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

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RE: IN THE MATTER OF ADVICE LETTER NO. 1712 FILED BY PUBLIC SERVICE COMPANY OF COLORADO TO REVISE ELECTRIC BASE RATES AND CHANGES TO TARIFF SHEETS AND REPLACE PUC NO. 7 WITH PUC NO. 8 TO BECOME EFFECTIVE FEBRUARY 25, 2016.)	**PROCEEDING NO. 16AL-0048E**
IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO FOR APPROVAL OF ITS SOLAR* CONNECT PROGRAM.)	**PROCEEDING NO. 16A-0055E**
IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO FOR APPROVAL OF ITS 2017-2019 RENEWABLE ENERGY COMPLIANCE PLAN.)	**PROCEEDING NO. 16A-0139E**

**OPENING TESTIMONY AND ATTACHMENTS OF
ALICE K. JACKSON**

ON

BEHALF OF

PUBLIC SERVICE COMPANY OF COLORADO

September 2, 2016

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

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OPENING TESTIMONY AND ATTACHMENTS OF ALICE K. JACKSON

Ms. Alice K. Jackson is Regional Vice President, Rates and Regulatory Affairs of Xcel Energy Services Inc. In this position she is responsible for providing leadership, direction, and technical expertise related to regulatory processes and functions for Public Service Company of Colorado, one of four utility operating company subsidiaries of Xcel Energy Inc. Her duties include, among other things, the design and implementation of Public Service Company of Colorado's regulatory strategy and programs, and directing and supervising Public Service Company of Colorado's regulatory activities, including oversight of rate cases. Ms. Jackson has filed testimony in two of the three proceedings that are the subject of this Opening Testimony.

In January 2016 the Company started on a journey that will take many years to present, refine, implement, and ultimately evolve. At that time, the Company presented the Our Energy Future initiative with the goal of achieving a future state of electric service to our customers that allows (1) customers to control not only their usage, but also have more control over their electricity costs; (2) customers to more efficiently use the system as a whole; and, (3) for the utility to provide the type of environment where customers are able to make more choices and the utility to enable those choices, while ensuring customers are fairly assessed the costs of the system commensurate with that election. The Company's Our Energy Future initiative also reflects Colorado's commitment to utilize renewable energy to achieve environmental benefits for all citizens. This Opening Testimony presents the Settlement Agreement that resolves the presentation of three of the first series of steps to bring this future to fruition. The Settlement Agreement is a refinement of the three proceedings that was reached through multiple hours of negotiation, discussion, and compromise. Furthermore, the Settlement Agreement includes a process for continued discussion, future refinements, and implementation through the Stakeholder Processes outlined in its Attachment F to the Settlement Agreement.

The three proceedings that have been refined and resolved in the Settlement Agreement are as follows:

- Proceeding No. 16AL-0048E – The Company's Phase II Rate Case which served the traditional purpose of taking the existing General Rate Schedule Adjustment ("GRSA") and converting it into base rates for customers based on historically approved Class Cost of Service Study ("CCOSS") methodologies. Also through this proceeding, the Company proposed a longer-term rate design that to be implemented in response to the rapidly changing environment in which we operate.
- Proceeding No. 16A-0055E – The Company's request to initiate a voluntary solar option, which was previously named Solar*Connect and renamed Renewable*Connect through the Settlement Agreement. This program will allow subscribers to purchase solar energy at an unsubsidized regulated retail rate with no negative cost impacts on non-participants. The solar energy will be acquired through a power purchase agreement for up to 50 MW.
- Proceeding No. 16A-0139E - The 2017 RE Plan presents how the Company will meet or exceed the Renewable Energy Standard ("RES") for the years 2017 through 2019 in a cost effective manner. The Plan proposes increasing megawatt ("MW") capacity for Public Service's Solar*Rewards and Solar*Rewards Community programs, lowering costs for participation in its Windsource® program, and

finalizing rate treatment for participants in the Company's Recycled Energy Program.

Through the refinement of the settlement negotiations the Company and parties present a solution that (1) moves Public Service customers forward with more transparent rates; (2) expands the availability of options for customers to participate in renewable resources; and (3) improves and expands the Company's existing renewable programs for its customers. The Phase II Rate Case portion of the Settlement Agreement will allow for the Commission, customers, regulatory stakeholders, and the Company to gather information and data regarding future rate design, while assertively moving forward with a rate design implementation for all customers that have the enabling technology to do so. This is accomplished by presenting residential customers with voluntary options to try different rate designs and recognizing that a change in rate design is warranted but limited by the available metering technology.

The Settlement Agreement recommends approval of the Renewable*Connect program with refinements to ensure that non-participating customers are indifferent or could benefit from the program. The Settlement Agreement also works to resolve the competition concerns that were raised by parties in those proceedings such that many of those parties are now able to join in support of the Renewable*Connect program.

The 2017 RE Plan as presented in the Settlement Agreement expands the currently available programs through Solar*Rewards and Solar*Rewards Community both in size and availability to customers. Through the settlement negotiations the following Solar*Rewards capacities are presented to the Commission for approval:

Program	2017 Capacity	2018 Capacity	2019 Capacity	Total RES Capacity
Sm Opt A	24	24	24	123
Sm Opt B	9	18	24	
Medium	24	24	24	72
Large	6	10	14	30
Total Program Capacity	**63**	**76**	**86**	**225**

This is an expansion of the Solar*Rewards programs from previous years with a particular focus on the Medium and Large programs. Additionally, the Solar*Rewards Community program is also being expanded and clarified. The table below reflects the Solar*Rewards Community capacities presented in the Settlement Agreement for approval.

	2017	**2018**	**2019**	**Total**
Minimum	15	15	15	45
Maximum[1]	30	35	40	105
100% Low-Income CSGs	4	4	4	12
Combined Maximum	**34**	**39**	**44**	**117**

In addition to the capacity recommendations, both the Solar*Rewards and Solar*Rewards Community programs are further refined to accommodate the low-income customers who pay into the Renewable Energy Standards Adjustment

[1] As described below, of this Maximum amount, 1) 0.5 MW per year will be set aside for a Non-Low-Income Standard Offer; 2) up-to 2 MW per year of this capacity may be used by the Company to own low-income CSG; and 3) 0.5 MW per year will be set aside for a low-income standard offer.

("RESA") but may have a more difficult time participating in these Solar*Rewards programs for physical or financial reasons. These recommendations are shown to be within the financial abilities of the RESA as presented in Attachment H to the Settlement Agreement and as discussed in more detail program by program in Ms. Jackson's Opening Testimony.

The presented Settlement Agreement is complex. However, the concepts presented and agreements reached through negotiation, consideration, and compromise achieves a just and reasonable outcome for customers and in the public interest. Remarkably, twenty-six intervenors participated in the settlement negotiations that ultimately resulted in the Settlement Agreement. Represented among these intervenors were customers of all sizes, state representatives, environmental advocates, solar industry interests, and energy efficiency groups. Of these twenty-six intervenors, the vast majority are supportive of the Settlement Agreement, which further underscores the consideration and the varied interest and benefit of the Settlement Agreement. Thus, for these reasons, the other testimonies presented by the Company and the Opening Testimony Ms. Jackson presents here, Ms. Jackson recommends the Commission find the Settlement Agreement to be in the public interest, a just and reasonable resolution of the issues and grant approval of the Settlement Agreement without modification.

**BEFORE THE PUBLIC UTILITIES COMMISSION
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**OPENING TESTIMONY AND ATTACHMENTS OF
ALICE K. JACKSON IN SUPPORT OF SETTLEMENT**

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LIST OF ATTACHMENTS

GLOSSARY OF ACRONYMS AND DEFINED TERMS

Acronym/Defined Term	Meaning
2017 RE Plan	2017-2019 Renewable Energy Standard Compliance Plan Proceeding No. 16A-0139E
CCOSS	Class Cost of Service Study
CEO	Colorado Energy Office
Commission	Colorado Public Utilities Commission
Consolidated Proceedings	Renewable*Connect, 2017 RE Plan and Phase II Rate Case
CP	Coincident Peak
CPCN	Certificate of Public Convenience and Necessity
CPP	Critical Peak Pricing
CSG	Community Solar Gardens
DSM	Demand-Side Management
ECA	Electric Commodity Adjustment
ERP	Electric Resource Plan
G&T	Generation and Transmission
Grid CPCN	Grid Intelligence and Security Certificate of Public Convenience and Necessity
GRSA	General Rate Schedule Adjustment
kWh	Kilowatt Hour
MW	Megawatt
Phase II Rate Case	Phase II Electric Rate Case Proceeding No. 16AL-0048E

Public Service or Company	Public Service Company of Colorado
QF	Qualifying Facility
REC	Renewable Energy Credits
Renewable *Connect	Solar*Connect Program Proceeding NO. 16A-0055E
RES	Renewable Energy Standard
RESA	Renewable Energy Standards Adjustment
RFP	Requests for Proposals
S&F	Service and Facilities
Schedule C	Commercial Service
Schedule PG	Primary General Service
Schedule R	Residential Service
Schedule RD	Residential Demand Service
Schedule RD-TOU	Residential Demand Time-of-Use service
Schedule RD-TDR	Residential Demand Time Differentiated Rates Service
Schedule RE-TOU	Residential Energy Time-of-Use
Schedule SG	Secondary General Service
Schedule SG-CPP	Secondary General Critical Peak Pricing
Schedule TG	Transmission General Service
Schedule TG-CPP	Transmission General Critical Peak Pricing Service
Schedule TOU-ECA	Time-of-Use Electric Commodity Adjustment
Schedule SPVTOU	Secondary Photovoltaic Time-of-Use service

SRC	Solar*Rewards Community
SWEEP	Southwest Energy Efficiency Project
TOU	Time-of-Use
XES	Xcel Energy Services Inc.
WACC	Weighted Average Cost of Capital

**BEFORE THE PUBLIC UTILITIES COMMISSION
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OPENING TESTIMONY AND ATTACHMENTS OF ALICE K. JACKSON

I. INTRODUCTION, PURPOSE OF TESTIMONY, RECOMMENDATIONS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Alice K. Jackson. My business address is 1800 Larimer, Suite 1400, Denver, Colorado 80202.

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

A. I am employed by Xcel Energy Services Inc. ("XES") as Regional Vice President, Rates and Regulatory Affairs. XES is a wholly-owned subsidiary of Xcel Energy Inc. ("Xcel Energy"), and provides an array of support services to Public Service Company of Colorado ("Public Service" or "Company") and the other utility operating company subsidiaries of Xcel Energy on a coordinated basis. A statement of my qualifications is provided at the end of my Direct Testimony filed in the Phase II Rate Case as well as Solar*Connect.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THE PROCEEDING?

A. I am testifying on behalf of Public Service.

Q. WHAT IS THE PURPOSE OF YOUR OPENING TESTIMONY?

A. On August 15, 2016, multiple parties filed the Non-Unanimous Comprehensive Settlement Agreement to resolve three proceedings that Public Service considered to be part of its Our Energy Future initiative. The three proceedings are, the Company's Phase II electric rate proceeding, Proceeding No. 16AL-0048E ("Phase II Rate Case"); (2), the Company's application for authorization to implement its Solar*Connect program, Proceeding No. 16A-0055E ("Renewable*Connect")[2]; and, (3) the Company's 2017-2019 Renewable Energy Standard Compliance Plan, Proceeding No. 16A-0139E ("2017 RE Plan"). Collectively, I will refer to these proceedings as

[2] As can be seen in the Settlement, the name of the Solar*Connect program has been changed to "Renewable*Connect". I will refer to the program as "Renewable*Connect" throughout the testimony.

the "Consolidated Proceedings" since the Commission has now consolidated them for purposes of the consideration of the Settlement Agreement.

