BEFORE THE PUBLIC UTILITIES COMMISSION

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IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO FOR AUTHORIZATION TO IMPLEMENT A REVENUE DECOUPLING ADJUSTMENT MECHANISM AS A PART OF ITS COLORADO P.U.C. NO. 7-ELECTRIC TARIFF.	**)** **)** **)** **)** **)** **)**	**PROCEEDING NO. 16A-XXXXE**

DIRECT TESTIMONY AND ATTACHMENTS OF STEVEN W. WISHART

ON

BEHALF OF

PUBLIC SERVICE COMPANY OF COLORADO

July 13, 2016

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

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IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO FOR AUTHORIZATION TO IMPLEMENT A REVENUE DECOUPLING ADJUSTMENT MECHANISM AS A PART OF ITS COLORADO P.U.C. NO. 7- ELECTRIC TARIFF.	))))))	**PROCEEDING NO. 16A-XXXXE**

SUMMARY OF THE DIRECT TESTIMONY OF STEVEN W. WISHART

Mr. Steven W. Wishart is Manager of Pricing and Planning for Xcel Energy Services Inc. In this position, he is responsible for tariff management and technical and policy analysis associated with the pricing for electric, natural gas, and steam services for Public Service Company of Colorado ("Public Service" or "Company"), one of four utility operating company subsidiaries of Xcel Energy Inc.

In his testimony, Mr. Wishart describes the proposed Revenue Decoupling Adjustment ("RDA") tariff, which will operate to adjust revenues for Residential and Small Commercial customers to assure the Company's recovery of fixed costs, as approved in its most recent Phase I Rate Case, Proceeding No. 14AL-0660E ("2014 Phase I"). He reviews the various provisions of the tariff and provides detailed explanations of how the future RDA surcharges or credits will be calculated. The initial decoupling adjustment is proposed to be based on weather-normalized sales in 2017,

with the first adjustment appearing on customer bills in mid-2018. The decoupling adjustment will be based on changes in weather-normalized average use per customer ("UPC") and actual customer counts in each year. To derive the dollar amount of the adjustment, the change in total weather-normalized kilowatt hour ("kWh") sales for each customer class is multiplied by the fixed cost portion of the applicable retail rates as approved by the Colorado Public Utilities Commission ("Commission") in the 2014 Phase I. The Residential RDA rate also includes an adjustment associated with over or under recovery of fixed costs through the Company's proposed Residential Demand Time of Use (RD-TOU) pilot rate that has been proposed in the Company's Phase II rate case in Proceeding No. 16AL-0048E. Finally, the total decoupling amount is reduced by the class's applicable share of the Demand-Side Management ("DSM") disincentive offset amount as awarded by the Commission in the Company's DSM proceedings. Under the RDA tariff, the Company will file an advice letter in the spring of each year to update the RDA rate. The filing will provide supporting documentation regarding the calculation of the rate as well as information regarding trends in average use per customer and the latest results for the RD-TOU pilot rate.

Mr. Wishart also presents a forecast of the RDA rate and its impact on typical Residential and Small Commercial customers. Based on this forecast, the largest impact is expected to be a 2.2 percent bill increase for Residential customers in 2021.

Mr. Wishart sponsors the Company's proposed RDA tariff, which is included as Attachment SWW-1 to his Direct Testimony. Mr. Wishart also provides the Company's

proposed template of the schedules be filed with annual RDA advice letters reflecting the calculation of the RDA based on forecasted RDA rates in Attachment SWW-2.

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

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IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO FOR AUTHORIZATION TO IMPLEMENT A REVENUE DECOUPLING ADJUSTMENT MECHANISM AS A PART OF ITS COLORADO P.U.C. NO. 7-ELECTRIC TARIFF.	**))))))**	**PROCEEDING NO. 16A-XXXXE**

INDEX

SECTION **PAGE**

LIST OF ATTACHMENTS

Attachment SWW-1	Revenue Decoupling Adjustment Tariff
Attachment SWW-2	Proposed Template for future RDA annual filings

GLOSSARY OF ACRONYMS AND DEFINED TERMS

Acronym/Defined Term	**Meaning**
2014 Phase I	Phase I Rate Case, Proceeding No. 14AL-0660E
Commission	Colorado Public Utilities Commission
GRSA	General Rate Schedule Adjustment
kWh	Killowatt Hours
Public Service or Company	Public Service Company of Colorado
RAL	Residential Area Lighting
RD	Residential Demand
RDA	Revenue Decoupling Adjustment
RD-TOU	Residential Demand Time-of-Use
Schedule C	Small Commercial
UPC	Weather-Normalized Average Use Per Customer
Xcel Energy	Xcel Energy Inc.
XES	Xcel Energy Services Inc.

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

*** * * * ***

IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO FOR AUTHORIZATION TO IMPLEMENT A REVENUE DECOUPLING ADJUSTMENT MECHANISM AS A PART OF ITS COLORADO P.U.C. NO. 7-ELECTRIC TARIFF.	**)** **)** **)** **)** **)** **)**	**PROCEEDING NO. 16A-XXXXE**

DIRECT TESTIMONY AND ATTACHMENTS OF STEVEN W. WISHART

I. INTRODUCTION, QUALIFICATIONS, PURPOSE OF TESTIMONY, AND RECOMMENDATIONS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Steven W. Wishart. 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. ("XES") as Manager of Pricing and Planning. 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.

