BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

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IN THE MATTER OF THE APPLICATION OF	**)**	
PUBLIC SERVICE COMPANY OF COLORADO	**)**	**DOCKET NO. 11A-___E**
FOR APPROVAL OF ITS 2012 RENEWABLE	**)**	
ENERGY STANDARD COMPLIANCE PLAN	**)**	

DIRECT TESTIMONY OF KURTIS J. HAEGER

ON

BEHALF OF

PUBLIC SERVICE COMPANY OF COLORADO

May 13, 2011

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DIRECT TESTIMONY AND EXHIBITS OF KURTIS J. HAEGER

I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Kurtis J. Haeger. My business address is 1800 Larimer Street, Denver, Colorado 80202.

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

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

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

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

Q. HAVE YOU INCLUDED A DESCRIPTION OF YOUR QUALIFICATIONS, DUTIES, AND RESPONSIBILITIES?

A. Yes. A description of my qualifications, duties, and responsibilities is included as Attachment A.

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my testimony is to provide support for Sections 5, 6, 7 and 8 of the Company's 2012 Renewable Energy Standard Compliance Plan ("Compliance Plan" or "Plan"). In doing so I will explain the Company's plan, presented in Section 5, for acquiring additional Non-DG and Wholesale DG in the 2012 and 2013 timeframe, the calculation of the Windsource premium presented in Section 6, the calculation of the Retail Rate Impact presented in Section 7, including the modeling assumptions and the incremental cost of Eligible Energy Resources used in the Strategist model runs and the presentation and support of Tables 7-1 through 7-5. I will first start with a brief background on what cost analysis is performed in developing the 2012 Compliance Plan and how this cost data contained in Sections 6 and 7 was derived.

1. BRIEF BACKGROUND ON MODELING

Q. WHAT COST ANALYSIS IS PERFORMED FOR THE DEVELOPMENT OF THE COMPLIANCE PLAN?

A. There are two primary sections of the compliance plan where cost analysis is performed and presented. In Section 6 the Company provides summary data related to the generation production costs associated with valuing the Renewable Energy Credits ("RECs") the Company sells to participants in the voluntary Windsource Program. In Section 7, Tables 7-1 through 7-5 of the

compliance plan, high level outputs of various model runs used to calculate the incremental cost of the renewable energy resources that Company has acquired to satisfy the Renewable Energy Standard ("RES") are presented. This cost analysis is ultimately used to determine the overall retail rate impact of the RES for customers. Underlying the summary and high level cost data presented in these sections are many assumptions and calculations.

Q. HOW DO YOU PERFORM THE COST ANALYSES PRESENTED IN THE 2012 COMPLIANCE PLAN?

A. The Company used a proprietary model called "Strategist" to develop the cost analyses used in preparation of the compliance plan. This model is essentially a big, fast and smart adding machine that calculates the Company's total cost of generating electricity. Strategist was designed to focus on two primary drivers, the cost of acquiring the necessary resources to meet the load obligation on peak load days and the cost of producing the energy necessary to serve the customers' hourly and daily energy needs. The benefit of the Strategist model is that it takes into account both of these major cost components and allows the Company to evaluate either the costs associated with the selection of new resources or the costs associated with the operation of our existing generation fleet. Although the Strategist model allows the Company to analyze the production and acquisition costs of its entire system, it can also be used to isolate or identify the generation production cost of very specific resources within the Company's generation portfolio.

Strategist is a very sophisticated and rather complicated model that requires hundreds of inputs and assumptions including a forecast of the energy and capacity needs of the system, the operating parameters of each of the power plants, the cost of buying and transporting natural gas and coal to the various power plants, the efficiency of its power plants, the cost of staffing and operating the power plants, the cost of energy and capacity purchased from other utilities, independent power producers and the market, as well as many other variables that affect the operation and cost of our electric system.

Q. HOW DOES THE STRATEGIST MODEL RELATE TO THE OPERATION OF THE COMPANY'S ELECTRIC SYSTEM?

A. Public Service's electric system is very dynamic, changing minute-by-minute as customer usage changes. To meet the real time electric load of our customers, Public Service must ramp up or down the production of energy at the various power plants that are under the Company's control in response to these changes. In addition to responding to changing customer loads, Public Service must also continuously modify the operations of its generation fleet to account for the varying levels of intermittent energy production that results from resources like wind and solar. Since the production of wind energy and solar energy is generally the result of atmospheric conditions, it too is changing all of the time. This constant effort of chasing load and variable generation by modifying the operations of the Company's other sources of electric generation is referred to as dispatching the system. Strategist uses all

of the inputs and assumptions built into the model to simulate this real time dispatch function of the system.