The purpose of my Opening Testimony is to provide additional information regarding the Settlement Agreement to support a Commission conclusion that the Settlement Agreement results in a just and reasonable resolution of the issues and overall is in the public interest. I will provide background on the Settlement Agreement. I will describe and explain many of its key terms. I will also discuss its financial impacts on customers. Finally I provide more detail regarding RESA impacts and the Company owned low-income gardens.

Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THE THREE CONSOLIDATED PROCEEDINGS?

A. I have filed testimony in two of the three proceedings addressed by our Settlement Agreement: the Phase II Rate Case and Renewable*Connect. I did not submit testimony in the 2017 RE Plan. Nonetheless, I am fully versed regarding the Company's proposals in that case and the terms of the Settlement Agreement relating to that proceeding.

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

A. Yes, I am sponsoring Attachments AKJ-1 through AKJ-6, which were prepared by me or under my direct supervision and are described and referenced throughout my testimony.

Q. WHAT RECOMMENDATIONS ARE YOU MAKING IN YOUR TESTIMONY?

A. I recommend that the Commission find that the Non-Unanimous Comprehensive Settlement Agreement is in the public interest, results in a just and reasonable resolution of the issues in the Consolidated Proceedings, and approve the Settlement Agreement without modification. As I shall explain below, the Settlement Agreement achieves many of the objectives of the Our Energy Future initiative of which the cornerstones were to (1) embrace technology; (2) provide customers more choices; and (3) empower economic development. Reflective of those goals, the Settlement resolves the Consolidated Proceedings through the following:

- Providing for the gathering of valuable information for us, our customers and the Commission in order to implement a future long-term rate design that properly allocates costs and gives customers more appropriate price signals to manage their energy usage.
- Giving customers more choices and opportunities to add renewable energy resources through traditional programs identified in our 2017 RE Plan or our new Renewable*Connect program, a new fully regulated and unsubsidized voluntary offering involving a new solar resource that has been patterned off our successful Windsource® program.
- Benefitting non-participating customers from the positive environmental impacts of increased use of renewable energy resources.
- Providing these benefits at a reasonable cost.

II. BACKGROUND

Q. WHAT WILL YOU DISCUSS IN THIS PORTION OF YOUR TESTIMONY?

A. I will briefly describe the three Consolidated Proceedings and provide an overview of the process that led to the Settlement Agreement.

Q. PLEASE PROVIDE A BRIEF DISCUSSION OF THE THREE CONSOLIDATED PROCEEDINGS?

A. The following summarizes the three proceedings:

- Our Phase II Rate Case served the traditional purpose of taking the existing General Rate Schedule Adjustment ("GRSA") and converting it into base rates for customers based on historically approved Class Cost of Service Study ("CCOSS") methodologies. However, through this proceeding, we proposed a longer-term rate design that the Company developed to be implemented in response to the rapidly changing environment in which we operate, which includes increasing penetration of distributed generation resources and the emergence of electric vehicles, among other customers options. More specifically, we believe this longer-term rate design addresses how we should be assessing the costs of the electric system to our customers in light of evolving technology. Although ultimately not adopted through the Settlement Agreement, the Company also presented a Grid Use Charge to more equitably allocate distribution costs to all of our customers, including those with customer-owned distributed generation. We proposed pilots in this proceeding to better understand how customers will respond to better price signals. As customers use the grid in differing ways, it will be increasingly important to have this knowledge.

- Through our Renewable*Connect program, we are proposing a new solar offering to our customers. Specifically, we will allow subscribers to purchase solar energy from us at an unsubsidized regulated retail rate with no negative cost impacts on non-participants. The solar energy will be acquired through an up to 50 MW solar resource procured through a power purchase agreement. As we have explained, this program will likely be attractive to customers who cannot avail themselves of other solar programs for a variety of reasons.
- The 2017 RE Plan was filed in compliance with Rule 3657 to present how the Company was to meet or exceed the Renewable Energy Standard ("RES")[3] for the years 2017 through 2019. The Plan proposed increasing megawatt ("MW") capacity for Public Service's Solar*Rewards and Solar*Rewards Community programs, lowering costs for participation in its Windsource® program, and finalizing rate treatment for participants in the Company's Recycled Energy Program. The Company also projected the impacts of both these recommendations and the historical plans on the Renewable

[3] Section 40-2-124(1)(c), C.R.S.

Energy Standard Adjustment ("RESA"). Ultimately the Company demonstrated that the RESA would be sufficient to cover the costs for the 2017 to 2019 compliance years.

Q. HOW WERE THE SETTLEMENT DISCUSSIONS INITIATED WITH THESE THREE PROCEEDINGS AND BROUGHT TO FRUITION?

A. Initially, the settlement meetings were initiated with the full set of intervenors in the Renewable*Connect proceeding in early June 2016. Based on these discussions, the Company realized that that -- due to the overlap of issues and the number of common parties – it might actually be more feasible to have a global settlement of the Consolidated Proceedings. The Company began to explore this possibility in mid-June 2016 by initiating discussions with a sub-group of intervenors that were common among all three proceedings or represented similar interests of intervening groups in all three proceedings. After several meetings with this smaller working group, the discussions were expanded to include all 26 intervenors on July 19, 2016. Due to the wide range of complex issues involved in the Consolidated Proceedings and the fact that not every party was interested in every issue, many smaller subgroup meetings were held to enable the parties to drill down on specific issues. To facilitate discussions and the evaluation of issues, the parties circulated many analyses and drafts of various settlement provisions and tariffs. All of these efforts culminated in the parties' reaching an agreement in principle on virtually all issues on August 12, 2016. These terms were memorialized in the Settlement Agreement filed on August 15, 2016.

Q. DOES THIS SETTLEMENT RESOLVE ALL OF THE ISSUES THAT WERE EITHER EXPLICITLY CONTESTED OR THAT COULD HAVE BEEN CONTESTED IN THE CONSOLIDATED PROCEEDINGS?

A. The Settlement is comprehensive in that it resolves all issues that parties either explicitly raised or could reasonably be expected to raise. But as explained below, some parties to the three Consolidated Proceedings are either not joining the Settlement for all proceedings in which they have intervened. The Settlement Agreement includes a chart that details which parties are settling which cases.

Q. HOW MANY PARTIES WERE GRANTED INTERVENTION IN THE CONSOLIDATED PROCEEDINGS?

A. There were twenty intervenors in the Phase II Rate Case, fourteen in Renewable*Connect and fifteen in the RE Plan Proceeding. Many parties intervened in multiple proceedings. Therefore, in total, twenty-six separate parties intervened in one or more of the Consolidated Proceedings.

Q. HOW MUCH INTERVENOR SUPPORT EXISTS FOR THE SETTLEMENT BEING PRESENTED TO THE COMMISSION?

A. Of the twenty-six parties involved to a varying degree in three proceedings addressed by this Settlement Agreement, only three parties oppose parts of the Settlement Agreement. I believe that level of consensus is impressive and speaks strongly to the cooperative good-faith efforts of all involved in negotiating and ultimately reaching agreement in the final Settlement

Agreement. I think it also demonstrates that there was much give and take across all three proceedings to reach this negotiated result.

Q. WHAT PARTIES ARE OPPOSING THE SETTLEMENT AGREEMENT?

A. The only three parties opposing the Settlement of one or more of the three proceedings are:

- Southwest Energy Efficiency Project ("SWEEP"), who opposes the settlement of the Phase II Rate Case;
- SunShare, who is joining the settlement of the Phase II Rate Case, but opposing the settlement of Renewable*Connect and the Settlement of the 2017 RE Plan; and
- Walmart, who is a non-opposing party for the Phase II Rate Case (see above), but opposes the settlement of Renewable*Connect.

Q. WHY IS A GLOBAL SETTLEMENT OF THE THREE CONSOLIDATED PROCEEDINGS PREFERABLE TO EITHER SETTLING OR LITIGATING THE THREE PROCEEDINGS SEPARATELY?

A. The Commission encourages settlement agreements. In fact, this is reflected in Commission Rule 1408. Generally speaking, the public interest standard that applies to most Commission actions is broad enough to permit a range of outcomes. When there are a number of parties in a proceeding with a number of differing positions and interests who are well represented by counsel, and they can negotiate and reach a resolution of their differences, that in my belief gives a strong indication that the result satisfies the public interest standard.

The Company acknowledges that global settlements comprising multiple proceedings are rare in Colorado. But from the Company's perspective, there is significant overlap among the Consolidated Proceedings and the parties in those proceedings that made this Settlement Agreement possible. Each of the proceedings is an important component of the Our Energy Future initiative that the Company has articulated to the Commission and its customers over the past year. The Company has stressed how these filings – regardless of whether they are required by statute, Commission Rule, or initiated at the Company's discretion – are designed to complement and reinforce each other by offering more options to customers and more renewable energy in Colorado, all at an economical price. The Company believes the parties' ability to reach consensus through the Settlement Agreement on these important components of the Our Energy Future initiative is a noteworthy achievement.

Q. CAN YOU ELABORATE ON HOW THESE PROCEEDINGS OVERLAP?

A. Certainly. One critical consideration common to each proceeding is its impacts on the broad body of customers. The rates, terms and conditions established in Phase II proceedings are obviously critical, but so are the opportunities and concomitant costs resulting from Renewable Energy compliance plans and voluntary renewable choice programs such as the new Renewable*Connect program. Considering the impacts of the three proceedings as a whole on service options and customer costs can prevent unintended, cumulative impacts that could otherwise result from resolving each proceeding in isolation.

Moreover, each proceeding affects the development of renewable resources in Colorado. The Phase II Rate Case affects the rates, terms and conditions under which customers with on-site generation will receive service and how net metered customers will be compensated for their production. The 2017 RE Plan establishes parameters – such as service terms and conditions, capacity limits and low-income participation – for the Solar*Rewards, Solar*Rewards Community and Recycled Energy programs. The Renewable*Connect program is another critical component of the voluntary development of renewable energy in Colorado.

Similarly, service rates and opportunities for low-income customers are affected by the rate and tariff conditions established in Phase II proceedings, as well as by parameters for low-income participation in programs encouraging on-site renewable generation or large-scale generators.

By considering the issues raised in all proceedings as a whole, stakeholders can more accurately and fairly assess implications for overall renewable development as a whole and for different market segments, cost impacts, and any competitive concerns. This made it possible, I believe, for the Company and other parties to compromise on an issue in one proceeding based on an accommodation in another proceeding. The consideration of all issues in a common forum allowed for greater flexibility in crafting agreements and, I believe, led to a superior result than would have been achieved by pursuing litigation or settlement of each proceeding in a vacuum.

Q. IS THERE ANOTHER FACTOR THAT FACILITATED A GLOBAL SETTLEMENT?

A. Yes. The Company submitted its filings initiating these three proceedings at approximately the same time: January 25, 2016, for the Phase II Rate Case; January 27, 2016, for Renewable*Connect; and February 29, 2016, for the 2017 RE Plan. The close proximity of these filing dates facilitated a global resolution. At the time formal Settlement discussions commenced, Direct and Answer Testimony had been submitted in the Phase II Rate Case, and Direct, Answer and Rebuttal Testimony had been submitted in Renewable*Connect. While only Direct Testimony had been submitted in the RE Plan Proceeding, parties had been afforded several months of discovery opportunities. Consequently, in each proceeding, parties had either formally submitted their positions in Answer Testimony or (in the case of the RE Plan Proceeding) developed them in anticipation of filing Answer Testimony.

