

June 12, 2023

Ms. Iris Griffin Vice President, Power Generation Dominion Energy Services, Inc. 120 Tredegar Street Richmond, Virginia 23219

Dear Ms. Griffin:

This is in response to your letter dated April 20, 2023, which requests to shorten the annual testing separation period for Title 40, Code of Federal Regulation (C.F.R.), Part 63, Subpart UUUUU— National Emission Standards for Hazardous Air Pollutants (NESHAP): Coal- and Oil-Fired Electric Utility Steam Generating Units, as it applies to a coal-fired utility boiler (UB1) operated by Dominion Energy South Carolina (DESC) at its Cope Power Station (Cope) in Cope, South Carolina. Based on our review of your information and circumstances, your request is approved. Details regarding the basis for our determination are provided in the remainder of this letter.

UB1 is a four-billion British Thermal Unit per hour (BTU/hr) boiler installed in 1993 and modified in 2018. It can combust multiple fuels, alone or in combination: (1) coal, (2) synthetic fuels, (3) No. 2 fuel oil, (4) on-spec used oil, and (5) natural gas. UB1's emissions controls include tiltable low NOx burners, overfire air, and selective catalytic reduction for control of NOx emissions, a fabric filter baghouse for control of particulate matter (PM), PM10 (\leq 10 microns in diameter), PM2.5 (\leq microns in diameter), and mercury (Hg) emissions, and two dry-scrubber flue gas desulfurizing reactors for control of sulfur oxide and Hg emissions. Natural gas serves as the primary fuel for UB1, but due to its combustion of bituminous coal, the unit is categorized as "*an existing electric generating unit (EGU), coal-fired unit not low rank virgin coal*" for the purposes of Subpart UUUUU.

Cope demonstrates compliance with the Hg heat-input-based emission limit of 1.2 pounds Hg per trillion BTU (lb/TBtu) contained in Table 2 to Subpart UUUUU. UB1 initially qualified as a low emitting electric (LEE) utility steam electric generating unit (EGU) for Hg in accordance with 40 C.F.R. \S 63.10005(h)(1)(ii) by completing the initial performance testing. The initial test results resulted in average emissions of Hg of less than 10 percent of the applicable emissions limit or with potential mass emissions of no more than 29.0 lb/year. Subsequent annual performance testing for Hg is required to maintain LEE status and ongoing compliance is demonstrated by the conduct of performance testing at UB1 at least once every 12 calendar months in accordance with \S 63.10000(c)(1)(ii) with testing separated by at least 320 calendar days from the end date of the previous test in accordance with 40 C.F.R. \S 63.10006(f)(1)(ii)(B).

The most recent annual Hg LEE performance test was completed on December 29, 2022, and the next annual Hg LEE test could begin no earlier than November 14, 2023, by Subpart UUUUU. However, according to your letter, the timing is challenging and could jeopardize reliability during the winter

months. Specifically, your letter indicated that Cope routinely undergoes maintenance outages in the fourth quarter of the calendar year to ensure reliability for the upcoming winter peak demand season and any delay in the unit returning to service could impede completion of the performance test by the required deadline (*e.g.*, the end of December 2023). Additional operational concerns which could impact UB1 during this period are the ability of DESC to obtain coal to replace the coal burned during the required 30-day testing period, and the need to maintain a reliable coal inventory during the winter months when natural gas is likely unavailable. Therefore, DESC is requesting to move forward the start date of the 2023 test to the second or third quarter, in lieu of the fourth quarter. Conducting the testing period in the second or third quarter when both coal and natural gas are available is consistent with a normal operation scenario. Based on this information, DESC is seeking approval to test earlier than 320 calendar days from the previous test to re-establish a more convenient date for the annual testing requirement.

