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 40 MW SIMPLE CYCLE COMBUSTION TURBINE AND ASSOCIATED BALANCE OF PLANT PURSUANT TO COMMISSION DECISION NO. C12-1434.

DIRECT TESTIMONY OF

FREDRIC C. STOFFEL

ON BEHALF OF

BLACK HILLS/COLORADO ELECTRIC UTILITY COMPANY, LP

April 30, 2013
DIRECT TESTIMONY OF FREDRIC C. STOFFEL

I. INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
A. My name is Fredric C. Stoffel. My business address is 1515 Wynkoop Street, Suite 500, Denver, Colorado 80202.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?
A. I am employed by Black Hills Utility Holdings, Inc., a wholly-owned subsidiary of Black Hills Corporation. I am Director of Regulatory Services, Colorado.

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 DIRECTOR OF REGULATORY SERVICES, COLORADO?
A. I am responsible for overseeing the rate and regulatory proceedings in Colorado for Black Hills’ electric and gas utilities. My employment history and expertise is provided in Appendix A.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?
A. Yes.

II. PURPOSE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?
A. Black Hills has applied in this proceeding for a Certificate of Public Convenience and Necessity (CPCN) to design, construct, own and operate 40 MW of new gas-fired electric generation capacity to be located at the Company’s Pueblo Airport
Generating Station (PAGS) in Pueblo, Colorado. The new generation capacity, which will be produced by an LM6000\(^1\) generating unit, replaces a similar amount of capacity that is being retired by the Company pursuant to the Clean Air Clean Jobs Act (CACJA). The purpose of my testimony is to describe and support the Company’s application in this proceeding. My testimony will explain the relation of this application to the Company’s Electric Resource Plan (ERP) which is being filed at the same time as this proceeding. I will provide background regarding the decision to retire the 42 MW\(^2\) of capacity at the Clark Station, previous proceedings before the Commission in which the Company proposed other replacement alternatives for the Clark Station capacity, and the standard the Commission should use in this proceeding to determine this replacement capacity is in the public interest. I will also describe and discuss the evaluation factors the Commission was required to use in its assessment of the Company’s plan to retire Clark Station and the proposed replacement capacity under CACJA and their application to our proposal to build and own the LM6000. I will introduce the Company’s proposal to apply a Point Cost Cap with regard to what can ultimately be included in rate base, as well as an incentive-sharing mechanism that would apply to the final cost of the project. Finally, I will introduce the Company’s other witnesses in this proceeding.

\(^1\) 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.

\(^2\) 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.
Q. HOW IS THE COMPANY’S APPLICATION IN THIS PROCEEDING RELATED TO THE ERP THAT THE COMPANY IS CONCURRENTLY FILING?

A. Black Hills is required by Commission Rules 3600-3619 to file an ERP. The basic purpose of the ERP is to provide the Commission the necessary information to assess and evaluate the Company’s future electric supply and demand balance and to identify probable future resource needs. After future resource needs have been evaluated and determined, the ERP rules set forth alternative approaches to be used to acquire the resources needed to serve the utility’s customers. Black Hills is filing its 2013 ERP simultaneously with this CPCN application. Black Hill’s 2013 ERP proposes to use a 25-year planning period (2013-2038) and a seven-year Resource Acquisition Period (2013-2020). As shown and explained in the 2013 ERP, the Company has identified a total resource need for approximately 107 MW of additional capacity in 2017. Our application in this proceeding is to develop, own and rate base 40 MW of that identified resource need.

Q. WHAT IS THE STANDARD THE COMPANY IS USING IN THIS PROCEEDING TO SUPPORT THE ADDITION OF THE LM6000?

A. The Commission specified the standard that will be used for acquiring replacement generation for Clark Station in Decision No. C12-1434. This standard is distinct from those used for stand-alone CPCNs and for resource acquisitions under the ERP Rules, as the Commission explained in Decision No. C12-1434, paragraphs 20 and 21. Importantly, the Commission affirmed that
Black Hills continues to enjoy a presumption under the CACJA that the replacement capacity will be utility-owned and can be acquired without competitive bidding.

As stated in Decision No. C12-1434:

20. Second, we affirm that Black Hills continues to enjoy a presumption under the CACJA that the replacement capacity for the Clark Station will be utility owned and can be acquired without competitive bidding. This assumes that the cost information introduced in the ERP proceeding demonstrates that such a project can be acquired consistent with the public interest.

21. Third, since the Commission has already determined that 42 MW of replacement capacity is needed, we clarify that the standard for granting a CPCN will be met once Black Hills demonstrates to the Commission that a similarly-sized generation facility can be accomplished prudently and for reasonable rate impacts. This is the standard of review set forth in CACJA and is a standard that is compatible with the Commission’s determination of a cost effective resource plan pursuant to the ERP Rules.

Q. YOU STATED THAT THE PROPOSAL TO CONSTRUCT, OWN, AND RATE BASE AN LM6000 IS CONSISTENT WITH CACJA. PLEASE DESCRIBE THE CONNECTION TO THE CACJA.

A. The CACJA contemplated that Colorado electric utilities would propose to retire certain older coal-fired generation facilities and replace the retired capacity with new natural gas-fired generation. Following passage of the CACJA, the Commission held separate hearings for Black Hills and Public Service Company of Colorado with respect to their respective plans to comply with the CACJA.

