

**BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION**

In the Matter of the Investigation of AVISTA CORPORATION d/b/a AVISTA UTILITIES, PUGET SOUND ENERGY, and PACIFIC POWER & LIGHT COMPANY, Regarding the Prudence of Outage and Replacement Power Costs	Docket UE-190882
In the Matter of PACIFIC POWER & LIGHT COMPANY, 2018 Power Cost Adjustment Mechanism	Docket UE-190458

PACIFIC POWER & LIGHT COMPANY

**REDACTED – COMPANY-CONFIDENTIAL REBUTTAL TESTIMONY OF
CHARLES L. TACK**

REVISED February 20, 2020

TABLE OF CONTENTS

I. Purpose and Summary 1

II. Prudence of Pacific Power’s Oversight of Talen..... 3

III. Prudence of Talen’s Actions..... 5

 A. Timeline of Talen’s Actions Before the Outage 5

 B. Alternate Indicators 5

 C. Burning Area A Coal..... 9

 D. Taking a Planned Outage 11

VI. Conclusion 17

ATTACHED EXHIBITS

Exhibit CLT-15 - MATS PM Results and Trends in the Alternate Indicators

1 **Q. Are you the same Charles L. Tack who submitted supplemental direct testimony**
2 **on behalf of PacifiCorp dba Pacific Power and Light Company (Pacific Power or**
3 **Company) in this proceeding?**

4 A. Yes.

5 **I. PURPOSE AND SUMMARY**

6 **Q. What is the purpose of your rebuttal testimony?**

7 A. My rebuttal testimony addresses the response testimony of Mr. David C. Gomez on
8 behalf of Staff of the Washington Utilities and Transportation Commission (Staff)
9 and the response testimony of Mr. Avi Allison on behalf of the Washington State
10 Office of the Attorney General, Public Counsel Unit (Public Counsel). Both parties
11 ask the Washington Utilities and Transportation Commission (Commission) to
12 determine that Pacific Power's actions leading up to the 2018 Colstrip Outage were
13 imprudent either (1) directly, by failing to adequately supervise Colstrip's operator,
14 Talen Montana, LLC (Talen), or (2) indirectly, by attributing Talen's actions to
15 Pacific Power and arguing that Talen imprudently operated the plant.

16 **Q. Please summarize your rebuttal testimony.**

17 A. My testimony responds to four concerns raised by Staff and Public Counsel:

- 18 • First, Staff and Public Counsel argue that Pacific Power was imprudent in
19 failing to adequately supervise and oversee Talen's actions as the operator.
20 I explain that Pacific Power acted consistent with its responsibility to
21 adequately manage and oversee the utility operator as a member of the
22 plant's Ownership and Operating (O&O) Committee by staying in close
23 contact with Talen management, inquiring about steps taken to investigate

1 the elevated Mercury and Air Toxics Standards (MATS) Particulate
2 Matter (PM) test results, and asking clarifying questions where necessary.
3 Pacific Power was actively engaged, and it was reasonable for the
4 Company to rely on Talen’s day-to-day actions and reports as it
5 investigated PM levels.

- 6 • Second, on the premise that Pacific Power is responsible for any
7 imprudence by Talen, Staff and Public Counsel further challenge Talen’s
8 reliance on alternate indicators, [REDACTED]

9 [REDACTED]

10 [REDACTED]. I explain that Talen’s response to
11 the elevated PM readings treated the issue with the appropriate degree of
12 care, consistent with operational best practices. Talen reasonably relied on
13 alternate indicators, [REDACTED]

14 [REDACTED]

15 [REDACTED]

16 [REDACTED].

- 17 • Third, Staff incorrectly contends that Pacific Power made affirmative
18 misrepresentations in the discovery process by stating that it was unaware
19 of an “investigation” undertaken before the 2018 forced outage. Pacific
20 Power’s responses described the troubleshooting undertaken before the
21 outage, while distinguishing these efforts from a formal, post-outage
22 investigation.

- 23 • Fourth, [REDACTED]

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[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] The final MDEQ Penalty Assessment, which is the most accurate and complete portrayal of the PM issue, did not conclude that the outage was foreseeable.

II. PRUDENCE OF PACIFIC POWER’S OVERSIGHT OF TALEN

Q. Mr. Gomez states that Pacific Power is “responsible for the actions of the Operator of Colstrip Units 3 and 4.”¹ What do you understand to be the appropriate standard to evaluate Pacific Power’s prudent oversight of Talen?

