



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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

OFFICE OF
AIR AND RADIATION

Re: Petition for Unit 70 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 25, 2015 petition submitted under 40 CFR 75.66 by Indianapolis Power & Light Company (IPL), together with supplemental information,¹ requesting a waiver for Unit 70 at the Harding Street Generating Station (Harding Street) of the requirement to submit operating data in order to qualify as a "gas-fired" unit 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 Unit 70 has historically been operated as a coal-fired boiler. The unit has a design heat input capacity of 4346 million Btu per hour and serves a generator with a nameplate capacity of 471 megawatts. This unit is subject to the Acid Rain Program, the Cross-State Air Pollution Rule (CSAPR) annual trading program for sulfur dioxide (SO₂), and the CSAPR 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 this unit in accordance with 40 CFR part 75. Part 75 also requires IPL to continuously monitor opacity and to report exceedances to the Indiana Department of Environmental Management. 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, a stack gas flow rate CEMS, and a continuous opacity monitoring system (COMS) on the unit's exhaust stack.

In the September 25, 2015 petition, IPL states that it plans to permanently convert Unit 70 from a coal-firing unit to a natural gas-firing unit. As part of the conversion, certain equipment required for coal combustion, including the pulverized coal piping and coal burners, will be

¹ In an email message sent on December 15, 2015, IPL stated that Harding Street Unit 70 would combust only natural gas following the physical modifications described in the September 25 petition.

removed and replaced with equipment designed for natural gas combustion. The operating permit for the Harding Street station has been modified to prohibit Unit 70 from combusting coal following the conversion and to designate natural gas as the primary fuel, and IPL has further represented to EPA that natural gas will be the only fuel combusted. 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 part 75 monitoring options that do not require this equipment.

Under part 75, units that meet the definition of "gas-fired" units in 40 CFR 72.2 have monitoring options that are not available to coal-fired units, including the option to quantify the units' SO₂ mass emissions and heat input rate using the methodology in appendix D to part 75, which relies on measurements of the quantity and quality of fuel combusted, as an alternative to using SO₂ and stack gas flow rate CEMS. Gas-fired units also have options for quantifying CO₂ mass emissions under appendix G to part 75 that are not available to coal-fired units. In addition, part 75 does not require opacity monitoring for gas-fired units.

IPL's petition requests a waiver of an otherwise applicable condition for Harding Street Unit 70 to be considered a "gas-fired" unit for purposes of 40 CFR part 75 following the conversion to natural gas combustion. The definition of the term "gas-fired" in 40 CFR 72.2 includes provisions under which a unit that previously has not qualified as gas-fired can qualify as gas-fired based upon the submission of operating data for three calendar years or 720 operating hours, whichever is less, demonstrating that the unit has combusted natural gas for specified minimum percentages of its overall fuel usage and has combusted only fuel oil for its remaining fuel usage. In the petition, IPL requests that Unit 70 be considered a gas-fired unit for purposes of part 75 without the submission of such operating data.

EPA's Determination

Absent the waiver requested in IPL's petition, following the conversion of Harding Street Unit 70 to natural gas combustion IPL would be required to submit three calendar years or 720 operating hours of operating data for the units in order to demonstrate that the unit qualifies as gas-fired under 40 CFR 72.2. The purpose of this data submission requirement is to provide assurance that the conversion is permanent. As described above, in the petition IPL has provided other information intended to demonstrate the permanence of the conversion. Specifically, the unit will have undergone physical modifications that will render it incapable of combusting coal and the Title V operating permit has been modified to prohibit combustion of coal following the conversion. IPL has further represented to EPA that the unit will burn only natural gas after the conversion. EPA views these factors as providing sufficient assurance that the conversion of Unit 70 from coal to gas combustion will be 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 Unit 70 meets the definition of "gas-fired" under 40 CFR 72.2. This unit shall be considered gas-fired for the purposes of 40 CFR part 75, the Acid Rain Program, and CSAPR as soon as it begins to operate after the conversion to natural gas-firing, subject to continuing qualification as provided in paragraph (4) of the definition of "gas-fired". EPA notes that this 2

approval by itself does not alter any requirement to operate and maintain a CEMS or a COMS that may arise under legal authority other than 40 CFR part 75, such as the facility's Title V operating permit, a state regulation, or a consent decree.

As conditions of this approval to be considered a gas-fired unit for purposes of 40 CFR part 75, the Acid Rain Program, and CSAPR without the submission of operating data that would otherwise be required, IPL shall:

1. Make all necessary revisions to the electronic monitoring plan for Harding Street Unit 70 to represent the change from coal combustion to natural gas combustion and any changes in monitoring methodology. 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. The monitoring plan shall include the information required to be reported under 40 CFR 75.53(h)(5) for qualification as a gas-fired unit, provided that IPL may report projected fuel usage data in lieu of actual fuel usage data for periods before the change from coal combustion to natural gas combustion;
2. Ensure that the natural gas flowmeters are certified according to section 2.1.5 of appendix D to part 75; and
3. Ensure that the data acquisition and handling system is properly programmed to use the appendix D methodology for quantifying SO₂ mass emissions and heat input rate and Equation G-4 for quantifying CO₂ mass emissions.

EPA's determination relies on the accuracy and completeness of IPL's September 25, 2015 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,



Reid P. Harvey, Director
Clean Air Markets Division

cc: Michael Compher, EPA Region V
Dave Cline, IDEM
Louis Nichols, EPA, CAMD ✓

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