STATEMENT OF BASIS

Southern Natural Gas Company, LLC
Selma Compressor Station
Selma, Dallas County, Alabama
Facility No. 104-0021

This draft Title V Major Source Operating Permit (MSOP) 4th renewal is issued under the provisions of ADEM Admin. Code chap. 335-3-16. The above named applicant has requested authorization to perform the work or operate the facility shown on the application and drawings, plans and other documents attached hereto or on file with the Air Division of the Alabama Department of Environmental Management, in accordance with the terms and conditions of this permit. The current MSOP was issued on May 29, 2015, and is scheduled to expire on March 9, 2020. There have been no modifications to or additions of significant emission sources at this facility since the issuance of the 3rd renewal MSOP.

Southern Natural Gas Company, LLC (SNGC) operates a compressor station for the transmission of pipeline natural gas. The significant sources of air pollutants at this facility are two 9,160 hp GE MS-3002G natural gas-fired combustion turbines (Compressor Turbine Nos. 1 and 2) and two 260 hp Kohler 135R ZD, 4-stroke, rich-burn (4SRB) natural gas-fired reciprocating internal combustion engines (RICE) acting as emergency generators (Emergency Generator Nos. 1 and 2). Insignificant emission sources at this station include one storage tank used for new oil (<5,000 gallons), two storage tanks used for used oil (<5,000 gallons each), one pipeline condensate tank (<5,000 gallons), one natural gas-fired fuel gas heater, space heaters, two electric air compressors, and water heaters.

Applicability: Federal Regulations

Title V

This facility is a major source under Title V regulations because the potential emissions for nitrogen oxides (NO_x) exceed the 100 TPY major source threshold. It is not a major source of Hazardous Air Pollutants (HAP) because individual HAP potential emissions are less than 10 TPY, and the total HAP potential emissions are less than 25 TPY.

Prevention of Significant Deterioration (PSD)

This facility is located in an attainment area for all criteria pollutants, and the facility operations are not one of the 28 listed major source categories; therefore, the applicable major source threshold is 250 TPY for criteria pollutants. The facility is a major source under PSD regulations because the facility-wide potential NOx emissions exceed the 250 TPY threshold. The two turbines underwent PSD permitting when brake horsepower was increased in 1996, and each has a Best Available Control Technology (BACT) limit of 53.0 lb/hr for NO_x.

NSPS

Although Compressor Turbine Nos. 1 and 2 were initially installed in 1965, they were modified in 1996 and became subject to 40 CFR Part 60, Subpart GG, Standards of Performance for Stationary Gas Turbines [Adopted by reference in ADEM Admin. Code r. 335-3-10-.02(33)]; therefore, they

have applicable NO_x and sulfur dioxide (SO_2) emission limits. Performance testing has determined that each turbine is able to comply with each applicable NO_x standard. In accordance with 40 CFR §60.334(h)(3), SNGC elects to demonstrate compliance with the SO_2 standard by demonstrating that the only fuel combusted in an affected source would meet the definition of "natural gas" as defined at 40 CFR §60.331(u).

The natural gas-fired emergency stationary RICE at this facility are not subject to 40 CFR Part 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines [Adopted by reference in ADEM Admin. Code r. 335-3-10-.02(88)] based on the date that these engines were manufactured (1995).

The compressors associated with Compressor Turbine Nos. 1 and 2 were installed prior to the August 23, 2011, applicability of 40 CFR Part 60, Subpart OOOO, Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distributions [Adopted by reference in ADEM Admin. Code r. 335-3-10-.02(91)]; therefore, these units are not subject to this subpart.

The Selma Compressor Station is considered a natural gas compressor facility and is potentially subject to 40 CFR Part 60, Subpart OOOOa, Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced After September 18, 2015 [Adopted by reference in ADEM Admin. Code r. 335-3-10-.02(91)(a)]. However, all equipment and processes potentially subject to this regulation were installed and modified prior to the applicability date, therefore, this facility is not subject to this subpart.