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

A. I am testifying on behalf of Public Service.

Q. PLEASE SUMMARIZE YOUR RESPONSIBILITIES AND QUALIFICATIONS.

A. As the Manager of Pricing and Planning, I am responsible for financial and policy analyses associated with the Company's electric, natural gas, and steam rates in addition to the regular administration of the Company's electric, natural gas, and steam tariffs. My duties include quantitative analyses, cost allocation and rate design, and policy support on a number of Colorado regulatory issues. A description of my qualifications, duties, and responsibilities is set forth after the conclusion of my Direct Testimony in my Statement of Qualifications.

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my testimony is to provide a detailed description of the proposed Revenue Decoupling Adjustment ("RDA") tariff and the mechanics of its operation. I first discuss the main sections contained within the tariff, including significant definitions, applicability, and the proposed term of the RDA tariff. I explain how the RDA calculations are based on changes in weather-normalized average use per customer plus a separate adjustment for over- or under-recovery of fixed costs through the Company's proposed Residential Demand Time of Use ("RD-TOU") pilot rate. I also will provide numerical examples of each calculation used in the calculation of the RDA rates. I conclude my testimony by providing a forecast of the RDA during its proposed term along with associated customer bill impacts.

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

A. Yes, I am sponsoring Attachments SWW-1 and SWW-2, which were prepared by me or under my direct supervision. Attachment SWW-1 is our proposed RDA Tariff that I am sponsoring and recommending the Colorado Public Utilities Commission ("Commission") approve. Attachment SWW-2 is the template that I propose to use for future RDA annual filings detailing the calculation of the RDA rate and documentation for the RDA forecast that I present in my Direct Testimony. This attachment also demonstrates the annual RDA calculations and documents the assumptions used in the forecast.

Q. WHAT RECOMMENDATIONS ARE YOU MAKING IN YOUR DIRECT TESTIMONY?

A. I recommend that the Commission approve the Company's proposed Revenue Decoupling Adjustment tariff for an initial term of five years, from 2017 to 2021, in substantially the same form as reflected in Attachment SWW-1.

II. PUBLIC SERVICE'S PROPOSED REVENUE DECOUPLING TARIFF

Q. PLEASE DESCRIBE THE COMPANY'S PROPOSED RDA TARIFF.

A. The RDA tariff establishes detailed procedures that will permit the Company to recover (in the event of an under-collection) or refund (in the event of an over-collection) the difference between the fixed costs per customer authorized for recovery by the Commission in Proceeding No. 14AL-0660E (or in subsequent Phase I or Phase II rate cases) and the fixed costs per kWh recovered through base rates.

Q. HOW IS THE RDA TARIFF ORGANIZED?

A. The RDA Tariff has five primary sections, as follows:

1. Applicability – This section specifies to which rate schedules the RDA will be applied.
2. Definitions – This section defines significant terms used elsewhere in the tariff.
3. RDA Calculations – This section provides formulas that will be used for determining how the RDA is to be calculated each year.
4. Annual Filing Requirements – This section specifies when annual filings are to be made and describes the content of those filings.
5. RDA Term – This section defines the term and recovery period of the proposed RDA.

Q. TO WHICH RATE SCHEDULES WILL THE RDA BE APPLICABLE?

A. We propose to apply the RDA to Residential (R) rates, Residential Demand Time of Use pilot rate (RD-TOU), and Small Commercial (C) rates. No other rate schedules will have the RDA adjustment applied to them. Customers on the R and RD-TOU rate schedules will have the same RDA rate applied to them, while customers on the C rate schedule will be subject to a separately calculated RDA rate.

Q. WHAT DEFINITIONS ARE CONTAINED IN THE RDA TARIFF?

A. The following terms are specifically defined and are used later in the RDA tariff to detail the calculation of the decoupling adjustments:

- Baseline Use Per Customer
- Current Year
- Current Year Use Per Customer
- Current Year Average Number of Customers
- Fixed Cost Rate
- Recovery Period
- Residential Demand – Time of Use Rate (RD-TOU)
- RD-TOU Fixed Cost Recovery
- DSM Disincentive Offset

I will highlight a few of these definitions that go to the core calculation of the decoupling adjustments. First, “Current Year” is described as the 12-month period for which the RDA is being calculated. This is the period during which any over- or under-recovery of fixed costs is determined. This is differentiated from the “Recovery Period,” which is the 12-month period for which the RDA rate is

applied to customers' bills. For example, the first proposed year of the RDA is 2017, so this will be the first Current Year of the RDA. The data used will be the billing month data for January through December of 2017.[1] The distinction of billing month data is important. Because of cycle billing, billing month data is different from calendar month data. Billing month data is based on all the bills that were sent out in a given month. These bills will include some usage from the current month, plus some usage from the previous month. Due to the fact that our existing meters do not measure and store daily usage data, the distribution of energy between months within one billing cycle cannot be exactly determined (although the Company has developed methodologies to estimate usage between months based on heating degree days). All of the calculations within the RDA will be based on billing month data, as it is the most accurate way to calculate customer usage.

