

December 10, 2020

VIA ELECTRONIC FILING

Utah Public Service Commission Heber M. Wells Building, 4th Floor 160 East 300 South Salt Lake City, UT 84114

Attention: Gary Widerburg Commission Administrator

RE: Docket No. 20-035-01

Application to Increase the Deferred Rate through the Energy Balancing Account Mechanism *Rocky Mountain Power Response Testimony*

In accordance with the Scheduling Order and Notice of Hearing issued by the Utah Public Service Commission ("Commission") on March 31, 2020, PacifiCorp, d.b.a. Rocky Mountain Power, hereby submits for electronic filing its response testimony in the above referenced matter.

Rocky Mountain Power respectfully requests that all formal correspondence and requests for additional information regarding this filing be addressed to the following:

By E-mail (preferred):	datarequest@pacificorp.com utahdockets@pacificorp.com jana.saba@pacificorp.com emily.wegener@pacificorp.com
By regular mail:	Data Request Response Center PacifiCorp 825 NE Multnomah, Suite 2000 Portland, OR 97232

Informal inquiries may be directed to Jana Saba at (801) 220-2823.

Sincerely,

Joelle Steward

Vice President, Regulation

cc: Service List - Docket No. 20-035-01

CERTIFICATE OF SERVICE

Docket No. 20-035-01

I hereby certify that on December 10, 2020, a true and correct copy of the foregoing was served by electronic mail to the following:

Utah Office of Consumer Services

Michele Beck	mbeck@utah.gov
<u>ocs@utah.gov</u>	
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Patricia Schmid	pschmid@agutah.gov
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Savar ttie

Katie Savarin Coordinator, Regulatory Operations

Rocky Mountain Power Docket No. 20-035-01 Witness: David G. Webb

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF UTAH

ROCKY MOUNTAIN POWER

Response Testimony of David G. Webb

December 2020

1	Q.	Are you the same David G. Webb who submitted direct testimony on behalf of
2		PacifiCorp, d/b/a Rocky Mountain Power ("the Company") in this proceeding?
3	A.	Yes.
4	Q.	What is the purpose of your response testimony?
5	A.	My testimony responds to certain issues raised by the Utah Division of Public Utilities
6		("Division") in its energy balancing account ("EBA") Audit Report and by Daymark
7		Energy Advisors ("Daymark"), on behalf of the Division.
8	Q.	Are any other Company witnesses filing testimony in response to issues raised by
9		the Division and Daymark?
10	A.	Yes. Company witness Mr. Dana M. Ralston provides testimony responding to the
11		proposed adjustments related to the four generating plant outages.
12		REPLACEMENT POWER COSTS
12 13	Q.	REPLACEMENT POWER COSTS Please describe the proposed adjustment for generating plant outages.
	Q. A.	
13		Please describe the proposed adjustment for generating plant outages.
13 14		Please describe the proposed adjustment for generating plant outages. Daymark recommends reducing net power costs from the EBA by \$2,792,525 on a
13 14 15		Please describe the proposed adjustment for generating plant outages. Daymark recommends reducing net power costs from the EBA by \$2,792,525 on a Utah allocated basis attributed to four plant outages, which it claims were imprudent. ¹
13 14 15 16		Please describe the proposed adjustment for generating plant outages. Daymark recommends reducing net power costs from the EBA by \$2,792,525 on a Utah allocated basis attributed to four plant outages, which it claims were imprudent. ¹ This adjustment consists of \$2,617,430 for the replacement power costs and \$175,095
13 14 15 16 17	A.	Please describe the proposed adjustment for generating plant outages. Daymark recommends reducing net power costs from the EBA by \$2,792,525 on a Utah allocated basis attributed to four plant outages, which it claims were imprudent. ¹ This adjustment consists of \$2,617,430 for the replacement power costs and \$175,095 in interest.
 13 14 15 16 17 18 	A.	 Please describe the proposed adjustment for generating plant outages. Daymark recommends reducing net power costs from the EBA by \$2,792,525 on a Utah allocated basis attributed to four plant outages, which it claims were imprudent.¹ This adjustment consists of \$2,617,430 for the replacement power costs and \$175,095 in interest. How does the Company respond to Daymark's proposed adjustments related to
 13 14 15 16 17 18 19 	А. Q.	Please describe the proposed adjustment for generating plant outages. Daymark recommends reducing net power costs from the EBA by \$2,792,525 on a Utah allocated basis attributed to four plant outages, which it claims were imprudent. ¹ This adjustment consists of \$2,617,430 for the replacement power costs and \$175,095 in interest. How does the Company respond to Daymark's proposed adjustments related to these four outages?

