

Rocky Mountain Power
Docket No. 20-035-04
Witness: James C. Owen

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF UTAH

ROCKY MOUNTAIN POWER

Direct Testimony of James C. Owen

May 2020

1 **I. INTRODUCTION AND QUALIFICATIONS**

2 **Q. Please state your name, business address, and present position with PacifiCorp**
3 **d/b/a Rocky Mountain Power (“Rocky Mountain Power” or the “Company”).**

4 A. My name is James C. Owen and my business address is 1407 West North Temple, Suite
5 210, Salt Lake City, Utah 84116. I am currently employed as Director of
6 Environmental. I am testifying for Rocky Mountain Power.

7 **Q. Please describe your education and professional experience.**

8 A. I have a Bachelor of Science Degree in Mining Engineering, a Masters of Business
9 Administration Degree, and a Juris Doctorate of Law Degree, all from the University
10 of Utah. I joined the Utah Department of Natural Resources – Division of Oil Gas and
11 Mining in November 2008, and held positions of increasing responsibility within the
12 agency, including responsibilities for environmental permitting, enforcement of
13 environmental compliance, engineering design, oversight of mine reclamation
14 bonding, environmental program management, and legislative and policy management.
15 I joined PacifiCorp in February 2018. My current responsibilities encompass strategic
16 planning, stakeholder engagement, regulatory support, support of major generation
17 resource additions, and direct oversight of major environmental compliance projects.

18 **II. PURPOSE OF TESTIMONY**

19 **Q. What is the purpose of your direct testimony in this case?**

20 A. My testimony supports the prudence of certain selective catalytic reduction (“SCR”)
21 retrofit projects installed since the Company’s last general rate case. Specifically, I
22 discuss the SCR projects at Craig Unit 2 and Hayden Unit 2, which have been in service
23 since December 2017 and August 2016, respectively. The SCRs at both facilities were

24 installed in accordance with state and federal environmental compliance requirements
25 for the individual units, as well as for continued safe, reliable, and cost-effective
26 operation of the facilities.

27 **Q. Please summarize your direct testimony.**

28 A. My testimony demonstrates that the installation of the emissions control retrofit
29 projects for Craig Unit 2 and Hayden Unit 2 were prudent and in the public interest.
30 The projects were required to comply with environmental laws, namely the Clean Air
31 Act Regional Haze Rules, established by the U.S. Environmental Protection Agency
32 (“EPA”) and administered by the respective state agencies in which the units are
33 located.

34 **III. SELECTIVE CATALYTIC REDUCTION RETROFIT PROJECTS**

35 **Q. What was the Company’s cost to complete the selective catalytic reduction retrofit**
36 **projects included in this proceeding?**

37 A. The cost of the Craig Unit 2 SCR system included in this proceeding is \$37.8 million
38 on a total-company basis. The cost of the Hayden Unit 2 SCR system included in this
39 proceeding is \$9.7 million on a total-company basis. These capital additions are
40 reflected in the revenue requirement and incorporated in the exhibits of Mr. Steven R.
41 McDougal in this rate case.

42 **Craig Unit 2 SCR**

43 **Q. Please describe the Craig facility.**

44 A. The Craig facility is a three-unit coal-fired electrical generating facility located in
45 Moffat County, Colorado. Units 1 and 2, which can generate a combined
46 837 megawatts (“MW”), are jointly owned by Tri-State Generation and Transmission

47 Association, Inc. (“Tri-State”), Salt River Project, Platte River Power Authority, Public
48 Service Company of Colorado (“PSCo”), and the Company. The Company owns
49 19.28 percent of Units 1 and 2. Unit 3 is solely owned by Tri-State. Tri-State operates
50 all units at the facility.

51 **Q. Please provide a general description of the Craig Unit 2 SCR system.**

52 A. The Craig Unit 2 SCR system is primarily comprised of a reactor with multiple catalyst
53 levels; inlet and outlet ductwork; an ammonia reagent system; certain boiler structure
54 and ancillary infrastructure retrofits; electrical and control system installation and
55 integration with the existing plant.