In analyzing resource acquisitions for the system, Public Service must take into account both the capital and operating costs of the system in addition to the energy costs associated with the real time dispatch of the system. The Strategist model also has the ability to calculate all of these costs and to balance or optimize these costs in a way to generate an estimate of the least cost generation plan for the Company. When presented with different generation scenarios, Strategist will perform hundreds of different model runs in an attempt to identify the least cost options for selecting and operating various resources. Since Strategist has the ability to simulate or model both generation production costs and resource acquisition costs, the Company can see the relative cost differences between various projected future states or resource mixes.

In the development of the RES Compliance Plan, the two states that are of primary interest are the “RES Plan” – a future state with new renewable energy additions at varying levels to meet or exceed the RES Standard -- and the “No RES Plan” – a future state in which those same customer demands are met by removing the new renewable resources and replacing them with non-renewable resources or re-dispatching the existing resources to meet the same level of customer energy needs. The cost difference between these two states or plans estimates the incremental cost of the one set of resources compared to the other set of resources. The purpose of comparing the RES

and No RES plans in Strategist for the RES Compliance Plan is to determine if there is an additional cost, and to quantify any additional cost, of using the Company's existing renewable resources or to aid in the evaluation of whether the Company should acquire additional renewable resources as compared to using non-renewable resources like gas-fired or coal-fired generation.

Q. WHAT DO YOU DO WITH THE COST DATA ONCE THE STRATEGIST MODEL HAS BEEN DEVELOPED?

A. We use the Strategist output to calculate the rate charged to our Windsource customers, presented in Section 6, and we use it to determine the retail rate impact of the renewable energy used to comply with the RES, presented in Section 7 of the compliance plan.

II. ACQUISITION PLANS (SECTION 5)

Q. IS THE COMPANY PROPOSING TO ACQUIRE ADDITIONAL NON-DG AND WHOLESALE DG RESOURCES IN CONJUNCTION WITH THE 2012 COMPLIANCE PLAN?

A. No. Although the Company is requesting the approval for the acquisition of incremental Retail DG acquisitions for 2012 and 2013, as discussed by Witness Kittel, Public Service is not proposing in the 2012 RES Compliance Plan the acquisition of additional Non-DG or Wholesale DG resources. As a result of Non-DG and wholesale DG already on-line and the acquisition of 700 MW of additional wind resources and 60 MW of solar resources that were approved in the 2007 Colorado Resource Plan, which are scheduled to just

start coming on-line in 2011, the Company is already in the position to meet or exceed compliance for these categories of the Renewable Energy Standard ("RES") through 2013 and much further into the future. In addition, the size of resources that the Company would likely consider to acquire for the Non-DG exceed 30 MW in size. Commission Rules require these larger resources to be acquired in a resource plan and not in a RES compliance plan. Likewise, Wholesale DG categories of the RES are more likely to be large enough (approaching 30 MW size resources) to possibly impact the selection of resources that should be considered in the Company's 2011 Resource Plan. Therefore the Company believes it is more appropriate to defer the decisions regarding the acquisition of additional utility scale solar and wind projects until the 2011 Resource Plan. Delaying this acquisition decision will allow the Commission and interested parties to consider these future acquisitions in a docket in which more information about the entire Public Service system is scheduled to be considered.

Q. WILL THE TIMING OF THE 2011 RESOURCE PLAN RESULT IN ANY RISK OF PUBLIC SERVICE NOT COMPLYING WITH THE RES?

A. No. Based on the Company's current balance of Renewable Energy Credits ("RECs") described in Section 4 and the additional RECs that are expected to be generated from the existing generation and the addition of 700 MW of wind and 60 MW of wholesale DG solar that is scheduled to come on-line over the next two years, the Company is not at risk of failing to comply with the RES through the planning horizon.