¹ Also includes \$21,822 related to the update of the system overhead factor.

Page 1 – Response Testimony of David G. Webb

detailed testimony for the Company's position that plant operations were prudent and
other than the Wyodak outage, the proposed adjustments are without merit.
Additionally, the Company accepts Daymark's calculation of the Wyodak replacement
power costs to be deducted from the requested EBA. This reduction is \$47,568 on a
Utah allocated basis which includes \$43,962 for replacement power costs and \$3,606
in interest.

Q. Notwithstanding the Company's objection to the remaining proposed
adjustments, does the Company agree with Daymark's calculation of the
replacement power costs?

32 A. Yes. The methodology used by Daymark to calculate the replacement power costs is33 reasonable.

34

INCREMENTAL NON-FUEL FAS 106 SAVINGS

Q. Please describe the adjustment to the Incremental Non-Fuel FAS 106 Savings proposed by the Division.

37 The Incremental Non-Fuel FAS 106 Savings is related to the settlement of the Deer A. 38 Creek Retiree Medical Obligation and the resulting reduced expense. This expense 39 reduction is allocated to Utah using the SO allocation factor. In its initial filing, the 40 Company used the SO factor for the 12 months ended June 30, 2019 from the Results 41 of Operations report. As with prior years, the Division recommends updating the Utah 42 allocation of the cost savings by using the calendar year 2019 SO allocation factor 43 which is now available. This adjustment reduces the Company's requested recovery in 44 the EBA by \$21,822.

Page 2 – Response Testimony of David G. Webb

45 Q. Does the Company accept the Division's update to the Incremental Non-Fuel FAS
46 106 Savings to use the 2019 SO allocation factor?

47 A. Yes.

48 Q. Does the Company agree with the Division's characterization of this adjustment
49 as an error?

50 A. Division witness Mr. Gary Smith's direct testimony inaccurately states that this 51 correction is an error when instead it is merely an update using the final 2019 SO 52 allocation factor that was not available at the time of the initial EBA filing in 53 March 2020. The Company will continue to use the appropriate and most recently 54 available allocation factors in future filings where applicable. Due to the general rate 55 case in Docket No. 20-035-04, the Company will no longer need to update the SO 56 allocation factor for the Deer Creek Retiree Medical Obligation settlement because the remaining Deer Creek components will become part of base rates. 57

58

TRADE PURPOSE DOCUMENTATION

Q. Please summarize the Division's concerns related to the trade purpose
 documentation.

- A. The Division notes their concern with the Company's trade purpose documentation,
 specifically its Commercial Objective Reports that are provided through discovery to
 support net power costs.
- 64 Q. What is the Company's response?

A. Representatives from the Company met with the Division on November 30, 2020 to
 discuss their concerns, and the Company is working to address its processes to provide
 the adequate documentation going forward as to why specific transactions occurred.

- 68 Because these process changes are being made now and on a going forward basis, there 69 will only be a limited timeframe during the 2020 deferral period that the revised 70 documentation will be available.
- 71 Q. Does this conclude your response testimony?
- 72 A. Yes.

REDACTED

Rocky Mountain Power Docket No. 20-035-01 Witness: Dana M. Ralston

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF UTAH

ROCKY MOUNTAIN POWER

REDACTED

Response Testimony of Dana M. Ralston

December 2020

1	Q.	Please state your name, business address, and present position with PacifiCorp	
2		d/b/a Rocky Mountain Power (the "Company").	
3	A.	My name is Dana M. Ralston. My business address is 1407 West North Temple, Suite	
4		210, Salt Lake City, Utah 84116. My title is Senior Vice President of Thermal	
5		Generation and Mining.	
6		QUALIFICATIONS	
7	Q.	Briefly describe your education and professional experience.	
8	A.	I have a Bachelor of Science Degree in Electrical Engineering from South Dakota State	
9		University. I was previously the Vice President of Coal Generation and Mining from	
10		March 2015 to November 2017, and Vice President of Thermal Generation from	
11		January 2010 to March 2015. For 29 years before that, I held a number of positions of	
12		increasing responsibility within Berkshire Hathaway Energy's generation	
13		organizations, including the plant manager position at the Neal Energy Center. In my	
14		current role, I am responsible for operating and maintaining PacifiCorp's coal and	
15		natural gas-fired generation fleet, coal fuel supply, and mining.	
16	Q.	Have you testified in previous regulatory proceedings?	
17	A.	Yes. I have filed testimony on behalf of the Company in proceedings before the Utah	
18		Public Service Commission ("Commission") and public utility commissions in	
19		California, Oregon, Washington, and Wyoming.	
20		PURPOSE OF TESTIMONY	
21	Q.	What is the purpose of your testimony in this case?	
22	A.	My testimony responds to the direct testimonies of Mr. Philip DiDomenico and	
23		Mr. Dan F. Koehler of Daymark Energy Advisors, Inc. ("Daymark") who submitted	

