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	E
FOR APPROVAL OF ITS 2011 ELECTRIC)	
RESOURCE PLAN)	

DIRECT TESTIMONY OF CURTIS DALLINGER

ON

BEHALF OF

PUBLIC SERVICE COMPANY OF COLORADO

October 31, 2011

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I. <u>INTRODUCTION AND PURPOSE</u>

- 1 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
- 2 A. My name is Curtis Dallinger. My business address is 1800 Larimer St,
- 3 Denver, CO 80202.
- 4 Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT POSITION?
- 5 A. I am employed by Xcel Energy Services, Inc., a wholly-owned subsidiary of
- 6 Xcel Energy Inc., the parent company of Public Service Company of
- 7 Colorado. My job title is Director Gas Resource Planning.
- 8 Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?
- 9 A. I am testifying on behalf of Public Service Company of Colorado ("Public
- 10 Service" or the "Company").
- 11 Q. HAVE YOU INCLUDED A DESCRIPTION OF YOUR QUALIFICATIONS,
- 12 **DUTIES, AND RESPONSIBILITIES?**
- 13 A. Yes. A description of my qualifications, duties, and responsibilities is included
- 14 as Attachment A.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

Α.

A. The purpose of my Testimony is to explain the study that is currently underway to determine the adequacy of generation resources for winter generation reliability (the "Winter Generation Adequacy Study"). I will also lay out the process that will be used to estimate the cost of the firm gas transportation service to be used in the All-Source RFP bid evaluation, should the Winter Generation Adequacy Study identify the need for additional firm fuel availability.

II. WINTER GENERATION ADEQUACY STUDY

Q. DOES THE COMPANY HAVE ANY CONCERNS ABOUT WINTER GENERATION RELIABILITY?

Yes. Over the next several years a number of Public Service's coal-fired purchase power contracts with firm fuel supplies expire and the Company is retiring our older coal-fired units or switching coal units to operate on natural gas. Public Service will be relying more heavily on natural gas generation. Some natural gas generators have interruptible gas supplies or interruptible gas transportation contracts and, consequently, may have their fuel interrupted during cold winter weather conditions where more gas is needed for heating. As such, this generation may not be available to serve winter peak electric loads.

During the winter of 2010-2011 the electric industry in Texas and across the Southwestern U.S. experienced electric blackouts. In August 2011 FERC issued a report on these events "Report on Outages and Curtailments during the Southwest Cold Weather Event of February 1-5, 2011." The FERC task

force recommended that "all entities responsible for the reliability of the bulk power system...prepare for the winter season with the same sense of urgency and priority as they prepare for the summer peak season." This has caused Public Service to review the availability of our owned and purchased gas-fired generation resources during winter conditions. The study is in progress and will be filed as a part of this Electric Resource Plan as soon as it is completed. The study will discuss the winter electric load forecast, the generation available to meet the winter loads, and the adequacy of gas transportation or on-site backup fuel to meet the expected winter cold weather generation requirements.

Q.

Α.

WILL THE COMPANY'S WINTER GENERATION ADEQUACY STUDY IMPACT THE GAS TRANSPORTATION COSTS THAT WILL BE ESTIMATED AND APPLIED TO RFP BID EVALUATION?

The Winter Generation Adequacy Study is still ongoing, so no results are yet available. If this study determines that additional available winter generation capacity is needed, the Company will incorporate into the Phase 2 evaluation of bid portfolios the appropriate costs associated with firm gas transportation or adequate onsite backup fuel to ensure reliable winter generation operations. The goal of this portfolio evaluation will be to adequately meet the winter generation operating needs of our system, while minimizing the cost of generation, including the cost to firm up gas transportation or backup fuel for the portfolio.

III. FUEL ADEQUACY REQUIREMENTS

2 Q. CAN YOU DESCRIBE HOW THE REQUIREMENT FOR ADEQUATE FUEL
3 SUPPLY WILL BE APPLIED IN THE RFP BID EVALUATION PROCESS?

Α.

- A. If the Winter Generation Adequacy Study indicates a need for additional available winter generation resources, Public Service will assign the cost of the required firm gas transport or backup fuel supply to each competing portfolio of bids, so that each portfolio can meet not only the Company's peak summer needs but also the Company's winter operating requirements. This gas transportation cost will be a part of each portfolio's annual cost in the bid analysis.
- 11 Q. DOES PUBLIC SERVICE HAVE A PREFERENCE FOR FUELS? IS A

 12 BACKUP FUEL ACCEPTABLE TO ENSURE FUEL SUPPLY ADEQUACY?
 - Public Service's preference for fuel supply for non-coal-fired thermal units (combustion turbines, reciprocating engines, combined cycle facilities, etc.) is natural gas. Fuel oil back-up will be acceptable as a fuel supply for peaking units under winter or restricted natural gas delivery conditions, provided that the natural gas is reliable during all times of the year except during restricted gas delivery days. If the generation resource does not have sufficient backup fuel capability with onsite storage as determined in the Winter Generation Adequacy Study, the cost of firm natural gas transportation will be estimated and will be applied to the portfolio evaluation using the process described in Section 2.9 of the Volume 2 Technical Appendix.