III. WINDSOURCE PREMIUM CALCULATIONS (SECTION 6)

Q. PLEASE PROVIDE AN OVERVIEW OF THE METHOD USED TO CALCULATE THE PREMIUM ASSOCIATED WITH WINDSOURCE PRODUCT.

A. The calculation of the Windsource premium is based on the concept that the premium will be equal to the average incremental cost of adding new renewable energy resources to the Company's system that could generate RECs to replace the RECs being used for the Windsource program. The average incremental cost of adding renewable energy to the Company's system is calculated in a similar fashion of how the Company determines the retail rate impact for the RESA, by determining the incremental cost, above avoided cost, of new Eligible Energy Resources that may be acquired in the future. This methodology is also the same methodology the Commission approved in Docket No. 08A-260E and that the Company used in developing the Windsource premium used and approved in the 2010 Compliance Plan (Docket No. 09A-772E) and what was presented in the December 14, 2010 filing that reaffirmed the Windsource rate of $21.58/MWh.

Q. WHAT IS THE WINDSOURCE PREMIUM CALCULATION THAT PUBLIC SERVICE IS PROPOSING IN THE 2012 - 2013 COMPLIANCE PLAN?

A. Based on using the same analytical methodology previously approved, the Company demonstrates the expected incremental cost of acquiring additional renewable resources is within the plus or minus 20 percent bandwidth of the current Windsource rate, and therefore the Company is proposing to keep the

Windsource rate at its current value of $21.58/Mwh. Exhibit 6.1 (volume 2) of the Plan provides the development of the incremental cost of the possible additions of new renewable resources in the future that could be used to replace the RECs being sold in the Windsource program. The expected incremental cost of adding additional renewable resources to the Public Service system was determined to be approximately $22.32/MWh. Taking into account that customers already receive 12 percent renewable energy in their traditional service, Public Service reduces the incremental cost of adding more renewable energy by this 12 percent, resulting in a Windsource premium of $19.64/MWh. The calculation of the new Windsource premium of $19.64/MWh is approximately 9 percent lower than the existing Windsource premium. In keeping with Commission Decisions No. C10-1033 and C10-1221, because this new premium is within the 20 percent bandwidth of the existing premium approved by the Commission, the Company is proposing to continue to use the existing Windsource rate through 2013 or until a final order is published on a future RES compliance plan.

Q. PLEASE IDENTIFY THE MODELING ASSUMPTIONS USED IN THE WINDSOURCE PREMIUM CALCULATIONS.

A. The Windsource premium for the 2012 Compliance Plan was developed by taking the Strategist model that was based on the Company's 2012 RES plan (referred to as the "base RES model" in the following discussion and includes all of the renewable resources acquired from the 2007 Colorado Resource Plan), and adding another 100 MW of wind resources in each of 2013, 2014

and 2015. This “modified” RES model was then compared to the base RES model to determine the average incremental cost over the next five years of adding of the three 100 MW wind projects in 2013, 2014 and 2015. The assumptions used in developing these models, for both the base RES model and the modified RES model, are consistent with the methodology used in the approved 2007 Resource Plan, including updated coal, gas and load forecasts, with the exception of the timing associated with potential carbon legislation.

When we consider the impact of legislation controlling emissions of carbon dioxide, we typically do so by imputing a carbon proxy cost into Strategist. One of the functions within Strategist is to calculate the emissions generated at each power plant. By inputting a carbon proxy cost, Strategist will calculate the estimated cost of carbon emissions for all of the generation that results in a carbon emission. The imputation of a carbon proxy cost has the effect of increasing the cost of fossil fuel generation in comparison to wind and solar generation. Through the years, we have had varying assumptions and sensitivity around this carbon proxy cost. Although the Company presents a “no-carbon” view in Table 7-3 (which means no carbon proxy cost used) and a “2014 carbon” view in Table 7-4, (which means that the carbon proxy cost starts to be applied in 2014 and the carbon proxy cost escalates at 7%/year thereafter), Public Service does not currently expect carbon legislation to go into effect in 2012 or 2013, the time period for which the proposed Windsource premium would be in effect. As a result, the proposal

to use the no-carbon view for calculating the Windsource premium makes sense in this case.

In addition to the changes in the timing of potential carbon legislation, the Company is proposing to use a wind price that does not include the Production Tax Credit ("PTC") currently available to wind developments that can be in-service by the end of 2012. Since the current PTC's for wind are set to expire at the end of 2012 and would not currently be available for any additional wind resources that may be added to the system between 2013 and 2015 to replace the RECs being used to supply the Windsource program, the Company is proposing to use a non-PTC price in the modeling of the three 100 MW wind additions being used to calculate the incremental cost for the Windsource program.