The second definition used in the tariff that is important to understand is "Fixed Cost Rate." This is the dollar-per-kilowatt hour rate based on the approved fixed cost recovery established by the Commission in the Company's last rate case that will be used in the calculation of the RDA. It is defined as:

> The base kilowatt-hour charge inclusive of any General Rate Schedule Adjustments for rate Schedule R and Schedule C, minus the component of the charge designated as recovery of variable Operations and Maintenance expenses. The fixed cost rate is derived for the winter, summer tier I, and summer tier II base kilowatt-hour charges for Schedule R and for winter and summer base kilowatt-hour charges for Schedule C.

[1] To the extent that the RDA tariff becomes effective after January 1, 2017, the first Current Year will be a partial calendar year and the first RDA adjustment will be calculated on a pro-rata basis.

The Fixed Cost Rate is intended to represent the average amount of fixed costs that are embedded in the approved base rates for Schedule R and C.

Q. IN WHAT TYPES OF PROCEEDINGS ARE COMMISSION-APPROVED BASE RATES ESTABLISHED FOR PURPOSES OF DERIVING THE FIXED COST RATES?

A. The Fixed Cost Rate for each customer class, expressed in dollars per kilowatt hour, will be derived from the effective base rates established by a final Commission order in the Company's Phase I and Phase II electric rate cases. Both Phase I rate cases and Phase II rate cases will affect the Fixed Cost Rate. In Phase I rate cases, the overall level of the Company's cost of service is determined and the resulting rate changes are typically implemented through General Rate Schedule Adjustment ("GRSA") rider. The Fixed Cost Rate will be derived based on the fixed cost portion of the revenue requirement designed to be recovered through the Schedule R and Schedule C base rates after application of the approved GRSA rider. In Phase II rate cases, the revenue requirement established in the preceding Phase I rate case is spread to the various customer classes, and the GRSA is eliminated. Thus, the Fixed Cost Rate will be derived based on the fixed cost portion of the revenue requirement so spread in designing the Schedule R and Schedule C base rates.

Q. HOW WILL THE ANNUAL ADJUSTMENTS UNDER THE RDA BE CALCULATED?

A. The RDA Tariff specifies two separate revenue decoupling adjustments; one for the Residential class, and a separate one for the Small Commercial class. The Residential decoupling adjustment is based on the changes in weather-normalized average use per customer ("UPC") upon which the Company's base rates were established by the Commission in its last rate case, plus an adjustment for the impacts of the proposed pilot RD-TOU rate. The baseline UPC is set using the same weather-normalized sales data that was used to determine the revenue deficiency in the Company's last rate case upon which the Company's approved base rates were derived. The basis for the revenue deficiency upon which the Company's currently-authorized base rates were derived in its last Phase I rate case in Proceeding No. 14AL-0660E was calendar year 2013 sales. This same calendar year 2013 sales data was also used for developing the Company's proposed rates in its current 2016 Phase II rate case in Proceeding No. 16AL-0048E. After each year, the weather-normalized UPC for the Current Year is calculated for the Residential (Schedule R) rate and compared to the baseline weather-normalized UPC embedded in the Company's base rates, which will be based on the 2013 calendar year sales and customer data until new base rates are established in a subsequent electric rate case. The change in UPC is then multiplied by the number of Schedule R customers in the Current Year to derive the total change in sales. The number of Schedule R

customers is defined as the average number customers in each billing month of the Current Year. Finally, that total is multiplied by the Residential Fixed Cost Rate, which as explained above is the fixed cost portion of the revenue requirement underlying the base rate for each customer class expressed in cents per kWh. I provide an example of this calculation for 2017 in Figure SWW-1 below. In this example, I use the actual weather-normalized use per customer that was established in Proceeding No. 14AL-0660E, the Current Year weather-normalized UPC and average number of customers based on the Company's Fall 2015 forecast of sales. For purposes of this example, the Fixed Cost Rate for each customer class is based on the rates proposed in Proceeding No. 16AL-0048E. Based on our Fall 2015 forecast, the UPC for Winter and Summer Tier I is expected to increase, while the level of Summer Tier II sales is expected to fall. This is reasonable because, as use per customer declines, the consumption in excess of 500 kilowatt hours ("kWh") will be impacted before consumption below 500 kWh.

Figure SWW-1 – Example of 2017 Residential Decoupling Calculation

	Winter & Summer Tier I		Summer Tier II		
Baseline Use Per Customer (UPC)	6201 kWh		1316 kWh		
- Current Year Weather Normalized UPC	6316 kWh		1070 kWh		
Change In UPC	115 kWh		(246)kWh		
x Current Year Average Number of Customers	1,232,693		1,232,693		
Change in Sales	141,380,748 kWh		(303,022,677)kWh		**Total Residential**
x Fixed Cost Rate	$0.02909		$0.07409		**Decoupling Adj.**
Change in Fixed Cost Recovery	$4,112,223	+	($22,449,787)	=	**($18,337,564)**