Black Hills’ proposal to comply with the CACJA was filed with the Commission in Docket No. 10M-254E. In that proceeding, the Company set forth
its plan to retire the 42 MW coal-fired Clark Station in Cañon City and to replace that retired capacity with 42 MW of capacity using a portion of the capacity of a proposed LMS100 generating plant that would be located at the Pueblo Airport Generating Station (PAGS). The Commission held a hearing regarding Black Hills’ plan and issued its Final Order Approving Emission Reduction Plan (Decision No. C10-1330), on December 15, 2010. Central to that Decision was the Commission’s finding that the retirement of the Clark Station units by the end of 2013 is needed and in the public interest. Our application in this proceeding is for a CPCN to replace the capacity that will be retired at Clark Station at the end of 2013.

Q. YOU HAVE INDICATED THAT BLACK HILL’S PLAN TO COMPLY WITH THE CACJA CONTEMPLATED USING THE CAPACITY FROM AN LMS100 AS REPLACEMENT FOR THE CLARK STATION CAPACITY. WHAT WERE THE COMMISSION’S FINDINGS AND ORDER WITH RESPECT TO THE LMS100 IN DECISION NO. C10-1330?

A. At Page 20 of Decision No. C10-1330, under the Findings heading, the Decision states:

   66. The Commission finds that 42 MW of replacement capacity is needed and in the public interest. Although we are concerned that the capacity of an LMS100 (92 MW) exceeds the 42 MW of need created by the retirement of the Clark Station, we will grant Black Hills a presumption of need for 42 MW of capacity with respect to a future CPCN application for the new LMS100 at PAGS.

   67. Commission Rule 3102, 4 CCR 723-3, requires Black Hills to file an application for a CPCN to construct the LMS100 at PAGS as a new generation facility. As part of that filing, the Company shall bear the burden of demonstrating the usefulness of the remaining 50 MW of capacity of the LMS100 unit.
68. While we will not institute a limit on the recoverable costs of the 42 MW of the LMS100 at this time, Black Hills shall present detailed and firm cost estimates in the CPCN application in order for the Commission to consider the establishment of a not-to-exceed maximum level of expenditures for the purposes of rate recovery. We further find a CPCN for the LMS100 must be granted before Black Hills can enjoy a presumption of prudence with respect to the recovery of the costs of replacement capacity for Clark Station under §§ 40-3.2-205(3) and 40.3.2-207(1)(a), C.R.S.

69. The Commission further directs Black Hills to file the CPCN application for the LMS100 no later than June 1, 2011, in order to ensure a timely review of the associated costs given the project’s construction schedule and the retirement of Clark Station in 2013.

The ordering paragraph of that Decision granted Black Hills the presumption that it could construct 42 MW of replacement capacity:

1. The Commission finds that the construction of replacement capacity utilizing an expansion slot for an LMS100 at Black Hill’s Pueblo Airport Generating Station for the retired Clark Station units, in the amount of 42 MW only, is approved, consistent with the discussion above.

This Application now brings before the Commission a 40 MW unit for review and approval.

Q. AT PAGE 18 OF DECISION NO. C10-1330, THE COMMISSION DIRECTED BLACK HILLS TO FILE AN APPLICATION UNDER RULE 3103 TO AMEND ITS CPCN FOR THE CLARK STATION TO ALLOW FOR ITS RETIREMENT BEFORE THE END OF 2013. DID BLACK HILLS MAKE SUCH A FILING?
A. Yes. The Company filed an application to close Clark Station in Docket No. 12A-763E.³ The Company’s uncontested application was approved by Decision No. R12-1318, issued November 9, 2012. This Decision became the final order of the Commission by operation of law.

Q. WHAT IS THE CURRENT STATUS OF THE CLARK COAL-FIRED UNITS?

A. The Clark Station units were placed in economic shut down in August 2012 and have not operated since. The Company is in the process of obtaining bids for their decommissioning.

Q. WHAT WAS THE RESULT OF THE COMPANY’S FILING IN DOCKET NO. 10M-254E WITH RESPECT TO INCORPORATING THE APPROVED RETIREMENT OF CLARK STATION IN THE STATE IMPLEMENTATION PLAN (SIP)?

A. On January 7, 2011, based on the Black Hills’ emissions reduction plan approved in Decision No. C10-1330, the Air Quality Control Commission of the CDPHE issued the Revised Colorado Visibility and Regional Haze State Implementation Plan for the Twelve Mandatory Class 1 Federal Areas in Colorado. The SIP makes mandatory the retirement of the Clark Station coal units by the end of 2013. By House Bill No. 11-1291, which was signed by the Governor on May 4, 2011, the General Assembly approved the SIP.

³ “In the Matter of the Application of Black Hills/Colorado Electric Utility Company, L.P. for a CPCN for the Decommissioning of the W.N. Clark Station which is required to be shut down at the end of 2013 pursuant to Decision No. C10-1330.”
Neither House Bill No. 11-1291 nor the SIP references the replacement capacity for the retired Clark Station units. This was acknowledged by the Administrative Law Judge in Decision No. R11-0889-I at paragraph 116: “Neither House Bill No. 11-1291 nor the SIP references the replacement capacity for the retired Clark Station units.”