III. BENEFITS OF THE SETTLEMENT AGREEMENT

Q. WHAT WILL YOU DISCUSS IN THIS SECTION OF YOUR TESTIMONY?

A. In this section of my Opening Testimony, I provide a high-level overview of the benefits the Company believes each of the various stakeholder groups obtained through the Settlement Agreement. During this discussion I will highlight certain specific elements of each proceeding.

A. HIGH LEVEL STAKEHOLDER BENEFITS

Q. WHO ARE THE STAKEHOLDERS THAT THE COMPANY BELIEVES BENEFIT FROM THE SETTLEMENT?

A. I believe the Settlement Agreement benefits our customers as a whole by charging them fairly for the costs they impose, preventing extreme billing impacts, and offering them expanded customer choice options at reasonable costs. These are all critical goals that the Settlement Agreement advances. Limiting the costs to customers of implementing the Settlement Agreement is another important goal. The Settlement Agreement also promotes further development of renewable resources in the State of Colorado, which is a benefit to everyone in the state, including all of our customers.

The Settlement also benefits specific subgroups of customers. The first subgroup consists of customers who have installed or are interested in installing on-site renewable generation or supporting the development of larger-scale renewable generation, as well as organizations who provide services to those customers and and/or represent renewable developers. Other subgroups include low-income customers, large businesses that are facing competitive pressures, and customers who have installed or may install energy-efficiency measures.

Aside from these groups of customers, it is important to consider the Company and its shareholders as well. The resolution of the Consolidated Proceedings should also be evaluated based on whether it affords the Company a reasonable opportunity to recover its approved revenue requirement, which includes its allowed return on equity. Obviously, the Company believes that the Settlement Agreement achieves this goal

B. BENEFITS TO ALL CUSTOMERS

Q. IN WHAT RESPECT DOES THE SETTLEMENT BENEFIT THE BROAD BODY OF THE COMPANY'S CUSTOMERS?

A. The Settlement advances the goals of recovering costs accurately from customers and sending better price signals. Moreover, these goals are achieved without imposing extreme billing impacts on any subgroup of customers. The Settlement also offers additional choices to customers, and results in significant environmental benefits.

Q. HOW DOES THE SETTLEMENT ADVANCE THE GOALS OF EQUITABLE COST RECOVERY AND SENDING GOOD PRICE SIGNALS?

A. One of the Company's goals in the Phase II Rate Case was to recover costs more equitably and offer better price signals – through rates that target the loads that drive costs (connection to the system, peak demand, or energy use) and reflect the varying costs of service by time of use. The Company's key initiatives in this respect were a Grid Use Charge for recovering distribution costs from residential and small commercial customers, a residential pilot program featuring a time-limited demand charge and a TOU Electric Commodity Adjustment (“ECA”)[4], a time of use (“TOU”) demand charge for customers served at primary and transmission voltage that would be assessed on peak loads only during weekday afternoons, a modest increase in seasonal rate differentials, and a Critical Peak Pricing (“CPP”) pilot for demand-metered customers. As a corollary to these initiatives, the Company asked to close some optional services that did not complement the Company’s long-term rate-design vision.

The Settlement Agreement maintains these Company-proposed initiatives with the exception of the Grid Use Charge and the TOU demand charge for customers served at transmission voltage. Both are eliminated in the Settlement Agreement based on concerns expressed by intervenors. In addition, the Settlement Agreement adds a residential TOU trial program with time-differentiated energy charges, or “Schedule RE-TOU."

The Company believes the resolution of the contested issues in the Settlement is fair and reasonable to all of our customers. The provisions in the Settlement addressing revenue decoupling, which I discuss in greater detail below, will help mitigate the impact of the elimination of the Grid Use Charge on revenue stability. In subsequent proceedings the stakeholders and

[4] Originally called the RD-TOU pilot, this demand based TOU pilot was renamed under the Settlement as Residential – Time Differentiated Rates or Schedule RD-TDR.

Commission can revisit the appropriate recovery of distribution costs. Moreover, the RE-TOU trial program, in addition to the RD-TDR pilot, will provide more information for the Commission to consider when evaluating the appropriate long-term rate design for small customers. The Company believes that in the long-term a rate design that provides time-differentiated pricing, reflects both energy and demand perspectives, and gives customers accurate price signals will be found by the Commission and most stakeholders to be the preferred pricing approach. The RE-TOU trial program and RD-TDR pilot will help the Commission determine whether that is right.

Q. WHY DOES THE COMPANY BELIEVE THAT THE SETTLEMENT RESULTS IN REASONABLE BILL IMPACTS?

A. In Attachment C to the Settlement Agreement, the Company provided monthly bill impacts for the typical customer on each of our five major service schedules. These percentage impacts range from -2.3 percent to 1.9 percent, thereby demonstrating that no customer type is bearing a disproportionately large burden as a result of the CCOSS summarized in Attachment A to the Settlement Agreement.

Moreover, the Settlement contains no major changes to individual rate components, which ensures that no customer type within a broad customer class will be unduly burdened. To confirm this conclusion, I have included as Attachment AKJ-1 to my Opening Testimony bill impacts for customers on Schedule R and Schedule C at low and high levels of usage, as well as disproportionately high use in the summer and disproportionately high use in the winter. The largest percentage impact is 1.5 percent, which I believe is a very reasonable outcome for a case that involves a CCOSS and rate design.

In Attachment AKJ-1, I also provide bill impacts for customers switching from the proposed Schedule R to the proposed Schedule RE-TOU or RD-TDR.

Q. DO THESE BILL IMPACTS CAPTURE ANY COST INCREASES RESULTING FROM THE PROGRAMS, SERVICE EXPANSIONS AND OTHER INITIATIVES AGREED TO IN THE SETTLEMENT?

A. No. Later in this section of my Opening Testimony, I will identify these other costs and explain why the impacts are manageable.

Q. HOW DOES THE SETTLEMENT PROMOTE MORE CUSTOMER CHOICE?

A. One of the attractive features of this Settlement is the increase in high-quality customer options. I use the modifier "high-quality" to stress the importance of targeting options that are both potentially attractive to customers and are consistent with public-policy goals.

The Settlement provides for the implementation of two service options for residential customers – the RE-TOU trial program and the RD-TDR pilot. The support for these offerings is provided in the pre-filed testimony of the Company and interveners and Pages 27-44 of the Settlement Agreement. The Company believes both alternatives are critical for evaluating the optimal long-term rate design for residential customers. This long-run decision on residential rate design is critical, as the Company serves 1.2 million residential customers, and these customers provide about 38 percent of the

Company's total revenues. While significant resources in terms of time and money will be required to administer and estimate the impacts of these offerings, this resource commitment is justified given the importance of residential rate design.

In addition, the Settlement of the Phase II Rate Case calls for the Pilot and Trial Program Stakeholder Group[5] to evaluate the possibility of offering alternative rate designs to commercial customers.

For large demand-metered customers, the Settlement Agreement provides for a CPP pilot. In our Direct Testimony, the Company explains why CPP service to this market segment makes sense. In short, this offering appears to be attractive from a benefit-cost perspective, nicely complements our standard tariffs to demand-metered customers, and complements our portfolio of demand response programs.

Finally, the Settlement Agreement significantly expands a customer's ability to install on-site renewable energy or support the development of large-scale renewable energy resources on the Company's system. The Solar*Rewards and Solar*Rewards Community capacities are increased through the terms of this Settlement, and up to 50 MW of large-scale solar will be acquired to implement the new Renewable*Connect Program. In addition, the Settlement Agreement provides for the reduction of Windsource® premiums, making wind cheaper for our customers. Finally, the Settlement

[5] As described in Attachment F to the Settlement.

Agreement provides for Recycled Energy service and a new voluntary renewable option, Renewable*Connect.

As a whole these initiatives significantly expand the opportunities for customers interested in renewable development. I discuss these renewable benefits in more detail below.

C. BENEFITS TO CUSTOMERS INSTALLING OR SUPPORTING RENEWABLE GENERATION

Q. HOW DOES THE SETTLEMENT AGREEMENT BENEFIT CUSTOMERS AND DEVELOPERS INTERESTED IN INSTALLING ON-SITE RENEWABLE GENERATION OR SUPPORTING/DEVELOPING LARGER-SCALE RENEWABLE GENERATION?

A. The Settlement Agreement benefits these customers in many respects. For discussion purposes I will divide these benefits into two categories: benefits to customers with on-site renewable generation, and benefits to customers supporting larger-scale renewable projects.

Q. DO YOU HAVE ANY COMMENTS REGARDING THE RENEWABLE TARGET LEVELS THAT ARE BEING AGREED TO IN THE SETTLEMENT?

A. I believe the levels are reasonable and appropriate. The levels are consistent with the general statutory requirement favoring the installation of renewables provided that the cost levels are acceptable. We have provided information in the Settlement Agreement regarding the cost impacts of the various programs and I discuss it further in Section IV of this Opening Testimony. I would add that it is important to recognize that the Company will likely be acquiring additional renewable resources through its Electric Resource Plan ("ERP") which will benefit all of our customers. I believe that the capacities agreed to in the Settlement Agreement achieve a balance between those that are acquired through the ERP and those that are acquired through the programs discussed herein.

1. Benefits to Customers with On-Site Renewable Generation

Q. WHAT ARE THE BENEFITS TO CUSTOMERS WITH ON-SITE RENEWABLE GENERATION?

A. The Company proposes significantly increasing its Solar*Rewards program capacities for the Small, Medium and Large programs. Through these Solar*Rewards programs, Public Service will be authorized to acquire up to 225 MW of new, incented solar resources over the next three years (2017-2019), thereby doubling the opportunities for customers to participate in Solar*Rewards capacity[6] authorized by the Commission in the 2014-2016 Compliance Years. This amount also represents an additional 24 MW over the capacity limit the Company proposed in our initial 2017 RE Plan filing, and accrues to customers of all sizes.

Moreover, residential net metered customers will benefit from two additional provisions of the Settlement Agreement. These benefits will accrue to net metered customers regardless of whether they participate in the Solar*Rewards program.

[6] 24 MW per year for the Small solar program in 2015-2016 and 12 MW per year for the Medium program 2015-2016. See Decision No. C15-0142 at paragraph 5.

First, net metered customers who opt for the energy-based TOU residential pilot -- Schedule RE-TOU -- will receive a larger credit for energy produced from 9 a.m. to 9 p.m. Solar panels generate much more energy during this period than during the remaining hours of the day.

Second, any excess energy generated by net metered residential customers on TOU rates during a billing period will be tracked separately by billing period. As is currently the case, customers will have two options regarding the treatment of excess energy: the Roll Over Option and the Cash Out Option. These two options should sound remarkably similar to what is currently offered to Net Metered customers, because they are, but it is necessary to enumerate a few specific details with each of these options when excess energy may offset different rates in different periods of the day. I provide an illustration of how the crediting under these two options will be implemented as Attachment AKJ-2 to my Opening Testimony.

Q. WHAT IS CURRENT TREATMENT OF EXCESS ENERGY FOR NET METERING CUSTOMERS AND WHY IS IT INSUFFICIENT?

A. Currently, Net Metered customers with generation located behind their meter are able to roll their excess production forward to offset consumption on a kWh for kWh basis. While this methodology accurately tracks the net of the kWh consumption and generation, it fails to look at the time periods in which excess generation was created. With a time differentiated rate structure, it is important to give credit to customers based on the rate that they are offsetting with their excess generation.