Q. ONCE THE INCREMENTAL COST FOR THE WINDSOURCE PREMIUM IS CALCULATED, WHAT IS THE FINAL STEP TO DETERMINE THE ACTUAL WINDSOURCE PREMIUM?

A. Keeping with the previously approved methodology of calculating the final Windsource premium, the Company assumes that all Windsource customers will subscribe at the 100 percent level. Realizing that all customers will receive 12 percent of their energy from renewable resources in the Company's overall portfolio, customers need only 88 percent of their energy in 2012 and 2013 from Windsource to become 100 percent renewable. To account for the fact that for a customer subscribing to Windsource at the 100 percent level needs only 88 percent of additional renewable energy, the

Windsource rate that is applied to 100 percent of the customer energy usage must be adjusted downward. The mathematical calculation to make this adjustment requires the incremental cost of the future renewable resources ($22.32/MWh) be multiplied by the 88 percent, the percentage of renewable energy to be acquired, to determine the final Windsource premium ($22.32 * 0.88 = $19.64/MWh final Windsource premium) that we be used to bill a customer at the 100 percent Windsource level.

IV. RETAIL RATE IMPACT METHODOLOGY

Q. PLEASE DESCRIBE HOW PUBLIC SERVICE CALCULATES THE RETAIL RATE IMPACT TEST.

A. Although Section 7 provides a full description of how the Company calculates the retail rate impact, I will provide a brief summary of these calculations. Rule 3661(h) sets forth the basic method for calculating the retail rate impact. Public Service follows this rule in setting up its models (as described above the Company uses the Strategist model to perform its cost analyses for the compliance plans) to determine the difference in costs between two alternative scenarios of electric resources over the RES Planning Period. The first scenario is a RES Plan that includes the new eligible energy resources that are being added during the RES Planning Period. This model run would include the possible addition of more wind or solar resources in the RES planning period. The second scenario, the No RES Plan, is a similar model run but with those new renewable resources removed and replaced by non-renewable resources. The No RES Plan model run would be constructed by

replacing the wind and solar resources that were being evaluated with capacity and energy made available from new non-renewable resources, such as additional gas-fired capacity (either combustion turbine or combined cycle generation), and/or re-dispatching the existing resources within Strategist to satisfy the energy needs of the system without the inclusion of the new renewable resources. A comparison of the annual cost of the RES Plan model run to the annual costs for the No RES Plan model run results in the incremental cost of the Eligible Energy Resources and forms the basis for the costs that will be paid for out of the RESA account and the overall retail rate impact. The avoided cost, or the cost that is included in both the RES and No RES model runs, is paid for out of the ECA account.

Q. PLEASE DESCRIBE THE MODELING ASSUMPTIONS THAT WERE USED TO DEVELOP THE INCREMENTAL COSTS TO BE BORNE BY THE RESA AND TO BE INCLUDED IN THE RETAIL RATE IMPACT TEST.

A. The RES Plan and No RES Plan model runs were developed using the same methodology as was approved for the 2007 Colorado Resource Plan, with the exception of the timing associated with the possible implementation of carbon legislation. Due to the uncertainty of the timing of implementing legislation to control or limit carbon dioxide emissions, the Company is providing Table 7-3, as its primary case of the retail rate impact, without any carbon proxy costs. In the alternative, the Company is including Table 7-4, which includes a carbon proxy cost assumption of $20 per ton beginning in 2014, escalating at 7 percent annually. Although the carbon proxy cost in the Company's last

major resource planning case approved by the Commission, the Clean Air Clean Jobs Act application in Docket No.10M-245E, was based on the 2014 carbon proxy cost as outlined in Table 7-4, Public Service now believes that a start date for implementing some form of carbon legislation by the beginning of 2014 is less clear. In addition, since the Company is proposing to defer the issue of acquiring additional utility scale renewable resources until the 2011 Resource Plan, all parties in that proceeding will have ample opportunity to voice their opinions as to the timing and escalation of any carbon proxy cost and have that decision apply to future large resource selection decisions. As a result, and keeping in mind that the focus of this 2012 RES Compliance Plan is primarily the retail DG to be acquired in 2012 and 2013, the Company is proposing to use the incremental cost data from Table 7-3 to determine the retail rate impact for the 2012 RES Compliance Plan.

