

April 7, 2014

Ms. Jennifer W Hatfield
Title IV Designated Representative
Indianapolis Power & Light Company
3700 South Harding Street
Indianapolis, IN 46217-3333

Re: Petition for Units 50 and 60 at the Harding Street Generating Station (Facility ID (ORISPL) 990) for a Waiver of the Requirement to Submit Operating Data to Qualify as “Gas-Fired” Under 40 CFR 72.2

Dear Ms. Hatfield:

The United States Environmental Protection Agency (EPA) has reviewed the September 13, 2013 petition submitted under 40 CFR 75.66 by Indianapolis Power & Light Company (IPL) requesting a waiver for Units 50 and 60 at Harding Street Generating Station (Harding Street) of the requirement to submit operating data in order to qualify as “gas-fired” units under 40 CFR 72.2. EPA approves the petition, with conditions, as discussed below.

Background

IPL owns and operates the Harding Street Generating Station, which is located in Indianapolis, Indiana. Harding Street Units 50 and 60 have historically been operated as coal-fired boilers. Each unit has a design heat input capacity of 1017 million Btu per hour (mmBtu/hr) and serves a generator with a nameplate capacity of 116 megawatts. These units are subject to the Acid Rain Program, the Clean Air Interstate Rule (CAIR) annual trading program for sulfur dioxide (SO₂), and the CAIR annual and ozone season trading programs for nitrogen oxides (NO_x). IPL is therefore required to continuously monitor and report NO_x, SO₂, and carbon dioxide (CO₂) mass emissions, NO_x emission rate, and heat input for these units in accordance with 40 CFR Part 75. To meet these monitoring requirements, IPL has installed and certified a NO_x-diluent continuous emission monitoring system (CEMS), an SO₂ CEMS, a CO₂ CEMS, and a stack gas flow rate monitor on each unit’s exhaust stack.

In the September 23, 2013 petition, IPL states that it plans to permanently convert Units 50 and 60 from coal-firing units to natural gas-firing units. As part of the conversion, certain equipment required for coal combustion, including the coal feeders and burners, will be removed and replaced with equipment designed for natural gas combustion. In addition, the operating permit for the Harding Street station is being modified to prohibit Units 50 and 60 from combusting fuel other than natural gas. Following the conversion to natural gas combustion, IPL also plans to remove the existing SO₂ and stack gas flow rate monitors and instead meet the units’ SO₂ and heat input monitoring requirements using the monitoring methodology in

Appendix D to Part 75, which relies on measurement of the quantity and quality of fuel combusted.

The Appendix D methodology is available only to units that are “gas-fired” or “oil-fired.” The definition of the term “gas-fired” in 40 CFR 72.2 includes provisions under which a historically coal-fired unit can qualify as “gas fired” based upon the submission of operating data demonstrating that the unit has burned natural gas for a specified minimum percentage of its overall fuel usage for a specified minimum number of hours.¹ IPL would prefer to begin using the Appendix D monitoring methodology at Units 50 and 60 immediately following their conversion to gas combustion, and accordingly has petitioned for the units to be considered as meeting the §72.2 definition of “gas-fired” immediately following their permanent conversion, which would necessitate a waiver of the otherwise applicable requirement to submit the operating data just described.

EPA’s Determination

Absent a waiver from the requirement to submit three calendar years or 720 operating hours of operating data to demonstrate that Harding Street Units 50 and 60 qualify as “gas-fired,” under 40 CFR 75.10(a)(1) IPL would be required to continue monitoring SO₂ emissions and heat input at Units 50 and 60 with stack gas flow rate and SO₂ monitors until such data were provided. However, if EPA were to grant a waiver of the operating data submission requirement and allow the units to be considered as meeting the definition of “gas-fired,” IPL would be able to discontinue using the SO₂ and flow monitors and begin using the Appendix D methodology immediately upon converting the units from coal to natural gas combustion.

According to IPL, the conversion of Units 50 and 60 from coal-firing to natural gas-firing will be permanent. All pulverized coal feeders to the boilers will be removed, and the coal burners will be replaced with gas burners at the same location. Once these changes are made, the units no longer will be capable of combusting coal. Further, IPL has indicated that the Title V operating permit is being modified to reflect the permanent change from coal combustion to natural gas combustion. EPA views these factors as providing sufficient assurance that the conversion of Units 50 and 60 from coal to gas combustion is permanent, fulfilling the purpose of the operating data submission requirement and making that requirement unnecessary in this instance.

In view of these considerations, EPA approves IPL’s petition for a waiver of the requirement to submit three calendar years or 720 hours of unit operating data to demonstrate that Harding Street Units 50 and 60 meet the definition of “gas-fired” under 40 CFR 72.2. These units shall be considered gas-fired for the purposes of the Acid Rain Program and CAIR as soon as they begin to operate after the conversion to natural gas-firing. At that point, IPL may discontinue using the SO₂ and flow rate monitors at Units 50 and 60 and may begin using the provisions of Appendix D to Part 75 to quantify SO₂ mass emissions and heat input.

¹ For a unit combusting only natural gas, the minimum required quantity of operating data would be data for three calendar years or 720 operating hours, whichever is less. 40 CFR 72.2.

As conditions of this approval, IPL shall:

1. Make all necessary revisions to the electronic monitoring plans for Harding Street Units 50 and 60 to represent the change from coal-firing to natural gas-firing. The monitoring plan revisions include, but are not limited to, assigning appropriate closeout dates, activation dates and codes for fuel type, monitoring systems, monitoring methodologies, emissions and heat input rate formulas, and monitoring system span and range values;
2. Ensure that the natural gas flowmeters are certified according to section 2.1.5 of Appendix D to Part 75 prior to the initial operation of Units 50 and 60 following the conversion to gas-firing and that the data acquisition and handling system is properly programmed for the Appendix D methodology; and
3. Begin using Equation G-4 in Appendix G to Part 75 to quantify the hourly CO₂ mass emission rate (tons/hr), starting with the first hour of operation of Units 50 and 60 after the conversion to gas-firing.

EPA's determination relies on the accuracy and completeness of IPL's September 13, 2013 petition and is appealable under 40 CFR Part 78. If you have any questions regarding this determination, please contact Louis Nichols at (202) 343-9008. Thank you for your continued cooperation.

Sincerely,

/s/

Reid P. Harvey, Director
Clean Air Markets Division

cc: Loretta Lehrman, EPA Region V
Dave Cline, IDEM
Louis Nichols, EPA, CAMD