Page 1 – Response Testimony of Dana M. Ralston

24		testimony and exhibits on behalf of the Division of Public Utilities ("DPU" or
25		"Division").
26	Q.	To what issues raised by Daymark in its testimony do you wish to respond?
27	А.	My testimony addresses the recommendations contained in DPU Confidential Exhibit
28		2.3 to disallow recovery of approximately \$2.8 million in replacement power costs
29		related to four separate outages in 2019 from the deferred EBA costs.
30	Q.	Please list the specific generating units and 2019 outages being discussed.
31	A.	The outages in question occurred at:
32		1. Dave Johnston Unit 1, on February 18, 2019
33		2. Hunter Unit 3, on July 29, 2019
34		3. Lake Side 2 Unit 3, on August 18, 2019
35		4. Wyodak Unit 1, on June 6, 2019
36	Q.	Is the Company accepting any of the adjustments proposed by Daymark related
37		to these outages?
38	A.	Yes. After reviewing the testimony, the Company accepts Daymark's proposed
39		adjustment related to the Wyodak Unit 1 outage on June 6, 2019. My testimony
40		demonstrates that the Company acted prudently with respect to the other outages in
41		question and the Commission should reject the proposed adjustments.
42		DAVE JOHNSTON UNIT 1 (February 18, 2019)
43	Q.	Please describe the outage at Dave Johnston Unit 1.
44	A.	On February 18, Dave Johnston Unit 1 was removed from service due to boiler draft
45		issues. The draft issue was corrected, but the unit remained offline while personnel
46		investigated and worked to repair leaking seals on the 1B boiler feed pump ("BFP").

Page 2 – Response Testimony of Dana M. Ralston

Inspection of the failed 1B BFP revealed that the internal volutes (the casing that
receives the fluid being pumped by the impeller) had been installed backwards by a
contractor in 2018, while the BFP was offsite at the contractor's facility.

50 Q. What is Daymark's rationale for the proposed disallowance related to this outage?

- A. On page 29 of DPU Confidential Exhibit 2.3 Daymark concludes that the circumstance
 "suggests a lack of proper vetting and oversight of the contractor."¹
- 53 Q. Can you please explain what qualifications the contractor demonstrated in order
 54 to perform the required maintenance?
- A. The contractor who performed the maintenance was the Original Equipment
 Manufacturer ("OEM") of the BFP for this unit. Furthermore, this contractor possesses
 technical expertise of the BFP and has supported the maintenance requirements of these
 pumps with no prior issues.

59 Q. Could additional oversight by the plant personnel have prevented the backwards 60 installation of the volutes?

A. The BFP was shipped offsite to the OEM's facility where the BFP overhaul, including installation of the volutes (internal to the BFP), was performed by the OEM. The pump components were reassembled by the OEM before being returned, and the internal position of the improperly installed volutes would not have been visually identifiable by plant personnel after arriving at the plant. Furthermore, the Company hired the OEM as the contractor for this project because these specific tasks were outside the technical expertise of plant personnel, and the OEM is the technical expert on these pumps.

¹ DPU Confidential Exhibit 2.3 - Daymark Energy Advisors EBA Audit Report for Calendar Year 2019 page 29.

68

Q.

How do you respond to the recommended disallowance for this outage?

- 69 The Company hired a fully qualified contractor, the OEM, to perform a technical task A. 70 that was outside the expertise of the plant maintenance personnel. The OEM 71 manufactured the BFP and is qualified to perform the specific pump maintenance. The 72 Company has had successful results with the OEM's prior work performance and the 73 accuracy of the scope of work performed. Due to the failed pump and follow up 74 inspection, the Company recognized that there were challenges with the OEM and 75 specifically the volute installation. This unsatisfactory performance led the Company 76 to select a different qualified contractor for future maintenance and repair work on the 77 BFP. The Company acted prudently in following the OEM's maintenance guidelines, 78 using the OEM to conduct required maintenance on the BFP, and challenging the OEM's performance and obtaining a discount on the invoice² when the mistake in 79 80 installing the volutes became apparent.
- 81

HUNTER UNIT 3 (July 29, 2019)

82 Please describe the background of the Hunter Unit 3 outage. **Q**.

83 On July 29, 2019 Hunter Unit 3 was brought offline to repair a reheater tube leak. The A. 84 subsequent inspection identified that the rate of wear on upper portions of the vertical 85 reheater (pendent) assemblies had accelerated which caused boiler tube leaks.

