Asheville-Buncombe Air Quality Agency

Memo

To: Air Quality Board

From: James Raiford, Alex Latta

CC: Ashley Featherstone

Date: November 13, 2025

Re: Permit Amendment for Duke Energy Progress, LLC

In a letter dated December 2, 2024, Duke Energy Progress, LLC proposed emission factors to be revalidated for their Plantwide Applicability Limits (PAL) as required by Permit Condition 2.6.A(2)(b) of Permit No. 11-628-22B. This condition states that the permittee shall revalidate the emission factors for PM and PM-10 emissions through performance testing or other scientifically valid means once every five years after the issuance of the PAL Permit (Permit No. 11-628-16B issued May 18, 2020).

Asheville-Buncombe Air Quality Agency reviewed the proposed emission factors submitted for revalidation and responded on December 18, 2024 (see letter for additional information). The Agency followed the guidance for revalidation set forth by the United States Environmental Protection Agency's (EPA) memorandum issued on August 4, 2020 by Anne L. Austin.

For Units 5 and 7 when burning natural gas, the facility submitted the same emission factors that were originally part of the PAL permit and were based on vendor specifications. The Agency did not believe that the proposed factors for Units 5 and 7 met the definition of contemporaneous, and we requested that a performance test be conducted to revalidate the emission factor for combusting natural gas in Units 5 and 7.

For Units 5 and 7 when burning oil, and for the remaining auxiliary equipment (Auxiliary Boiler, Emergency Generators, Fire Pump Engine, Dew Point Heaters, Cooling Towers, Gas Heaters, Ash Handling and Haul Roads), the Agency accepted the proposed emission factors since they are not significant sources of particulate matter emissions. Units 3 and 4 were recently tested and the emission factors for those units will not change.

The facility submitted the required notification to conduct testing on January 29, 2025. On February 27, 2025, Duke Energy Progress, LLC performed the required five year revalidation

testing which changed the permitted natural gas emission factors for Units 5 & 7 from 6.20 lb/hr to 10.82 lb/hr. This permit amendment changes this emission factor in the table found in condition 2.6.A(3)(a), which is used to calculate emissions for comparison with the PAL emissions limit. The facility submitted a complete application to change these emission factors on April 22, 2025, and included the required administrative amendment permit fee.

Conclusions, Comments, and Recommendations.

I recommend that the Board approve the permit amendment to update the emission factor for the PAL limit.

Signature: James C. Raiford **Date**: 11/13/2025

Director Signature: Ashley J Featherstone **Date:** 11/13/2025