NESHAP Part 63

This facility is not a major source for HAP; therefore, the combustion turbines are not affected sources under 40 CFR Part 63, Subpart YYYY, National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines [Adopted by reference in ADEM Admin. Code r. 335-3-11-.06(102)].

The two 260 hp natural gas-fired emergency stationary RICE are existing affected sources under 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (the RICE MACT). As an existing emergency stationary RICE <500 hp located at an area source of HAP emissions, these engines would be subject to the requirements of Table 2d of this subpart which include:

- Change oil and filter every 500 hours of operation or annually, whichever comes first, or utilize and oil analysis program;
- Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
- Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

In addition, these engines would be limited to operating during:

- Emergency situations;

- Maintenance checks and readiness testing, not to exceed 100 hours per year; and

- Non-emergency situations, not to exceed 50 hours per year (those 50 hours are counted towards the 100 hours per year provided for maintenance and testing).

Applicability: State Regulations

Although the turbines and the two emergency stationary RICE at the facility are fuel combustion sources, they are not subject to any particulate matter (as TSP) emission limitation of ADEM Admin. Code chap. 335-3-4 or any sulfur dioxide (SO_2) emission limitation of ADEM Admin. Code chap. 335-3-5 because they do not meet the definition of fuel burning equipment nor is the facility considered one of the process industries, general or specific. The turbines and the emergency stationary RICE would, however, be subject to the visible emissions requirements of ADEM Admin. Code r. 335-3-4-.01(1). Since the turbines and the two emergency stationary RICE would be fired exclusively with natural gas, they would be expected to be able to comply with this standard.

Emission Testing and Monitoring

SNGC would be required to certify on a semiannual basis that only natural gas was burned in the two turbines and the two emergency stationary RICE as a method for monitoring compliance with the visible emission requirements of ADEM Admin. Code r. 335-3-4-.01(1) since opacity would be expected to be negligible while combusting natural gas.

Proposed monitoring for the two turbines would be emissions testing for NOx once per peak season (October – March) and once per off-peak season (April – September). However, if the operating time for a turbine during the off-peak season does not exceed 250 hours, then emission testing would not be required for that turbine during that season. The first emission testing conducted following the effective date of this renewal permit shall be conducted using an appropriate EPA Reference Method. Emission testing for the remainder of the permit term may be conducted using either an appropriate EPA Reference Method or an alternate method approved in advance by the Air Division.

To monitor compliance with the SO_2 standard of 40 CFR Part 60, Subpart GG, SNGC shall monitor compliance with the applicable SO_2 standard in accordance with at least one of the options specified in 40 CFR §60.334.

No emission testing would be required for the two 260 hp emergency stationary RICE.

Recordkeeping and Reporting

As part of the Semiannual Monitoring Report, SNGC would be required to include a statement addressing whether only natural gas was fired in each unit during the respective reporting period. SNGC would also be required to maintain records of the fuel sulfur content on-site in a form suitable for inspection.

In addition to certifying that only natural gas was fired in the emergency stationary RICE, SNGC would be required to record the hours of operation for these units on a monthly and 12-month

rolling total basis to ensure that the permittee operates these engines as emergency stationary RICE as specified by 40 CFR §63.6640(f). In addition, SNGC shall report to the Air Division any failure to perform a work practice on the scheduled required. The report shall be submitted within two working days of the deviation. These records would be required to be maintained in a permanent form suitable for inspection and be made available upon request.

Compliance Assurance Monitoring (CAM)

The Compressor Turbine Nos. 1 and 2 do not use an active control device as defined in the CAM regulations to meet the applicable emission standards. As such, the facility is not subject to CAM requirements.

Recommendation

Based on the above analysis, I recommend that the renewal Major Source Operating Permit (104-0021) be issued with the requirements above pending resolution of any comments received during a 30-day public comment and a 45-day EPA review.

Brandon Cranford

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Air Division

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Date

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