86 **Q**.

What is Daymark's stated understanding?

87 A. Daymark states, "the need for a broadscale replacement of tubes in the reheater was 88 first identified in 2013 at which time the Company decided to make extensive repairs in 2016 and defer full replacement till 2024."³ This statement does not accurately reflect 89

 $^{^{2}}$ RMP Response to DPU 4.4(a).

³ DPU Confidential Exhibit 2.3 - Daymark Energy Advisors EBA Audit Report for Calendar Year 2019 page 29.

90 the sequence of events. To clarify, my testimony is accompanied by three exhibits -91 Exhibit RMP (DMR-1), Exhibit RMP (DMR-2), and Exhibit RMP (DMR-3), 92 information on the Company's which provide decision-making process. 93 Exhibit RMP (DMR-1) is the 2012 inspection report of the vertical reheater and 94 shows there were no broadscale issues with this section of the boiler at that time. 95 Exhibit RMP (DMR-2) is the 2013 inspection report of the vertical reheater during 96 a forced outage in January of 2013. The results of the inspection show that the tubes 97 were in good condition and no immediate repairs or concerns were identified. Based 98 on information the Company had at the time (2013) as well as its knowledge and 99 experience with Hunter Unit 3, a full replacement of the reheater was added to planned 100 capital expenditures to occur during calendar year 2024 for approximately \$4.3 million.

101 Q. Did the Company continue to monitor this area of the boiler?

102 A. Yes. The reheater was inspected again in 2016 during a scheduled overhaul, which 103 included the general area where the tube leak occurred that later caused the July 29, 104 2019 outage. Exhibit RMP (DMR-3) provides the 2016 inspection report that shows 105 the area needed some minor repairs but was in acceptable condition. Ultimately, as a 106 result of the unexpected wear between the inspection conducted during the 2016 107 overhaul and the 2019 forced outage, the Company developed a project to address the 108 damaged tubing in the upper portions of the vertical reheater (pendent) section during 109 the planned outage for the 2020 overhaul.

Page 5 – Response Testimony of Dana M. Ralston

Q. Was the 2020 project to address the damaged tubing in the upper portions of the
vertical reheater section an acceleration of the 2024 planned full replacement of
the reheater as stated by Daymark?

A. No. This project was a replacement of a specific section of the vertical reheater (pendent) to address the unexpected wear, not a full replacement. The 2020 project costs were approximately \$627,000 and the 2024 project was budgeted, as stated above, for approximately \$4.3 million. The scopes of the two projects are significantly different. Due to the benefits from the 2020 project, the Company has moved the forecasted 2024 project back to 2028, not moved up as Daymark states.

119 Q. What is the premise for Daymark's recommended disallowance related to the 120 Hunter Unit 3 outage?

- A. On page 30 of DPU Confidential Exhibit 2.3 it states that, "The Company has provided
 no evidence of quantitative analysis justifying the decision to delay replacement of the
 reheater to 2024 despite ample evidence of a broadscale problem in 2013."⁴
- 124 Q. How do you respond to this recommendation?
- A. The Company did not delay the replacement of the reheater. The 2013 inspection did not indicate that the reheater assembly was at the end of its useful life. Rather, as explained above, it showed that the tubes were in good condition and identified no need for an immediate broadscale replacement or major repair. Based on the inspection and Company's knowledge and experience with Hunter 3, it was prudent to budget a future replacement of the reheater for 2024.

⁴ DPU Confidential Exhibit 2.3 - Daymark Energy Advisors EBA Audit Report for Calendar Year 2019 page 30.

Q. What is your recommendation to the Commission with respect to the Hunter 3 adjustment proposed by Daymark?

A. I recommend that the Commission reject the adjustment proposed by Daymark. The
 Company acted prudently through ongoing monitoring and targeted replacement of
 reheater sections of concern to help ensure equipment life was maximized at reduced
 costs instead of an unnecessary costly wholesale replacement of the entire reheater.

