BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

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IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO FOR APPROVAL OF ITS 2017 – 2019 RENEWABLE ENERGY COMPLIANCE PLAN	**)** **)** **)** **)** **)**	**PROCEEDING NO. 16A-XXXXE**

DIRECT TESTIMONY OF JANNELL E. MARKS

ON

BEHALF OF

PUBLIC SERVICE COMPANY OF COLORADO

February 29, 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 APPROVAL OF ITS 2017 – 2019 RENEWABLE ENERGY COMPLIANCE PLAN	**)))))**	**PROCEEDING NO. 16A-XXXXE**

SUMMARY OF THE DIRECT TESTIMONY OF JANNELL E. MARKS

Jannell E. Marks is the Director, Sales, Energy and Demand Forecasting at Xcel Energy Services Inc., a wholly-owned subsidiary of Xcel Energy Inc., the parent company of Public Service Company of Colorado. The purpose of Ms. Marks's testimony is to support the retail electricity sales forecast filed in Public Service's 2017 Renewable Energy Plan ("RE Plan") and to describe the methodology used to develop that forecast. Ms. Marks was responsible for preparing Attachment RLK-1, Section 3 of the RE Plan, which describes the Retail Energy Forecast. The section prepared by Ms. Marks is in compliance with the Commission's Renewable Energy Standard Rules, including Rule 3657(b)(I)(D), which requires that the RE Plan include an estimate of its retail electricity sales for a minimum of 10 years.

Ms. Marks explains that Public Service's Base Case forecast for retail electricity sales is expected to increase at an average annual rate of 1.0 percent through 2030, as compared to 0.8 percent average annual growth over the past 10 years. This energy sales forecast assumes achievement of the 2017-2020 Demand-Side Management

goals of 400 gigawatt-hours per year that the Commission ordered in Proceeding No. 13A-0686EG, Decision No. C14-0731.

Ms. Marks explains that the forecast of retail electricity sales was developed using a methodology based on monthly historical customer and sales data by rate class, together with historical and forecasted weather, economic, demographic, and price data. For the forecast, Public Service used a Statistically-Adjusted End-Use modeling approach, regression models, and trend analysis.

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DIRECT TESTIMONY OF JANNELL E. MARKS

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GLOSSARY OF ACRONYMS AND DEFINED TERMS

Acronyms/Defined Term	Meaning
2017 RE Plan, RE Plan, Plan, or Compliance Plan	Public Service's 2017-2019 Renewable Energy Compliance Plan
CSG	Community Solar Garden
DG	Distributed Generation
DSM	Demand Side Management
DSMCA	Demand Side Management Cost Adjustment
ECA	Electric Commodity Adjustment
ERP	Electric Resource Plan
kW	Kilowatt
kWh	Kilowatt-hour
Large Retail DG	Retail Distributed Generators > 1MW
MW	Megawatt
NDA	Non-Disclosure Agreement
No RES Plan	Company's Plan to acquire only non-renewable resources
Non-DG	Non Distributed Generation
O&M	Operations and Maintenance
PCCA	Purchased Capacity Cost Adjustment
PTC	Production Tax Credit
Public Service or Company	Public Service Company of Colorado
PV	Photovoltaic

Acronyms/Defined Term	**Meaning**
QRU	Qualified Retail Utility
R Rate	Standard Retail Rate
RD TOU Rate	Residential-Demand Time of Use Rate
RE	Renewable Energy
REC	Renewable Energy Credit
RES	Renewable Energy Standard
RES Plan	Renewable Energy Standard Plan
RESA	Renewable Energy Standard Adjustment
Retail DG	Retail Distributed Generation
RFP	Request for Proposal
S&F	Service and Facilities
S*R®	Solar*Rewards®
Schedule RE	Recycled Energy Service
SRCS Tariff	Solar*Rewards® Community Service Tariff
TCA	Transmission Cost Adjustment
WECC	Western Electricity Coordinating Council
Wholesale DG	Wholesale Distributed Generation
WREGIS	Western Renewable Energy Generation Information System
Xcel Energy	Xcel Energy Inc.

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DIRECT TESTIMONY OF JANNELL MARKS

I. INTRODUCTION AND PURPOSE OF TESTIMONY

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Jannell Marks. 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 Director, Sales, Energy and Demand Forecasting.

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 at the end of my testimony.

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my testimony is to support the retail electricity sales forecast filed in Public Service's 2017 Renewable Energy Plan ("RE Plan" or "Plan"). In addition, I will provide a brief description of the retail electricity sales forecast and the methodology used to develop the forecast.