Q. CAN YOU DESCRIBE THE ROLL OVER OPTION FOR TREATMENT OF EXCESS ENERGY PROVIDED BY THE SETTLEMENT?

A. Yes. The Roll Over Option will track the customers excess energy generated by the time period it was generated (On Peak, Shoulder or Off Peak). The excess energy in each time period will then be multiplied by the prevailing total energy rate for each respective time period to create a total credit on a dollar basis. The total dollar credit will then be rolled forward to subsequent billing periods to offset the cost of the customers' electric bill. Any accumulated credit will roll forward, month-to-month, in perpetuity until the customer leaves the premise, at which time any accumulated credits would be forfeited. This mechanism is extremely similar to what is offered to customers today, with the refinement that the excess energy is now valued based on the time period it is generated.

Q. CAN YOU ALSO DESCRIBE THE CASH OUT OPTION FOR TREATMENT OF EXCESS ENERGY PROVIDED BY THE SETTLEMENT?

A. Yes. The Cash Out Option will track the customers excess energy generated by the time period it was generated (On Peak, Shoulder or Off Peak). It then will carry that kWh generation per period forward to future billing periods, and will serve to net against future consumption in similar or less expensive periods. For instance, if a customer has a positive balance of excess kWh energy in the On Peak, Shoulder and Off Peak periods which is carried forward, the On Peak balance will serve to offset consumption in the On Peak period, the Shoulder balance will serve to offset consumption in the Shoulder period, and the Off Peak balance will serve to offset consumption in the Off Peak period. Additionally, more valuable excess energy can be used to offset consumption in a less value period. For instance excess On Peak kWh can be used to offset Shoulder period consumption, and Shoulder period excess kWh can be used to offset Off Peak consumption. Shoulder period excess consumption cannot be used to offset On Peak consumption, and Off Peak excess energy cannot be used to offset either On Peak or shoulder consumption. In practice, the Company will maximize the value of excess energy for customers by first using the less valuable Shoulder period excess energy to offset Off Peak consumption before using more valuable On Peak excess energy. Finally, at the end of the year all excess energy, from all periods will be cashed out to the customer at the Company's Average Hourly Incremental Cost of energy.

Q. WHY IS THE COMPANY OFFERING BOTH OF THESE OPTIONS VERSUS JUST ONE OF THE OPTIONS?

A. Commission Rule 3664(b) sets forth the provisions of how net metering is to function for both the Company and the Customer. In that rule, the Commission requires that Company permit customers who qualify for net metering to offset their consumption with the qualifying customer's behind the meter generation on a 1:1, kWh for kWh basis, and to roll forward any excess generation to be used as credits in future months. The rule further states that at the end of the calendar year the Company is to compensate the net metering customer for any remaining excess generation at the current average hourly incremental cost. However, the rule also provides that customers have the option to continue to roll forward any excess generation credit indefinitely, but forfeit being paid out for any accrued excess generation at the time the customer terminates service. In practice this rule provides customers with two options for the treatment of excess net metered generation; to "cash out" or "roll-over" their excess generation. The Settlement maintains compliance with Commission Rule 3664(b) by providing net metered customers with both of these options for excess generation.

Q. ARE THERE ANY BENEFITS TO NON-RESIDENTIAL CUSTOMERS WITH ON-SITE RENEWABLE GENERATION THAT YOU WISH TO HIGHLIGHT?

A. Yes. The Settlement also benefits large net metered customers served at secondary voltage. Specifically, the Settlement maintains a variation of Schedule SPVTOU for customers who enroll in the Medium Solar*Rewards program during the program years of 2017 through 2019. This new Schedule SPVTOU rate design splits the recovery of Generation and Transmission ("G&T") capacity costs between an on-peak demand charge and energy charges – and provides a significantly greater credit to net metered customers than does Schedule Secondary General ("SG").

Moreover, customers on the current Schedule SPVTOU as of December 31, 2016, will be allowed to continue to take service under the existing rate design. This historical SPVTOU rate design collects 100 percent of the G&T capacity costs through the energy charge.

Finally, customers on either variation of Schedule SPVTOU will benefit from the two options for crediting excess energy explained above.

2. Benefits to Customers Supporting Community Based Renewable Generation

Q. WHAT ARE THE BENEFITS TO CUSTOMERS WHO WISH TO SUPPORT COMMUNITY-BASED RENEWABLE GENERATION?

A. The Settlement provides for the acquisition of up to 117 MW of additional Solar*Rewards Community ("SRC") capacity from 2017 through 2019. This amount represents 27 MW more than the three-year maximum authorized for the 2014-2016 compliance period and an additional 27 MW over the capacity limit the Company proposed in our initial 2017 RE Plan filing.

Today, Public Service has 18.1 MW of solar garden capacity online through its SRC program. The Company recently awarded 30 MW of Community Solar Garden ("CSG") requests for proposals ("RFP") for the 2015 Compliance Year. In Proceeding No. 13A-0836E, the Company and solar garden developers have received approval of a Settlement Agreement, which contemplates awarding up to 60 MW of new solar garden capacity through its 2016 RFPs.[7] Public Service anticipates this RFP process will begin in the third quarter of this year. The acquisition levels proposed in the Settlement are balanced and appropriate.

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[7] This includes 30 MW for 2016 and captures an additional 30 MW for 2014.

The Settlement also advances the development of the SRC program and industry by:

(1) clarifying the application of the statutory capacity limit of 2 MW;

(2) supporting a class average bill credit; and,

(3) assisting CSG developers through the Company's commitment to:

a. develop a study to make available possible interconnection points on the system for CSG via a stop-light green-light type of demarcation, and

b. provide alternative means for such developers to satisfy their 5% low-income obligations.

Q. PLEASE EXPLAIN WHY CLARIFICATION OF THE STATUTORY CAPACITY LIMIT OF 2 MW IN THE SETTLEMENT IS BENEFICIAL?

A. By statute, CSGs are limited to 2 MW in size, but it is not clear what constitutes a single CSG. An issue arises whether two CSGs that are located adjacent to each other are in fact a single CSG. Through our administration of the CSG program, we could simply select CSGs that are not proximate to each other, but that could lead to challenges by bidding CSGs or limit the total capacity awarded in a solicitation. We thought the better course of action was to be transparent on how we would treat proximate CSGs so that bidders could appropriately take those requirements into account in preparing their bids. It may be that this is an area that the Commission should take up in a future rulemaking, but in the meantime, we believe that the approach in the Settlement Agreement is a reasonable and workable solution.

Q. WHY IS THE IMPLEMENTATION OF THE CLASS AVERAGE BILL CREDIT FOR THE RE PLAN YEARS 2017-2019 APPROPRIATE?

A. Customers benefit from the utilization of the class average bill credit because this bill crediting methodology does not incent the CSG providers to seek out certain customer types to obtain an unusually high bill credit. This issue was discussed in detail in the recently approved settlement regarding the 2014-2016 RE Plan, Proceeding No. 13A-0836E, Decision No. C16-0747. The reasons presented and agreed to in that proceeding have not altered.

Q. HOW DOES THE PROVISION IN THE SETTLEMENT TO PROVIDE FURTHER INFORMATION FOR GRID INTERCONNECTION PROVIDE A BENEFIT TO CUSTOMERS?

A. At this point in time, in order for a CSG provider to identify an interconnection location, they must issue a request to the Company to identify if there is capacity available where they would be interconnecting. This results in a "hunt and peck" type scenario where multiple CSG providers are making multiple requests to identify the potential for interconnection. This process is costly for the CSG provider and for the Company. Thus, it is reasonable that the Company provide a map that details which substations on its distribution system have capacity available. The provision of this information should result in lower costs for the CSG providers as well as for the Company. The Distribution Grid and Interconnection Stakeholder Group will be discussing this study and report further to refine the information in order to provide the greatest value.

Q. HOW DOES THE COMPANY'S OWNERSHIP OF THE MANDATORY LOW-INCOME CSGs BENEFIT CUSTOMERS?

A. Section V of my Opening Testimony directly addresses the Company's ownership of the mandatory low-income community solar gardens. However, at a high level, it came to the Company's attention that the existing CSG providers were struggling with identifying and retaining the necessary low-income customers for a variety of reasons. Because of the Company's unique situation and relationship with community low-income service providers, the Company and these organizations are better situated to assist with fulfilling the 5% obligation. Thus, the provision for the Company to serve these customers.

Q. AS PART OF THE SETTLEMENT AGREEMENT THE COMPANY AGREED TO PROVIDE UPDATED CONTRACT PROVISIONS AS WELL AS UPDATED RFP DOCUMENTS RELATED TO OUR SOLAR*REWARDS PROGRAMS. ARE THOSE BEING PROVIDED WITH YOUR TESTIMONY?

A. Yes. I have included Attachment AKJ-3 to my Opening Testimony which contains all these updated documents. A part of the 2017 RE Plan, the Company included the contracts needed for the various Solar*Rewards programs as well as the Solar*Rewards Community program. Attachment AKJ-3 is essentially an updated Volume 3 to the Company's Renewable Energy Plan which was presented as Attachment RLK-3 to the Direct Testimony of Robin Kittel in Proceeding No. 16A-0139E.

Q. WHAT DOCUMENTS ARE BEING PROVIDED FOR THE SOLAR*REWARDS PROGRAM?

A. For the Solar*Rewards Program, I have included REC Purchase Contracts, Interconnection Agreements, Customer Forms, and the RFP for the Large program.

Q. ARE THERE ANY SIGNIFICANT CHANGES TO THESE DOCUMENTS?

A. No. There are only some minor corrections for rule references. Other documents such as the REC Purchase Contracts and the Interconnection Agreements had no updates at all. These documents are being provided for completeness.

Q. WHAT DOCUMENTS ARE BEING PROVIDED FOR THE SOLAR*REWARDS COMMUNITY PROGRAM?

A. For this program, I have included the Solar*RFP, Reservation Letter, Producer Agreement, Interconnection Application, and Interconnection Agreement.

Q. ARE THERE ANY SIGNIFICANT CHANGES TO THESE DOCUMENTS?

A. For the Producer Agreement some additional definitions were added along with updated language associated with co-location consistent with the Settlement. The RFP was updated to account for low-income specific and innovative proposals, class average bill credits, and co-location terms.

Q. ARE YOU PROVIDING ANY UPDATED DOCUMENTS FOR THE COMPANY'S RECYCLED ENERGY PROGRAM?

A. Yes. For this program I have included the Recycled Energy Incentive Contract.

Q. ARE THERE ANY SIGNIFICANT CHANGES TO THIS DOCUMENT?

A. Yes. We have included some additional definition around the customer's site and updated terms associated with excess energy compensation, incentive payments to customers, and liquidated damages.

Q. HAS THE COMPANY IDENTIFIED THE CHANGES OUTLINED ABOVE?

A. Yes. Attachment AKJ-3 includes the documents in redline format to allow parties to see the changes I outlined against the document presented in the Attachment RLK-3 of the 2017 RE Plan.

3. Benefits to Customers Supporting Large-Scale Renewable Projects

Q. WHAT BENEFITS DOES THE SETTLEMENT OFFER CUSTOMERS INTERESTED IN SUPPORTING THE DEVELOPMENT OF LARGE-SCALE SOLAR PROJECTS?