137 Lake Side 2 Unit 3 Outage (August 18, 2019)

138 Q. Please summarize the event that occurred at the Lake Side plant on August 18, 139 2019.

140 On August 18, 2019, the Lake Side Block 2 Steam Turbine Generator ("STG") tripped A. 141 offline due to an 86G Generator protection lockout relay. The unit had both the 142 Schweitzer 300G and 487E differential trips activate along with 64G-1 & G-2 (stator 143 fault elements). Unit data logs indicated the generator 'A' phase current reached 56,000 144 amps, which is approximately 5 times the unit rating. Based on the information 145 reviewed from the 300G relay and stator ground fault elements, the plant personnel 146 initiated an assessment into the physical condition of the unit. Further analysis of the 147 overall differential protection relays appeared to indicate the unit experienced a three-148 phase fault. Personnel also noted a strong burnt electrical smell in the immediate area 149 of the generator after this event occurred. The plant contacted the original equipment 150 manufacturer ("OEM"), Siemens, to assist with the investigation, inspections, and disassembly. Electrical testing and visual examination confirmed that an electrical fault 151 152 had occurred and melted a portion of the generator stator core beyond repair.

Page 7 – Response Testimony of Dana M. Ralston

REDACTED

- 153 Q. Was an official root cause analysis (RCA) completed on the failure?
- A. Yes. Siemens completed an in-depth RCA of the failure that was ultimatelyinconclusive.

156 Q. Was the Company or the OEM able to determine the root cause for the outage?

157 No. The Siemens Root Cause Analysis ("RCA") was inconclusive and no definitive A. root cause has been identified. Siemens evaluated potential failure scenarios and all 158 159 were either "Eliminated" or considered "Low Probability" to the root cause. The RCA 160 did not find any occurrence of improper operation or maintenance, poor workmanship, 161 foreign material, or signs of previous damage that would cause the failure. The 162 potential failure scenarios the RCA evaluated, included work completed inside the 163 generator. None of the results indicated that any foreign objects were found or that 164 foreign material prevention, tracking or exclusion procedures detected any issues. 165 Daymark states "the Company has yet to offer a final determination of the root cause of this event."⁵ As stated above, the results of the detailed RCA were inconclusive due 166 167 to the fact that none of the evidence could conclusively determine a defined cause.

168 Q. Has the Company taken additional steps to determine the cause of the Lake Side 169 2 outage?

A. Yes. Due to the significance of the event and the fact that the Company owns two other
generators of the same design, the Company hired and is working with a neutral thirdparty contractor to perform an additional RCA investigation in pursuit of a root cause.
This report is expected to be completed by end of 2020, and the preliminary results
indicate no different conclusions from the Siemens RCA.

Page 8 – Response Testimony of Dana M. Ralston

⁵ DPU Confidential Exhibit 2.3 – Daymark Energy Advisors EBA Audit Report for Calendar Year 2019, page 30.

175 Q. How do you respond to Daymark's comments regarding the timeliness of RCA 176 production?

177 A. After the Lake Side event occurred, plant management prioritized working with the 178 OEM to complete an RCA of the failure and returning the unit to service. As previously 179 described, this initial RCA was completed and ultimately inconclusive as to the root 180 cause. This RCA was made available to the DPU through discovery on June 22, 2020. 181 The Company also voluntarily undertook a second RCA, even though it was not 182 required. The amount of time required to perform RCA's is often dictated by experts, 183 scale of event, complexity of the analysis process, information gathering, etc. and as an 184 added challenge specific to this year, the COVID-19 pandemic. The fact that the second 185 RCA has been delayed past the original projected finish time does not demonstrate a 186 lack of prudence on the Company's part.

187 Q. Was the Company prudent in its operation of the Lake Side plant?

188 A. Yes. The Company has demonstrated that it has operated, maintained, and acted 189 prudently with respect to Lake Side by: 1) operating the unit within design; 2) following 190 OEM recommendations; 3) providing oversight and being engaged with Siemens 191 during maintenance activities; 4) using the OEM experts on this equipment to perform 192 maintenance; and 5) following FME policies and procedures for both the Company and 193 the OEM. All of these actions demonstrate a concerted effort to ensure that the 194 Company acted and continues to act prudently and in the best interest of customers. 195 Understanding the root cause is extremely important to the Company, and because of 196 this, the Company hired a third-party contractor to perform an additional RCA 197 investigation due to the significance of the issue and to prevent future failures on

Page 9 – Response Testimony of Dana M. Ralston

similar equipment. The Commission should reject Daymark's suggestion that the
Company be subjected to a standard where it must show a cause of an outage
conclusively to demonstrate prudence. Daymark's position that the Company may be
at fault is unsupported and should be rejected by the Commission because of the
Company's prudent actions in the operating, maintaining, and management of its Lake
Side plant.