56 **Q. What was the required timeline for Tri-State to install the SCR system at Craig
57 Unit 2?**

58 A. The Craig Unit 2 SCR was required by the Clean Air Act Regional Haze Rules and the
59 associated state of Colorado Regional Haze State Implementation Plan (“SIP”) to be
60 installed by January 30, 2018. Colorado’s Regional Haze SIP was first approved by the
61 Colorado Air Quality Control Commission in January 2011, and was submitted to EPA
62 for review and approval on May 25, 2011.

63 **Q. Did EPA approve the State of Colorado’s Regional Haze SIP compliance
64 requirements for Craig Unit 2?**

65 A. Yes. EPA published its approval of the Colorado Regional Haze SIP compliance
66 requirements for Craig Unit 2 in the *Federal Register* on December 31, 2012.¹ EPA’s
67 final rule became effective January 30, 2013.

¹ See codified regulation at 40 C.F.R 52.320.

68 **Q. Please generally describe the joint ownership governance of Craig Unit 2.**

69 A. The terms and conditions of joint ownership in Craig Unit 2 are governed by a
70 Participation Agreement (“Craig Participation Agreement”). The Craig Participation
71 Agreement mandates the installation of capital improvements that are required by
72 applicable law. The Craig Participation Agreement also places an independent
73 obligation on Tri-State, as Operating Agent, to operate Craig Unit 2 in accordance with
74 applicable laws.

75 As Operating Agent, Tri-State is also responsible for development of operating
76 budgets and capital investment recommendations to be set forth for joint owner review
77 and approvals. The Craig Participation Agreement’s provisions for approval of capital
78 expenditures requires that the proposed expenditures be included in the annual capital
79 expenditure budget prepared by the Operating Agent and that the annual capital
80 expenditure budget is approved by a majority vote (*i.e.*, greater than 50 percent
81 ownership share) of the joint owners.

82 **Q. Did Tri-State request approval of the Craig Unit 2 SCR capital investment in**
83 **accordance with the terms of the Craig Participation Agreement and was it**
84 **approved by greater than 50 percent ownership share of the joint owners?**

85 A. Yes. Tri-State initially included costs associated with the Craig Unit 2 SCR in the 2013
86 capital expenditures budget for review and approval pursuant to the Craig Participation
87 Agreement. The project was approved by a greater than 50 percent ownership share of
88 the joint owners.

89 **Q. Did the Company independently assess the benefits associated with the Craig Unit**
90 **2 SCR project?**

91 A. Yes. In July 2013, the Company independently assessed the benefits associated with
92 the Craig Unit 2 SCR project against a hypothetical scenario that assumed the Company
93 could unilaterally effectuate an accelerated shutdown of the unit. This hypothetical
94 scenario was not a realistic option because the Company cannot unilaterally effectuate
95 an accelerated shutdown of the Craig units based on the language of the Craig
96 Participation Agreement. The Company's hypothetical assessment did not support the
97 installation of SCRs.

98 **Q. What position did the Company take with respect to the Craig Unit 2 SCR project**
99 **capital budget approval?**

100 A. The Company voted 'no' with respect to the Craig Unit 2 SCR project. As a minority
101 owner, the Company recognized that under the terms of the Craig Participation
102 Agreement, its vote alone would not change the outcome with the other joint-owners
103 voting 'yes', and the Company remained obligated to pay its share of the Craig Unit 2
104 SCR.

105 **Q. Did the Company also independently assess its legal options with respect to the**
106 **capital expenditures approval process incorporated into the Craig Participation**
107 **Agreement?**

108 A. Yes. In June 2013, the Company engaged external counsel to independently assess the
109 Company's rights under the Craig Participation Agreement with respect to payment
110 options and dispute resolution that may occur with a majority decision on capital
111 expenditures that was not supported by the Company. The ultimate determination of

112 the legal review of the Craig Participation Agreement was that the Company had the
113 right to challenge the majority's decision, but there was little to no opportunity to
114 successfully challenge the project through arbitration or litigation. This was primarily
115 because the project met the requirements under the Craig Participation Agreement,
116 specifically: (i) the project is required by applicable law (the Colorado Regional Haze
117 SIP); (ii) Craig Unit 2 is required to be operated in accordance with applicable law
118 under the Craig Participation Agreement; and (iii) the majority of the Craig Unit 2 joint-
119 owners (in fact all joint-owners other than the Company) voted in support of the project.