Q. HOW WILL THE RD-TOU REVENUE DECOUPLING ADJUSTMENT BE CALCULATED?

A. The RD-TOU decoupling adjustment is based on a comparison of the actual fixed cost recovery from the RD-TOU rate and what the fixed cost recovery would have been under the standard Residential (Schedule R) rate had no customers migrated to the RD-TOU rate. Under the RD-TOU rate schedule, transmission and generation costs are recovered through the demand charge. Conversely, transmission and generation costs are recovered through the kWh energy charge for the standard Residential (Schedule R) rate. Therefore, it is these two rate components that must be reconciled. For both rates, distribution costs are to be recovered identically through the Company's proposed Grid Use Charge[2], so distribution cost recovery is identical between the two rates and is therefore not considered in the calculation. In the event that the Company's proposed Grid Use Charge is not approved by the Commission, the RDA calculation will need to be modified to account for the fixed costs of distribution.

The total revenue from the RD-TOU demand charges is compared against what the fixed cost recovery would have been under the standard Schedule R rate if the RD-TOU rate were not offered. Again, the calculation is split between summer and winter demand rates and standard and Tier II energy charges to account for levels of fixed cost recovery. Figure SWW-2 below provides an

[2] In its current Phase II rate case, Proceeding No. 16AL-0048E, the Company has proposed a Grid Use Charge. The Grid Use Charge is designed to recover all distribution costs through a fixed month charge assessed on each residential customer.

example of the revenue decoupling calculation for the RD-TOU pilot rate. In this example, I have assumed that there are 5,000 customers on the RD-TOU pilot rate in 2017 and that those customers have an average load factor of 30 percent (*i.e.*, average usage is 30 percent of the average demand quantity). The assumed load factor is higher than our average load factor for residential customers and reflects the expectation that the customers who volunteer for the RD-TOU pilot will be those with higher-than-average load factors, because these are the customers who will likely save money by switching to the pilot rate.

Figure SWW-2 – Example of 2017 RD-TOU Decoupling Calculation

RD-TOU Fixed Cost Recovery	**Winter Demand Charge**	**Summer Demand Charge**	
Current Year Sales (kW)	109,324 kW	59,348 kW	Total Fixed Cost
x Demand Charge	$5.52	$7.88	Recovery
Fixed Cost Recovery	$603,331	$467,895	$1,071,226
R - Fixed Cost Recovery	**Winter & Summer Tier I**	**Summer Tier II**	
Current Year Sales (kWh)	31,005,958 kWh	6,581,077 kWh	Total Fixed Cost
x Fixed Cost Rate	$0.02909	$0.07409	Recovery
Fixed Cost Recovery	$901,844	$487,567	$1,389,411
Actual Fixed Cost Recovery Under RD-TOU	$1,071,226		
- Estimated Fixed Cost Recovery Under R	($1,389,411)		
Change in Fixed Cost Recovery	($318,185)		

Q. HOW WILL THE DECOUPLING SURCHARGE OR CREDIT BE CALCULATED FOR THE RESIDENTIAL AND RD-TOU RATE CLASSES UNDER THE RDA TARIFF?

A. The change in fixed cost recovery for Residential (Schedule R) and RD-TOU will be combined for a total dollar amount. This total amount is then reduced by Residential customers' share of the DSM disincentive offset. This proportional share will be based on the ratio of Residential DSM savings in the previous year

compared to the corresponding overall DSM savings for Public Service. The net amount will be the total revenue decoupling adjustment for the Residential (Schedule R) class. Finally, the total dollar amount is divided by the projected sales during the Recovery Period to derive a cents-per-kWh rate which will be applied as the new RDA rider. Figure SWW-3 below provides an example of this calculation. For the DSM disincentive offset calculations, I used the 2015 actual achievements as reported in our annual DSM Status Report Proceeding No. 14A-1057EG as a proxy for the achievement that will be realized in 2017.

Figure SWW-3 – Example of 2017
Residential Revenue Decoupling Adjustment

Residental (R) Change in Fixed Cost Recovery	$18,337,564
+ RD-TOU Change in Fixed Cost Recovery	$318,185
- Residential Portion of DSM Disincentive Offset	($2,096,155)
Total Residential Decoupling Amount	$16,559,594
÷ Forecasted Sales	9,190,605,802 kWh
Residential Revenue Decoupling Adjustment (RDA)	$0.00180/kWh

Q. WHICH CUSTOMERS WILL BE CHARGED THE RESIDENTIAL DECOUPLING ADJUSTMENT IN THE RDA RIDER?

A. The RDA rider will apply to customers on the standard Residential (Schedule R) rate and to customers on the RD-TOU pilot rate. The rider will not be charged to customers on our existing Residential Demand rate ("RD") or to Residential Area Lighting ("RAL").

Q. HOW WILL THE SMALL COMMERCIAL REVENUE DECOUPLING ADJUSTMENT BE CALCULATED?

A. The Small Commercial decoupling adjustment will be very similar to the Residential decoupling adjustment, but without the inclusion of any adjustment associated with RD-TOU. First, the baseline UPC is compared against the actual UPC for the current year. This is done for both the summer and winter UPC for Small Commercial customers. Next, the change in UPC is multiplied by the current year's average number of customers to derive a total kWh value. Finally, the total kWh is multiplied by the applicable Fixed Cost Rate, which is equal to the standard cents per kWh retail rate less the embedded variable O&M component. Figure SWW-4 provides an example of the calculation of change in fixed cost recovery for the Small Commercial class in 2017. For this example, I used same data sources that I used in the development of the Residential example in Figure SWW-1.