204

WYODAK UNIT 1 (June 6, 2019)

205 Q. Please describe the outage at Wyodak Unit 1.

A. On June 6, 2019, Wyodak Unit was taken offline for an economizer tube leak. After the unit was returned to service it was discovered the leak had caused the ash in the ash silo to harden requiring an outage and silo cleaning. Plant management was aware of the economizer tube leak but believed that it would not affect the ash silo because any discharge from the economizer tube would first have to travel through the scrubber first.

Q. What is your recommendation to the Commission with respect to the Wyodak Unit 1 adjustment proposed by Daymark?

A. Because the Company recognizes that it could have managed the situation more
effectively, the Company agrees to remove the replacement power costs from the EBA
as recommended by Daymark. The Company intends this acceptance to be nonprecedential.

218 Q. Please summarize your recommendations regarding the disallowances proposed?

A. The Company prudently manages its thermal generation fleet for the benefit ofcustomers. During the deferral period (which included all of the outages raised by

Page 10 - Response Testimony of Dana M. Ralston

REDACTED

221		Daymark), the PacifiCorp-operated thermal fleet was available of the time
222		as compared to the NERC average for an equivalent fleet of . This
223		demonstrates PacifiCorp's commitment to providing the best value for our customers.
224		The Company agrees that outages should be reviewed individually for prudence but as
225		stated above the Company's fleet operates considerably better than the NERC average
226		for an equivalent fleet. Daymark's proposed disallowances appear to be based on
227		misunderstanding the circumstances of the outage or are an attempt to hold the
228		Company to an unrealistic perfection standard.
229	Q.	What is your recommendation to the Commission?

A. I recommend that the Commission reject the calculated disallowances for the 3 outages

- addressed above. My testimony demonstrates the Company was prudent in its actions.
- 232 Q. Does this conclude your response testimony?
- 233 A. Yes.

Rocky Mountain Power Exhibit RMP___(DMR-1) Docket No. 20-035-01 Witness: Dana M. Ralston

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF UTAH

ROCKY MOUNTAIN POWER

Exhibit Accompanying Response Testimony of Dana M. Ralston

2012 Vertical Reheater

December 2020

Unit 3 Hunter Plant 2012 A.O.

I - 1

	eheater Pendants
NT T IMITATI	Title: Vertical Reheater

Friority	ASSY	IUDE	LUCATION		
A, B, C		Position	WORK REQUIRED	W/C	ID
			Note : Asemblies numbered left to right facing in direction of the gas		
			flow. Tubes Numbered top to bottom.		
			Note : Asemblies numbered left to right facing the rear. Tubes Numbered front to rear.	front to	rear.
			Tube Material: 2.25" O.D. X .203" MWT SA213T22		
			AS VIEWED FROM IK'S 51 & 52 (Roof Line)		
A	Majority	A	Clean out pluggage between assemblies at roof.		
A	1	9	Replace 2' tube section as marked. UT108"		
А	7	9	Replace 2' tube section as marked. UT131"		
А	ы	9	Replace 2' tube section as marked. UT136"		
В	12	1	Replace 360° shield as marked.		
В	13	1	Replace 360° shield as marked.		
В	14	1	Replace 360° shield as marked.		
В	17	1	Replace 360° shield as marked.		
В	19	1	Replace 360° shield as marked.		
В	19	3	Replace 360° shield as marked.		
Α	29	9	Add 2' tube shield to cover erosion area. UT165"		
Α	33	9	Add 2' tube shield to cover erosion area. UT160"		
В	40	1	Replace 360° shield as marked.		
В	45	1	Replace 360° shield as marked.		
В	49	1	Replace 360° shield as marked.		
В	51	1	Replace 360° shield as marked.		
В	53	1	Replace 360° shield as marked.		
В	55	1	Replace 360° shield as marked.		
В	57	1	Replace 360° shield as marked.		
Я	50	1	Dowlood 2600 chield as moulted		

Rocky Mountain Power Exhibit RMP___(DMR-2) Docket No. 20-035-01 Witness: Dana M. Ralston

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF UTAH

ROCKY MOUNTAIN POWER

Exhibit Accompanying Response Testimony of Dana M. Ralston

Outage Inspection Report

December 2020



Location: Hunter Plant Date: January 30, 2013 Engineer: Daniel Kinder Subject: Unit 3 Boiler Inspection During

Hunter Power Plant was brought offline 1/30/2013 to fix a leak on 3-6 high pressure feedwater heater. During the outage a boiler inspection was conducted to assess the condition of the unit, and plan for future outages. Inspections on this outage were limited due to the temperatures of the boiler. The ID's fans tripped and weren't functional most of the night to cool the boiler. Also, work was being completed in the baghouse limiting the use of the fans for the safety of those working in the compartments.

