

SUBJECT: Title V Operating Permit Significant Modification
Homer City Generation, LP
Homer City Steam Electric Station
Center Township, Indiana County
TVOP 32-00055

TO: Eric Gustafson
Air Quality Program Manager
Northwest Regional Office

THROUGH: Matthew Williams
Facilities Permitting Chief
Air Quality Program -Northwest Regional Office

Incorporation of the relevant EPA's FIP conditions included in 40 CFR part 52 Section 52.2065 into
Homer City's TV permit and the PA State Implementation Plan (SIP)

DEP issued Homer City Generation Station's most recent case by case RACT II Permit on May 12th of 2022. The case by case RACT II conditions of this permit, 1-4, 7-8, and 10 from section E group BOILERS – RACT II CASE-BY-CASE related to RACT II case by case conditions for Homer City's three main boilers (source IDs 031, 032 and 033) (AKA Units 1, 2, and 3, respectively) were then submitted to EPA as a SIP revision on May 26th of 2022. This SIP action is currently pending EPA approval. EPA proposed a federal implementation plan (FIP) on May 25th of 2022. The FIP was subsequently finalized on August 31st of 2022 and included the conditions summarized below.

- Homer City's Units 1, 2, and 3 shall achieve and maintain a 30-Day Rolling Average NOx Emission Rate to not exceed .096 lb NOx/MMBtu. Units 1, 2 and 3 may average between themselves to achieve this limit.
- Homer City's Unit 1 shall achieve and maintain their Unit-specific Daily NOx Mass Emissions to not exceed 15,649 lb NOx/day.
- Homer City's Unit 2 shall achieve and maintain their Unit-specific Daily NOx Mass Emissions to not exceed 15,649 lb NOx/day.
- Homer City's Unit 3 shall achieve and maintain their Unit-specific Daily NOx Mass Emissions to not exceed 16,727 lb NOx/day.
- In determining the 30-Day Rolling Average NOX Emission Rate for Units 1 and 2, Homer City shall use CEMS in accordance with the procedures of 40 CFR parts 60 and 75, appendix F, Procedure 1.
- For purposes of calculating the Unit-specific Daily NOX Mass Emissions Limits, Conemaugh Generating Station shall use CEMS in accordance with the procedures at 40 CFR part 75.
- Recordkeeping and periodic reporting. (1) The Facility shall electronically submit to EPA a periodic report, within thirty (30) Days after the end of each six-month reporting period (January through June, July through December in each calendar year).
- The report shall include but not be limited to: Facility ID (ORISPL); Facility name; Unit ID; Date; Unit specific total Daily Operating Time (hours); Unit-specific Daily NOX Mass Emissions (lbs);

Unit-specific total Daily Heat Input (MMBtu); Unit-specific Daily NO_x Emission Rate (lb/MMBtu); Facility-wide 30-Day Rolling Average NO_x Emission Rate (lb/MMBtu); Owner; Operator; Representative (Primary); and Representative (Secondary). In addition, the Facility shall maintain the following information for 5 years from the date of creation of the data and make such information available to EPA if requested: Unit-specific hourly heat input, Unit-specific hourly ammonia injection amounts, and Unit-specific hourly NO_x emission rate.

Given that the FIP case-specific emission limits for Homer City have already been approved by the EPA as satisfying the 1997 and 2008 ozone NAAQS, they are more stringent than the presumptive RACT limits the Department initially promulgated for tangentially fired coal boilers of this size under 25 Pa. Code § 129.97(g)(1)(viii), they are roughly equivalent in stringency to the Department's prior case-by-case RACT II determination specifically for these sources, and the analysis conducted under 25 Pa. Code § 129.92(b) supports the conclusion that SCR Optimization constitutes RACT for the utility boilers, I recommend accepting EPA's proposal that the 0.096 lb/MMBtu (30-day rolling avg) and the unit specific (15,649 lb/day, 15, 649 lb/day, and 16,727 lb/day, for Units, 1, 2, and 3, respectively), NO_x emission limits representing SCR Optimization that were promulgated under 40 CFR § 52.2065 also satisfy the RACT II requirements of 25 Pa. Code §§ 129.96 – 129.100. Based on the EPA analysis and Homer City's comments on this analysis, the Department concludes that these emission limits are as stringent as or more stringent and represent RACT as determined by the Department when accounting for year-round operating conditions. The Department believes that the conditions in EPA's FIP, as summarized above, may help to adequately optimize the SCR's operation and therefore should be included in Section E – 'Source Group FIP' of the proposed revised TVOP 32-00055 as well as incorporated into the commonwealth SIP.

Best Available Retrofit Technology – Regional Haze

Section 51.308(f)(2) of the Regional Haze Rule requires State Implementation Plans to include the "enforceable emissions limitations, compliance schedules, and other measures that are necessary to make reasonable progress as determined pursuant to [51.308](f)(2)(i) through (iv)." To satisfy four-factor analysis requirements related to the second implementation period for Regional Haze, Homer City Generating Station is making the shutdown date of Source ID 031 (Boiler 1) and Source ID 032 (Boiler 2) and Source ID 033 (Boiler 3) to occur on or before June 30, 2023, and be federally enforceable and permanent."

The language that is being added to the permit is specific to the Second Implementation Period for Regional Haze aka Four-Factor Analyses.

Administrative Amendment Application

On November 28, 2023, the facility submitted an administrative amendment application requesting the removal of NRG Homer City Services LLC as the operator. The information was removed from the OPERATOR Contact in AIMS and the permit now shows Homer City Generation LP as the owner and operator instead of listing a separate operator as in the case of the previous permit. This change was incorporated into the current permit. The previous modified permit also had a compliance schedule which is no longer relevant since the facility has been shut down since July 1, 2023 which was removed from the current permit.

I recommend the proposed revised TVOP 32-00055 including the following case-by-case requirements for the utility boilers at Homer City's Station located in Center Township, Indiana County, be sent to the EPA, the permittee, and published in the PA Bulletin and a local newspaper in Indiana County in order to solicit further comments. Once comments are received, DEP will modify the permit conditions as appropriate and then submit them to EPA for inclusion in the commonwealth SIP.

cc: File: Keystone LLC, Permits, TVOP, 32-00055
Central Office – AQ Permits
EPA – Region III