BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

DOCKET NO. 13A – _____E

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IN THE MATTER OF THE APPLICATION OF BLACK HILLS/COLORADO ELECTRIC UTILITY COMPANY, LP, FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO CONSTRUCT A POWER PLANT CONSISTING OF A 40 MW SIMPLE CYCLE COMBUSTION TURBINE AND ASSOCIATED BALANCE OF PLANT PURSUANT TO COMMISSION DECISION NO. C12-1434.

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DIRECT TESTIMONY OF

LISA SEAMAN

ON BEHALF OF

BLACK HILLS/COLORADO ELECTRIC UTILITY COMPANY, LP

April 30, 2013
DIRECT TESTIMONY OF LISA SEAMAN

I. INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
A. My name is Lisa Seaman. My business address is 2828 Plant Street, Rapid City, South Dakota 57702.

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

Q. ON WHOSE BEHALF ARE YOU TESTIFYING?
A. I am testifying on behalf of Black Hills/Colorado Electric Utility Company, LP (the Company or Black Hills).

Q. WHAT ARE YOUR DUTIES AND RESPONSIBILITIES AS MANAGER OF RESOURCE PLANNING?
A. I am responsible for oversight of the day-to-day functions of the Resource Planning Department, including development of annual and long-term load forecasts and support budget and strategic planning efforts. I am responsible for the preparation of electric resource plans and Certificate of Public Convenience and Necessity (CPCN) applications for new generation for the three electric utilities that are owned by Black Hills Corporation. My employment history and expertise is provided in Appendix A.

Q. HAVE YOU TESTIFIED BEFORE THIS COMMISSION?
A. Yes. I have filed testimony in the following dockets: (1) Black Hills/Colorado Electric Utility Company 2012 Electric Resource Plan and 2013-2014 RES
II. PURPOSE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to describe the analysis that was conducted for Black Hills’ Electric Resource Plan (ERP) to determine that the 40 MW LM6000 addition in 2017 is the appropriate resource for replacement of the W.N. Clark Generating Station (Clark Station) unit that will be retired at the end of 2013.

Q. WHAT IS YOUR RECOMMENDATION?

A. The need for an LM6000 addition in 2017 is justified by the ERP Phase I process. The Baseline 1 Plan selected firm seasonal market purchases, a two-year 50 MW PPA in 2015, and the installation of a 40 MW LM6000 and 74 MW combustion turbine (CT) in 2017. This portfolio identified: (1) a LM6000 as the appropriate similarly-sized replacement capacity (40 MW) for the retiring Clark Station, (2) an economic, two-year power purchase agreement (PPA), and (3) an additional capacity need that the Company intends to include in a Phase II competitive solicitation.

III. OVERVIEW OF THE ERP PROCESS

Q. PLEASE DESCRIBE THE ERP PROCESS.

A. Commission rules found in 4 CCR 723-3-3600 et seq. require jurisdictional utilities to file electric resource plans every four years. The utility must develop a load forecast, evaluate its existing and committed resources, and determine the

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1 All references herein to “LM6000” or “General Electric LM6000” or “GE LM6000” do not represent a commitment to purchase; but instead, represent a proposal for a 40 MW simple-cycle, aeroderivative gas-fired turbine that will be defined by the Company’s vendor selection process.
need for additional resources for a specified planning period and resource acquisition period (RAP). The resource planning process results in the determination of the future resources that should be acquired to meet the utility’s customer load obligations in a cost-effective manner, while ensuring adequacy of resource supply. An application for Commission approval of the ERP (the resource portfolio) must be filed by the utility pursuant to Commission Rule 3617(a).

IV. ERP SELECTION OF LM6000 ADDITION

Q. PLEASE PROVIDE AN OVERVIEW OF THE PROCESS USED TO DEVELOP THE RESOURCE PLAN.

A. Black Hills developed a load forecast, evaluated the Company’s existing resources, and determined the need for additional resources for a 25-year planning period and a seven-year RAP. Based on Commission rules, the ERP must contain at least three alternative plans that can be used to represent the cost and benefits of the resources necessary to meet the resource need, including increasing amounts of renewable energy resources, demand-side resources or section 123 resources, and the utility’s proposed plan for acquiring the resources to meet the identified need. The Company uses expansion modeling to determine the optimum resource portfolios for each of the plans and production cost modeling is used to evaluate the cost of each of the plans on a net present value of revenue requirements (PVRR) basis. Inputs and assumptions are required for the modeling. It uses stochastic analysis to evaluate the risk of each plan under a range of varying conditions. Finally, the Company evaluates the results of the
modeling and proposes its resource plan for the RAP and planning period. The Company’s ERP was filed concurrently with this CPCN application.

V. CONCLUSION

Q. WHAT IS YOUR CONCLUSION?

A. The need for a 40 MW LM6000 addition in 2017 is justified by the ERP Phase I process. The Baseline 1 Plan selected firm seasonal market purchases, a two-year 50 MW PPA in 2015, and the installation of a 40 MW LM6000 and a 74 MW CT in 2017. This portfolio identified an LM6000 as the appropriate similarly-sized replacement capacity (42 MW\(^2\)) for the retiring Clark Station, an economic, two-year PPA, and an additional capacity need that the Company intends to include in a Phase II competitive solicitation.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

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\(^2\) The replacement capacity of Clark Station is 42 MW as referenced in Black Hills’ Clean Air-Clean Jobs Act Plan (Docket No. 10M-254E). The actual capacity is now 40 MW because one set of cables was removed from each phase of Clark Station Unit 1 in 2011, reducing the unit’s capability from 18 MW to 16 MW.
Appendix A

Statement of Qualifications

Lisa Seaman

Ms. Seaman graduated from the South Dakota School of Mines and Technology with a Bachelor of Science degree in Civil Engineering.

Ms. Seaman has more than 20 years of experience in Engineering, including 10 years with Black Hills Corporation. She began her work experience as a project engineer for Horizons, Inc. from 1987 to 1999. From 1999 to 2003, she worked for the City of Rapid City as the Manager of the GIS Division.

Ms. Seaman began her career with Black Hills Corporation in 2003 as the Manager of the GIS and CAD Services Department for Black Hills Power. She worked in Black Hills Power’s Energy Services Department as an Energy Services Engineer from 2006 through 2008. In 2009, she transferred to Investor Relations and then, in 2011, she accepted the position of Senior Resource Planning Analyst. In 2013, Ms. Seaman was promoted to Manager of Resource Planning.