A. The development of the Renewable*Connect program provides an option for third-party large-scale solar developers. Up to 50 MW of nameplate solar capacity will be acquired for the Renewable*Connect program via an RFP solicitation. Thus, the resource serving the Renewable*Connect program will be owned by a third party and the Company will contract to purchase the output of the facility to serve the customers voluntarily participating in

Renewable*Connect. We modeled Renewable*Connect after our Windsource® program. As is the case for Windsource®, Renewable*Connect will be regulated by the Commission.

Q. DO THE PARAMETERS OF THE RENEWABLE*CONNECT PROGRAM IN THE SETTLEMENT DEVIATE SIGNIFICANTLY FROM THE COMPANY'S REBUTTAL TESTIMONY?

A. I would say, not significantly for the program operation or the impact on non-participating customers. The parameters of the program in the Settlement Agreement are largely based on the Company's proposals in our Direct Testimony as refined by our Rebuttal Testimony. The Settlement Agreement further refined the program to address competitive concerns and provide for further non-participant protections. These enhancements include:

(1) the name change mentioned earlier;

(2) opening the program eight weeks early to residential and small commercial customers only;

(3) limiting a single entity's subscription of the program to no more than 40% of the overall program and limiting the capacity of any entity at a single location to no more than 10 MW;

(4) reducing the retention of excess revenues from 10% to the Company's weighted average cost of capital ("WACC");

(5) crediting any excess revenues above the WACC to our general customer body through the Renewable Energy Standard Adjustment

("RESA") versus refunding those amounts to program participants; and,

(6) revising slightly how the avoided energy component of the bill credit will be determined.

Q. DOES THE RENEWABLE*CONNECT PROGRAM BENEFIT NON-PARTICIPATING CUSTOMERS?

A. Colorado is in the forefront of states that have promoted the use of renewable energy resources, including solar, by customers. The Commission in approving our Windsource® program, which was a first of its kind program in the country, recognized that all of our customers benefit from the environmental benefits of the program – that is due to reduced emissions.[8] The Renewable Energy Standard statute (§ 40-2-124(I)(e)(III), C.R.S.), which is designed to promote greater use of renewable energy resources, directs the Commission to encourage regulated utilities to create programs to "design solar programs that allow consumers of all income levels to obtain the benefits offered by solar electricity generation and shall allow programs that are designed to extend participation to customers in market segments that have not been responding to the standard offer programs." Renewable*Connect is such a program.

[8] See Decision No. C97-203, at pages 6-7. In this decision, the Commission approved of our Windsource® program. I have attached this decision as Attachment AKJ-6 to my Opening Testimony.

While a direct financial benefit to non-participating customers is not guaranteed with the revisions to the program in the Company's Rebuttal Testimony, and further refined by this Settlement Agreement, non-participating customers should be indifferent to, if not slightly benefitted by, the program. By utilizing the established qualifying facility ("QF") methodology for calculating the capacity and energy components of the bill credit as well as the refunding of any excess revenues above the Company's WACC to the RESA, non-participating customers are held harmless and could potentially benefit financially from the program.

Q. REGARDING THE RENEWABLE*CONNECT PROGRAM, MANY INTERVENORS CONTENDED THAT IT WAS ANTI-COMPETITIVE. HOW DOES THE SETTLEMENT AGREEMENT RESPOND TO THAT CONCERN?

A. In the Renewable*Connect proceeding, we acknowledged that the Renewable*Connect program would have an impact on competition, but it was and remains our belief that this impact is positive. Renewable*Connect represents one more solar offering for customers that wish to directly obtain solar energy, and fills a niche that other programs cannot fill. Many intervenors contended that the program was anti-competitive in answer testimony, and we responded to those arguments in our rebuttal case, specifically through my and Mr. Wishart's testimony. We disagreed with the premise that the program is anti-competitve, and further explained that the concern about undercutting other solar programs was unfounded. Nonetheless, we indicated that we were amenable to implementing some restrictions on how we would market the program, report on the Renewable*Connect program as well as the other existing voluntary renewable energy programs; these agreements are included in the Settlement Agreement. I would further observe that the proposed size of the Renewable*Connect program is dwarfed by the amount of solar available to customers via our other programs as proposed in this Settlement Agreement.

Q. ARE THERE ANY REASONS RENEWABLE*CONNECT MUST BE OFFERED AS A REGULATED PROGRAM?

A. Yes. The argument was previously made that other entities should be allowed to provide a Windsource® type product to our customers, but the Commission concluded that to do so would be unlawful under the doctrine of regulated monopoly that applies under the Colorado Public Utilities law.[9] Similar logic applies here. As I have noted, we are "encouraged" by the Colorado Public Utilities law to design programs to market segments that have not been responding to the standard offer program. We have established that the existing the standard offer program in conjunction with CSG still leaves a niche that needs to be filled in overall solar program offerings, and therefore is both beneficial customers and consistent with the Colorado Public Utilities Law.

[9] Decision No C00-1057, at pages 12-13.

Q. PLEASE SUMMARIZE THE RECYCLED ENERGY PROGRAM AGREED TO IN THE SETTLEMENT OF THE 2017 RE PLAN.

A. The Settlement provides for up-to 60 MW of new recycled energy capacity (20 MW per year). The tariff specifying the parameters, incentives and rates for this program is based on the Commission's Decision in Proceeding Nos. 13A-0836E and 15AL-0118E. This program will encourage the development of facilities that can produce both thermal and electrical energy at customer sites.

Q. WHAT BENEFITS DOES THE SETTLEMENT PROVIDE TO CUSTOMERS INTERESTED IN THE WINDSOURCE® PROGRAM?

A. The Settlement reduces the Windsource® premium price to $1.50 per 100 kWh block, or 1.5 cents per kWh. This premium was developed through a market-based pricing methodology, and reduces the cost of voluntarily supporting renewable resources.

Q. ARE THERE OTHER ASPECTS OF THE SETTLEMENT PERTAINING TO RENEWABLE DEVELOPMENT THAT YOU WISH TO HIGHLIGHT?

A. Yes. The discussion above highlights the benefits to customers installing or wishing to support renewable generation. But the Company recognizes that these inducements impose costs on non-participating customers. The Company believes the Settlement includes various protections for these customers, such as the change to the Schedule SPVTOU rate design and the structuring of the Renewable*Connect program to eliminate any subsidies from non-participating customers. I will address these protections in more detail later in this section of my Opening Testimony.

D. BENEFITS TO LOW INCOME CUSTOMERS

Q. HOW DOES THE SETTLEMENT BENEFIT LOW INCOME CUSTOMERS?

A. There are three significant benefits for low-income customers I wish to highlight.

(1) The protections afforded low-income customers who volunteer to take service under either Schedule RE-TOU or Schedule RD-TDR.

(2) The partnership between Public Service and the Colorado Energy Office ("CEO") to develop a new low-income rooftop solar program.

(3) The modifications to the Solar*Rewards Community program to facilitate more participation by low-income customers, which include capacity reservations for low-income customers only (and a separate low-income RFP process), as well as an expanded definition of "low income" to include more potential customers.

Q. WHAT PROTECTIONS ARE OFFERED TO LOW INCOME CUSTOMERS WHO VOLUNTEER FOR EITHER SCHEDULE RE-TOU OR SCHEDULE RD-TDR?

A. Both Schedule RE-TOU and Schedule RD-TDR include a "Hold Harmless" provision for low-income customers. Specifically, a low-income customer volunteering for either schedule will pay the lower of the bill under that schedule or the bill under Schedule R. In other words, low-income customers can benefit from, but will never be financially harmed by, their decision to opt for Schedule RE-TOU or Schedule RD-TDR. This protection will encourage low-income customers to participate in the trial program or pilot and will facilitate our analysis of the impacts of each schedule on this more vulnerable customer segment.

Q. WHAT ACCOMMODATIONS ARE OFFERED TO LOW-INCOME CUSTOMERS WHO WISH TO SUBSCRIBE TO A SOLAR*REWARDS COMMUNITY PROJECT?

A. Our understanding from discussions the Company has had with various parties that either serve low-income customers (e.g., Denver Housing Authority and Energy Outreach Colorado) or must seek low-income customer participation in existing SRC gardens (e.g., existing SRC providers), is that the service to this customer segment is difficult. The service is difficult because these customers struggle to meet financial hurdles, or are more transient in nature. Additionally, the structure of the SRC program to provide services through low-income service providers such as the Denver Housing Authority has been difficult. This Settlement attempts to address these concerns in a multi-faceted manner.

By accommodating the ability of entities such as the Denver Housing Authority to provide evidence of low-income qualifications in its housing venues and evidence of the direct benefits to these customers of their subscription to a SRC garden, the low-income population eligible for assistance from SRC gardens is expanded. This expansion directly aligns with the statutory declaration for CSGs.

Furthermore, by the Company consolidating the obligation to provide at least 5% of the CSG output to low-income participants in Company-owned gardens, the CSG providers are relieved of this financial hurdle. Moreover, the direct relationship the Company already has with low-income program facilitators such as Energy Outreach Colorado may be leveraged for the largest impact on the low-income population in the Public Service service area.

The Company believes that, without the settlement negotiations and the back and forth discussions enabled by those negotiations, this problem may well have gone unresolved for a number of years. The collaborative nature of the settlement process across the proceedings enabled this outcome and benefit for customers in the Public Service service area.

Q. DOES THE COMPANY BELIEVE THESE PROTECTIONS OR ACCOMMODATIONS ARE WELL DESIGNED?

A. Yes. In providing low-income assistance, the Company stresses two fundamental goals: (1) limit the measures to the intended recipients (low-income customers), and (2) ensure that the assistance encourages appropriate customer behavior and is consistent with public-policy goals. Both the RE-TOU/RD-TDR Hold Harmless provision and the SRC carve-out for low-income customers meet these goals. Both are available only to low-income customers, and both advance public-policy objectives. The RE-TOU and RD-TDR incentive encourages participation of a more vulnerable customer subgroup in the trial program and pilot, while the SRC carve-out encourages participation of this same customer subgroup in renewable energy initiatives.

Greater protections are afforded to the low-income customers through the Company's consideration of a broader variety of factors when awarding the low-income RFP such as: (1) the percentage of expected electric utility bill reduction for the low-income customer, (2) provision of solar installation job training for low-income individuals at the bid CSG, and (3) coordination with installation of energy efficiency measures. Also, any entity providing additional commitments to a CSG bid, if awarded, will provide proof to the Company via a Company established methodology on an annual basis, as applicable to the specific measure. In the event the entity providing the additional bid commitments does not provide adequate proof of delivery of the commitments or does not produce the amount of energy made in the awarded bid, the Company may seek a cure from the developer or take that factor into consideration in future offerings from that same entity up to and including rejection of that entity's bid for past non-compliance.[10]

E. BENEFITS TO LARGE CUSTOMERS

Q. WHAT BENEFITS DOES THE SETTLEMENT OFFER LARGE BUSINESSES?

A. The Settlement of the Phase II Rate Case results in only limited changes to the rate design and rate levels for the standard service schedules applicable

[10] Settlement Agreement page 71.

to these larger customers. Most large customers probably welcome this pricing stability. But there are a couple of additional opportunities for these customers to lower their bills.

First, the G&T Demand Charge for Schedule Primary General ("PG") customers will be assessed on a customer's peak load during a limited number of hours – non-holiday weekdays from 2 p.m. to 6 p.m. This modification will give Schedule PG customers more flexibility in managing their billing demands.