A. As discussed in the rebuttal testimony of Mr. Michael G. Wilding, my understanding is that a utility co-owner is responsible for demonstrating adequate management and oversight of a plant operator.² Under this standard, Pacific Power’s actions as a minority owner of Colstrip Unit 4 were reasonable and prudent. Furthermore, based on Pacific Power’s management and oversight, Talen’s actions were reasonable and prudent.

¹ DCG-1CCT at 15.
² *Wash. Utils. and Transp. Comm’n v. Qwest Corp. d/b/a CenturyLink QC*, Docket UT-140597, Order 03 ¶ 25 (Feb. 22, 2016).

1 **Q. Both Mr. Gomez and Mr. Allison claim that Pacific Power did not provide**
2 **sufficient oversight of or input into Talen’s actions leading up to the outage.³ Do**
3 **you agree?**

4 A. No. As I have previously explained,⁴ Pacific Power is a minority owner of Colstrip
5 Unit 4, the operation of which is governed by the O&O Agreement. Under the O&O
6 Agreement, Pacific Power’s oversight and input is provided through a
7 representative’s participation on the O&O Committee. As Pacific Power’s
8 representative, I actively monitored and provided input on major operational issues
9 associated with Colstrip Unit 4. As events actually unfolded, I regularly engaged
10 with and questioned Talen on the facilities’ PM levels and trouble-shooting efforts.⁵
11 During this process, Pacific Power reasonably relied on the representations made by
12 Talen that the elevated PM levels in the February 2018 official test seemed to be
13 anomalous, particularly in light of the other available indicators suggesting that the
14 plant was performing well.

15 **Q. Did you have any reason to believe that Talen’s actions in response to the**
16 **elevated PM levels were unreasonable or imprudent?**

17 A. No. In my observation, Talen understood the importance of the elevated PM results
18 and attended to the issue in a manner fully consistent with operational best practices
19 and the concern the Colstrip owners expressed. As the plant operator, Talen’s history
20 of performance has demonstrated prompt and focused attention in response to other
21 equipment challenges at Colstrip, as demonstrated by the top quartile availability

³ Gomez, Exh. DCG-1CCT, Allison, Exh. AA-1CT at 20.

⁴ CLT-1CCT at 2.

⁵ CLT-1CCT at 3-5.

1 rates at the plant. Pacific Power reasonably believed that Talen would continue to
2 perform consistent with prudent operational practices.

3 **III. PRUDENCE OF TALEN'S ACTIONS**

4 **A. Timeline of Talen's Actions Before the Outage**

5 **Q. Mr. Gomez provides a timeline of the events and major decision points leading**
6 **up to the outage.⁶ Does this timeline tell the whole story?**

7 A. No. Significant actions were left out, including monitoring and evaluations that took
8 place from the official February MATS PM testing to the official MATS PM testing
9 in June. This missing information is significant because it shows that Talen took the
10 elevated PM levels seriously, and that Talen's response was prudent and reasonable.
11 These actions were previously discussed more thoroughly in Exhibit CLT-9CC,
12 which includes the alternate indicators that were being monitored as well as the
13 results of that monitoring. Additionally, Exhibit CLT-5CC is an email from Talen
14 discussing actions that it began taking in February 2018 in response to the elevated
15 PM levels.

16 **B. Alternate Indicators**

17 **Q. Both Mr. Gomez and Mr. Allison contend that Talen's reliance on alternate**
18 **indicators was not sufficient and that more in-stack testing should have**
19 **occurred.⁷ Do you agree?**

20 A. No. The alternate indicators (PM Continuous Emissions Monitoring System
21 (CEMS), Opacity, and Plum Bob DP, as discussed in previously submitted testimony
22 Exhibit CLT-9CC) Talen used to understand PM levels represent operational best

⁶ Gomez Exh. DCG-1CCT at 29-31.

⁷ Allison, Exhibit AA-1CT at 13-14, Gomez Exh. DCG-1CCT at 47.