Figure SWW-4 – Example of 2017 Small Commercial Revenue Decoupling Adjustment

	Winter		Summer		
Baseline Use Per Customer (UPC)	7980 kWh		4036 kWh		
- Current Year Weather Normalized UPC	7882 kWh		4054 kWh		
Change In UPC	(98)kWh		18 kWh		
x Current Year Average Number of Customers	110,966		110,966		**Total Small**
Change in Sales	(10,849,278)kWh		2,004,586 kWh		**Commercial**
x Fixed Cost Rate	$0.02399		$0.05259		**Decoupling Adj.**
Change in Fixed Cost Recovery	($260,282)	+	$105,423	=	**($154,859)**

Q. HOW WILL THE DECOUPLING SURCHARGE OR CREDIT BE CALCULATED FOR THE SMALL COMMERCIAL RATE CLASS?

A. The lost fixed cost recovery amount for Small Commercial will be reduced by Small Commercial's share of the DSM disincentive offset. Because the DSM achievements are not tracked for Small Commercial, Small Commercial's share of the total offset will be based on Business's share of total achievements and then prorated by Small Commercial's share of total business sales. The net amount is then divided by forecasted sales in the Recovery Period to derive the final Small Commercial decoupling adjustment. Figure SWW-5 provides an example of this calculation. This example shows that, although the Small Commercial class is forecasted to have a small reduction in UPC, the net adjustment results in a small credit because the DSM Disincentive Offset is large enough to offset the UPC adjustment.

Figure SWW-5 – Example of 2017
Small Commercial Revenue Decoupling Calculation

Small Commercial (C) Change in Fixed Cost Recovery	$154,859
- Small Commercial Portion of DSM Disincentive Offset	($289,583)
Total Small Commercial Decoupling Amount	($134,724)
÷ Forecasted Sales	1,334,649,539 kWh
Small Commerical Revenue Decoupling Adjustment (RDA)	($0.00010)

Q. WHICH CUSTOMERS WILL BE CHARGED THE SMALL COMMERCIAL DECOUPLING ADJUSTMENT?

A. Only customers on the standard Small Commercial ("Schedule C") rate.

Q. IS THE COMPANY PROPOSING TO TRUE UP THE FIXED COSTS RECOVERED THROUGH THE DECOUPLING ADJUSTMENTS?

A. No. Although it is certain that revenues collected through the decoupling adjustments will not exactly match the target recovery amounts, we feel that the potential deviations will be so small as not to warrant a true-up mechanism. In this way, the revenue recovery process under the RDA tariff will be similar to that provided under the Company's approve Earnings Sharing Adjustment tariff, which similarly does not include a true-up to account for over- or under-recoveries due to these types of variations.

Q. HOW WOULD THE RDA CALCULATIONS CHANGE IF REVISED BASE RATES ARE APPROVED IN A NEW RATE CASE BY THE COMMISSION?

A. The approval of revised base rates in a Phase I rate case would reset the RDA to zero for the test year adopted in that case.[3] Upon the completion of a new Phase I proceeding, the baseline UPC would be set to whatever test year was used to develop the revenue requirement upon which the new GRSA was based. For example, if the Company files a new Phase I rate case in 2017 that uses a historic test year of 2016 and the Commission approves a new GRSA based on this proposal to be effective January 1, 2018, the 2018 RDA will use a baseline UPC from 2016 and the Fixed Cost Rate would include the impact of the new

[3] In other words, in the unlikely event that the Current Year under the RDA tariff and the test year used for purposes of setting the Phase I rates are identical, no decoupling adjustment would be necessary for that Current Year because the baseline UPC and Current Year UPC would be the same.

approved GRSA. I have incorporated this example into the RDA forecast that I present in the next section of my Direct Testimony.

Q. HOW WOULD THE RDA CALCULATIONS BE MODIFIED IF THE COMMISSION APPROVES A MID-YEAR CHANGE TO RATES AS A RESULT OF A PHASE I RATE CASE?

A. In the event that the Commission approves revised base rates in a Phase I rate case, but the effective date is other than the beginning of a calendar year, the RDA calculations will need to be prorated to account for the change. Building off of my previous example, if the Commission were to approve revised base rates based on a 2016 test year, to be effective June 1, 2018, two 2018 RDA calculations would be separately made and then combined -- one with the baseline UPC underlying the base rates approved in Proceeding No. 14AL-0660E and Fixed Costs Rates based on the previously effective rates and a second with a 2016 baseline UPC and Fixed Cost Rates based on the newly approved rates. The two calculations would then be prorated based on the percentage of Residential (R + RD-TOU) and Small Commercial (C) sales that occur before and after June 1, 2018, and summed.

