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II. GENERATING UNIT FORCED OUTAGE DISALLOWANCES

Q. PLEASE DISCUSS YOUR INVESTIGATION OF GENERATING UNIT FORCED OUTAGES THAT OCCURRED DURING THE EBA DEFERRAL PERIOD.

A. It is not unusual for generating units to fail and typically utilities incur higher operating costs when failures occur. However, ratepayers should not have to be responsible for bearing higher outage costs when failures are caused by operator errors, or by outages that are clearly avoidable.

In this proceeding, I reviewed forced outages that occurred during calendar year 2014 and determined there were two relatively long forced outages that could have been avoided. One outage occurred at Craig Unit 1 and the other at Hunter Unit 3. The Craig outage was also identified as an avoidable outage by the Division of Public Utilities (“Division”) in its direct testimony.

Q. PLEASE DESCRIBE THE CRAIG OUTAGE.

A. The Craig Station, located near Craig, Colorado, is a 1,304 MW coal plant, which PacifiCorp owns jointly with Tri-State Generation and Transmission (“Tri-State”) and

99 other utilities (PacifiCorp's owns 19.3% of Units 1 and 2). According to the 2014
100 Thermal Outage Summary, the 428 MW Craig 1 unit was forced out of service on
101 [BEGIN CONFIDENTIAL] [REDACTED] [END
102 CONFIDENTIAL], and returned to service on [BEGIN CONFIDENTIAL] [REDACTED]
103 [REDACTED]¹ [END CONFIDENTIAL] In total, PacifiCorp and the other Craig unit owners
104 experienced a loss of [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL]
105 MWh during calendar year 2014.² Based on its 19.3% share, PacifiCorp determined the
106 unit experienced a loss of [BEGIN CONFIDENTIAL] [REDACTED] [END
107 CONFIDENTIAL] MWh during the [BEGIN CONFIDENTIAL] [REDACTED] [END
108 CONFIDENTIAL] hours that it was out of service.³ [BEGIN CONFIDENTIAL]

109 [REDACTED]
110 [REDACTED]
111 [REDACTED]
112 [REDACTED]
113 [REDACTED]
114 [REDACTED]

115 Q. [REDACTED]
116 [REDACTED]
117 A. [REDACTED]
118 [REDACTED]
119 [REDACTED]
120 [REDACTED]

¹ OCS 2.4(c)
² DPU 7.1 1st Supplemental.
³ Ibid.

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[REDACTED]

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[REDACTED]

[Additional Filing Requirement 10, 1st Supplemental, at 2]

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[REDACTED]

⁴ Additional Filing Requirement 10, 1st Supplemental, "Craig U1 12 Dec 2014 DC Lube Oil Pump.pdf".

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[REDACTED]

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[REDACTED]

151 Q.

[REDACTED]

152

[REDACTED]

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[REDACTED]

154 A.

[REDACTED]

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[REDACTED]

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[REDACTED]

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[REDACTED]

158 Q.

[REDACTED]

159

[REDACTED]

160 A.

[REDACTED]

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[REDACTED]

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[REDACTED]

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[REDACTED]

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[REDACTED]

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[REDACTED]

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[REDACTED]

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[REDACTED]

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[REDACTED]

169 Q.

[REDACTED]

170

[REDACTED]

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[REDACTED]

172 A. [REDACTED]
173 [REDACTED]
174 [REDACTED]
175 [REDACTED]
176 [REDACTED]
177 [REDACTED]
178 [REDACTED]
179 [REDACTED]
180 [REDACTED]
181 [REDACTED]
182 [REDACTED]

183 [END CONFIDENTIAL]

184 **Q. DO YOU BELIEVE THE COMPANY SHOULD BE PERMITTED TO RECOVER**
185 **REPLACEMENT POWER COSTS ASSOCIATED WITH THIS OUTAGE?**

186 A. No, I do not. The Craig 1 outage could have been avoided if [BEGIN
187 CONFIDENTIAL] [REDACTED]

188 [REDACTED] [END CONFIDENTIAL]. It would be improper to require ratepayers to pay
189 for replacement power costs associated with such an outage.

190 **Q. PLEASE DESCRIBE THE ADJUSTMENT YOU RECOMMEND CONCERNING**
191 **THE CRAIG UNIT 1 OUTAGE.**

192 A. The Company's response to DPU 7.1 1st supplemental derived an estimate of the
193 replacement power cost for the Craig 1 outage. The response provided the amount of
194 generation that could have been produced by Craig 1 had the unit operated at its
195 maximum capacity during the entire [BEGIN CONFIDENTIAL] [REDACTED] [END

196 **CONFIDENTIAL]** hour outage period, which was **[BEGIN**
197 **CONFIDENTIAL]** ██████████ **[END CONFIDENTIAL]**. This energy was then
198 adjusted by the same capacity factor for Craig 1 that had been derived from the
199 Company's GRID projection used to produce base rates during the GRC. The energy
200 was further reduced to account for PacifiCorp's Craig 1 ownership percentage of 19.28%.
201 After applying these adjustments, PacifiCorp's estimate of the amount of the Craig Unit 1
202 energy that had to be replaced was **[BEGIN CONFIDENTIAL]** ██████████ **[END**
203 **CONFIDENTIAL]**MWh. I then used the average \$/MWh cost of operating Craig 1
204 from the 2014 rate case to derive what it would have cost for Craig 1 to produce **[BEGIN**
205 **CONFIDENTIAL]** ██████████ **[END CONFIDENTIAL]** MWh, and I compared that to the
206 cost of purchasing the same amount of energy from the Four Corners market. The
207 difference in the two costs was my estimate of the System replacement cost due to the
208 Craig 1 outage. I then computed the impact on the Utah deferral balance after accounting
209 for the 70% sharing mechanism.⁵ The proposed adjustment is presented in Hayet Direct
210 – Exhibit OCS-2.2, which indicates that the Utah EBA deferral is reduced by \$**[BEGIN**
211 **CONFIDENTIAL]** ██████████ **[END CONFIDENTIAL]**.

⁵ Since the Division also developed an adjustment for this Craig 1 outage, I used the scalar and Base NPC values found on DPU Exhibit 1.5, and I confirmed that I developed the same adjustment as the Division.