	\$28,911	\$120,821
A	High Efficiency Air Conditioning	93	96,240	\$60,450	92,861	\$32,547	\$92,997
B	Home Lighting & Recycling	21,157	4,482,935	\$140,495	4,107,460	\$56,654	\$197,149
A	Home Performance w/ Energy Star	65	34,366	\$8,540	34,999	\$12,324	\$20,864
A	Insulation Rebates	88	35,113	\$9,029	33,858	\$4,817	\$13,846
A	Pool Pumps	4	8,016	\$400	6,948	\$20,141	\$20,541
A	Refrigerator Recycling	241	275,005	\$12,050	173,377	\$27,965	\$40,015
B	School Education Kits	1,047	221,023	\$13,109	159,094	\$39,022	\$52,131
B	Showerheads	106	21,907	\$325	12,595	\$997	\$1,322
A	Water Heating	7	16,685	\$3,150	18,077	\$6,587	\$9,737
	<b>Low Income</b>						
A	Energy Savings Kit	247	117,325	\$3,308	96,758	\$2,427	\$5,734
A	Multi-Family Weatherization						\$0
A	Non-Profit Weatherization	3	24,450	\$9,031	26,490	\$3,006	\$12,037
A	Single-Family Weatherization	33	25,872	\$9,529	28,030	\$4,808	\$14,337
	<b>Load Management</b>						
	Residential Saver's Switch	200	6,940	\$123,786	7,519	\$95,410	\$219,195
	<b>Indirect Impact</b>						
C	Indirect Impact Total					\$158,566	\$158,566
	<b>Boulder TOTAL</b>	<b>26,960</b>	<b>16,348,332</b>	<b>\$1,699,268</b>	<b>14,352,026</b>	<b>\$1,172,693</b>	<b>\$2,871,960</b>
	<b>Total Portfolio</b>	<b>832,624</b>	<b>423,246,806</b>	<b>\$42,927,494</b>	<b>383,115,326</b>	<b>\$32,470,542</b>	<b>\$75,398,035</b>
	<b>Boulder % of Total</b>	<b>3.2%</b>	<b>3.9%</b>	<b>4.0%</b>	<b>3.7%</b>	<b>3.6%</b>	<b>3.8%</b>

Net Generator kWh based on Product ratio of Net Generator kWh per Gross Customer kWh. Administration Spend based on Products that have Boulder participation tracked in Salesforce.com use to estimate the fraction of Participants, Gross participation of the Total Portfolio.

**Xcel DSM Limitations for City of Boulder**  
**DSM Recovery and Expenditures**  
*(Millions of Dollars)*

	Xcel Total				Boulder Total				Boulder Share			
	2010	2011	2012	2013	2010	2011	2012	2013	2010	2011	2012	2013
<b>DSM Recovery</b>	\$ 113.1	\$ 109.7	\$ 120.6	\$ 144.7	\$ 5.1	\$ 4.4	\$ 4.8	\$ 5.7	4.5%	4.0%	4.0%	3.9%
<b>DSM Expenditures</b>												
<i>DSM Portfolio Expenditures</i>	\$ 54.7	\$ 63.8	\$ 79.4	\$ 75.3	\$ 2.3	\$ 3.2	\$ 4.4	\$ 2.9				
<i>ISOC and Other Expenditures</i>	\$ 39.6	\$ 32.3	\$ 32.7	\$ 33.7	\$ 1.8	\$ 1.3	\$ 1.3	\$ 1.3				
<i>Shareholder Incentives</i>	\$ 6.6	\$ 11.8	\$ 14.8	\$ 28.4	\$ 0.3	\$ 0.5	\$ 0.6	\$ 1.1				
<b>Total Expenditures</b>	\$ 100.8	\$ 107.9	\$ 126.9	\$ 137.4	\$ 4.4	\$ 4.9	\$ 6.3	\$ 5.3	4.4%	4.6%	5.0%	3.9%
<b>Over/(Under) Collection</b>	12.3	1.8	(6.3)	7.3	0.7	(0.6)	(1.5)	0.4				

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**JONATHAN B. KOEHN**  
**STATEMENT OF QUALIFICATIONS**

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Jonathan Koehn is the City of Boulder's Regional Sustainability Coordinator, in the City's Community Planning and Sustainability Department. He is also working jointly in the City's Department of Energy Strategy and Electric Utility Development where he works to implement the city's sustainability agenda, specifically in relation to climate action and waste reduction, but more broadly across the complete spectrum of the city's sustainability goals. He began his tenure in Boulder as the Environmental Manager for the city of Boulder in 2006, with over 10 years experience working with state, regional and local governments and their constituencies domestically and internationally to develop strategic and tactical solutions to energy, economic and climate challenges. In recent months, he has also been responsible for a number of aspects of the city's municipalization exploration project including analyses and research on potential resource portfolio issues along with specific policy recommendations related to the energy future efforts.

