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,	Docket UE-190882
Regarding the Prudency of Outage and Replacement Power Costs	
In the Matter of	
PACIFIC POWER & LIGHT COMPANY,	Docket UE-190458
2018 Power Cost Adjustment Mechanism	

PACIFIC POWER & LIGHT COMPANY EXHIBIT MDEQ PENALTY ASSESSMENT

December 2019

Department of Environmental Quality - Enforcement Division Penalty Calculation Worksheet

Responsible Party Name:	Talen Energy (Talen)	
FID:		
Statute:	Clean Air Act of Montana (Act)	
Maximum Penalty Authority:		\$10,000.00
Date:	11/19/2019	v
Name of Employee Calculating Penalty:	Chad W. Anderson	

Penalty Calculation #1

Description of Violation:

Talen failed to operate its Colstrip facility in continuous compliance with an applicable emission standard (PM limit), in accordance with Operating Permit #OP0513-14 and 40 CFR Part 63.

I. BASE PENALTY

Nature

Explanation:

Talen exceeded an emission limit in Title V Operating Permit #OP0513-14. The exceedance of an air quality emission limit has the potential to harm human health or the environment.

Potential to Harm Human Health or the Environment	X
Potential to Impact Administration	

Gravity and Extent

Gravity Explanation:

Talen released a substance which poses a potential to harm human health or the environment, which is a criterion for major gravity. While traditional criteria air pollutants warrant regulation due to their potential to harm, Hazardous Air Pollutants (HAP) are regulated in a separate manner because they cause or may cause cancer and/or other serious health effects. Potential HAP emission levels are considered "major" by regulatory definition at much lower levels than criteria pollutants. 10 tons per year (TPY) of an individual HAP or 25 TPY of all combined HAP triggers major source designation versus 100 TPY of a criteria pollutant for an electrical generating facility such as Talen. Talen experienced an exceedance of a HAP emission limit designed to protect human health which has the potential for serious harm. The gravity of the violation is major.

Extent Explanation:

When determining the extent of a violation, the factors that may be considered include volume, concentration, and toxicity of the regulated substance, as well as the severity and percent of exceedance of a regulatory limit and the duration of the violation. The pollutant limit that was exceeded was for Particulate Matter (PM); however, its origin is from an air toxics standard and PM is a surrogate for non-Hg (Mercury) metals HAP. Therefore, the exceedance is of an air toxics limit. The limit of 0.030 lb/MMBtu was exceeded by 16%-36% for 77 days of noncompliance, with an average exceedance of 32%. Based on the length of noncompliance and percent of exceedance from an air toxics limit, the extent is major.

Harm to Human Health or the Environment

Gravity

Extent	Major	Moderate	Minor		
Major	0.85	0.70	0.55		
Moderate	0.70	0.55	0.40		
Minor	0.55	0.40	0.25	Gravity and Extent Factor:	0

Impact to Administration

Gravity

-1	Major	Moderate	Minor		
	0.50	0.40	0.30	Gravity Factor:	0.00

BASE PENALTY (Maximum Penalty Authority x Gravity Factor):

\$8,500.00

II. ADJUSTED BASE PENALTY

A. Circumstances (up to 30% added to Base Penalty)

Explanation:

When determining the circumstances of the violation, consideration must be given to how much control the source had over the violation, the foreseeability of the violation, whether the source took reasonable precautions to prevent the violation, and whether the source knew or should have known of the requirement that was violated. While the individual unit emission rates have experienced increases and decreases over the years, the weighted average PM emission rate had a slight upward trend, indicating a shrinking compliance margin over time. The PM test from the first quarter 2018 showed a decrease in PM emissions for Unit 1; however, Units 2, 3 and 4 all showed increases in PM emissions to their highest reported weighted average since MATS took effect in 2016. The results yielded a weighted average emission rate equal to the permit limit of 0.030 lb/MMBtu, prompting Talen to investigate possible reasons for the elevated PM emissions. Talen reviewed indicators in the CAM plan, reviewed operations and maintenance, scrubber plumb bob dP, opacity and PM CEMS data and found no indicators of abnormal operations and no causes of higher PM emissions. The second quarter MATS compliance test indicated the average PM emission rate for Unit 4 was 0.051 lb/MMBtu, which was above the 0.05 lb/MMBtu PM limit in condition III.C.2 of Talen's Operating Permit for Unit 4. There are circumstances that warrant an increase in the base penalty; however, prior to the second quarter 2018 Talen had no history of noncompliance with the MATS. Talen made efforts to understand the PM emission performance once the compliance margin was reduced. The Department has determined that an increase in the base penalty of 8% is appropriate for circumstances.