1 practice and were appropriate indicators of how the plant was operating. These
2 indicators provide real-time, continuous, operational data to ensure that the units are
3 operating as expected. The stack tests (official and unofficial) reflect only a single
4 point in time rather than an ongoing real time trend.⁸

5 **Q. What is the role of manual in-stack testing?**

6 A. Manual in-stack testing (diagnostic PM testing) is one of the many tools a plant
7 operator uses to help evaluate unit operation. The manual in-stack test (diagnostic
8 test) is an abbreviated, snapshot test to get an indication of the PM levels that can be
9 compared to the alternate indicators for correlation and review. It is not a compliance
10 test. An official compliance MATS PM test requires three separate runs following
11 required Environmental Protection Agency (EPA) testing methods at conditions
12 representative of site-specific normal operations. The diagnostic test is a single run,
13 *generally* following EPA testing methods, to gather data, develop correlations, and
14 evaluate potential corrective actions. The tests are similar with the diagnostic usually
15 being one run and the official compliance test being three runs that are averaged.

16 **Q. Why was it appropriate to rely on alternate indicators for PM levels?**

17 A. Historically, alternate indicators have provided an accurate ongoing measure of
18 Colstrip units' PM levels. Colstrip has years of data showing that the alternate
19 indicators Talen relied on—PM CEMS, Opacity, and Plum Bob DP—accurately
20 reflect PM levels.⁹ On the other hand, the February 2018 Q1 official MATS PM in-
21 stack test only represented a single data point that did not exactly align with the

⁸ Official tests are 3 consecutive tests (approximately 1 to 2 hours long (volume dependent) and then averaged to a single data point.

⁹ Exhibit CLT-15.

1 alternate indicators data. It was prudent for Talen to evaluate the alternate indicators
2 against this single data point. In fact, the PM CEMS (and other alternative
3 parameters) have accurately portrayed PM levels since at least 2016, except for the
4 two formal stack tests in Q1 and Q2 of 2018, and Talen had only the February test
5 results when it relied on the alternate indicators. Tests run after the exceedance and
6 the most recent tests when the plant has been in compliance also align with the
7 alternate indicators. I have provided these trends in Exhibit CLT-15.

8 [REDACTED]

9 [REDACTED]

10 [REDACTED]

11 [REDACTED]

12 [REDACTED]

13 [REDACTED]

14 [REDACTED]

15 [REDACTED]

16 [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 [REDACTED]

21 [REDACTED]

22 [REDACTED]

23 [REDACTED]

1 [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]
9 [REDACTED]
10 [REDACTED]

11 **Q. Mr. Gomez expresses a belief that the Q2 PM test was rescheduled due to the**
12 **elevated PM levels measured on May 30, 2018.¹¹ Is this true?**

13 **A. No. As I discuss in my direct testimony, the test was moved due to market and load**
14 **conditions.¹²**

15 **Q. Are you aware of any information that would support Mr. Gomez’s belief?**

16 **A. No.**

¹⁰ Exhibit CLT-10CC at 4.

¹¹ DCG-1CCT at 48 n.165

¹² Exhibit CLT-1CCT at 8-9.

1 [REDACTED]

2 [REDACTED]

3 [REDACTED]

4 [REDACTED]

5 [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED]

11 [REDACTED]

12 [REDACTED]

13 [REDACTED]

14 [REDACTED]

15 [REDACTED]

16 [REDACTED]

17 [REDACTED]

18 [REDACTED]

¹³ DCG-1CCT at 39.

¹⁴ While Units 1 and 2 have different operating parameters than Units 3 and 4, Talen operates all of these units and thus has considerable experience with and knowledge of Area A coal.

¹⁵ DCG-1CCT at 39:18.

1 [REDACTED]

2 [REDACTED]

3 [REDACTED]

4 [REDACTED]

5 [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED]

11 [REDACTED]

12 [REDACTED]

13 [REDACTED]

14 [REDACTED]

[REDACTED]

[REDACTED]

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[REDACTED]

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[REDACTED]

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[REDACTED]

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D. Taking a Planned Outage

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Q. Mr. Gomez argues that Talen should have taken Units 3 and 4 into a planned outage following the February 2018 PM test results.¹⁷ Is it typical to take a unit offline whenever an elevated parameter is detected?

8

A. Absolutely not. As a general matter, an operator does not take a planned outage without reasonable certainty that the outage is inevitable and/or there is a clear plan to respond to the underlying problem. For instance, in 2013, Pacific Power experienced an outage at the Chehalis coal plant when one of the bushings in the unit’s step-up transformer failed.¹⁸ While Pacific Power had experienced two prior outages at the Chehalis plant related to bushing failures, RCAs following those prior outages had been unable to pinpoint whether the failures had been “anomalies or indicative of a widespread issue with the transformer or bushings[.]”¹⁹ In the absence of a clear cause, Pacific Power decided that taking a planned outage to attempt repairs would be imprudent because it would ensure negative cost impacts based on “speculation, not facts[.]”²⁰ Rejecting arguments that Pacific Power’s actions were imprudent, the Commission concluded that Pacific Power’s operation of the plant was prudent.²¹

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¹⁶ [REDACTED]

Exhibit CLT-10CC at 4.