Q. PLEASE SUMMARIZE THE PURPOSE OF THE TABLES INCLUDED IN VOLUME 2 OF THE 2012 COMPLIANCE PLAN AND THE EXPLAIN INFORMATION PRESENTED IN THE TABLES.

A. Table 7-1 is a summary of the total system cost of the RES Plan and No RES Plan model runs without any carbon proxy cost (Table 7-2 is a similar table with the 2014 carbon proxy cost). The difference between these two model runs is equal to the "Modeled RES Incremental Cost." The "Total Renewable Energy Costs" (also shown as column P on Table 7-3 and 7-4) column is equal to the total cost of the renewable energy from resources that are not locked down from previous proceedings and the on-going incremental costs

from resources that have been locked down by previous proceedings. The "Derived ECA Costs" (also shown as column R on Table 7-3 and 7-4) is calculated by taking the "Total Renewable Energy Costs" and subtracting the "Modeled Incremental RES Cost" and the "On-going Cost." The "On-going Cost" (also shown as column L on Table 7-3 and 7-4) is the incremental cost of those renewable resources that were locked down in a previous proceeding.

- Table 7-3 (Table 7-3 does not include a carbon proxy cost while Table 7-4 includes a carbon proxy cost starting in 2014) is a summary of the individual components that ultimately impact the RESA account. Although a more thorough discussion of the various columns on Tables 7-3 and 7-4 are included in Section 7 of Volume 1, I will provide a general high level overview of these tables.
- Columns B through E represents the total cost of renewable resources that have not been locked down by previous proceedings and have been included in the RES and No RES comparison. Column F, "Total RES Renewable Energy Costs" is the summation of the costs shown in columns B through E.
- Columns G, H and I are the credits or revenues to the RESA account.
- Columns K through O are the individual cost components of the RESA account and include the modeled incremental cost of resources not locked down and that were included in the RES and No RES cost comparison, the on-going incremental costs of the resources that have

been locked down in previous proceedings and other program and administrative costs.

- Column P is the addition of column F and column L and represents the total cost of the renewable resources.
- Column Q is the addition of columns J through L and represents the total incremental cost of the renewable resources that will be funded by the RESA.
- Column R is the difference between columns P and Q and represents the cost component of the renewable resources that are funded out of the ECA.
- Column S is the jurisdictional split of the renewable costs that are borne by the wholesale customers.
- Columns T and U are columns that sum the total RESA revenues and costs, while column V is the difference between the RESA revenues and the costs.
- Columns W, X and Y include the interest calculations for the deferred balance, and the on-going deferred balance calculations.
- Columns Z and AA are the same as columns G and Y but where the RESA funding has been eliminated in 2018. These additional columns are presented purely as a sensitivity to demonstrate the impact of reducing RESA funding in the future.

- Table 7.5 provides the incremental cost of resources that have been locked down in previous proceedings or those resources that the Company is requesting to be locked down in this proceeding.

Q. ARE ALL RESOURCES TREATED THE SAME IN CALCULATING THE RETAIL RATE IMPACT?

A. No. In accord with Commission Rules and Decisions, some older resources are included in both the RES and no RES Plan and other resources have had their incremental costs determined in a prior plan so that they are "locked down" in this plan.

Q. HOW DOES THE COMPANY DECIDE WHICH RESOURCES TO INCLUDE IN THE RES AND NO RES PLAN COMPARISON AND WHICH RESOURCES ARE LOCKED DOWN?

A. To determine the Eligible Energy Resources and costs to be included in the RES and No-RES Plan modeling runs, one must consult Commission Rules and also look back over prior Commission decisions to determine which costs are to be included and at what level. In a number of prior proceedings, the Commission has locked down the incremental costs of certain Eligible Energy Resources for certain periods of time. "Locked down" incremental costs means that the specific $/MWh rate or total annual incremental cost for a specific resource has been separately identified and set for a specific period of time and that these incremental cost calculations would be "locked down" and would not be revisited or re-determined in an annual RES compliance plan filing until the lock-down expires. The Commission's lock-down rule is

Rule 3661(h)(V). The purpose of the lock-down rule is to provide the utility with some certainty as to the incremental costs of resources already acquired that will be charged against the RESA account during the lock-down years, thereby facilitating the planning for the acquisition of additional renewable resources.) Table 7-5 in the Volume 2 of the 2012 Compliance Plan highlights the various resources whose incremental costs have been locked-down or are proposed to be locked-down for the purpose of calculating the retail rate impact. Below is a discussion of these various segments of the RES portfolio.