2	Q.	HOW WILL FIRM GAS TRANSPORTATION CHARGES BE ESTIMATED
3		FOR INPUT INTO THE GENERATION MODELING PROCESS?
4	A.	Each natural-gas fired generator proposed will be assigned appropriate firm
5		transportation costs as described in the Section 2.9 of the Volume 2 Technical
6		Appendix that may be used in the portfolio analysis.
7	Q.	DO THESE FIRM GAS TRANSPORTATION CHARGES INCLUDE ALL OF
8		THE GAS TRANSPORTATION CHARGES TO DELIVER GAS TO THE
9		GENERATION FACILITY?
10	A.	Yes. The firm gas transportation charges include the costs for transporting
11		gas on all of the pipelines required to deliver the gas from the Cheyenne Hub
12		to the generation facility. The charges may include costs from Colorado
13		Interstate Gas ("CIG"), Public Service, or any other pipelines that are required
14		to deliver the gas to the generation facility.
15	Q.	IF ADEQUATE GAS TRANSPORTATION CAPACITY IS NOT AVAILABLE
16		ON AN UPSTREAM PIPELINE, WHAT OTHER GAS TRANSPORTATION
17		CHARGES ARE APPLICABLE?
18	A.	If adequate gas transport capacity is not available on a pipeline system, then
19		a capacity expansion may be needed and the expected rates for service on
20		each upstream pipeline, including Public Service, will be determined in accord
21		with the applicable tariffs as well as the applicable rates and facility policies of
22		the regulatory body that has rate and certificate jurisdiction over the upstream
23		pipeline.

FIRM GAS TRANSPORTATION CHARGES

1

IV.

- 1 Q. HOW ARE THE FIRM GAS TRANSPORTATION COSTS STRUCTURED
- 2 AND HOW WILL THEY BE PRESENTED FOR BID EVALUATION
- 3 **MODELING?**
- 4 A. Firm gas transportation charges are structured in three parts: 1) an annual 5 fixed cost or demand cost for gas transportation capacity that is incurred regardless of how much gas commodity is moved through the pipe; 2) a gas 6 7 commodity charge which is charged on each MMBtu of gas delivered to the 8 power plant; and 3) a Fuel, Lost and Unaccounted for ("FL&U") factor, which 9 is a percentage of the gas throughput that must be provided to the pipelines 10 for operation of their systems. The FL&U charge effectively increases the 11 amount of natural gas commodity which must be provided to the pipeline 12 above the amount of natural gas delivered to the generation resource.
- 13 Q. WILL PUBLIC SERVICE REQUEST A GAS TRANSPORTATION
 14 DISCOUNT TO APPLY WHEN A FIRM GAS TRANSPORT COST IS
 15 DEVELOPED FOR THE BID EVALUATION PROCESS?
- 16 A. Yes. Public Service will request a discounted rate from a gas transporter if 17 there is a viable bypass option that can be used to effectuate a discount from 18 the pipeline.
- 19 Q. DOES THIS CONCLUDE YOUR TESTIMONY?
- 20 A. Yes, it does.

Curtis C. Dallinger

Statement of Qualifications

I graduated from Colorado State University, Fort Collins, Colorado, in 1978 with a Bachelors of Science Degree in Civil Engineering.

I am currently employed as Director of Gas Resource Planning for Xcel Energy Services Inc. in Denver, Colorado. My group's responsibilities included the development of forecasts for daily and annual gas requirements, and gas strategic planning including the upstream gas system resource needs for Public Service Company of Colorado, Northern States Power Company, and Southwestern Public Service Company. I am responsible for the gas supply planning functions for the gas distribution and electric generation natural gas requirements, as well as the administration of the upstream gas transportation and storage contracts for the Xcel Energy operating companies.

I began my employment with Public Service Company of Colorado in June of 1978 and have been employed by Public Service or one of their affiliates in a number of positions including Gas Utilization Engineer, Gas Process Engineer, Supervisor of Gas Process Engineering, Engineering Manager, Manager of Gas Business Development, President and General Manager of Natural Fuels Corporation an Affiliate of Public Service. In 1999 I was made Manager, Gas Control for Public Service, and in 2004 I was promoted to my current position of Director Gas Resource Planning for Xcel Energy Services Inc.

I have filed testimony before the Colorado Public Utilities Commission for Public Service Company of Colorado.