¹⁷ DCG-1CCT at 52.

¹⁸ *Wash. Utils. and Transp. Comm’n v. Pac. Power and Light Co.*, Docket UE-140762, Rebuttal Testimony of Dana M. Ralston, Exhibit No. DMR-2T at 2.

¹⁹ Docket UE-140762, Rebuttal Testimony of Dana M. Ralston, Exhibit No. DMR-2T at 5:3.

²⁰ Docket UE-140762, Rebuttal Testimony of Dana M. Ralston, Exhibit No. DMR-2T at 4:9-11.

²¹ Docket UE-140762, Order 08 ¶ 104 (Mar. 25, 2015).

1 **Q. Why was a planned outage not taken in this case?**

2 A. Taking Units 3 and 4 offline in response to a single elevated parameter would have
3 been contrary to prudent utility practice because (a) the units were still in compliance;
4 (b) there was no evidence that an exceedance was inevitable; and (c) taking the units
5 offline would have undermined Talen's ability to diagnose the cause of the unusually
6 high PM test results. A suite of alternate indicators suggested that the units would
7 pass the upcoming PM tests, meaning that the outage was not understood to be
8 inevitable. Indeed, the RCA has confirmed that the cause of the outage was complex
9 and multi-factored. Diagnosing the problem required Talen to observe real-time
10 operations data and to assess the operational performance impacts of various
11 corrective actions. If the units had been taken prematurely offline, then Talen would
12 not have had the information necessary to reach a diagnosis and to identify necessary
13 repairs, ultimately prolonging the units' unavailability.

14 **Q. Do Staff and Public Counsel inappropriately seek to deny all cost recovery on the**
15 **theory that there should have been a planned outage in the spring rather than the**
16 **forced outage in June?**

17 A. Yes. Both Staff and Public Counsel ask the Commission to disallow the *entirety* of
18 the Company's replacement power costs.²² While we cannot know the precise
19 impacts of a planned outage in the spring, a spring outage would have had its own
20 cost consequences. Replacement power costs in the spring would have been lower,
21 but the outage may have been longer in duration and may not have succeeded in
22 resolving the multi-factor causes of the PM exceedance. Given the complexity of the

²² AA-1CT at 22; DCG-1CCT at 54.

1 underlying problem, it is possible that Talen could have taken the units offline in the
2 spring, been unable to identify the multi-factor causes of the elevated PM reading,
3 brought the units back online, and then suffered the same forced outage.

4 **Q. Should Talen have known that Colstrip Units 3 and 4 would not pass the Q2 PM**
5 **tests?**

6 A. No. Talen could not reasonably have known that its troubleshooting efforts would be
7 unsuccessful or that the alternate indicators were, suddenly and without precedent,
8 not reliable predictors of the units' PM levels. Without the benefit of perfect
9 hindsight, there was no reason for Talen to have taken these fully compliant units
10 offline before completing a thorough assessment of the causes of the elevated PM test
11 and ruling out the possibility of an abnormal PM reading. Given the difficulty in
12 identifying the cause of the elevated PM levels in the RCA, even with the benefit of
13 hindsight, it should be unsurprising that the operator was unable to quickly identify
14 the cause of the February 2018 elevated PM tests. And as I previously explained,
15 taking the generating units offline would also have complicated Talen's effort to
16 identify the cause of the elevated PM test results and may not have reduced the
17 overall cost impact on customers.

18 **Q. Mr. Gomez suggests that seasonal market prices should have been the driving**
19 **factor in determining whether Talen should have taken the units offline.²³ Do**
20 **you agree?**

21 A. No. An outage related to a PM exceedance is not a discretionary outage that may be
22 timed to coincide with low market prices. If Pacific Power had seen or been made

²³ DCG-1CCT at 52.

1 aware of any credible evidence that the official MATS PM was going to fail, it would
2 have advocated to immediately develop a plan, evaluate risks, understand impacts,
3 and prepare to shut the units down depending on outcome of the information
4 gathered. Based on the alternate indicators, additional monitoring, and Talen’s
5 significant operating experience, Talen reasonably concluded that the units would
6 pass the official MATS PM compliance tests in June, and Pacific Power reasonably
7 relied on Talen’s assessment.