Priority was given to those areas known to have higher erosion rates according to previous inspections, and tube leaks. The two areas focused on this outage were the vertical reheat pendant assemblies and the secondary superheat platen assemblies.

Vertical RH Assemblies:

No tubes were found with thicknesses below 80% of min wall thickness. The ash build up in the area made it difficult to inspect, but it was not more than typically build up in the area. Thickness measurements will be added to Unit 3 spreadsheet to track erosion rates.



Rocky Mountain Power Exhibit RMP___(DMR-3) Docket No. 20-035-01 Witness: Dana M. Ralston

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF UTAH

ROCKY MOUNTAIN POWER

Exhibit Accompanying Response Testimony of Dana M. Ralston

2016 Vertical Reheater

December 2020

Rocky Mountain Power - Hunter Station

Unit #3 Vertical Reheater Pendants

G - 11

March 2016

DATE VERIFIED WELDER VISUAL A AS VIEWED FROM TOP SCAFFOLD DECK AT THE ROOF (REAR SIDE OF FRONT PANELS) N/O Repair refractory around the man way openings on both the left and right side walls. AS VIEWED FROM IK'S 61 & 62 (REAR PANELS) AS VIEWED FROM IK'S 67 & 68 **WORK REQUIRED** LOCATION 5-6,10-11 Reposition disengaged alignment bracket as marked. Replace 5' eroded tube section as marked. Replace 5^{-1} eroded tube section as marked. Replace 5' eroded tube section as marked. Replace 5^{-} eroded tube section as marked. Replace 5' eroded tube section as marked Replace 5' eroded tube section as marked. Replace 5' eroded tube section as marked. Replace 5' eroded tube section as marked. No repair items noted. Position TUBE 55555 000000 000000 ASSY 10 ∞ 27 29 $\frac{35}{39}$ 45 47 48 50 51 53 55 55 57 57 61 64 65 66 67 68 Priority A, B, C 4 ∢ AA AA R \checkmark В \checkmark \triangleleft Þ ≮ \triangleleft \triangleleft \triangleleft K \triangleleft \triangleleft 4 A A \triangleleft A \checkmark \triangleleft Ы

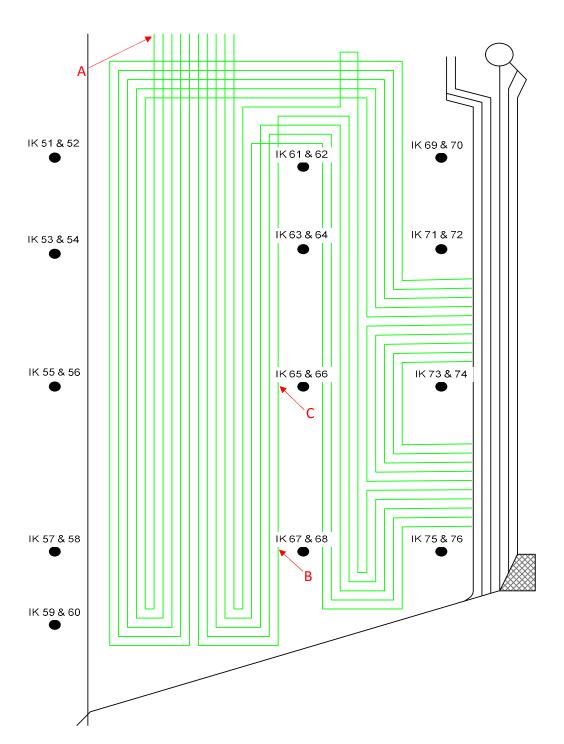
5 Star Testing, Inc.

Unit #3 Vertical Reheater Pendants

Priority ASSY	ASSY	TUBE	LOCATION	DATE	DATE VERIFIED WELDER VISUAL	LDER VI	SUAL	
A, B, C		Position	WORK REQUIRED	W/C		D		
В	14	5-6	5-6 Reposition disengaged alignment bracket as marked.					
В	22	9-10	9-10 Reposition disengaged alignment bracket as marked.					
В	42	9-10	Reposition disengaged alignment bracket as marked.					
В	48	9-10	Reposition disengaged alignment bracket as marked.					
В	56	9-10	Reposition disengaged alignment bracket					
В	58	9-10	9-10 Reposition disengaged alignment bracket as marked.					
В	60	8-9	Reposition disengaged alignment bracket as marked.					
В	62	4-5	4-5 Reposition disengaged alignment bracket as marked.					
В	64	9-10	9-10 Reposition disengaged alignment bracket as marked.					
В	68	5-9	5-9 Reposition disengaged alignment bracket as marked.					
			TOTALS:					
			30 TUBE REPLACEMENTS					
			72 SHIELD ADDITIONS					
			21 REPAIR ALIGNMENT BRACKETS					