Q. IN DOCKET NO. 10M-254E, BLACK HILLS IDENTIFIED A NATURAL GAS-FIRED LMS100 GENERATING UNIT AS THE SOURCE OF REPLACEMENT CAPACITY FOR THE RETIRED CLARK STATION AND THE COMPANY WAS ORDERED TO FILE A CPCN APPLICATION TO REPLACE THE RETIRED CAPACITY. DID THE COMPANY MAKE THAT FILING?

A. Yes. On March 14, 2011, in Docket No. 11A-226E, Black Hills filed an application for a CPCN to construct, own, and operate the LMS100 with 88 MW of capacity at PAGS. In that proceeding, the Company endeavored to demonstrate that the LMS100 was the appropriate generation unit to replace the capacity retired in Cañon City. Also in that proceeding, the Company proposed to shut down two old power plants located in downtown Pueblo – Pueblo 5 and 6. The Company also discussed the impact of the end of a “swap agreement” with Sunflower Electric on its resource portfolio. The Company asserted that the surplus capacity above that which was required to replace the Clark Station capacity was needed to replace capacity at Pueblo 5 and 6. The Company had reached a Settlement Agreement among several of the parties to the proceeding which would have resulted in the retirement of Pueblo 5 and 6, the construction of
the LMS100 at PAGS, and the temporary sale of the excess capacity above that
needed to replace the Clark units’ to a third party.

Q. WHAT WAS THE COMMISSION’S DECISION IN DOCKET NO. 11A-
226E?

A. The Commission issued Decision No. C12-0380 in Docket No. 11A-226E on
March 14, 2012 with regard to Recommended Decision No. R11-1344 of the
Administrative Law Judge (ALJ), who had heard the Company’s proposals. In
effect, the Commission Decision rejected the Settlement Agreement, thus denying
Black Hills’ request for a CPCN for construction of the LMS100 and the
retirement of Pueblo 5 and 6. In disapproving the Company’s Application, the
Commission found the Company had not shown that the overall plan was in the
public interest. Among other things, the Commission’s Decision stated:

46. Many aspects of the Black Hills’ Application have no direct
relationship with the CACJA. Nonetheless, we affirm our finding a
paragraph 66 in Decision No. C10-1330 in Docket No. 10M-242E issued
December 15, 2010, that 42 MW of replacement capacity for the closure
of the Clark Station is needed and in the public interest.

47. Finally, Black Hills will file its next ERP in short order. We
expect the upcoming docket to afford the Company, the Commission, and
other stakeholders further occasion to explore the merits of retiring Pueblo
units 5 and 6 and the best approach for replacing the Sunflower “Swap,” if
and as necessary. The ERP proceeding also presents Black Hills an
immediate opportunity to address the 42 MW of replacement capacity
associated with the closure of the Clark Station.

Q. HOW DOES THE CURRENT APPLICATION ADDRESS THE
COMMISSION’S CONCERNS FROM DECISION C12-0380?
This Application consists of a straightforward request to approve the 42 MW of capacity retired at Clark Station. Unlike the LMS100 rejected in that docket, the LM6000 capacity proposed here is similarly-sized to the retired Clark Station.

Q. PLEASE SUMMARIZE TO THIS POINT IN TIME THE CHAIN OF EVENTS REGARDING THE RETIREMENT OF THE CLARK STATION AND THE REPLACEMENT OF THAT CAPACITY.

A. In compliance with CACJA, Black Hills proposed to retire Clark Station. In finding that the closure of the Clark Station was in the public interest, the Commission determined that replacement capacity of 42 MW was also in the public interest. The Commission also gave the Company a presumption of prudence for replacing the 42 MW.

In rejecting the Settlement Agreement in Docket No. 11A-226E, the Commission found that the Company had failed to show that retiring Pueblo 5 and 6 was required and that replacement of that capacity with a portion of the LMS100 that would be owned by a third party was appropriate. However, the Commission reiterated that 42 MW of replacement capacity for the closure of Clark Station is needed and in the public interest and that this would again be addressed in the ERP that the Company was intending to file later in 2012.

Q. WHEN DID BLACK HILLS FILE ITS 2012 ERP?

A. Black Hills filed its ERP in Docket No. 12A-851E on July 30, 2012. In that proceeding, pursuant to the Commission’s Rules, Black Hills submitted a 20-year 

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projection of its load and resource requirements. Among other things, the plan set
forth the Company’s proposal to build, own and operate an LM6000 generation
unit to fill the resource need created by the retirement of Clark Station in
compliance with the CACJA. Black Hill’s filing indicated that the Company
intended to supplement the ERP filing with a separate application for a CPCN for
the proposed LM6000 generation unit.