Second, the Settlement provides for up to 30 MW of load on a CPP pilot. Large customers with the ability to manage load during a few critical hours of the year could realize significant bill savings.

Third, large customers interested in supporting renewable development will benefit from the program initiatives I explained earlier.

F. BENEFITS TO CUSTOMERS INTERESTED IN DEMAND SIDE MANAGEMENT ("DSM")

Q. WHAT BENEFITS DOES THE SETTLEMENT OFFER CUSTOMERS INTERESTED IN DSM?

A. As a whole, the Consolidated Proceedings are more focused on renewable development than DSM initiatives. Nonetheless, there are several positive DSM aspects of the Settlement. I earlier explained how the Settlement of the Phase II Rate Case promotes more equitable cost recovery and sound price signals. These pricing objectives are important in large part because they help ensure customers make economically sound decisions regarding their usage – including their evaluation of whether the bill savings from decreased use attributable to DSM measures justifies their cost.

Moreover, one DSM component of our DSM portfolio that the Company wishes to bolster is demand response. The Company has offered direct load control programs for many years, but has provided limited opportunities for customers to voluntarily reduce their load during actual critical periods in response to pronounced price signals. Consequently, the CPP pilot agreed to in the Settlement of the Phase II Rate Case will help fill an important niche in our DSM portfolio.

Finally, as discussed in more detail below, the Settlement of the Phase II Rate Case includes a provision that joining parties will not oppose the concept of revenue decoupling for customers on Schedules R and C. Decoupling and DSM initiatives are complementary because decoupling eliminates or reduces the utility's financial disincentive to reduce sales. Consequently, any agreement that increases the probability of revenue decoupling is a positive development in terms of encouraging DSM initiatives.

G. BENEFITS TO THE COMPANY AND ITS SHAREHOLDERS

Q. CAN THE COMPANY MANAGE THE RISKS RESULTING FROM ALL OF THE REVISIONS AND ADDITIONS TO SERVICES AND RATES EXPLAINED ABOVE?

A. The provisions of the Settlement will exacerbate the short-term revenue and earnings erosion from net metering -- given the lower Service and Facility ("S&F") Charges for our primary service schedules, the higher program caps for Solar*Rewards and Solar*Rewards Community, the elimination of the Grid Use Charge for residential and small commercial customers, and the continuation of Schedule SPVTOU. There will be additional erosion attributable to customer decisions to enroll in the optional residential programs and the CPP pilot.

But the Company believes we can manage these earnings impacts if we are allowed a reasonable revenue decoupling mechanism. That is why the inclusion of the policy concept of revenue decoupling in the Settlement of the Phase II Rate Case was critical to the Company. This mechanism will mitigate the earnings impacts to reasonable levels.

Q. PLEASE ELABORATE ON WHAT THIS REVENUE DECOUPLING PROVISION MEANS.

A. The provisions related to revenue decoupling are found on Pages 40-41 of the Settlement. The Company is agreeing to withdraw its proposal for a Grid Use Charge, implement Schedule RE-TOU, and expand the incremental renewable capacity under the RE Plan beyond the levels the Company proposed in Direct Testimony. In consideration of these accommodations, which the Company believes are likely going to lead to revenue erosion from decreased sales, parties who join the Phase II Settlement in its entirety are agreeing to not oppose the *principle* of decoupling for customers on Schedules R and C.

Q. ON JULY 13, 2016, THE COMPANY FILED FOR APPROVAL OF A REVENUE DECOUPLING MECHANISM. DOES THE DECOUPLING AGREEMENT IN THE SETTLEMENT STATE OR SUGGEST THAT PARTIES CANNOT OBJECT TO THE COMPANY'S PROPOSED REVENUE DECOUPLING MECHANISM AS FILED?

A. No. Revenue decoupling mechanisms can be implemented in a wide variety of ways. In fact, in our Direct Testimony supporting the requesting decoupling mechanism the Company discusses a variety of different ways to structure a decoupling mechanism and the basis for our specific proposal. Under the terms of the Settlement parties are free to suggest modifications to the form and mechanics of the Company's proposed decoupling mechanism, as well as the tariff terms and conditions. Moreover, parties can recommend extending the decoupling mechanism to other service schedules. Parties are also free to explore whether the decoupling mechanism changes the Company's risk profile and required return on equity.

In other words, parties joining the Settlement of the Phase II Rate Case in its entirety retain significant flexibility to recommend changes to the Company's proposed mechanism. Moreover, Parties not joining the Phase Settlement have no obligation to support even the principle of revenue decoupling. Consequently, the Company believes that many different perspectives on revenue decoupling will be offered in the ongoing decoupling proceeding.

Q. SINCE PARTIES RETAIN SIGNIFICANT FLEXIBILITY AS EXPLAINED ABOVE, OF WHAT VALUE TO THE COMPANY IS THE DECOUPLING AGREEMENT?

A. Most of the interveners in the Phase II Rate Case have joined the Settlement of this proceeding in its entirety. The Company acknowledges that these parties are free to recommend many changes to our proposed decoupling mechanism. Nonetheless, the first threshold challenge when advocating a new ratemaking policy is to convince stakeholders that the policy is sound and makes sense in a given context. Only after that policy basis is established do implementation and ancillary issues assume any relevance. In this respect, the Company values the commitment of many parties to not oppose the principle of revenue decoupling for residential and small commercial customers. From our perspective, that agreement is a critical aspect of the global Settlement.

H. OTHER BENEFITS OF SETTLEMENT

Q. ARE THERE ANY OTHER BENEFITS OF THE SETTLEMENT YOU WISH TO HIGHLIGHT?

A. Yes. The three proceedings covered under the global Settlement required parties to explicitly resolve a wide variety of policy and ratemaking issues. These substantive agreements resolve issues regarding: class allocations and rate design; the closing and opening of new services; renewable capacity goals; the terms, conditions and rates relevant to customers with on-site renewable generation and large-scale renewable projects, etc.

But despite all of these substantive and tangible agreements, all parties realize that we face significant challenges down the road – both to issues not explicitly addressed in this Settlement and to implement the agreements reached in the Settlement. A salient example of the first is how to serve customers with behind-the-meter storage applications paired with on-site generation. An example of the second is how to ensure the success of the RD-TDR pilot and RE-TOU trial program to gather valuable insight and information for future decision making.

In recognition of this challenge, the parties to the Settlement have agreed to establish the following Stakeholder Groups: (1) Distribution Grid and Interconnection Stakeholder Group, (2) Future Voluntary Renewable Programs Stakeholder Group, (3) Existing Voluntary Renewable Programs Stakeholder Group, and (4) Pilot and Trial Program Stakeholder Group. The many issues reserved for these groups are specified in Attachment F.

In addition to these formal collaborative efforts, the Company will also convene two informal collaborative groups to work with interested stakeholders. The first will be a collaborative groups convened in 2017 to discuss alternatives methods of classifying and allocating production plant and evaluate whether any of these methods might be reasonably employed in future Phase II proceedings. The second will be a formal collaborative group of interested stakeholders, including the Commission Staff and industrial intervenors, to explore alternative ways to develop the customer-specific S&F Charges for Schedule Transmission General (“TG”) customers.

These "process" agreements are important supplements to the more substantive agreements that I discussed above. In the Company's view, these process agreements will encourage a more collaborative approach to current and emerging service issues. Moreover, these specific forums will help focus interested stakeholders on resolving important issues in a reasonably expeditious manner. The Company questions whether such a comprehensive collaborative approach could have been developed outside a Settlement comprising multiple proceedings.

I. COST IMPACTS OF SETTLEMENT INITIATIVES

Q. YOU HAVE OUTLINED THE BENEFITS OF THE SETTLEMENT TO THE LARGE BODY OF CUSTOMERS, VARIOUS CUSTOMER SUBGROUPS, AND SHAREHOLDERS. BUT WILL THESE BENEFITS ENTAIL COSTS TO THE LARGE BODY OF CUSTOMERS?

A. Yes. Evaluating whether the benefits of various programs or service options justify their costs usually requires some judgment; it is not always possible to conduct rigorous benefit-cost tests that capture all relevant impacts.

For example, the primary reason to implement the RE-TOU trial program and RD-TDR pilot is to assess customer response to these rate designs and evaluate their efficacy for the purpose of future decision making. If we knew today the impacts of these rate designs on customers' coincident and non-coincident peak demands or energy use by time of use, then there would be no need for testing. We would simply implement one optimal rate design as expeditiously as possible. The fact that we do not have adequate information regarding the optimal rate design for the residential class is in itself a compelling reason to implement the trial program and pilot. Providing the data necessary for the Commission to adequately evaluate alternative rate designs justifies devoting some resources to testing them.

Q. CAN YOU IDENTIFY THE COSTS OF THE VARIOUS AGREEMENTS REACHED IN THIS GLOBAL SETTLEMENT?

A. Yes. For simplicity I will divide the costs into three categories: implementation costs, Renewable Energy Credits ("REC"), and other incentives to Renewable Energy Resources.

Q. PLEASE DESCRIBE WHAT YOU MEAN BY IMPLEMENTATION COSTS.

A. The implementation costs include the typical rate-case expenses – such as noticing, legal support and hearing expenses. In addition, the Company will incur costs to recruit customers for the new the RE-TOU trial program, RD-TDR pilot, and the CPP program, as well as meter and bill these customers. The Company will also incur costs to establish control groups, meter their usage, and administer and analyze the pilot and programs on an ongoing basis. The special provisions for low-income customers and net metered customers will add some to these costs.

Q. PLEASE DESCRIBE WHAT YOU HAVE CLASSIFIED AS REC AND OTHER INCENTIVES TO RENEWABLE ENERGY RESOURCES.

A. REC payments are certainly nothing new. But the expansion of the Solar*Rewards programs will increase the annual REC payments to customers. Moreover, the new Recycled Energy Service will also entail incentives to participants. The REC and incentive payments are borne directly by the RESA and are included in the estimated RESA impact as Attachment H to the Settlement Agreement. I will also discuss this in further detail later in my testimony as requested by Chairman Epel during a Commissioner Weekly Meeting on August 24, 2016.

Q. WHY ARE YOU NOT INCLUDING ANY COSTS FOR THE RENEWABLE*CONNECT PROGRAM IN YOUR LIST OF SETTLEMENT COSTS?

A. Customers voluntarily participating in the Renewable*Connect program will bear any incremental costs of the Renewable*Connect program. As I explained earlier, this program is designed to have no impact on the rates (either riders or base rates) assessed to non-participating customers.

Q. HOW WOULD THE IMPLEMENTATION COSTS YOU IDENTIFY ABOVE BE COLLECTED FROM CUSTOMERS?

A. The Company will defer the typical rate-case expenses[11] and seek recovery of these expenses in a future Phase I rate proceeding. The implementation costs for the pilot and programs will be collected primarily through participating customers' S&F Charges or through the future base rates of all customers. In Attachment AKJ-4 I list these expenses and provide dollar amounts when reasonable estimates are available.

[11] Attachment G to the Settlement Agreement details the estimated Rate Case Expenses for the Phase II Rate Case that are eligible to be sought in the next Phase I for cost recovery.

While the Company is still developing estimates of some implementation costs, we believe that the value of the rate-design changes and new service offerings resulting from the Settlement will justify these implementation costs.