1. RESOURCES COMMENCING SERVICE PRIOR TO JULY 2, 2006

Rule 3661 (h)(III) considers all Eligible Energy Resources whose acquisition commenced prior to July 2, 2006 to be considered "sunk" resources that are to be included in both the RES Plan and the No RES Plan, such that they do not factor into the calculation of the overall incremental costs of the Eligible Energy Resources. These resources include Company-owned hydroelectric plants, and certain wind resources (Cedar Creek I, Colorado Green, Foote Creek, Login, Peetz, Spring Canyon, and Twin Buttes).

2. RESOURCES LOCKED DOWN IN DOCKET NO. 08A-532E

In Docket No. 08A-532E in Decisions No. R09-0549 and C09-1037, the Commission approved "locking down" the incremental costs of the Solar*Rewards contracts placed into service in 2007 and 2008, along with a central station solar project, the SunE Alamosa project, for the life of the

agreements. See Table 7-5 “2009 Plan Ongoing costs.” In this way the allocation of the cost of this renewable generation between ECA and RESA is fixed for the life of these assets or agreements. As a result we fix the portion of the cost of these resources that has been allocated to the RESA in analyzing the retail rate impact.

3. RESOURCE LOCKED DOWN IN DOCKET NO. 09A-772E

In Docket No. 09A-772E, Decision No. R10-0586 and C10-1033, the PUC approved locking down of the incremental costs associated with the 2009 Solar Rewards program (through 9/1/2009), along with the Northern Colorado Wind I and Northern Colorado Wind II projects. These projects were originally locked down through 2014, but in this docket we consider them to be locked down through 2016, or until a final order is published in conjunction with the resource and RES compliance plans expected to be filed on October 31, 2015. The change in the lock down period is the result of the Commission approving final modifications to the RES rules on December 30, 2010. (See Rule 3661(h) (V)). See also Table 7-5 for the locked down value of the incremental costs of these resources.

4. RESOURCES PROPOSED TO BE LOCKED DOWN IN THE 2012 RES COMPLIANCE PLAN

In this filing the Company is requesting to lock down the incremental costs of those resources that were selected as a result of the 2007 Electric Resource Plan, which are Greater Sandhill, Cedar Creek II, Cedar Point Wind, San Luis Solar and the wind project selected out of the 2011 Wind RFP. The

incremental costs of these resources are shown in Table 7-5. The incremental costs of these resources were developed using the no carbon scenario presented in Table 7-3.

Q. WHAT ARE THE RESULTS OF THE COMPANY'S RETAIL RATE IMPACT STUDY?

A. Column Y of Table 7-3 (Rolling Balance – Deferred) shows that the RESA balance is expected to be in a deficit position through 2016. Based upon the current modeling assumptions, the negative RESA account grows to a negative balance of approximately $78 million by the end of 2013, before reversing course and achieving a positive balance of approximately $23 million by the end of 2017. In keeping with the Company's request to lock down the incremental costs of the majority of the Eligible Energy Resources that are in the Company's generation portfolio, the projections of the RESA balance shown on Table 7-3, for the years of 2012 through 2016, will be for the most part locked down at the levels identified in Table 7-3. The only resources that will not be locked down through 2016 will be the incremental costs of the on-going Solar*Rewards program for those systems that were installed in 2010, those that will be installed in 2011 through 2016, and small Eligible Energy Resources that have not been requested to be locked down. These small renewable resources are listed on the bottom of Table 7-5.

Q. WILL A CHANGE IN NATURAL GAS PRICES OR OTHER MARKET CHANGES IMPACT THE RESA IN THE YEARS OF 2012 THROUGH 2016 BASED ON THE COMPANY'S PROPOSAL?

A. No, a change of gas prices or other market assumptions will not impact the RESA account balance through 2016. Within the modeling, the only variables that have the opportunity to really impact the RESA account balance through 2016 are the actual level of energy that is produced at each of the renewable energy facilities and the impact of small projects not locked down. I will later discuss other matters that could impact the overall RESA balance. Since the incremental cost of the Eligible Energy Resources is locked down on a per unit basis ($/MWh), the only variable that is not locked down is the actual generation quantity. As a result, the RESA balance projections shown on Table 7-3 for the years of 2012 through 2016 will become the RESA balance as we move forward through this five year period.