Q. HOW WAS THE COMPANY’S JULY 31, 2012 ERP FILING RECEIVED?

A. On August 7, 2012, the Commission’s Staff filed a deficiency letter regarding the
completeness of the application and with respect to certain of the Company’s
requests for waivers. The deficiency letter led the Commission to request briefs
regarding the completeness of the Company’s application, aspects of the requests
for waivers and the statutory interpretation of the CACJA. As stated in Paragraph
5, Page 3 of Decision No. C12-1233 in Docket No. 12A-851E:

Specifically, the Commission solicited comments on whether the “shall
allow” language within § 40-3.2-207(6), C.R.S. gives Black Hills an
absolute right to develop and own the new 40 MW LM6000 gas-fired unit,
without either: (1) going through the all-source competitive bidding
contemplated by the ERP Rules and considering the availability of
existing natural gas-fired generation; or (2) meeting its burden of proof
that an alternative plan for resource acquisition is in the public interest, as
set forth in Rule 3611. Rule 3611 contemplates that a utility seeking
approval of an alternative plan for resource acquisition would file: (1) the
necessary bid policies, request for proposals (RFPs), and model contracts
to satisfy the resource need if its request for alternative plan is denied; and
(2) a contemporaneous application for a Certificate of Public Convenience
and Necessity (CPCN) for a new resource that would be included in the
utility’s rate base upon being acquired outside of competitive all-source
bidding.
Following the submittal of briefs by a number of interested parties, and its deliberations on the content of the Company’s ERP filing and requested waivers, the Commission dismissed the Company’s Application without prejudice and ordered the Company to re-file the ERP. As it relates to the Company’s proposal to build and own an LM6000, Decision No. C12-1223 stated:

26. We conclude that, before Black Hills may develop and own the LM6000 unit pursuant to § 40-3.2-207(6), C.R.S., consideration and approval of the proposed facility must occur now, because the LM6000 unit is not what the Commission previously considered and approved in Docket No. 10M-254E. The Commission must take all the factors specified in §§ 40-3.2-205 and 206, C.R.S., into account and issue a decision on whether the LM6000 is the appropriate replacement capacity for Clark Station. Because the Application will not permit the Commission to comply with the CACJA, as it did in Docket Nos. 10M-245E and 10M-254E, we will deny the Motion for Waivers as to the timing of the CPCN filing and dismiss the application without prejudice. We also conclude that providing Black Hills an opportunity to remedy its Application within this Docket is less feasible administratively and less likely to be fair to the Company and the other parties.

27. Although Docket No. 10 M-254E concluded long ago, the Company has not lost all rights under the CACJA because of the passage of time. We therefore find that it would be beneficial to clarify Black Hills’s status under the CACJA and Decision No. C10-1330 as it moves into its next ERP proceeding.

28. The Commission has determined that the retirement of the Clark Station is needed and in the public interest for emission reduction purposes and that 42 MW of replacement capacity is needed and in the public interest. Black Hills retains an opportunity to make a proper filing in the future, preferably in the form of an ERP application, where the Company shall provide the evidence necessary to demonstrate that its replacement capacity project is just and reasonable.

Q. WAS THERE ANY FURTHER ACTION REGARDING THE COMPANY’S JULY 30, 2012 ERP FILING?

A. Yes. The Company requested rehearing, reargument, and reconsideration on certain aspects of Decision No. C12-1223, particularly with respect to the
Company’s rights under CACJA. In the Commission’s Order Granting Rehearing, (Decision No. C12-1434, the Commission provided an overview of the alternative approaches used in Colorado by utilities for acquiring new generation resources. As stated beginning at page 4 of the Decision:

14. The Commission generally reviews jurisdictional utilities’ requests to build and own new generation resources under one of two approaches: (1) the utility can file a standalone application for a Certificate of Public Convenience and Necessity (CPCN) under Rule 3102 of the Rules Regulating Electric Utilities, 4CCR 723-3; or (2) the utility can file an application for a CPCN in conjunction with an application for approval of an ERP under Rule 3611. In addition, the CACJA contains a “self-build” provision that is available to the utilities in certain instances as part of an emission reduction plan. See § 40-3.2-207(6), C.R.S. It is important to note that the public interest is the overarching consideration under all three of these approaches. However, we apply different standards under each approach when analyzing the costs and ownership of the new facilities.

15. In the context of a standalone CPCN application, the Commission focuses on whether there is a present or future need for the construction of the proposed facility. The need for a specific new generation resource usually arises to accommodate load growth on the system or to replace generation resources that will no longer be available (e.g., a plant retirement). The Commission determines whether the proposed facility is cost effective by reviewing existing facilities and potential alternatives to the proposed construction. If appropriate alternatives exist, a traditional CPCN process examines the costs of those alternatives with the goal of identifying the least-cost solution. The standalone CPCN application does not generally entail competitive bidding.

16. The ERP process is more comprehensive than a CPCN proceeding because it looks at total resource needs for a particular period in the future. The ERP Rules express a preference for competitive bidding for the acquisition of new generation resources. However, the Commission adopted these rules with the intent to reconcile competitive bidding with utility request to construct new generation facilities. Specifically, the ERP Rules accommodate an alternative method of resource acquisition, where the utility may propose that a portion of its resource need be met with resources not acquired through competitive bidding, provided that this alternative approach is shown to serve the public interest. Rule 3611(c). Rule 3611(e) further requires a utility to file, simultaneously with its ERP, an application for a CPCN for that new resource. (Footnote omitted.)

17. The ERP process culminates in a cost-effective resource plan or “a designated combination of new resources that the Commission determines
can be acquired at a reasonable cost and rate impact.” When identifying the utility’s cost-effective resource plan, the standard for approval is whether all of the resources included in the plan are deemed reasonable in light of the expected benefits they bring to the system.