Q. HOW WOULD THE COSTS OF RECs AND INCENTIVE PAYMENTS TO RECYCLED ENERGY FACILITIES BE COLLECTED FROM CUSTOMERS?

A. These costs will be collected through the RESA.

Q. HAS THE COMPANY ESTIMATED THE IMPACT OF THE SETTLEMENT ON THESE RESA EXPENSES?

A. Yes. I will address the RESA impact at length in a separate section of my testimony

Q. DO YOU HAVE ANY OTHER COMMENTS REGARDING THE IMPACT OF THIS SETTLEMENT ON CUSTOMER COSTS?

A. Yes. I attempt to identify the costs of the Settlement above, and this exercise is very valuable in terms of assessing whether the Settlement is in the public interest. But equally important are the costs avoided by eliminating the need to litigate – or even settle – three separate proceedings. While these savings are difficult to estimate, and would vary depending on how the (hypothetical) separate proceedings ultimately would have unfolded, there is little doubt that these savings would significantly reduce the *net* cost of the Settlement.

IV. RESA IMPACT

Q. WHAT WILL YOU DISCUSS IN THIS SECTION OF YOUR TESTIMONY?

A. In this section of my Opening Testimony I take a deeper dive into the impact of the Settlement Agreement on the RESA. The aggregated impact was provided in Attachment H to the Settlement Agreement, this section will provide further detail on how the individual programs are expected to impact the RESA.

Q. IS THE SETTLEMENT EXPECTED TO IMPACT THE RESA DEFERRED BALANCE PROJECTION THAT WAS ORIGINALLY FILED AS PART OF THE 2017 RE PLAN?

A. Yes. As I have discussed previously in my Opening Testimony, the Settlement contains a number of changes to the Company's 2017 RE Plan which will impact the RESA deferred balance over the planning period from 2016 to 2026. Specifically, the Settlement increases the proposed capacity acquisitions for the Solar*Rewards Medium and Large programs, increases the proposed maximum and minimum capacity acquisitions for the Solar*Rewards Community program in 2018 and 2019, and provides additional opportunities for low-income customers to participate in both CSGs as well as rooftop solar.

Q. HAS THE COMPANY CALCULATED THE IMPACT OF THE SETTLEMENT TO THE RESA DEFERRED BALANCE?

A. Yes. The projected RESA deferred balance reflecting the changes of the Settlement was included as Corrected Attachment H to the Settlement.

However, the Settlement is not the only matter currently before the Commission which has a RESA deferred balance impact. In addition to the changes proposed by the Settlement, the Company also has also requested a Certificate of Public Convenience and Necessity ("CPCN") to acquire the 600 MW Rush Creek wind facility. Table AKJ-1 below contains the RESA deferred balance as it was filed in the 2017 RE Plan, as modified by the Settlement, and as modified by the Settlement including the Company's preferred RESA treatment of the Rush Creek wind facility.

Table AKJ-1

RESA Deferred Balance Comparison

	2017 RE Plan As Filed 16A-0139E	2017 RE Plan Settlement [Corrected]	2017 RE Plan Settlement With Rush Creek
2015	$ 39,583,522	$ 39,583,522	$ 39,583,522
2016	$ 64,638,011	$ 64,529,014	$ 64,529,283
2017	$ 36,188,360	$ 29,025,878	$ 28,089,577
2018	$ 36,210,223	$ 22,282,987	$ 15,446,550
2019	$ 56,574,095	$ 35,402,991	$ 6,610,203
2020	$ 113,768,841	$ 92,732,366	$ 36,023,612
2021	$ 191,921,872	$ 169,464,454	$ 106,902,020
2022	$ 275,846,948	$ 251,943,739	$ 187,186,005
2023	$ 367,596,986	$ 342,155,140	$ 270,770,706
2024	$ 466,818,329	$ 439,775,035	$ 361,887,404
2025	$ 573,011,274	$ 544,281,572	$ 462,905,310
2026	$ 688,239,085	$ 657,717,612	$ 572,617,479

Table AKJ-1 demonstrates that the RESA deferred balance is projected to remain positive throughout the planning period even with the combined impacts of the higher acquisitions of solar generation within the Settlement and the Rush Creek wind facility.

Q. WHAT ASPECTS OF THE SETTLEMENT DRIVE THE DIFFERENCE BETWEEN THE RESA DEFERRED BALANCE AS FILED AND THE SETTLEMENT ESTIMATE?

A. A majority of the difference is driven by the up-front incentives afforded to the new low-income solar programs provided for within the Settlement. The Company currently estimates that the annual RESA impact from the Company Owned Low-Income CSGs, the Low-Income CSG Request for Proposal ("RFP") and the Low-Income Rooftop Solar programs will average $7.6 million annually from 2017 to 2019. These RESA impacts are primarily attributable to the up-front incentives provided for in the Settlement, and are expected to decrease precipitously after 2019 when these up-front incentives are no longer provided. The ultimate cost of these programs is subject to the results of an RFP, so at this time the Company does not know precisely how much these programs will cost the RESA. But even if the RFPs result in bids that are more expensive than expected, the limited capacity and time frame of the programs will permit the Company to manage the RESA effectively on a going forward basis.

Q. WHY IS IT NECESSARY TO PROVIDE THESE SOLAR PROGRAMS TO LOW-INCOME CUSTOMERS?

A. I address this to some extent in my previous Opening Testimony, however, it is important to note that all customers, including low-income customers, have benefited from the actions the Company and Commission have undertaken in compliance with the RES and which have been enabled by the RESA. Currently, over 2,300 MW of wind generation and 250 MW of large-scale solar generation are operating on the Public Service system. This renewable generation benefits all customers, and much of it is a direct result of the funding and cost protections provided to customers through the RESA. As of June 2016, the Solar*Rewards program has received approximately $356 million in direct rebates and REC incentives, and the Solar*Rewards Community program has received approximately $2.6 million in REC incentives -- all provided from the RESA. Aside from the obligation for CSGs to achieve 5% of their subscriptions from low-income customers, it is difficult to ascertain precisely how much of these incentives have benefited low-income customers. The three low-income solar programs will provide incentives to expand the available rooftop and CSG solar capacity for low-income customers by up to approximately 25 MW from 2017 to 2019.

Q. WILL THE COMPANY'S RENEWABLE*CONNECT PROGRAM BURDEN THE RESA DEFERRED ACCOUNT WITH ANY COSTS?

A. No. As mentioned previously, the Renewable*Connect program requires no subsidies from nonparticipants – either through the RESA or other rates.

While the program will not attribute any cost to the RESA deferred account, the program could provide benefits under some circumstances. Consistent with the Company's Rebuttal Testimony, the Settlement defines that a participant in Renewable*Connect will pay for the costs of the solar resource serving the program and the incremental costs of administering the program through the Bill Charge, and will receive a Bill Credit equivalent only to the avoided cost of the energy received from that same solar resource. Further, the Settlement provides that any unsubscribed solar energy may be sunk to the system at the lower of avoided cost of that energy or the cost of the PPA. By structuring the Bill Charges, Bill Credits and unsubscribed energy in this way, non-participant customers are insulated from any cost impact of the program because participants are paying the full cost of the program and are only receiving a credit equivalent to avoided cost. Additionally, to the extent that revenues from participants exceed the cost of the program, Public Service will limit the amount of retained excess revenue from the program to its prevailing WACC. Any excess revenue received over and above the prevailing WACC would be credited back to the RESA deferred account.

Q. WILL A CHANGE IN NATURAL GAS PRICES OR OTHER MARKET ENERGY PRICES IMPACT THE RESA DEFERRED BALANCE?

A. Not through 2026. The Settlement Agreement would also serve to "lock down" the modeling associated with the 2017 RE plan for the entire term of the RES planning period ending in 2026. While this lock down of modeling assumptions will provide the Commission and Company with significantly more predictable RESA deferred balance over that period, the Company will still provide the Commission a current market view of the RESA without a lock down in each forthcoming RE Plan. This provision of the Settlement helps achieve two ends; it will provide a more predictable RESA deferred balance for the next ten years, while still ensuring the Commission will be able to transparently track the RESA deferred account and the impact of the lock down in each RE Plan.

Q. WHAT OTHER VARIABLES COULD IMPACT THE RESA DEFERRED BALANCE THROUGH 2026?

A. Even though most of the variables which impact the RESA deferred balance have been locked down by the Settlement, there are still a few variables which are not locked down and could have a measurable impact. For instance, the Strategist model contains assumptions for the levels of generation the Company will receive from its various renewable resources. While the Company's predictions of generation over longer periods of time, such as a year or longer, have proven to be reasonably accurate the actual generation will deviate by some degree from our assumptions. These deviations will either impart higher incremental cost or lower incremental cost to the RESA than originally estimated, and can impact the RESA deferred balance as we move through time. Additionally, the REC incentives which will be afforded to the Solar*Rewards Large, and the Solar*Rewards Community programs will be set by an RFP. The Company has estimated what the results of those RFPs for the purpose of estimating the RESA deferred balance, but the actual results may be either higher or lower than what was estimated. Lastly, the current RESA deferred balance does not assume future additions of discrete renewable generators to the Public Service system. If history is any indication, it is likely that the Company will continue to add renewable generation to the system if it makes sense for our customers. If the Company adds additional renewable generation, it could impact the RESA deferred balance either positively or negatively depending on the economics of the generation resource.

Q. WHAT IS THE INCREMENTAL IMPACT OF EACH OF THE PROGRAMS PROVIDED THROUGH THE SETTLEMENT AGREEMENT ON THE OVERALL RESA BALANCE?

A. Attachment AKJ-5 shows the expected RESA impact of each program provided the program is fully subscribed or utilized. Assumptions were necessary regarding the rate at which the RFPs would be provided for the programs subject to an RFP process.

V. COMPANY OWNED LOW-INCOME CSG

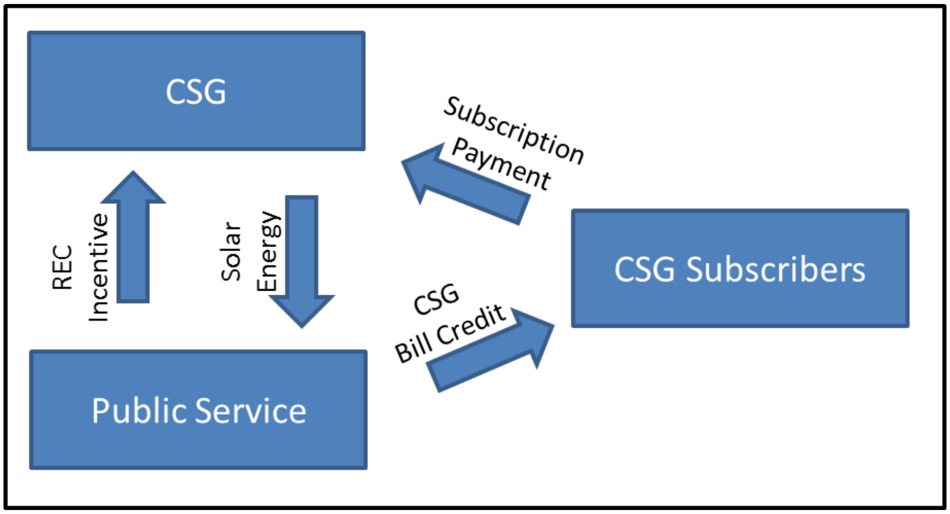
Q. WHAT WILL YOU DISCUSS IN THIS SECTION OF YOUR TESTIMONY?

A. I will discuss the high level structure of CSGs operating on the Public Service system, as well as the Settlement proposal for Company owned low-income CSGs and the resultant impact to the RESA deferred balance.