Under 40 C.F.R. § 63.10000(c)(1), for coal-fired units, IGCC units, and solid oil-derived fuel-fired units, initial performance testing is required for all pollutants to demonstrate compliance with the applicable emission limits. Under 40 C.F.R. § 63.10000(c)(1)(i), for a coal-fired or solid oil-derived fuel-fired EGU or IGCC EGU, you may conduct initial performance testing in accordance with 40 C.F.R § 63.10005(h), to determine whether the EGU qualifies as a LEE EGU for one or more applicable emission limits, except as otherwise provided in paragraphs (c)(1)(i)(A) and (B) of § 63.10005. Under 40 C.F.R. § 63.10000(c)(1)(ii), for a qualifying LEE EGU for Hg emissions limits, you must conduct a 30-day performance test using Method 30B at least once every 12 calendar months to demonstrate continued LEE status.

Under 40 C.F.R. § 63.10005(h)(1)(ii), for low Hg emitting EGUs, testing (initial and subsequent annual) must either result in average emissions less than 10 percent of the applicable Hg emissions limit in Table 2 to Subpart UUUUU (expressed either in units of lb/TBtu or lb/Giga-watt-hours (GWh)) or result in a potential Hg mass emissions of 29.0 or fewer pounds per year and compliance with the applicable Hg emission limit in Table 2 to Subpart UUUUU (expressed either in units of lb/TBtu or lb/GWh)). Under 40 C.F.R. § 63.10000(c)(1)(ii), for qualifying LEE EGUs for Hg emissions limits, you must conduct a 30-day performance test using Method 30B at least once every 12 calendar months to demonstrate continued LEE status.

Under 40 C.F.R. § 63.10006(f)(1)(ii)(B), at least 320 calendar days (as measured from the test's end date) must separate annual sorbent trap mercury testing for 30-boiler operating day LEE tests. Under 40 C.F.R. § 63.10006(f)(3)(ii), if your EGU misses a performance test deadline due to being inoperative and if 168 or more boiler operating hours occur in the next test period, you must complete an additional performance test in that period whereas at least 107 calendar days must separate two performance tests conducted in the same calendar year.

Under 40 C.F.R. § 63.10011(d), for candidate LEE units, you must use the results of the performance testing, described in 40 C.F.R. § 63.10005(h), to determine initial compliance with the applicable emission limit(s) in Table 1 or 2 to Subpart UUUUU to determine whether the unit qualifies for LEE status.

Under 40 C.F.R. § 63.10007(b), you must conduct each performance test (including traditional 3-run stack tests, 30-boiler operating day tests based on CEMS data (or sorbent trap monitoring system data), and 30-boiler operating day Hg emission tests for LEE qualification) according to the requirements in Table 5 to Subpart UUUUU.

Your request for a one-time approval of a shorter annual Hg LEE testing separation period was submitted to the U.S. Environmental Protection Agency (EPA) because of potential unit availability concerns you anticipate if testing is conducted during UB1's fourth-quarter maintenance outages. You also cite issues related to the upkeep-maintenance of a reliable coal inventory during the fourth quarter of the year and note that moving the testing period to the second or third quarter of the year aligns with normal operation of the unit with either coal or natural gas fuel available. Based on this information, DESC is seeking a one-time approval to test earlier than 320 calendar days from the previous test to re-establish a more convenient annual testing date for the annual testing requirement.

Based upon our review, the EPA approves your one-time request to test earlier than 320 calendar days from the end date of the previous test to establish an annual testing date that aligns with the needs related to outage scheduling for the unit. Upon finalization of the testing date in the second or third quarter of 2023, the EPA expects Cope to comply with 40 C.F.R. 63.10006(f)(1)(ii)(B) thereafter barring allowable exceptions by the rule.

This AMP approval was coordinated with the EPA's Office of Enforcement and Compliance Assurance and Office of Air Quality Planning and Standards. If there any questions concerning this response, please contact Tracy Watson of my staff at (404) 562-8998 or <u>watson.marion@epa.gov</u>.

Sincerely,



Caroline Y. Freeman Director Air and Radiation Division

cc: Denise Hall, SC DHEC Melanie King, EPA OAQPS Robert Scinta, EPA OECA