Circumstances Percent:

0.08

Circumstances Adjustment (Base Penalty x Circumstances Percent)

\$680.00

B. Good Faith and Cooperation (up to 10% subtracted from Base Penalty)

Explanation:

When considering a source's good faith and cooperation, the Department considers the promptness in reporting and correcting the violation, how quickly the impacts of the violation are mitigated, the extent of the source's voluntary and full disclosure of the facts related to the violation, and the extent of the source's assistance in the Department's investigation and analysis of the violation. Talen reported the violation in a prompt manner via telephone on June 28, 2018 and provided a written notification on July 27, 2018, as required by its Title V Operating Permit #OP0513-14 Section V.E. Talen promptly and voluntarily ceased operation of Units 3 and 4 after discovery of the violation. In an effort to minimize emissions and their impacts as the cause of the deviation was investigated, Talen only operated Units 3 and 4 as needed for diagnosis and evaluation. The Department issued an information request to Talen on August 31, 2018 regarding the MATS noncompliance. Talen provided the requested information by the deadline on September 17, 2018. The information indicated that Talen treated the violation as a high priority and employed significant outside resources in addition to its own work on solving the issue. The actions and information provided by Talen communicate a timely and high-quality investigation into the issue. Actual fuel combustion data for all 4 units show that after Units 3 and 4 were brought offline, they operated sporadically for several weeks following the failed test. This is consistent with Talen's statement that it would bring units online for evaluation but otherwise not operate them. The Department considers Talen's actions following the discovery of the violation to be consistent with the elements of good faith and cooperation. Therefore, a decrease of 10% in the base penalty is appropriate.

Good Faith & Coop. Percent:

0.10

Good Faith & Coop Adjustment (Base Penalty x G F & Coop. Percent)

\$850.00

C. Amounts Voluntarily Expended (AVE) (up to 10% subtracted from Base Penalty)

Explanation:

Talen reportedly spent over \$2.9 million dollars on outside resources investigating and correcting potential causes of the PM exceedance. The information supplied indicated that it employed multiple outside resources in the form of equipment and process consultants and emissions testers. Talen also installed additional hardware in the scrubbers to improve PM control performance. Talen treated the noncompliance with a high priority and undertook significant expense to research and address the issue. Therefore, a base adjustment decrease of 10% is appropriate.

	AVE Percent:	0.10
Amounts Voluntarily Expended Adjustmer	it (Base Penalty x AVE Percent)	\$850.00

ADJUSTED BASE PENALTY SUMMARY

Base Penalty	\$8,500.00
Circumstances	\$680.00
Good Faith & Cooperation	-\$850.00
Amt. Voluntarily Expended	-\$850.00
ADJUSTED BASE PENALTY	\$7,480.00
Maximum penalty authority	\$10,000.00

III. DAYS OF VIOLATION

Explanation:

Talen exceeded the PM emission limit from June 21, 2018 through September 5, 2018, for a total of 77 consecutive days. The Department considered that Talen voluntarily shut down Units 3 and 4 when a violation of the MATS PM limit was discovered, and only operated the units as necessary to undertake testing, gather data, perform diagnostics, and evaluate potential corrective actions to return the units to compliance. Although the Department maintains that the days of violation of the site-wide average limit lasted for 77 days, Units 3 and 4 week shut down for 15 of those days. During an additional 26 of the 77 days only one of Units 3 and 4 operated. Therefore, a base penalty adjustment decrease of 50% for 15 days (\$4250 x 15 = \$63,750) and a base penalty adjustment decrease of 25% for 26 days (\$6375 x 26 = \$165,750) is appropriate. The remaining 36 days of violation are calculated at the adjusted base penalty (\$7480 x 36 = \$269,280).

Number of Days: 77

ADJUSTED BASE PENALTY x NUMBER OF DAYS:

\$498,780.00

IV. OTHER MATTERS AS JUSTICE MAY REQUIRE

Explanation:

As indicated in **Section I. Base Penalty**, the Department calculated the adjusted base penalty to be \$7,480 based on the nature, gravity and extent, and circumstances of the violation as well as the good faith and cooperation and amounts voluntarily expended by Talen.