March 2016 G - 13

Unit #3



VERTICAL REHEATER UT DATA

Unit #3

VERTICAL REHEATER UT DATA

(Color Code
	0.203" and Above - Blue
	0.173" thru 0.202" - Green
	0.143" thru 0.172" - Pink
	0.142" and Below - Red
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Position A through C - SA 213 T22 2.25" OD x 0.203" MWT

Assy. #	А	В	с
1	0.213	0.221	0.224
2	0.235	0.230	0.085
3	0.212	0.225	0.102
4	0.228	0.224	0.098
5	0.226	0.225	0.164
6	0.217	0.238	0.225
7	0.235	0.234	0.160
8	0.238	0.226	0.135
9	0.233	0.235	0.162
10	0.235	0.228	0.222
11	0.234	0.232	0.162
12	0.233	0.238	0.228
13	0.232	0.234	0.220
14	0.237	0.220	0.204
15	0.221	0.233	0.209
16	0.236	0.237	0.229
17	0.238	0.227	0.219
18	0.224	0.230	0.220
19	0.231	0.236	0.171
20	0.232	0.232	0.230
21	0.197	0.235	0.228
22	0.227	0.223	0.229
23	0.236	0.225	0.228
24	0.172	0.231	0.222
25	0.107	0.235	0.216
26	0.245	0.222	0.224
27	0.246	0.239	0.150
28	0.158	0.227	0.214
29	0.226	0.228	0.140
30	0.256	0.227	0.170
31	0.226	0.232	0.182
32	0.195	0.230	0.224
33	0.239	0.236	0.217
34	0.165	0.237	0.219
35	0.183	0.240	0.132
36	0.181	0.233	0.181

Rocky Mountain Power - Hunter Station

Unit #3

0.193	0.227	0.091
0.231	0.236	0.156
0.236	0.219	0.099
0.232	0.228	0.109
0.234	0.230	0.159
0.243	0.230	0.227
0.250	0.237	0.199
0.234	0.239	0.162
0.237	0.232	0.102
x	0.230	0.162
x	0.227	0.079
×	0.233	0.139
0.235	0.229	0.106
0.239	0.224	0.125
0.236	0.229	0.096
0.171	0.239	0.186
0.219	0.250	0.106
0.234	0.247	0.148
×	0.232	0.148
×	0.236	0.073
×	0.246	0.076
×	0.226	0.232
x	0.248	0.098
0.240	0.241	0.222
0.242	0.231	0.113
x	0.245	0.222
×	0.251	0.224
0.235	0.238	0.047
0.207	0.253	0.082
0.195	0.249	0.072
0.205	0.231	0.093
0.235	0.238	0.076
0.211	0.223	0.230
	0.236 0.232 0.234 0.243 0.250 0.234 0.237 x x x x 0.235 0.239 0.236 0.171 0.219 0.234 x x x x x x x x x x x x x x x x x x x	$\begin{array}{cccccc} 0.236 & 0.219 \\ 0.232 & 0.228 \\ 0.234 & 0.230 \\ 0.243 & 0.230 \\ 0.250 & 0.237 \\ 0.234 & 0.239 \\ 0.237 & 0.232 \\ \times & 0.230 \\ \times & 0.227 \\ \times & 0.233 \\ 0.235 & 0.229 \\ 0.239 & 0.224 \\ 0.236 & 0.229 \\ 0.239 & 0.224 \\ 0.236 & 0.229 \\ 0.219 & 0.250 \\ 0.234 & 0.247 \\ \times & 0.232 \\ \times & 0.236 \\ 0.234 & 0.247 \\ \times & 0.232 \\ \times & 0.236 \\ \times & 0.246 \\ \times & 0.246 \\ \times & 0.246 \\ \times & 0.246 \\ \times & 0.248 \\ 0.240 & 0.241 \\ 0.242 & 0.231 \\ \times & 0.245 \\ \times & 0.251 \\ 0.235 & 0.238 \\ 0.207 & 0.253 \\ 0.195 & 0.249 \\ 0.205 & 0.231 \\ 0.235 & 0.238 \\ \end{array}$