Koehn has submitted testimony to the Colorado Public Utilities Commission on behalf of the City of Boulder including SmartGridCity, demand-side initiatives, Windsource and SolarRewards. He has worked in the non-profit, academic, and government sectors and holds a Masters Degree in Environmental Science and Biology from the University of Northern Arizona, and a Bachelors in Marine Sciences from the University of Florida.

**In the Matter of the Application of )  
Public Service Company of Colorado )  
To Address Voluntary Service )  
Offerings in the City of Boulder )  
)**

**Fourth Discovery Request  
of the City of Boulder  
Served on Public Service Company**

**Docket No. 14A-0102E )**

**May 15, 2014**

**DISCOVERY REQUEST NO. BLDR4-4:**

In Lee Gabler's response to BLDR 3-38, he responded that Public Service is proposing in this proceeding to include the new Solar\*Rewards termination provision in all Solar\*Rewards contracts going forward.

- a. To clarify, is Public Service intending to provide the termination language in all of its Solar\*Rewards contracts or only the Solar\*Rewards contracts with its Boulder customers?
- b. Please provide a copy of the relevant Solar\*Rewards contract with the proposed termination language.

**RESPONSE:**

- a. The proposed termination language will be included in all contracts.
- b. The Company has not yet drafted contracts that include this type of language.

**Sponsor: Lee Gabler**

**Response Date: May 27, 2014**

## CITY OF BOULDER, COLORADO

Office of the City Attorney  
Municipal Building  
1777 Broadway  
Post Office Box 791  
Boulder, Colorado 80306  
Telephone (303) 441-3020  
Facsimile (303) 441-3859



*VIA EMAIL* paula.connelly@xcelenergy.com

September 09, 2013

Paula M. Connelly  
Xcel Energy  
Managing Attorney, Legal Services  
1800 Larimer St., Suite 1100  
Denver, CO. 80202

Re: DSM and Solar\*Rewards Programs in Boulder

Dear Paula:

Thank you for your August 22, 2013 letter to Jane and me on the topics of the demand-side management (DSM) and Solar\*Rewards programs in Boulder. The city shares your concerns about protecting all ratepayers. We look forward to working together to find solutions that are in both of our interests and perhaps more importantly, in the interests of forward-thinking customers who are ready to commit to solar resources.

As I understand your letter, you are proposing that the city and Xcel Energy come to an agreement with regard to reimbursement for all new application under the Solar\*Rewards and DSM programs after October 1, 2013. To say the least, the time frame you proposed for reaching an agreement is tight. I fear it is too tight, especially given the fact that Xcel Energy has provided no information to the city that would allow us to verify the figures that you have calculated. In any event, the city is willing to negotiate on these topics with Xcel Energy or litigate the issues surrounding these topics if that is the company's preference. It would be difficult not to note the relationship between this incredibly short deadline and the upcoming election. I hope that Xcel Energy does not intend to scare its Boulder customers in the hope of influencing the election.

In any event, the city's position on this issue has not changed. Customers in Boulder continue to be Xcel Energy's customers as long as Xcel Energy remains the regulated monopoly that provides service to this area and as long as they are contributing to the DSMCA and the RESA. Your proposal regarding how to settle the Solar\*Rewards program is interesting. However, as has often been the case in our relationship with the company, the city has had a difficult time understanding Xcel Energy's assumptions about its costs.

Ms. Paula Connelly  
Page 2  
September 9, 2013

Re: DSM and Solar Rewards Programs in Boulder

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The information that you provided is helpful as a first step in understanding your proposal, but your letter has raised a number of questions. I have included the city's First Set of Discovery Requests in Docket No. 12A-155E with this letter. After we receive your responses to these requests, we will review them promptly and reply to your proposal as soon as possible thereafter.

We are looking forward to forging successful partnerships with Xcel Energy, upon which we might build into the future. The city is also interested in discussing these issues, as well as solar gardens, as part of the partnership discussions that have been ongoing for the last year. The information requested in the attached document will help us evaluate whether the interests of Boulder customers are protected as well.

I look forward to discussing these issues with you in the coming months.

Kind regards,



Tom Carr  
Boulder City Attorney

cc: Jane Brautigam, City Manager  
Heather Bailey, Ex. Dir. of Energy Strategy and Electric Utility Development