Q. Please state your name, business address and position with PacifiCorp dba Rocky Mountain Power.

A. My name is Chad A. Teply. My business address is 1407 West North Temple, Suite 210, Salt Lake City, Utah. My position is vice president of resource development and construction for PacifiCorp Energy. I report to the president of PacifiCorp Energy. Both Rocky Mountain Power and PacifiCorp Energy are divisions of PacifiCorp.

Qualifications

Q. Please describe your education and business experience.

A. I have a Bachelor of Science Degree in Mechanical Engineering from South Dakota State University. I am a Registered Professional Engineer in the state of Iowa. I joined MidAmerican Energy Company in November 1999 and held positions of increasing responsibility within the generation organization, including the role of project manager for the 790-megawatt Walter Scott Energy Center Unit 4 completed in June 2007. In April 2008, I moved to Northern Natural Gas Company as senior director of engineering. In February 2009, I joined the PacifiCorp team as vice president of resource development and construction, at PacifiCorp Energy. In my current role, I have responsibility for development and execution of major resource additions and major environmental projects.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to provide the Commission and parties with justification and information on the pollution control investments being made at

the Dave Johnston Unit 3 power plant that will result in environmental improvements.

Background

Q. Please describe the current operation of Dave Johnston Unit 3.

A. Dave Johnston Unit 3 is located in central Wyoming, near the town of Glenrock, WY. Dave Johnston Unit 3 is a nominal 230 megawatt pulverized coal unit placed in service in 1964. The unit is equipped with a cell-fired boiler. The original burners are still being used on the unit; however, combustion control modifications for nitrogen oxides (NO_X) control are scheduled in 2010. An electrostatic precipitator for control of particulate matter was installed in 1976. Dave Johnston Unit 3 is not equipped with sulfur dioxide (SO_2) removal equipment; however, the environmental improvement project that is the subject of this Docket will provide sulfur dioxide (SO_2) emissions and particulate matter (PM) emissions control with its in-service date in 2010.

Q. Does Dave Johnston currently have operating restrictions related to emissions?

A. Dave Johnston Unit 3 is currently operated with a 220 megawatt net output limit to maintain compliance with state of Wyoming sulfur dioxide (SO_2) emissions limits. The new pollution control equipment will increase the auxiliary power consumption by approximately 4.2 net megawatts. Investment in the new pollution control equipment will remove the net output constraint on the unit associated with sulfur dioxide (SO_2) emissions; however, net output of the unit will likely remain below 230 megawatts even after additional minor capital

investments are made during the 2014 planned maintenance outage.

Description of Pollution Control Investments

Q. Please describe the Dave Johnston Unit 3 pollution control project and associated equipment.

A. The pollution control project being undertaken at the Dave Johnston Unit 3 power plant will upgrade and improve the unit's particulate matter controls and install sulfur dioxide (SO_2) controls. The capital expenditure for the project during the test period is $293 million. Construction began in 2008, and the project is expected to be operational by May 31, 2010. The new equipment will be tied into the existing equipment during a scheduled plant maintenance outage. The project will install a dry flue gas desulfurization (DFGD) system with fabric filter. A DFGD system injects lime slurry in the top of an absorber vessel (scrubber) with a rapidly rotating atomizer wheel. The rapid rotation of the atomizer wheel causes the lime slurry to separate into very fine droplets that intermix with the flue gas. The sulfur dioxide (SO_2) in the flue gas reacts with the calcium in the lime slurry to form calcium sulfate in the form of particulate matter. The dry particulate matter is then captured in the downstream baghouse along with fly ash from the boiler. The DFGD system will produce a nonhazardous dry waste product suitable for landfill disposal. Other equipment to be installed as part of the project includes induced draft fans, boiler reinforcement, new ductwork, lime slurry reagent preparation systems, waste material handling systems, electrical infrastructure, controls, and other miscellaneous appurtenances and support systems.

Q. Please describe the emissions improvements that will be achieved with the Dave Johnston Unit 3 pollution control project.

A. The Dave Johnston Unit 3 dry flue gas desulfurization system and baghouse will reduce sulfur dioxide emissions from the unit by approximately 90 percent, or approximately 6,600 tons per year. In addition to reducing sulfur dioxide emissions, the baghouse will reduce the emissions of particulate matter. The particulate matter emission limit will be reduced from 0.20 pounds per million British Thermal Units to 0.015 pounds per million British Thermal Units.