120 **Q. Considering the terms and conditions of the Craig Participation Agreement, did**
121 **the Company pursue arbitration or litigation of the Craig Unit 2 SCR project**
122 **decision?**

123 A. No, for the reasons explained above.

124 **Q. What was the Company's cost to complete the Craig Unit 2 SCR system?**

125 A. The cost of the Craig Unit 2 SCR system included in this proceeding is \$37.8 million
126 on a total-company basis with an in-service date of December 2017.

127 **Q. What is the current status of the Craig Unit 2 SCR system?**

128 A. The Craig Unit 2 SCR system was placed in service in December 2017, following the
129 planned major maintenance overhaul for the unit. Completion of the Craig Unit 2 SCR
130 system satisfied the compliance deadlines established for the unit, as well as the
131 prescribed emissions reductions.

132 Installation of this major emissions control retrofit project was aligned with
133 scheduled major maintenance outages for the affected unit to mitigate replacement
134 power cost impacts while benefiting from overlapping major maintenance outage time

135 frames. These environmental compliance projects allow the retrofitted facilities to
136 continue to operate as low-cost generation resources for the benefit of customers.

137 **Hayden Unit 2 SCR**

138 **Q. Please describe the Hayden Facility.**

139 A. The Hayden plant is a 441 MW, two-unit coal-fired electrical generating facility located
140 in Routt County, Colorado. Unit 1 is jointly owned by PSCo and the Company. The
141 Company owns 24.5 percent of Unit 1. Unit 2 is jointly owned by PSCo, Salt River
142 Project, and the Company. The Company owns 12.6 percent of Unit 2. PSCo operates
143 the plant.

144 **Q. Please provide a general description of the Hayden Unit 2 SCR system.**

145 A. The Hayden Unit 2 SCR system is primarily comprised of: reactors with multiple
146 catalyst levels; inlet and outlet ductwork; ammonia reagent systems; certain boiler
147 structures and ancillary infrastructure retrofits; electrical and control systems
148 installation; and integration with the existing plant.

149 **Q. What was the required timeline for the Company to install the SCR system at
150 Hayden Unit 2?**

151 A. The Hayden Unit 2 SCR was required by the State of Colorado's Regional Haze SIP to
152 be installed no later than December 31, 2016.

153 **Q. Did EPA approve the state of Colorado's Regional Haze SIP compliance
154 requirements for Hayden Unit 2?**

155 A. Yes. The EPA published its approval of the Colorado Regional Haze SIP in the
156 Federal Register on December 31, 2012.² EPA's final approval made these emissions

² <http://www2.epa.gov/region8/air-program>.
<http://www2.epa.gov/sites/production/files/201402/documents/epafinalactioncoloradoregionalhazeplan.pdf>.

157 reduction compliance requirements at Hayden Unit 2 federally enforceable, in
158 addition to being enforceable under state law.

159 **Q. What regulations required the Hayden Unit 2 SCR project to be installed?**

160 A. In December 2010, the Colorado Air Quality Control Commission promulgated new
161 Best Available Retrofit Technology (“BART”) determinations and emissions control
162 requirements for the Hayden units in the Colorado Regional Haze SIP. These BART
163 determinations set an emissions limit of 0.07 lbs NO_x/MMBtu for Hayden Unit 2.
164 Although the BART determinations did not specify how the limit was to be achieved,
165 installation of SCR was the only technically feasible method available.

166 **Q. Was a CPCN acquired for the Hayden Unit 2 SCR system in the state of Colorado
167 and where the projects were constructed?**

168 A. On January 26, 2011, the Colorado Public Utilities Commission approved the
169 installation of SCR system on Hayden Unit 2, finding that PSCo had demonstrated that
170 the installation of the project was in the best interest of customers but still required the
171 filing of a modified CPCN application primarily because the cost information presented
172 was not adequate.³ The Colorado Public Utilities Commission approved PSCo’s CPCN
173 application on July 18, 2012.⁴

³ *In re Public Service Co. of Colorado’s Plan in Compliance with House Bill 10-1365, “Clean Air-Clean Jobs Act”*, Docket No. 10M-245E, Decision No. C10-1328 at pp. 44-45, 51, 86 (Jan. 26, 2011) (available at: http://www.dora.state.co.us/PUC/DocketsDecisions/decisions/2010/C10-1328_10M-245E.doc).