Q. CAN YOU IDENTIFY THE DRIVING FACTORS THAT RESULTED IN THE RESA ACCOUNT ACHIEVING SUCH A LARGE NEGATIVE BALANCE AS IDENTIFIED IN TABLE 7-3?

A. Yes, the primary drivers for the negative RESA balance through 2011 were the up-front incentives formerly provided for on-site solar facilities in the Solar*Rewards program. With the modifications to this program going forward resulting from the Settlement in Docket No. 11A-135E and as carried forward in this 2012 RES Compliance Plan, which convert upfront payments to for pay-for-performance over time, the Company does not anticipate the Solar*Rewards program costs to be a significant issue for the RESA account in 2012 and beyond.

The primary driver for the RESA account continuing to become more negative in 2012 through 2014 are the incremental cost of the larger renewable resources selected in the 2009 All-Source solicitation. As these resources get placed into service in 2011 through 2012, the incremental costs of these resources significantly impact the RESA account in the near term. Table 7-5 demonstrates the impact of these individual resources on the RESA account for the years of 2012 through 2016.

Q. IS THERE A RISK THAT THE RESA BALANCE COULD BECOME EVEN MORE NEGATIVE THAN WHAT IS PRESENTED IN TABLE 7-3?

A. There is some possibility that the RESA balance could become even more negative by the end of 2016, but the Company believes that risk is rather small. Since Public Service is proposing to lock down the incremental cost of the majority of the renewable resources, in accordance with the Commission's rules, the Company is essentially locking in the RESA balance projections shown on Table 7-3 through 2016. For the period of 2012 through 2016, there are only a few variables in the RESA account balance calculation that could change after consideration of the locked down components, including the total retail revenue that forms the basis of the 2% RESA revenue, the incremental cost of the few small resources that are not locked down, the administrative costs of the program, and the jurisdictional allocation to the wholesale customers and the Windsource credits. All of these variables do not tend to impact the RESA in a way that would cause large swings in the account balance.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

Attachment A

Statement of Qualifications

Kurtis J. Haeger

I graduated from the University of Colorado, Boulder, in 1982 with a Bachelor of Science Degree in Civil Engineering and from the University of Colorado, Denver, in 1987, with a Master of Business Administration in Finance.

I began my employment with Public Service Company of Colorado in June 1982, as a Gas Distribution Engineer. In June 1988, I was promoted to Supervisor, Gas Utilization and Testing. In May 1990, I was promoted to System Planning & Forecasting Manager, and, in October 1994, I was promoted to Gas Supply and Planning Manager. Upon the merger between Public Service Company of Colorado and Southwestern Public Service Company in August 1997, I assumed the same position with New Century Services, Inc., the service company subsidiary of New Century Energies, Inc. In March 1999, I assumed the position of Director, Gas Business Support. Upon the merger between New Century Energies, Inc. and Northern States Power Company in August 2000, I was appointed to the position of Director, Gas Supply and Supply Planning for Xcel Energy Services Inc. In May 2004, I was promoted to the position of Managing Director, Wholesale Planning, the position I currently hold.

Since 1990, my responsibilities have included the development of forecasts of annual and daily gas requirements, long term price of gas forecasts, cost of gas budgets, business planning, strategic planning, long range gas supply planning and gas integrated resource planning, gas supply purchasing, the purchasing of gas

transportation and storage services and electric resource planning for Public Service Company, Northern States Power Company and Southwestern Public Service. In my present position, I am responsible for the resource planning activities for electric generation, the gas supply planning functions for both the local gas distribution and the electric generation requirements, and the administration of the upstream gas transportation and storage contracts for the Xcel Energy operating companies.

I have presented testimony before the Colorado Public Utilities Commission in Docket Nos. 93A-561G, 94A-447G, 93S-001EG (95I-394G), 02A-267G, 98S-518G, 00A-415G, 97A-622G, 99A-549E, 00A-415G, 01A-181E, 02A-267G, 02S-315EG, 02A-541E, 03A-489EG and Application No. 34815. I have also sponsored testimony before the Federal Energy Regulatory Commission in Colorado Interstate Gas Co.'s rate case Docket Nos. RP93-99 and RP96-190, Northern Natural Gas Co.'s rate case Docket No. RP03-398 and before the Wyoming Public Service Commission in Docket No. 30005-GR-97-51.