Q. WHAT IS THE PROPOSED TERM OF THE RDA TARIFF?

A. We are proposing that the first year of the RDA be 2017, with the credit or surcharge resulting from 2017 UPC and fixed cost recovery data going into effect from June 1, 2018 through May 31, 2019. This process would continue on an annual basis for five years until the RDA for the final base year of 2021 is

calculated and applied to customers' bills from June 1, 2022 through May 31, 2023. The RDA tariff will sunset May 31, 2023. As explained by Ms. Jackson in her Direct Testimony, the Company may seek an extension of this RDA effective period if there is a delay in the Company's transition from existing rate structures to future rate designs that move residential and small commercial customers to rates that are structured different that our rates today.

III. FORECASTED IMPACTS OF DECOUPLING ADJUSTMENTS UNDER THE PROPOSED RDA

Q. HOW LARGE ARE THE ADJUSTMENTS UNDER THE PROPOSED RDA EXPECTED TO BE?

A. We expect the decoupling adjustments to be a small component of customers' bills. I have developed a forecast of the RDA rates that indicate that bill impacts will range from 0.4 percent to 2.2 percent over the term of the RDA tariff.

Q. HOW DID YOU DEVELOP THE RDA FORECAST?

A. To forecast the Residential portion of the RDA, I first established the average use per customer baseline underlying the currently-effective base rates approved in Proceeding No. 14AL-0660E. For this, I used the weather normalized sales that were utilized in our last Phase I rate case in Proceeding No. 14AL-0660E. For the forecast of Current Year weather normalized UPC, I used the Company's fall 2015 forecast of sales. This is the same forecast that the Company is using in its 2016 Electric Resource Plan in Proceeding No. 16A-0396E. Next, I calculated the Fixed Cost Rate based on the Residential rates we have proposed in our current Phase II rate case in Proceeding No. 16AL-0048E. These rates include the Company's proposed Grid Use Charge, so the Fixed Cost Rate used in the forecast excludes the distribution costs that are currently embedded in Residential energy charges. With these forecasted elements – *i.e.*, baseline UPC, forecasted UPC, and forecasted Fixed Cost Rate -- I had all the elements necessary to calculate the Residential portion of the RDA.

Estimating lost fixed cost recovery associated with the RD-TOU rate required some additional assumptions, because at this time we do not have a Company forecast for sales under this pilot rate. As explained by Company witness Alice Jackson in her Direct Testimony, the RD-TOU rate was based on an estimate of average demand and average load factors for the Residential class. If these rate design assumptions are correct, the RD-TOU lost fixed costs will be zero. However, it is reasonable to expect that customers that have higher than average load factors will be the ones who can take advantage and, consequently, will volunteer for the pilot rate. This is because customers with higher load factors will be the ones who will save the most money by switching to the new RD-TOU rate. Therefore, to estimate the RD-TOU decoupling adjustment totals during the RDA effective period, I first had to make an assumption about the demand characteristics of the customers who are expected to be on the RD-TOU rate. For this analysis, I assumed that the average monthly load factor for customers on the RD-TOU rate will be 30 percent. This is above the average load factor of 24 percent for standard residential customers.

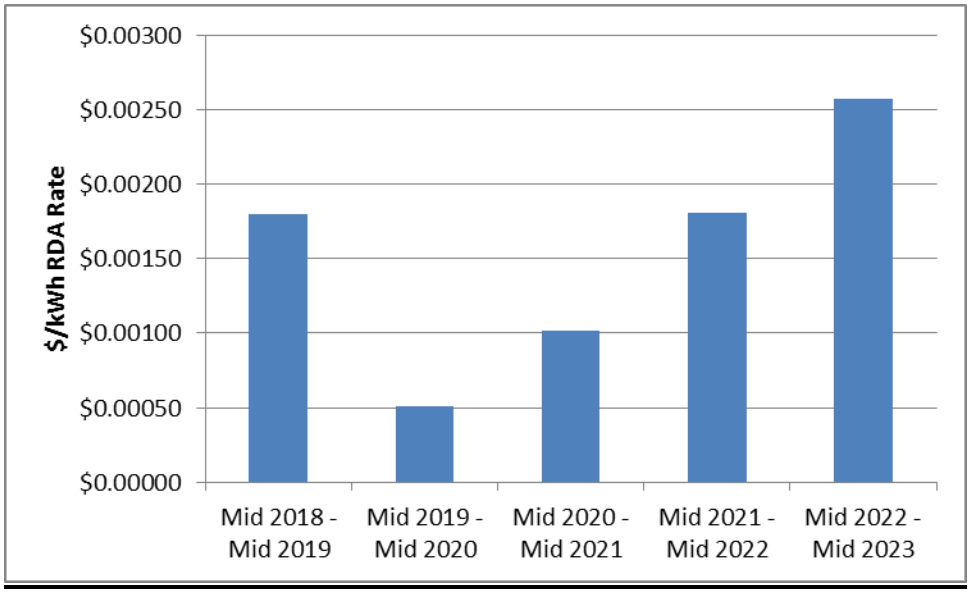
Finally, as I previously mentioned, I made an assumption about a 2017 Phase I rate case. I assumed that the Commission will approve new base rates in a 2017 Phase I rate case based on a 2016 test year, with a 5 percent GRSA to be implemented January 1, 2018. This assumption essentially resets the RDA to a 2016 baseline, which decreases the RDA amount. The calculations used in my forecast are provided in Attachment SWW-2. Figure SWW-6 below shows my

forecast of the total dollars included in the Residential RDA, inclusive of the reduction for the DSM disincentive offset. Figure SWW-7 illustrates the forecasted rate for the RDA. Our proposal is to have the decoupling adjustment based on actual lost fixed cost recovery. This will create a one and a half year lag in the application of the decoupling adjustments under the RDA tariff. For example, the 2017 decoupling adjustment will be applied to customer bills from mid-2018 to mid-2019. This same one and a half year offset is reflected in each year in Figures SWW-6 and SWW-7 below.