18. Section 40-3.2-202, C.R.S., states the overall goal of the CACJA is to achieve emission reductions from coal-fired generation facilities by means of a coordinated plan that cuts pollutants at a lower cost than a piecemeal approach. The statute requires consideration of the need for emission controls, for repowering coal plants with natural gas, and for replacing plants with new and less-polluting facilities. The CACJA, at § 40-3.2-207(6), C.R.S., also states that the Commission shall allow the utility to develop and own as utility rate-based property any new electric generating plant constructed primarily to replace any coal-fired electric generating unit retired pursuant to a CACJA emission plan. Due to the Colorado Legislature’s embrace of a coordinated approach for emission reduction, the CACJA approach to resource acquisition also differs from CPCN or ERP proceedings. That approach focuses on whether the replacement capacity can be accomplished prudently and for reasonable rate impacts. See, § 40-3.2-206(1)(a), C.R.S.

19. In light of the above overview, we make the following clarifications regarding the information in the filed ERP Application that will be necessary to support the approval of the replacement capacity for Clark Station and the standard of review that we will apply. First, the filing that Black Hills submitted in this docket did not provide enough information on the scope, schedule, and costs of Black Hills’ proposed replacement capacity for Clark Station to enable the Commission to make the necessary findings under any of the public interest standards discussed above. We therefore affirm Decision No. C12-1223, specifically the decision to dismiss the Application without prejudice. It is our intent to review the Company’s replacement capacity project in its next ERP proceeding. Black Hills is therefore directed to provide detailed costs to inform our review, consistent with the project’s scope and schedule.

20. Second, we affirm that Black Hills continues to enjoy a presumption under the CACJA that the replacement capacity for the Clark Station will be utility owned and can be acquired without competitive bidding. This assumes that the cost information introduced in the ERP proceeding demonstrates that such a project can be acquired consistent with the public interest.

21. Third, since the Commission has already determined that 42 MW of replacement capacity is needed, we clarify that the standard for granting a CPCN will be met once Black Hills demonstrates to the Commission that a similarly-sized generation facility can be accomplished prudently and for reasonable rate impacts. This is the standard of review set forth in CACJA and is a standard that is compatible with the Commission’s determination of a cost effective resource plan pursuant to the ERP Rules.
Q. PLEASE SUMMARIZE WHAT THE COMPANY NEEDS TO SHOW IN ORDER TO BE GRANTED A CPCN UNDER THE STANDARDS THE COMMISSION SET FORTH REGARDING CACJA-RELATED REPLACEMENT CAPACITY IN REHEARING DECISION NO. C12-1434?

A. Pursuant to Paragraphs 18 and 19 of the Decision, the Company is required to provide complete information on the scope, schedule, and costs of Black Hills’ proposed replacement capacity. The Company’s approach must meet the public interest standard that similarly-sized replacement capacity for the to-be-retired Clark Station capacity can be accomplished prudently and with reasonable rate impacts. The Company does not need to comply with the standards Decision No. C12-1434 discussed with respect to either the stand-alone CPCN or the all-source comparison of the entire resource portfolio alternatives required in the Commission’s ERP rules.

Q. WHY IS THE COMPANY PROPOSING AN LM6000, 40 MW GENERATING UNIT IN THIS PROCEEDING?

A. The LM6000 will provide approximately 40 MW of capacity and is therefore similarly-sized to replace the capacity that is being retired in Cañon City pursuant to CACJA. The Company’s previous efforts to replace the CACJA-related retirement capacity with a portion of the capacity of an LMS100 generating unit in Docket No. 11A-226E were unsuccessful. Our intent in this proceeding is to match the new utility-owned capacity from the LM6000 to the level of capacity
that is being retired due to CACJA. The retirement of Clark Station creates a
clear need for 42 MW\(^5\) of replacement capacity and an LM6000 will meet 40 MW
of that need. Any additional capacity needs identified in the 2013 ERP will be
acquired through competitive bidding pursuant to the Commission’s Rules.

Q. **IS THE COMPANY PROVIDING COMPLETE INFORMATION REGARDING THE SCOPE, SCHEDULE AND COSTS OF THE PROPOSED LM6000 IN THIS PROCEEDING?**

A. Yes. The Company’s filing in this proceeding includes all of the necessary
information related to the scope, schedule, and costs. Generally, the scope of this
project is to build at PAGS a new natural gas-fired LM6000. The Company is
intending for the plant to begin its commercial operations in January, 2017. The
approximate cost of this project is $71 million. The Company is providing
complete testimony and support regarding this project. The witnesses discussing
the necessary aspects of this project, and specifically regarding scope, schedule,
and costs are set forth below.

Q. **WHY IS THIS PROJECT IN THE PUBLIC INTEREST?**

A. First, this project is in the public interest because additional capacity is necessary
to fill the void created by the retirement of Clark Station pursuant to CACJA.
This capacity is needed to meet the power requirements of our customers.
Second, this project is in the public interest because the proposed simple-cycle

\(^5\) 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.
generating unit can provide power to our customers at a reasonable cost. In addition, the construction of the simple-cycle will use local resources and, during construction, the project will create a number of temporary jobs that benefit the local economy. Because this natural gas-fired capacity is to replace the coal-fired capacity retired pursuant to CACJA, there will be environmental benefits attendant on reduced air emissions. Finally, because of the state-of-the-art technology embedded in the LM6000, the generation will use less water resources. The combination of these factors demonstrates that the project is in the public interest.