8 **IV. PACIFIC POWER’S STATEMENTS DURING DISCOVERY**

9 **Q. Mr. Gomez states that Pacific Power denied knowledge of an investigation into**
10 **the elevated PM levels at Colstrip.²⁴ Is that accurate?**

11 A. No. The response cited by Staff is based on my interpretation of what Staff meant by
12 “investigation,” which I understood to mean the official root cause investigation that
13 commenced only after the PM levels exceeded permit levels in Q2. In the same
14 paragraph as the statement in question quoted by Staff, Pacific Power discusses the
15 additional monitoring that took place in Q1.²⁵ Although additional monitoring is
16 sometimes used interchangeably with the term “investigation,” in this response, I was
17 distinguishing between: (1) the additional monitoring and trouble-shooting efforts
18 that took place in Q1 due to the “rise in particulate matter levels” that still met
19 compliance requirements, from (2) the official investigation—the RCA—that took
20 place after particulate matter levels exceeded compliance requirements in Q2.

21 The intent of the original data response was to clarify that the official MATS
22 PM results (although elevated) were within compliance and did not require an official

²⁴ Gomez, Exh. DCG-1CCT at 27.

²⁵ *Id.*

1 investigation. Therefore, additional monitoring (increased attention) and internal
2 evaluation of that data took place, rather than a formal root cause *investigation*.
3 Pacific Power was aware of and engaged with multiple efforts Talen was undertaking
4 as a result of the rise in particulate matter readings.

5 **V. THE MDEQ CONSENT DECREE AND PENALTY ASSESSMENT**

6 [REDACTED]
7 [REDACTED]
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10 [REDACTED]
11 [REDACTED]
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16 [REDACTED]
17 [REDACTED]
18 [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]

²⁶ Gomez, Exh. DCG-1CCT at 13; Allison, Exh. AA-1CCT at 10.
²⁷ DCG-1CCT at 13; AA-1CT at 10.

1 [REDACTED]

2 [REDACTED]

3 [REDACTED]

4 [REDACTED]

5 [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 **Q. How do the determinations in the final and more accurate version of the MDEQ**
11 **Penalty Assessment [REDACTED]?**

12 **A. [REDACTED]**

13 [REDACTED]

14 [REDACTED] Together, these documents represent the
15 most accurate and reliable factual record of the incident. [REDACTED]

16 [REDACTED]

²⁸ AA-1CT at 10; DCG-1CCT at 13.

²⁹ DCG-1CCT at 13 n.42; AA-1CT at 10 (“It appears that, in the process of negotiating a final settlement with Talen, MDEQ removed from its final penalty factors description the language explicitly describing the MATS exceedance as ‘foreseeable’”).

1 **Q. Despite the fact that MDEQ’s final report did not describe the outage as**
2 **foreseeable, both Mr. Gomez and Mr. Allison suggest that MDEQ continued to**
3 **treat the violation as foreseeable by applying an 8 percent increase to the base**
4 **penalty.³⁰ Please respond.**

5 A. Mr. Gomez and Mr. Allison misconstrue the significance of the 8 percent penalty
6 factor. MDEQ could have applied a larger penalty based on “circumstances,”
7 including, among other factors, “how much control the source had over the
8 violation[.]”³¹ Instead, in the final penalty calculation, MDEQ imposed a relatively
9 minor 8 percent circumstances penalty—\$680 added to a \$8,500 daily base penalty.
10 MDEQ also recognized that “prior to the second quarter 2018 Talen had no history of
11 noncompliance with the MATS” and “Talen made efforts to understand the PM
12 emission performance once the compliance margin was reduced.”³²

13 VI. CONCLUSION

14 **Q. Please summarize your testimony.**

15 A. Pacific Power exercised reasonable oversight and management of its interest in
16 Colstrip Unit 4 in the events leading up to the forced outage in June 2018. Pacific
17 Power closely monitored Talen’s response to the elevated PM test results, which
18 followed operating best practices including the use of alternate indicators. The RCA
19 demonstrated that the cause of the PM exceedance was complex and multi-factored,
20 making clear that neither Pacific Power as a minority co-owner nor Talen as the plant
21 operator could have reasonably foreseen and prevented the outage.

³⁰ DCG-1CCT at 12; AA-1CT at 10.

³¹ CLT-12 at 2.

³² CLT-12 at 2.

1 **Q. Does this conclude your rebuttal testimony?**

2 **A. Yes.**