Figure SWW-6 – Forecasted Residential RDA Total Cost

Current Year	Recovery Period	Residential	RD-TOU	DSM Offset	Net Residential RDA
2017	Mid 2018 - Mid 2019	$18,337,564	$318,185	($2,096,155)	$16,559,594
2018	Mid 2019 - Mid 2020	$5,935,960	$826,320	($2,096,155)	$4,666,125
2019	Mid 2020 - Mid 2021	$10,228,162	$1,145,132	($2,096,155)	$9,277,139
2020	Mid 2021 - Mid 2022	$17,213,305	$1,365,452	($2,096,155)	$16,482,602
2021	Mid 2022 - Mid 2023	$23,723,275	$1,439,013	($2,096,155)	$23,066,133

Figure SWW-7 – Forecasted Residential RDA Rate



Q. HOW CERTAIN IS THE FORECAST SHOWN IN FIGURES SWW-6 AND SWW-7?

A. There is significant uncertainty associated with these estimates. It is conceivable that the average UPC could reverse its trend and start growing again. This would decrease the size of the adjustment. On the other hand, declines in UPC could end up being larger than our baseline projection, which would result in a larger decoupling adjustment.

In comparison to the Residential UPC portion of the decoupling adjustment, the RD-TOU segment should always be relatively small. In our 2016 Phase II rate case, Public Service has proposed that the RD-TOU pilot rate be capped at 18,000 customers. Therefore, the adjustment will always be small in comparison to the Residential portion, which accounts for UPC changes based on more than one million customers.

Q. COULD THE DECOUPLING ADJUSTMENT EVER BE NEGATIVE?

A. Yes. Public Service is proposing a symmetrical revenue decoupling adjustment that allows the Company to recover its authorized fixed costs in the event the average use per customer declines, but also will refund excess revenues to customers should average use per customer exceed the baseline levels used in our last Phase I rate case. Our forecast of the Small Commercial RDA is negative in most years.

Q. WHAT WILL BE THE IMPACT OF THE DECOUPLING ADJUSTMENT ON A TYPICAL RESIDENTIAL CUSTOMER?

A. Assuming the largest forecasted Residential decoupling adjustment of $23 million, the total impact on a typical customer's bill is estimated to be only 2.2 percent. To calculate this impact, I divided the $23 million Residential RDA amount by 2015 total residential revenues of $1.05 billion. The 2021 total revenues will likely be higher than the 2015 revenues I used in my calculations, but the percentages are so small, l I did not believe that additional precision was necessary.

Q. HAVE YOU ESTIMATED THE EXPECTED LEVEL OF THE SMALL COMMERCIAL DECOUPLING ADJUSTMENTS OVER THE RDA EFFECTIVE PERIOD?

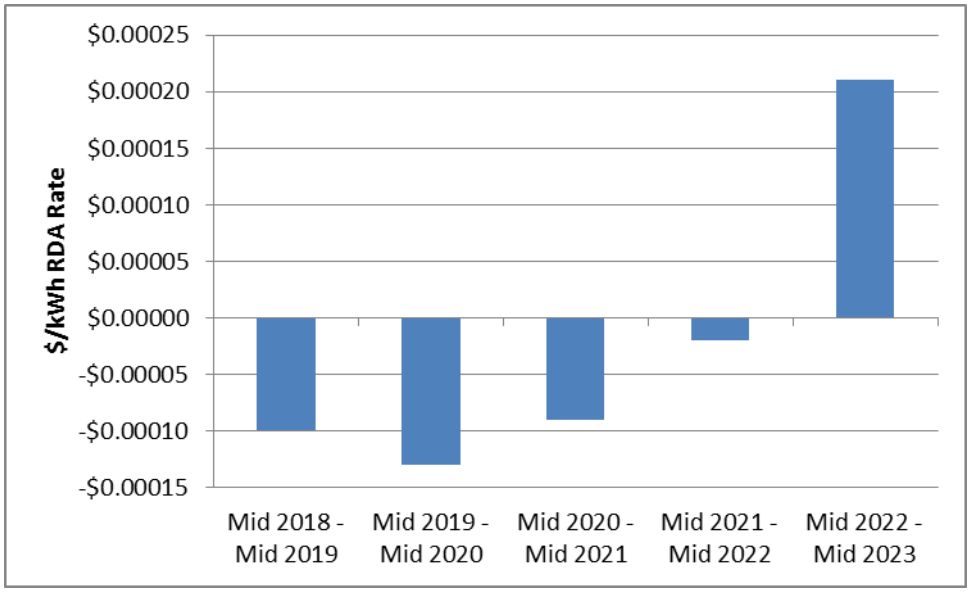
A. Yes. I followed the same methodology that I described above for estimating the Residential decoupling adjustment. But because the adjustment is only based on changes in UPC, the forecast was simpler to develop. The results of my

calculations are shown below in Figures SWW-8 and SWW-9. In 2017 through 2021, the Small Commercial RDA is forecasted to be negative. Although year-to-year Small Commercial UPC is declining, the DSM disincentive offset is large enough to make the net RDA amount negative.