Q. Please provide additional details on the project cost of $293 million.

A. The project costs are broken down into the lump sum engineering, procurement, and construction (EPC) contract, owner's engineer costs, PacifiCorp internal costs, permitting costs, existing stack and ID Fan demolition costs, boiler reinforcement costs, contingency and the allowance for funds used during construction (AFUDC). As a percentage of the total cost, these categories are EPC (85.11%), owner's engineer (0.72%), PacifiCorp internal cost (1.38%), permitting (0.05%), stack and ID Fan demolition (1.88%), boiler reinforcement (2.50%), contingency (0.7%), and AFUDC (7.67%).

Q. Has the cost of the project been prudently managed?

A. Yes. The project has been contracted under lump-sum turnkey EPC contract terms which resulted from a competitive bidding process. PacifiCorp project management staff continues to provide oversight of the project and closely manages any project execution plan changes or potential EPC contract scope changes.

Q. Are there additional operating costs that will be incurred as a result of the installation of the pollution control equipment?

A. Yes. Operation of the new pollution control equipment will result in increased operations and maintenance costs associated with reagent, waste disposal, and equipment maintenance.

Q. Are there net power cost savings related to adding the Dave Johnston Unit 3 pollution control equipment explained in your testimony?

A. No. While providing benefits to customers through emissions reductions and in meeting compliance requirements, the addition of pollution control equipment does not reduce net power costs. Installation of the pollution control equipment on Dave Johnston Unit 3 will reduce output by 4.2 megawatts and the average heat rate is expected to increase by 138 British Thermal Units per kilowatt-hour of generation. Company witness Ms. Hui Shu addresses the impact these changes will have to net power costs in her testimony.

Q. How are the Dave Johnston Unit 3 pollution control investment costs and associated operating costs being treated in the revenue requirement?

A. The costs for the pollution control equipment have been included in this case as explained in the revenue requirement testimony of Mr. Steve R. McDougal.

Justification of Investment

Q. What is the basis for this investment?

A. This investment was identified as part of the Company's response to environmental regulations that govern its operations. Through the 1977 amendments to the Clean Air Act, Congress set a national goal for visibility to

remedy impairment from manmade emissions in designated national parks and wilderness areas; this goal resulted in development of the Regional Haze Rules, enacted in 2005 by the Environmental Protection Agency. These rules trigger Best Available Retrofit Technology (BART) reviews for all coal-fired generation facilities built between 1962 and 1977 that emit at least 250 tons of visibility-impairing pollution per year. Because Dave Johnston Unit 3 was built in 1964 and emits at least 250 tons of visibility impairing pollution per year, it is subject to BART review. A BART review of Dave Johnston Unit 3 was completed and submitted to the Wyoming Department of Environmental Quality for final disposition. A copy of the final report of the BART Analysis for Dave Johnston Unit 3 is provided as an attachment in the confidential filing requirements, section A.1 of this application.

The Wyoming Department of Environmental Quality issued a BART permit for Dave Johnston Unit 3 on December 31, 2009 incorporating the Dave Johnston Unit 3 equipment and installation schedule recommended via the BART review and contemplated in this case. The conditions of the Dave Johnston Unit 3 BART permit will be incorporated into the Wyoming State Implementation Plan (SIP) for Regional Haze in support of its goals to reduce visibility impairing emissions. The Wyoming SIP is subject to Environmental Protection Agency review and approval. The state of Wyoming has also issued an Approval Order (i.e. permit to construct) for the Dave Johnston Unit 3 environmental improvement project. The environmental compliance activities discussed above form the basis for this investment.

Q. What factors does the Company consider when determining which capital investments to make in environmental equipment retrofit projects?

A. There are several factors the Company takes into consideration when making pollution control equipment investments including; evaluation of state and federal environmental regulatory requirements and associated compliance deadlines, review of emerging environmental regulations and rulemaking, and analyses of alternate compliance options. In the case of Dave Johnston Unit 3, the Company evaluated several technologies on their ability to economically achieve compliance and support an integrated approach to control criteria pollutants (e.g. sulfur dioxide (SO_2), nitrogen oxides (NO_X), and particulate matter (PM) for the facility if it were to continue to operate and to burn coal. The BART analysis reviewed five available retrofit emission control technologies and their associated performance and cost metrics. Each of the technologies was reviewed against its ability to meet a presumptive BART emission limit based on technology and fuel characteristics. The BART analysis outlined the available emission control technologies, the cost for each and the projected improvement in visibility which can be expected by the installation of the respective technology. Once the preferred BART technology was identified, the Company moved forward with its competitive bidding process to evaluate and ultimately select the preferred provider for the project.