Under ARM 17.4.305, the Department has the discretion to consider each day of violation as a separate violation subject to penalties. The Department is further granted the discretion to multiply the adjusted base penalty by the number of days of violation to obtain a total adjusted penalty. Finally, if multiplication of the days of violation with the adjusted base penalty results in a penalty that is higher than the Department believes is necessary to provide an adequate deterrent, the Department may reduce the number of days of violation. Pursuant to ARM 17.4.305, the Department determined that Talen exceeded the PM emission test from June 21, 2018 through September 5, 2018 for a total of 77 days. The Department multiplied the adjusted base penalty (\$7,480) with the maximum days of number of days of violation (77) to calculate a penalty of \$498,780. (See Section III. Days of Violation).

The Department believes, however, that a penalty in the amount of \$446,000, which includes costs of implementing Supplemental Environmental Projects (SEPs) to reduce particulate matter emissions in two local communities, and the \$2.9 million Talen has expended to investigate and correct the violation, provide an adequate deterrent. While the Department has the authority to make this adjustment by reducing the number of days of violation, the Department believes it is also appropriate to make an adjustment under "Other Matters as Justice May Require" based on the sufficiency of the penalty to provide a deterrent effect. Therefore, the Department is decreasing the calculated penalty of \$498,780 to the final assessed penalty of \$446,000.

OTHER MATTERS AS JUSTICE MAY REQUIRE TOTAL:

\$446,000.00

V. ECONOMIC BENEFIT

Explanation:

Talen ceased normal operation of the affected units during a time when power output was in high demand. Talen stated in the July 27, 2018, Prompt Deviation Report that Units 3 and 4 would remain offline and only be brought online for evaluation. Units 3 and 4 heat input data for the 77 day period of noncompliance indicate numerous instances of short-term operation followed by shutdown, which is consistent with Talen's proposed operation while investigating the cause of elevated emissions. This resulted in lost potential revenue which could have been realized had Talen operated these units normally during the period of violation. Talen also expended money and resources to investigate and correct the noncompliance during this time. The operation of the facility and application of resources during the period of violation do not reflect an intent to gain economic benefit from the noncompliance. The Department does not consider an increase to the base penalty from economic benefit to be warranted.

ECONOMIC BENEFIT REALIZED:

\$0.00

Department of Environmental Quality - Enforcement Division Penalty Calculation Worksheet

Responsible Party Name:	Talen Energy (Talen)	
FID:		
Statute:	Clean Air Act of Montana (Act)	
Maximum Penalty Authority:		\$10,000.00
Date:	11/19/2019	
Name of Employee Calculating Penalty:	Chad W. Anderson	

Penalty Calculation #2		
Description of Violation:		
	l, accurate certification on July 31, 2018 in violation of ARM 17.8.1207 and its	
「alen failed to submit a signed 「itle V operating permit.	l, accurate certification on July 31, 2018 in violation of ARM 17.8.1207 and it	

I. BASE PENALTY

Nature

Explanation:	
Talen failed to appropriately certify its MATS semiannual report for the period of Janu 2018. This is violation is classified as Administrative.	ary 1, 2018 to June 30,
Potential to Harm Human Health or the Environment	
Potential to Impact Administration	Х

Gravity and Extent

Gravity Explanation:

The certification required by ARM 17.8.1207 must be based on information and belief formed after reasonable inquiry, and the statement and information in the document must be true, accurate and complete. The semiannual MATS compliance report that Talen submitted July 31, 2018, which covered the period from January 1, 2018 to June 30, 2018, did not include the required signature by a responsible official on the certification statement. Talen provided a signed certification statement for this report on August 1, 2018. This certification statement identified that Talen had demonstrated continous compliance with all applicable emission limits during the report period. However, Talen was not in compliance with the non-mercury metals emission standard throughout the entire report period. Failing to properly certify is classified as moderate gravity because Talen did not specifically identify noncompliance with PM as a surrogate for non-mercury metals limitation. This could have an adverse impact on the Department's implementation of its programs.

Extent Explanation:

Not applicable for Administrative violations.

Harm to Human Health or the Environment

 Gravity

 Extent
 Major
 Moderate
 Minor

 Major
 0.85
 0.70
 0.55

 Moderate
 0.70
 0.55
 0.40

 Minor
 0.55
 0.40
 0.25

	0.85	0.70	0.55		
)	0.70	0.55	0.40		
	0.55	0.40	0.25	Gravity and Extent Factor:	0.00

Impact to Administration

Gravity

ſ	Major	Moderate	Minor		
	0.50	0.40	0.30	Gravity Factor:	0.40

BASE PENALTY (Maximum Penalty Authority x Gravity Factor):

\$4,000.00

II. ADJUSTED BASE PENALTY

A. Circumstances (up to 30% added to Base Penalty)

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The report included documentation and disclosure of the noncompliance. While the report included the correct documentation, the certification is an important element of the source's culpability in demonstrating compliance with regulations.