Figure SWW-8– Forecasted Small Commercial RDA Total Cost

Current Year	Recovery Period	Small Commercial	DSM Offset	Net Small Commercial RDA
2017	Mid 2018 - Mid 2019	$154,859	($289,583)	($134,724)
2018	Mid 2019 - Mid 2020	$108,997	($289,583)	($180,586)
2019	Mid 2020 - Mid 2021	$171,101	($289,583)	($118,482)
2020	Mid 2021 - Mid 2022	$268,141	($289,583)	($21,442)
2021	Mid 2022 - Mid 2023	$550,593	($289,583)	$261,010

Figure SWW-9 – Forecasted Small Commercial RDA Rate



Q. HAVE YOU ESTIMATED THE EXPECTED IMPACT ON THE TYPICAL MONTHLY BILL FOR SMALL COMMERCIAL CUSTOMERS?

A. Yes. For Small Commercial customers, the impact of the decoupling adjustments is expected to be even smaller. Using the largest forecasted adjustment of $261,000, the resulting impact on Small Commercial bills would be about 0.2 percent. Using the largest negative adjustment of ($180,000), the impact would be an average bill reduction of 0.1 percent.

IV. PROPOSED DECOUPLING IMPLEMENTATION AND ANNUAL ADJUSTMENTS

Q. WHAT IS THE COMPANY'S PROPOSAL REGARDING THE IMPLEMENTATION OF THE RDA?

A. We have proposed January 1, 2017 as the implementation date of the new retail rates from our 2016 Phase II in Proceeding No. 16AL-0048E. For consistency, Public Service is also proposing to place its RDA tariff in effect on January 1, 2017, with actual revenue decoupling adjustments starting in June 2018. However, to the extent that the RDA tariff becomes effective after January 1, 2017, the first Current Year will be a partial calendar year and the first RDA adjustment will be calculated on a pro-rata basis similar to that discussed above where revised base rates from a new Phase I rate case are implemented mid-year.

Thus, beginning in 2017, the Company will begin to track changes in average UPC and revenue collected though the RD-TOU rates for the purpose of calculating the decoupling adjustment. An advice letter implementing the 2017 decoupling adjustment would be filed on our around May 1, 2018 to be effective June 1, 2018. A similar schedule would be followed in each subsequent year until the expiration of the RDA rider.

Q. WHAT INFORMATION WILL BE INCLUDED WITH THE ANNUAL RDA ADVICE LETTERS?

A. The advice letter will primarily focus on the calculations used to derive the RDA rates. We will detail our calculation of the weather-normalized average use per

customer and the calculation of the fixed cost recovery rate. The filing will also include the forecasted sales for the period June 1 through May 31 of the following year.

We also propose to include information explaining the trends in average use per customer for the Residential and Small Commercial rate classes, as well as the developing experience with the RD-TOU pilot. A detailed analysis of the RD-TOU sales will be valuable information as examine future rate designs.

V. CONCLUSION

Q. PLEASE SUMMARIZE YOUR DIRECT TESTIMONY?

A. The RDA tariff specifies the applicable rate schedule, the definitions used, the calculation of the rate, annual filing requirements, and the term of the rider. The calculations are based on changes in the weather-normalized use per customer plus an adjustment for the RD-TOU pilot rate for the Residential decoupling adjustment. Overall, the forecasted impact of the RDA is expected to be small, with the largest forecasted impact being only 2.2 percent of a typical residential bill.

I recommend that the Commission approve the Company's revenue decoupling tariff and, more specifically, approve the RDA tariff in substantially the same form as the tariff sheets included in Attachment SWW-1. Approval of this tariff will effectively decouple the Company's fixed cost recovery from sales and change the economic model that Public Service operates under to ensure that our interests are aligned with the interests of our customers.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.

Statement of Qualifications

Steven W. Wishart

I began my employment with Xcel Energy Services, Inc. in 2005, in the Company's Demand-Side Management department. I am currently a Manager in the Pricing and Planning Group. My responsibilities include quantitative analyses, cost allocation and rate design, and policy support on a number of Colorado regulatory issues.

Prior to taking my current position, I worked for Xcel Energy Services Inc. in Minneapolis, Minnesota, as Director of Resource Planning and Bidding for the Northern States Power region. In that role, I oversaw resource planning and resource acquisition processes for that company.

From 2009 through 2012, I worked for the Company as the Manager of Quantitative Analytics. In that role, I managed a group responsible for conducting long term analysis of the costs and performance of Xcel's electric generating systems.

Prior to joining Xcel Energy in 2005, I was a PhD candidate in the Department of Applied Economics at the University of Minnesota where I studied energy related topics.