Q. IN DOCKET NO. 10M-254E, THE COMMISSION CONSIDERED BLACK HILLS’ PLAN TO COMPLY WITH CACJA. IN DECISION NO. C10-1330, THE COMMISSION DISCUSSED NINE FACTORS THAT WERE SET FORTH IN HB10-1365 THAT THE COMMISSION HAD TO CONSIDER IN EVALUATING THE COMPANY’S PLAN. HOW DO THOSE FACTORS RELATE TO THE PLAN TO CONSTRUCT, OPERATE AND OWN THE LM6000 INSTEAD OF THE LMS100 THAT WAS CONSIDERED IN DOCKET NO. 10M-254E?

A. Black Hills’ proposal to construct, own and operate an LM6000 does not change any of the Commission’s finding with respect to the nine evaluation factors discussed in Decision No. C10-1330. A recap of the nine factors and how they should be considered follows.

a. The CDPHE’s Report Concerning Reduction in Emissions of Oxides of Nitrogen
HB10-1365 requires the Commission must consider whether the CDPHE “reports that the plan is likely to achieve at least a seventy to eighty percent reduction, or greater, in annual emissions of oxides of nitrogen.” In making this determination, the CDPHE is required to consider “emissions from coal-fired power plants identified in the plan and continuing to operate after retrofit with emission control equipment,” as well as “emissions from any facilities constructed to replace any retired coal-fired power plants identified in the plan.”

The CDPHE previously determined for the purposes of HB10-1365 and the AQCC’s SIP, that the emissions of NOx from Clark Station will be completely eliminated upon its retirement, therefore exceeding the reduction amounts required by HB10-1365. This condition will not change with the substitution of the LM6000 for the LMS100.

b. **The CDPHE’s Determination Pursuant to § 40-3.2-204(2)(b)(III),C.R.S.**

This section requires the CDPHE to “determine whether any new or repowered electric generating unit proposed under the plan, other than a peaking facility utilized less than twenty percent on an annual basis or a facility that captures and sequesters more than seventy percent of emissions not subject to a national ambient air quality standard or a hazardous air pollutant standard, will achieve emission rates equivalent to or less than a combined-cycle natural gas generating unit.” Previously, the CDPHE stated that the emission rates from an LMS100 would not exceed
the emission rates of a combined-cycle unit. The substitution of the smaller LM6000 for the LMS100 will not change this finding.

c. The Degree to Which the Plan Will Result in Reductions in Other Air Pollutant Emissions.

The Commission previously acknowledged CDPHE’s analysis of the retirement of Clark Station that indicated that the Company’s plan would significantly reduce emissions of SO2, mercury, and greenhouse gases. The substitution of the smaller LM6000 for the LMS100 will not change this finding.

d. The Degree to Which the Plan Will Increase Utilization of Existing Natural Gas-Fired Generating Capacity.

The Commission previously noted that Black Hills’ anticipated natural gas use would increase upon implementation of its plan, “primarily due to the expected increase of the natural gas-fired combined cycle units at PAGS that will be in place before the new LMS100 goes into operation.” The substitution of the natural gas-fired LM6000 for the LMS100 at PAGS will not change this finding. Replacing natural gas-fired generation for coal-fired generation will result in higher usage of existing natural-gas fired generating capacity.

e. Satisfaction of Clean Energy Requirements, and Utilization of Energy Efficiency or Other Low-Emitting Resources.
The Commission previously stated that “[T]he Company’s plan entails the development of natural-gas fired replacement capacity to replace the retired 42 MW of the Clark Station coal-fired units,” and that the plan “may increase the Company’s ability to satisfy clean energy requirements.” The substitution of the natural gas-fired LM6000 for the LMS100 will not change this finding. The retirement of Clark Station helps the Company satisfy its clean energy requirements and does not impact our efforts to meet renewable energy or energy efficiency standards.

f. Promotion of Colorado Economic Development

Section 40-3.2-205(1)(f), C.R.S., requires the Commission to consider whether the plan promotes Colorado economic development. The Commission previously found, based on the Company’s representation, that the plan may generate construction related jobs in Pueblo. The addition of new generating capacity at PAGS may provide sales tax and property tax revenues to the City of Pueblo and Pueblo County. These basic impacts will not change with the substitution of the LM6000 for the LMS100. There will still be construction related employment opportunities, and the investment in the new generating unit at PAGS will create sales tax and property tax revenues.

g. Preservation of Reliable Electric Service.