Q. WILL YOU PLEASE DESCRIBE AT A HIGH LEVEL THE CURRENT RELATIONSHIP BETWEEN A CSG, ITS SUBSCRIBERS AND PUBLIC SERVICE?

A. Yes. Generally speaking, for a given CSG there are a number of straight forward transactions that take place between the CSG, Public Service and the CSG Subscriber. First, a CSG subscriber provides a “subscription payment” to the owner/operator of the CSG and in exchange for the subscription payment the CSG provides solar energy to the Public Service system. In order to recognize the benefit of the solar energy provided to the system by virtue of the actions of the CSG and its subscribers, Public Service provides a bill credit to the CSG subscriber and a REC incentive to CSG. This relationship is depicted below in Figure AKJ-1.

Figure AKJ-1 CSG Subscription Diagram



To the extent that the Bill Credit provided to a CSG Subscriber is less than the cost of the subscription payment, that CSG subscriber will save money on their electric bill. The amount of bill credit afforded to CSG subscribers is set by Commission rule and is based upon the electric rates of Public Service. Additionally, the cost of the REC incentive provided to the CSG is determined through a competitive solicitation conducted by Public Service. The subscription payment from the subscriber to the CSG is privately negotiated and is not disclosed to the Company or Commission.

Q. DO ALL SOLAR GARDENS ON THE PUBLIC SERVICE SYSTEM OPERATE UNDER THIS STRUCTURE?

A. Generally, yes. While different CSGs have been awarded different REC incentives, and employ different PV solar technologies, they all abide by the basic structure depicted in Figure AJK-1.

Q. WOULD THE COMPANY OWNED LOW-INCOME CSGs CONTEMPLATED BY THE SETTLEMENT OPERATE ANY DIFFERENTLY?

A. No, a Company owned and operated CSG would operate using the same basic structure as all the other CSGs operating today with the exception that all of the subscribers to the Company's CSGs would be qualified low-income customers.

Q. WHAT IS THE RESA IMPACT OF THE COMPANY OWNED LOW-INCOME CSGs PROVIDED FOR IN THE SETTLEMENT?

A. The Settlement sets the REC incentive that Public Service would receive for its CSG solar generation at the same incentive provided to the standard offer REC incentive for low-income CSGs, which is defined by the Settlement to be the average of the results from the low-income CSG RFP plus $0.01/kWh. At this time, the Company does not have any indication of how bidders may response to the low-income CSG RFP. Notwithstanding, for the purpose of estimating the RESA deferred balance impact of these low-income CSG programs the Company has estimated that the low-income CSG standard offer could result in a REC incentive of $0.0515/kWh based on anecdotal evidence and conversations with CSG developers. Using the assumption of $0.0515/kWh for the low-income CSG standard offer REC incentive, the Company owned low-income CSG program would result in a maximum RESA impact of approximately $1.4 million in 2020 which would then decrease over time.

Q. IS THERE ANY ADDITIONAL RISK TO CUSTOMERS ASSOCIATED WITH A COMPANY OWNED SOLAR GARDEN COMPARED TO A DEVELOPER OWNED SOLAR GARDENS?

A. No. The Settlement defines that Public Service will not seek recovery for its investment in low-income CSG through base rates, which negates any financial risk of the investment to customers. The only financial impact of these Company-owned low-income CSGs will be the REC incentives paid from the RESA, which are no different than the standard off low-income CSG REC incentives that would be paid to any other third-party CSG developer.

Q. IS THE PROPOSAL FOR PUBLIC SERVICE TO OWN CSGs CONSISTENT WITH THE OWNERSHIP LIMITATIONS IN § 40-2-124(1)(f), C.R.S, (AND CORRESPONDING RULE 3660(h)) AS REQUIRED BY § 40-2-127(f), C.R.S. (AND CORRESPONDING RULE 3665(d)(5))?

A. Yes, because I do not believe the incentives and ownership limitations apply to our proposal as it is structured. As we read the § 40-2-124(1)(f), C.R.S., it applies to utility-owned resources that are to be rate-based. That is not what we are proposing here, so we believe that neither the ownership limitations nor the potential incentives apply to this proposal.

VI. PUBLIC INTEREST STANDARD

Q. WHAT WILL YOU DISCUSS IN THIS SECTION OF YOUR TESTIMONY?

A. I will discuss whether the Settlement Agreement is in the public interest – based on a consideration of many factors.

Q. DOES THE COMPANY BELIEVE THE SETTLEMENT AGREEMENT IS IN THE PUBLIC INTEREST?

A. Yes. Of course, one way to evaluate the Settlement Agreement is to evaluate each provision in isolation – based on its desirability from a public interest perspective and record support. I assess the Settlement Agreement from this perspective in the previous section of my Opening Testimony. This is certainly one reasonable approach to evaluating the Settlement Agreement, and I believe the conclusion should be that the Settlement Agreement is in the public interest.

But it is also important to assess the Settlement Agreement at a higher level, particularly since it comprises so many policy issues in multiple proceedings. This approach recognizes that settlements are a product of multiple negotiations and compromises among parties, and that the litmus test is the end result rather than a laundry list of pluses and minuses for individual settlement components.

Q. HOW CAN A PUBLIC INTEREST STANDARD BE APPLIED TO THIS HIGHER-LEVEL APPROACH?

A. One criterion is whether the proposed settlement results in a better outcome than would have resulted from the individual litigation or settlement of each proceeding in isolation. This is admittedly a difficult assessment, in that we are comparing the results of a specific settlement with the hypothetical results had these proceedings been processed individually. But a reasonable assessment can be based on the following:

- Does the settlement have widespread support from stakeholders?
- Does the settlement result in more equitable cost recovery, better price signals and customer choice?
- Does the settlement promote such statutory goals as renewable development, DSM and low-income protection?
- Does the settlement allow the Company a reasonable opportunity to earn its authorized return on equity?
- If the settlement does achieve these goals, does it do so at a reasonable cost?
- To the extent the settlement does not resolve any issues that stakeholders raised, does it provide for specific processes to further investigate these issues?

Q. FROM THE COMPANY'S PERSPECTIVE, WHAT ARE THE ANSWERS TO THESE QUESTIONS?

A. The Company believes the answer to each question is "Yes" for the Company's presented Settlement Agreement.

Q. WHY DOES THE COMPANY BELIEVE THE SETTLEMENT AGREEMENT GARNERED WIDESPREAD STAKEHOLDER SUPPORT?

A. One aspect of the Settlement Agreement I would tout is the widespread consensus. These proceedings did not necessarily lend themselves to expedient resolution. A large number of parties intervened in the three proceedings, and these parties held a wide variety of positions on many issues that have proven to be controversial in the past and in these current proceedings. But despite these divergent perspectives, the majority of parties to the proceedings are joining Parties to the Settlement Agreement. The consensus represented by this Settlement Agreement is a notable and positive aspect. While each party may believe the positions they advanced in Direct or Answer Testimony represent the optimal outcomes, in reality a better outcome is often achieved through negotiations.

Q. WHY DOES THE COMPANY BELIEVE THE SETTLEMENT AGREEMENT PROMOTES MORE EQUITABLE COST RECOVERY AND BETTER PRICE SIGNALS?

A. I provided the basis for this conclusion earlier in my Opening Testimony. In short, this Settlement Agreement provides for important incremental improvements in terms of promoting equitable cost recovery and the encouragement of efficient levels of energy use. One feature I would emphasize is that alternative tariffs or programs resulting from this Settlement Agreement are not based on a “scatter-shot” approach – where many individual alternatives are provided without due consideration of their long-term efficacy and how they mesh with each other. The rate-design changes (such as the new approach to determining G&T billing demands) and alternative service options (such as the CPP Program and Renewable*Connect program), are all sustainable in the long term and are designed to complement each other. Moreover, we expect that the residential service options will generate the data needed to assess the optimal long-term residential rate design given our evolving customer base.

Q. WHY DOES THE COMPANY BELIEVE THE SETTLEMENT AGREEMENT PROMOTES RENEWABLE DEVELOPMENT, DSM AND LOW-INCOME PROTECTION?

A. I summarize the Settlement Agreement's contributions to these areas earlier. The existing renewable programs are being expanded, and a new renewable program (requiring no subsidies from non-participating customers) will be implemented to fill an important niche.

The Settlement Agreement also provides for better price signals, conceptual support of revenue decoupling for small customers, and the addition of the demand response program deemed to be most cost-effective of the viable alternatives. All of these initiatives should increase the deployment of cost-effective DSM measures.

Finally, recruiting low-income customers for TOU rate programs and renewables programs has historically presented a significant challenge. The "Hold Harmless" provisions in Schedules RD-TDR and RE-TOU and the Solar*Rewards Community carve-out should help overcome these barriers.

This accommodation of low-income customers is an important public-policy benefit of the Settlement Agreement.

Q. WHY DOES THE COMPANY BELIEVE THAT THE SETTLEMENT AGREEMENT AFFORDS THE COMPANY A REASONABLE OPPORTUNITY TO EARN ITS AUTHORIZED ROE?

A. Admittedly, this is the most difficult question to answer in the affirmative. Under the Settlement Agreement, the Company will reduce its S&F Charges for small customers, offer voluntary service options to residential customers, increase the amount of net metered load on the system, and implement a CPP program. All of these initiatives push to reduce base revenue.

However, the Company anticipates the option to mitigate the revenue loss from small customers through revenue decoupling. Moreover, the impact of the CPP program on base revenue should be manageable. There is no obvious remedy to the revenue loss resulting from the significant increase in net metered load for large secondary customers. The Company believes we can manage this loss until the next Phase I rate case.

In addition, as explained earlier, some of the Settlement Agreement initiatives will entail incremental metering costs, IT/billing expenses, marketing and customer education expenses, and other expenses. The Company will endeavor to secure complete and timely recovery of these costs through a combination of S&F Charges, the recovery of deferred Phase II rate-case expenses, and our upcoming Phase I electric proceeding.

Q. WHY DOES THE COMPANY BELIEVE THE SETTLEMENT AGREEMENT ACHIEVES THE PUBLIC INTEREST GOALS AT A REASONABLE COST?

A. I explained at length above why the various costs resulting from the Settlement Agreement are reasonable, particularly since this global resolution significantly reduces the costs of litigating or settling the three proceedings separately.

Q. WHY DOES THE COMPANY BELIEVE THE SETTLEMENT AGREEMENT ESTABLISHES A REASONABLE PATH TO ADDRESING ISSUES THAT THE PARTIES COULD NOT RESOLVE IN THIS SETTLEMENT AGREEMENT?

A. As I explained earlier, the Settlement Agreement provides for the establishment of formal Stakeholder Groups and informal collaborative efforts to address unresolved issues. I believe stakeholders are motivated to use these forums productively to develop solutions. Given the number of issues that *were* resolved in this Settlement Agreement, the Company is optimistic that we can resolve additional issues in the future.

Q. WHAT DO YOU CONCLUDE FROM THIS PUBLIC-INTEREST ASSESSMENT?

A. The individual components of the Settlement Agreement are reasonable and based on record evidence. In some cases a specific agreement corresponds directly to the position of one or more parties. In other cases, the agreement represents a unique, negotiated outcome based on the various positions of parties.

Viewed more broadly, the Settlement Agreement advances (and balances) many public-policy objectives. The Settlement Agreement also minimizes regulatory costs. It is difficult to envision how litigating or settling the three proceedings individually would have yielded a better result. The Company recommends that the Commission find that the Settlement Agreement is in the public interest.

Q. DOES THIS CONCLUDE YOUR OPENING TESTIMONY?

A. Yes, it does.