Q. Would the Company's decision to make this incremental investment in environmental controls at this unit change if limitations were placed on carbon dioxide emissions, such as in the Waxman-Markey bill in the U.S. House of Representatives or the Kerry-Boxer bill in the U.S. Senate?

A. No. The Company is currently engaged in assessing its existing generation resources, its planned supply and demand-side resources and its 10-year capital budget regarding the impact of carbon dioxide emissions restrictions. While planned investments in other units may change, the Company's plans regarding this investment in Dave Johnson Unit 3 would not be changed by carbon-emission restriction. The unit has a depreciation life for ratemaking purpose that concludes in 2027, providing sufficient remaining time to depreciate the investment in the environmental controls.

Timing of Investment

Q. Why is PacifiCorp installing the Dave Johnston Unit 3 pollution control equipment at this time?

A. As discussed above, the Company is installing the pollution control equipment at this time primarily to ensure compliance with Regional Haze Rules, but also in response to a variety of existing and emerging emission reduction requirements. The Wyoming Department of Environmental Quality issued a BART permit for Dave Johnston Unit 3 on December 31, 2009 incorporating the Dave Johnston Unit 3 equipment and installation schedule recommended via the BART review and contemplated in this case. The conditions of the Dave Johnston Unit 3 BART permit will be incorporated into the Wyoming State Implementation Plan (SIP)

for Regional Haze in support of meeting presumptive BART emission rates to reduce visibility impairing emissions. The BART permit issued for Dave Johnston specifically requires that the new Dave Johnston Unit 3 baghouse be installed as a part of the overall pollution control investment must be in-service and initially performance tested before the end of 2010.

Final installation activities and tie-in of the pollution control equipment can only be accomplished when the unit is off-line. Dave Johnston Unit 3 is scheduled for a maintenance overhaul during the spring of 2010. Meeting the timing requirements of the BART permit and reducing plant outage time necessitated completion of final installation activities and tie-in of the pollution control equipment during the scheduled overhaul this spring. PacifiCorp anticipates that the pollution control equipment will be installed and in service by May 31, 2010.

Installation of the pollution control equipment and associated systems contemplated in this case represent a significant step for the PacifiCorp coal-fueled power plant fleet towards meeting the sulfur dioxide (SO_2) reductions required by the Regional Haze Rules and the established sulfur dioxide (SO_2) emissions reduction milestones.

Customer Considerations

Q. What are the benefits to customers of installing the Dave Johnston Unit 3 pollution control equipment and why should Rocky Mountain Power's customers pay the costs related to this project?

A. Customers directly benefit from the continued availability of low-cost generation

produced at the Dave Johnston plant while also achieving environmental improvements from this resource, resulting in cleaner air. In addition, the tie-in of these necessary controls is being accomplished during a planned outage, as opposed to scheduling a separate outage for this work, which reduces replacement power costs. The Company has ten BART-eligible units in Wyoming and four in Utah. The BART controls for each of these units must be installed within five years from the date the SIP is approved and prior to the compliance dates specified in the permits. Although SIP approval has not yet been received, the Company anticipates that BART-required controls will be required on some or all of these units if they are not retired or retrofitted to burn natural gas. Postponing installation on this unit to a later planned maintenance outage would make it virtually impossible for the Company to effectively ensure that all of its affected units meet compliance deadlines and would place the Company at risk of not having access to necessary capital, materials, and labor while attempting to perform these major equipment installations in a compressed timeframe.

Conclusion

Q. Please summarize your conclusions.

A. Investment in the Dave Johnston Unit 3 pollution control equipment is required to meet the Regional Haze Rules, enacted in 2005 by the Environmental Protection Agency, and the resulting Best Available Retrofit Technology (BART) reviews and permitting process, if the unit is to continue to burn coal. The Company's decision to install this pollution control equipment would not be changed by the enactment of carbon dioxide emissions reduction legislation such as Waxman-

Markey bill or the Kerry-Boxer bill. The $293 million investment during the test period and associated operating costs are reasonable and prudent, and the Company should be granted cost recovery. The investment allows for the continued operation of a low-cost coal-fired generation facility while achieving significant environmental improvements to air quality and regional haze issues.

Q. Does this conclude your testimony?

A. Yes.