Section 40-3.2-205(1)(g), C.R.S., requires the Commission to consider the impact of retiring Clark Station has on the provision of
reliable electric service. The Commission previously found that the replacement of the Clark Station capacity, together with various transmission enhancements to the Cañon City area, would result in continued provision of reliable electric service to Black Hills’ customers. The substitution of the natural gas-fired LM6000 for the LMS100 as replacement capacity for Clark Station will not change this finding.

h. Protection from Future Cost Increases

Section 40.3.2-205(1)(h), C.R.S., requires the Commission to consider whether the plan is likely to help protect Colorado customers from future cost increases, including costs associated with reasonably foreseeable emission reduction requirements. The Commission previously determined that this evaluation factor was met by relying on the CDPHE’s findings regarding the expected emissions reductions from the Company’s plan to shut down Clark Station, and pursuant to the General Assembly’s determinations that a coordinated plan was preferable and ultimately less costly to customers than a piecemeal approach to reducing emissions. The Commission previously found that retiring Clark Station and replacing that capacity with a natural gas-fired generating unit would help protect Black Hills’ customers from higher cost compliance actions associated with the Clark Station. The substitution of the LM6000 for the LMS100 as replacement capacity for Clark Station will not change this finding.

i. Reasonable Rate Impacts
Section 40.3.2-205(1)(i), C.R.S., requires the Commission to consider whether the cost of the plan results in reasonable rate impacts. The Commission was also directed to examine the impact on the rates of low-income customers. The Commission previously determined that an increase of 5 percent or less in the Company’s revenue requirements was a reasonable threshold and that the Company’s coordinated plan is expected by the General Assembly to be less costly than an alternative approach to complying with current and reasonably foreseeable CAA requirements to the benefit of all customers, including low-income customers. The substitution of the smaller and less costly LM6000 for the LMS100 as replacement capacity for Clark Station will not change this finding. The Company’s proposal to install an LM6000 results in a rate impact of less than 5 percent.

Q. HAS THE COMPANY APPROPRIATELY AND ADEQUATELY APPLIED THE NINE EVALUATION FACTORS SET FORTH IN CACJA TO ITS PROPOSAL TO INSTALL AN LM6000 AT PAGS?

A. Yes. Consistent with the Commission’s previous findings in Decision No. C10-1330, consideration and weighing of these evaluation factors supports an overall finding that the Company’s proposal is in the public interest.

HOW HAS THE COMPANY EVALUATED THE RATE IMPACT OF THIS PROPOSED UNIT?

A. The LM6000 will begin commercial operations in January, 2017. Black Hills has performed a pro forma analysis using its forecasted revenue requirements for 2016, with and without the addition of the LM6000 in rate base. This analysis isolates the impact of the LM6000 as shown in the testimony of Mr. Bryan Owens.

Q. HAS THE COMMISSION PREVIOUSLY ADDRESSED HOW IT WOULD ASSESS THE REASONABLENESS OF THE RATE IMPACT ASSOCIATED WITH COMPLYING WITH THE CACJA?

A. Yes. In Docket No. 10M-254E, Black Hill’s first CACJA proceeding before the Commission, the Commission specifically addressed rate impacts. Paragraph 91 of Decision C10-1330 states:

Section 40-3.2-205(1)(i), C.R.S., requires us to consider “whether the cost of the plan results in reasonable rate impacts.” In making this determination, we are directed to “examine the impact of the rates on low-income customers.” Id. We agree with Black Hills and the Gas Intervenors that an increase of 5 percent or less in the Company’s revenue requirement is reasonable. In addition, the Company’s coordinated plan is expected by the General Assembly to be less costly than an alternative approach to complying with current and reasonably foreseeable CAA requirements to the benefit of all customers, including low-income customers, consistent with HB 10-1365. We therefore find this factor weighs in favor of approving the Company’s plan.

While Black Hills has reduced the size of the gas-fired generation resource from an LMS100 to an LM6000 in light of previous Commission decisions, this should not alter the reasonableness threshold the Commission enunciated to measure the
impact on customers. A 5 percent threshold is still reasonable. As previously stated, our pro forma analysis indicates that the impact on the Company’s forecasted revenue requirement is less than 5 percent. If the calculated 3.3% increase in revenue requirements were implemented using a General Rate Schedule Adjustment (GRSA) percentage adder, it would impact the rates of all customers, including low income customers equally by 3.3%. On the basis of its pro forma revenue requirements analysis, assuming a GRSA, Black Hills has met the rate impact reasonableness threshold.

Q. CAN THIS PROJECT BE PERMITTED?
A. Yes. Black Hills is confident that the LM6000 will receive a timely air permit so that the facility can be installed at PAGS by January, 2017. This is discussed in the testimony of Mr. Fred Carl.

Q. DOCKET NO. 10M-254E, BLACK HILLS’ FIRST CACJA PROCEEDING, FOCUSED ON THE LMS100 GENERATION CAPACITY AS THE FOUNDATION OF THE COMPANY’S PLAN. IS THE COMPANY’S PRESENT PROPOSAL TO DEVELOP, BUILD, AND OWN THE LM6000 CONSISTENT WITH THE CACJA?
A. Yes. As previously discussed, construction of the LM6000 meets the nine evaluation factors set forth in the CACJA.

Q. IS BLACK HILLS PROPOSING TO CAP THE COSTS FOR DEVELOPING AND CONSTRUCTING THE LM6000 IN THIS PROCEEDING?
A. Yes. The Company is proposing a Point Cost Cap for this utility generation. The Point Cost Cap is approximately $71 million as set forth in the testimony of Mr. Mark Lux. This not-to-exceed amount is based on a third party’s estimate of the cost of engineering, procuring, and constructing (EPC) the project plus the Owner’s Costs that will be incurred during construction and startup. The $71 million cap can only be exceeded under extraordinary circumstances.