Q. WHAT SECTION OF THE PSCO 2017 RENEWABLE ENERGY PLAN WERE YOU RESPONSIBLE FOR PREPARING?

A. I was responsible for the preparation of Attachment RLK-1, Section 3, describing the Retail Energy Forecast which impacts the Company's compliance obligations.

Q. IS THIS SECTION IN COMPLIANCE WITH THE COMMISSION'S RENEWABLE ENERGY STANDARD RULES?

A. Yes. Commission Rule 3657 (b) (I) (D) requires that the Company's Renewable Energy Standard ("RES") Compliance Pl and include an estimate of its retail electricity sales for a minimum of 10 years. Rule 3654 (a) (IV) and (V) requires the minimum amount of Eligible Energy that Public Service shall generate, or cause to be generated (through purchase or by providing rebates or other form of incentive), for 2015 through 2019 to be 20 percent of retail electricity energy sales in Colorado with 2 percent of the 20 percent coming from distributed

generation (“DG”), and for 2020 and thereafter to be 30 percent of retail electricity energy sales in Colorado with three percent of the 30 percent from DG.

II. RETAIL ELECTRICITY SALES FORECAST

Q. PLEASE DESCRIBE PUBLIC SERVICE'S RETAIL ELECTRICITY SALES FORECAST.

A. Public Service's Base Case forecast for retail electricity sales is expected to increase at an average annual rate of 1.0 percent through 2030. This compares to average annual growth over the past 10 years of 0.8 percent. This energy sales forecast assumes achievement of the 2017-2020 Demand-Side Management ("DSM") goals of 400 gigawatt-hours per year that the Commission ordered in Docket No. 13A-0686EG, Decision No. C14-0731.

Q. WHAT METHODOLOGY DOES PUBLIC SERVICE USE TO FORECAST RETAIL ELECTRICITY SALES?

A. Public Service uses monthly historical customer and sales data by rate class, together with historical and forecasted weather, economic, demographic, and price data to develop its forecasts of retail electricity sales. The Company uses a Statistically-Adjusted End-Use modeling approach, as well as regression models and trend analysis.

Q. WHEN WAS PUBLIC SERVICE'S RETAIL ELECTRICITY SALES FORECAST DEVELOPED?

A. Public Service's retail electricity sales forecast submitted in this filing was developed in September 2015. This forecast is being used to establish the number of Renewable Energy Credits Public Service is required to obtain in order to meet the Renewable Energy Standard.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

Statement of Qualifications

Jannell E. Marks

I have a Bachelor of Science in Statistics from Colorado State University. I began my employment with Public Service in 1982 in the Economics and Forecasting Department. In 1985, I became a Research Analyst, and, in 1991, I was promoted to Senior Research Analyst. In that position, I was responsible for developing the customer and sales forecasts for Public Service and the economic, customer, sales, and demand forecasts for Cheyenne Light, Fuel and Power Company. In 1997, when Public Service merged with Southwestern Public Service to form New Centuries Energy, Inc. ("NCE"), I assumed the position as Manager, Demand, Energy and Customer Forecasts. In this position, I was responsible for developing demand, energy, and customer forecasts for NCE's operating companies, including Public Service. I also directed the preparation of statistical reporting for regulatory agencies and others regarding historical and forecasted reports. In August 2000, following the merger of NCE and Northern States Power, I was named Manager, Energy Forecasting with the added responsibility for Northern States Power's operating companies. I assumed my current position in February 2007.

In my current position, I have responsibility for the development of forecasted sales data and economic conditions for Xcel Energy's operating companies, and the presentation of this information to Xcel Energy's senior management, other Xcel Energy departments, and externally to various regulatory and reporting agencies. I also am responsible for Xcel Energy's Load Research function, which designs, maintains, monitors, and analyzes electric load research samples in the Xcel Energy Operating

Companies' service territories. Finally, I am responsible for developing and implementing forecasting, planning, and load analysis studies for regulatory proceedings.

I have attended the Institute for Professional Education's Economic Modeling and Forecasting class and Itron's Forecasting Workshops. I have also attended industry forecasting conferences and Residential End-Use Energy Planning System ("REEPS"), Commercial End-Use Planning System ("COMMEND"), and Industrial End-Use Forecasting Model ("INFORM"), User Group meetings and training classes sponsored by the Electric Power Research Institute. I am a member of Itron's Energy Forecasting Group and Edison Electric Institute's Load Forecasting Group.

I have testified before the Colorado Public Utilities Commission, the Public Utility Commission of Texas, the Minnesota Public Utilities Commission, the North Dakota Public Service Commission, the South Dakota Public Utilities Commission, the New Mexico Public Regulation Commission, and the Public Service Commission of Wisconsin.