Circumstances Percent: 0.00

Circumstances Adjustment (Base Penalty x Circumstances Percent)

\$0.00

B. Good Faith and Cooperation (up to 10% subtracted from Base Penalty)

Explanation:

In addition to the discussion of noncompliance in the report, Talen verbally communicated that there was noncompliance during the report period and that the certification was incorrect. Talen provided a corrected certification on August 27, 2018.

Good Faith & Coop. Percent: 0.00

Good Faith & Coop Adjustment (Base Penalty x G F & Coop. Percent)

\$0.00

C. Amounts Voluntarily Expended (AVE) (up to 10% subtracted from Base Penalty)

Explanation:

The Department is unaware of any amounts that Talen voluntarily expended to mitigate the violation or its impact beyond what was required to return to compliance. Therefore, no reduction is being allowed.

AVE Percent: 0.00

Amounts Voluntarily Expended Adjustment (Base Penalty x AVE Percent)

\$0.00

ADJUSTED BASE PENALTY SUMMARY

Base Penalty	\$4,000.00
Circumstances	\$0.00
Good Faith & Cooperation	\$0.00
Amt. Voluntarily Expended	\$0.00
ADJUSTED BASE PENALTY	\$4,000.00
Maximum penalty authority	\$10,000,00

III. DAYS OF VIOLATION

Explanation:

The semiannual report was provided on July 31, 2018 without a required signature by a responsible official on the certification statement. A signed certification statement was provided on August 1, 2018, but incorrectly certified continuous compliance with all the applicable emission limits during the report period. On August 27, 2018, Talen provided the Department a revised, signed certification statement for the semiannual MATS compliance report. By failing to submit a signed, accurate certification on July 31, 2018, Talen violated ARM 17.8.1207 and ARM 17.8.1213(7)(a)(c)(d) for one day.

Number of Days:

\$4,000.00

ADJUSTED BASE PENALTY x NUMBER OF DAYS:

IV. OTHER MATTERS AS JUSTICE MAY REQUIRE	
Explanation:	
None	
OTHER MATTERS AS JUSTICE MAY REQUIRE TOTAL:	\$0.00
V. ECONOMIC BENEFIT	
Explanation:	
The associated report documented and disclosed the noncompliance. Therefore, there was no economic benefit to the assertion of compliance.	
ECONOMIC BENEFIT REALIZED:	\$0.00

Department of Environmental Quality - Enforcement Division Penalty Calculation Summary

Responsible Party Name:	Talen Energy (Talen)		
FID:			
Statute:	Clean Air Act of Montana (Act)		
Maximum Penalty Authority:	\$10,000.00		
Date:	November 19, 2019		
Signature of Employee Calculating Penalty:	a bot		

	Penalty #1	Penalty #2					
I. Base Penalty (Maximum Penalty Authority x Matrix Factor)							
Maximum Penalty Authority: \$10,000.00 \$10,000.00							
Percent Harm - Gravity and Extent:		0.00					
Percent Impact - Gravity:		0.40					
Base Penalty:		\$4,000.00					
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II. Adjusted Base Penalty							
Base Penalty:	\$8,500.00	\$4,000.00					
Circumstances:		\$0.00					
Good Faith and Cooperation:	-\$850.00	\$0.00					
Amount Voluntarily Expended:		\$0.00					
Adjusted Base Penalty:	\$7,480.00	\$4,000.00					
Maximum Per Violation:	\$10,000.00	\$10,000.00					
III. Days of Violation or							
Number of Occurrences	77	1					
Total Adjusted Penalty:	\$498,780.00	\$4,000.00	\$502,780.00				
IV. Other Matters as Justice							
May Require	\$446,000.00	\$0.00					
V. Economic Benefit	\$0.00	\$0.00					
NO 1111-4-1-4			40.00				
_	¢440,000,00	£4.000.00					
Subtotal(s)	\$446,UUU.UU	\$4,000.00	\$450,000.00				
	\$446,000.00 \$0.00 \$446,000.00	\$0.00 \$0.00 \$4,000.00	\$0.00 \$450,000.00				

Total calculated penalty: \$450,000.00

^{*}Talen does not have a prior history of violations of the Clean Air Act of Montana documented in either an administrative order, judicial order, or judgment within the last three years.