Q. IS BLACK HILLS PROPOSING AN INCENTIVE-SHARING MECHANISM WITH RESPECT TO THIS PROJECT?

A. Yes. Black Hills is proposing an incentive-sharing mechanism whereby cost savings derived from completing the project under budget would be shared between the Company and its customers. The incentive-sharing mechanism includes a “dead band” provision pursuant to which all the first level of savings will benefit customers as a result of the project going into rate base at a level below the Point Cost Cap. Any savings below the dead band will be shared 85 percent customers and 15 percent shareholders. This incentive-sharing mechanism is similar to that previously approved by the Commission in Docket No. 09A-415E. Mr. Lux addresses this incentive-sharing mechanism in his testimony.

Q. WHO ARE THE COMPANY’S OTHER WITNESSES IN THIS PROCEEDING AND WHAT ARE THEIR AREAS OF TESTIMONY?

A. Lisa Seaman, Manager-Resource Planning for Black Hills Corporation, will address the 2013 ERP and resource modeling supporting the need for the LM6000 turbine addition.
Mark Lux, Vice President and General Manager, Power Delivery for Black Hills Corporation, will describe the LM6000 turbine addition in terms of its general description, infrastructure, environmental compliance, construction timeline, project scope, project plan, capital costs, and the Point Cost Cap and related incentive-sharing mechanism.

Bryan Owens, Manager-Colorado Electric Regulatory Affairs for Black Hills Corporation, will address the pro forma revenue requirements analyses and the retail rate impact of the LM6000 turbine addition under the Point Cost Cap.

Eric Egge, Director-Electric Transmission Services for Black Hills Corporation, will address the impact of the LM6000 turbine addition on the existing transmission system, and its relationship to transmission planning, and transmission reliability under the CACJA.

Christopher Burke, Vice President-Colorado Utility Operations for Black Hills Corporation, will describe Black Hills’ service territory, its current generating resources, its load growth, and the local impact of an LM6000 turbine addition at the existing (PAGS).

Fred Carl, Director-Environmental Services for Black Hills Corporation, will address the environmental impact of substituting an LM6000 turbine for an LMS100 gas-fired turbine at PAGS in terms of air emissions.

Mary Jo Kealy, Sr. Principal Economist for CH2MHILL, Inc., will address the employments metrics for Rule 3611(h).
III. CONCLUSION

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. My testimony discussed the history of the Company’s decision to retire the Clark Station coal-fired generation units, pursuant to CACJA and the various proceedings before the Commission that were directed at replacing that retired capacity. The testimony shows that the proposed LM6000 is a cost effective replacement for the Clark Station capacity and that its installation at PAGS is needed to meet our customers’ electricity needs. I have shown that the LM6000 is required to meet the public convenience and necessity and that its installation and operation will have reasonable and acceptable rate impacts. Based on the demonstration of these costs and benefits through the testimony and exhibits of the Company’s witnesses in this proceeding, the Commission should issue Black Hills a CPCN for the LM6000 together with approval of the Point Cost Cap of $71 million and incentive-sharing mechanism.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.
Appendix A

Statement of Qualifications

Fredric C. Stoffel

Mr. Stoffel graduated from the University of Colorado with a degree in Economics. He began his employment with Public Service Company of Colorado (Public Service) in February 1979. From May 1980 through January 1989, he held various positions in Rates and Regulations.

In February 1989, he was appointed Manager of the Gas Supply and Transportation Division, becoming General Manager in August 1992.

In April 1994, with the merger of Public Service and Southwestern Public Service Company, Mr. Stoffel was appointed Managing Director, Regulatory Administration, for New Century Energies, Inc. (NCE). In that capacity, he had overall responsibility for the company’s rate and regulatory affairs including determination of revenue requirements and electric and gas rate design.

With the merger of NCE and Northern States Power Company in August 2000 to form Xcel Energy Inc., he was promoted to the position of Vice President, Policy Development. In this position he was responsible for coordinating the development of the Company’s policies related to electric and natural gas restructuring, including environmental and market structure issues. He also had primary responsibility for managing the Company’s rate and regulatory affairs before the Colorado Public Utilities Commission.

In October 2006, he was named Vice President, Marketing. In this position, he oversaw Xcel Energy’s market research, product development, product management, advertising, customer advocacy and renewable and energy efficiency programs.
Beginning in March 2009, Mr. Stoffel began working as an independent energy consultant. In that capacity he managed the performance of an energy efficiency potential study for Tri-State Generation and Transmission Association, Inc. (Tri-State).

In December 2009, Mr. Stoffel was employed by Tri-State as Energy Resources Strategy Coordinator. In that capacity he was Project Manager for Tri-State’s Integrated Resource Plan and oversaw the implementation of its long-term business strategy analysis tools.

In June 2010, Mr. Stoffel was promoted to Senior Manager, Budget and Financial/Business Analytics and was responsible for the development of Tri-State’s annual operating and capital budgets as well as the long term financial forecast.

Mr. Stoffel began his employment with Black Hills Corporation in October 2012, as Director of Regulatory Services in Colorado.

Mr. Stoffel has testified before the FERC, the Colorado Public Utilities Commission, the Wyoming Public Service Commission, the New Mexico Public Regulation Commission, the Texas Public Utility Commission and the Colorado legislature on numerous regulatory, rate, certificate, resource planning and tariff issues.