2. TEST CAMPAIGN SUMMARY

The MRY Units 1 and 2 test campaign was completed in phases to control testing variables and to accommodate vendor availability, and scheduled outages. Testing included:

- November 23, 2023 to November 24, 2023: Maximizing MRY Unit 1 capabilities of the existing M-Prove fuel additive system and non-halogenated PAC injection (at 100% feeder rate) to evaluate if the current system can meet 1.2 lb/TBtu.

- December 19, 2023 to December 20, 2023: Maximizing MRY Unit 2 capabilities of the existing M-Prove fuel additive system and non-halogenated PAC injection (at 100% feeder rate) to evaluate if the current system can meet 1.2 lb/TBtu.

- March 19, 2024 to March 23, 2024: Utilizing a rental bulk bag unloading (BBU) system provided by Motus Group tied into the existing MRY Unit 1 PAC conveying lines and injection lances to inject brominated PAC (or BPAC), ARQ's FastPAC Platinum®, at varied injection rates ranging from 100 lb/hr (or 1.23 lb/MMacf) to a maximum of 185 lb/hr (2.28 lb/MMacf) to stay below the transport piping pluggage limit. The majority of this testing also included maximizing MRY Unit 1 capabilities of the existing M-Prove fuel additive system; however, test runs on March 22 and March 23 included BPAC injection with no fuel additive usage. Individual coal samples were taken and analyzed by a 3^{d} party lab for determination of inlet Hg coal content.

- March 28, 2024 to April 1, 2024: Individual coal samples were taken and analyzed by a 3^{d} party lab for determination of inlet Hg coal content.

This testing was not able to be completed during the proposed rule's short comment periodof only 60 days. Due to timing of boiler cleaning outages, time required to develop a test protocol and schedule, and coordination with multiple vendors, rental equipment availability, various site activities, and unplanned unit upsets/outages, a much longer duration was needed.

2.1. INCREMENTAL HG REMOVAL TEST RESULTS

The Hg emissions achievable based on maximizing current design capabilities using non-brominated PAC and M-Prove without any modifications is summarized below for both MRY Units 1 and 2.

Table 2-1 — MRY Units 1 and 2 Existing System Capabilities

Parameter	Units	MRY Unit 1 18 ppm M-Prove and 100% Non-brominated PAC	MRY Unit 2 18 ppm M-Prove and 100% Non-brominated PAC
Unit Load during testing	MWg	242	469
PAC Injection Rate	lb/MMacf	1.06	1.12
Avg. Sorbent Trap Hg Emissions	lb/TBtu	2.17	1.61

Based on maximizing injection capabilities of the existing systems (without any modifications), the test results show that MRY Unit 1 and MRY Unit 2 cannot achieve the proposed MATS limit of 1.2 lb/TBtu.