⁴ *In re Public Service Co. of Colorado’s Application for a Certificate of Public Convenience and Necessity for the Hayden Emissions Control Project*, Docket No. 11A-917E, Decision No. C12-0843 at pp. 1, 6 (July 18, 2012) (available at https://www.dora.state.co.us/pls/efi/EFI_SEARCH_UI.SEARCH?p_session_id=&p_results=Documents&p_proceeding_number=11A917E&p_document_type=Choose%20One&p_docket_status=Choose%20One&p_decision_type=Choose%20One&p_decision_author=Choose%20One&p_auto_search=Y).

174 **Q. Please generally describe the joint ownership governance of Hayden Unit 2.**

175 A. The terms and conditions of joint ownership in Hayden Unit 2 is governed by a
176 Participation Agreement (“Hayden Participation Agreement”). The Hayden
177 Participation Agreement mandates the installation of capital improvements that are
178 required by applicable law. The Hayden Participation Agreement also places an
179 independent obligation on PSCo, as Operating Agent, to operate Hayden Unit 2 in
180 accordance with applicable laws.

181 **Q. What is the current status of the Hayden Unit 2 SCR system?**

182 A. The Hayden Unit 2 SCR system was placed in service in August 2016, following the
183 planned major maintenance overhaul for the units. Completion of the Hayden Unit 2
184 SCR system satisfied the compliance deadline established for the unit, as well as the
185 prescribed emission reduction.

186 Similar to Craig, installation of this major emission control retrofit project was
187 aligned with a scheduled major maintenance outage for Hayden Unit 2 to mitigate
188 replacement power cost impacts while benefiting from overlapping major maintenance
189 outage time frames. This project also allows the retrofitted facility to continue to
190 operate as low-cost generation resources for the benefit of customers.

191 **Q. Were the emissions control retrofit projects included in this proceeding intended
192 to extend the operational life of either Craig Unit 2, or Hayden Unit 2?**

193 A. No. The emissions control retrofit projects included in this proceeding were required
194 to continue operations in Colorado to meet state environmental compliance
195 requirements. In addition, the Hayden Unit 2 SCR was a key component of the NO_x
196 reduction plan required by PSCo (the operator of Hayden Unit 2) to the Colorado Public

197 Utilities Commission under the Colorado Clean Air Clean Jobs Act. The Colorado
198 Public Utilities Commission approved PSCo's NO_x reduction plan, including the
199 Hayden Unit 2 SCR on December 9, 2010.⁵

200 IV. CONCLUSION AND RECOMMENDATION

201 **Q. Please summarize your testimony.**

202 A. The Company prudently managed the analysis and appropriately exercised its rights
203 under the Craig Participation Agreement with respect to the Craig Unit 2 SCR project.
204 The project was completed on time to meet applicable federal and state environmental
205 compliance deadlines and performance requirements, and was administered by the
206 plant Operating Agent, and supported by a majority vote of the unit's remaining joint
207 owners, in accordance with Craig Participation Agreement terms and conditions.

208 The Company's support of the Hayden Unit 2 SCR installations included in this
209 case has been administered pursuant to applicable law and the Hayden Participation
210 Agreement applicable to that unit.

211 These environmental compliance projects have allowed the retrofitted facilities
212 to continue to operate as low-cost generation resources for the benefit of the Company's
213 customers.

214 Based on these conclusions, I recommend that the Commission approve each
215 of the projects described in my testimony for inclusion in rates.

216 **Q. Does this conclude your direct testimony?**

217 A. Yes.

⁵ http://www.dora.state.co.us/PUC/DocketsDecisions/decisions/2010/C10-1328_10M-245E.pdf.