Air Quality Standard Permit for Electric Generating Units

Effective Date June 1, 2001

This standard permit authorizes electric generating units that generate electricity for use by the owner or operator and/or generate electricity to be sold to the electric grid, and which meet all of the conditions listed in the paragraphs below.

(1) Applicability

This standard permit may be used to authorize electric generating units installed or modified after the effective date of this Standard Permit and that meet the requirements of this standard permit.

(2) Definitions

(A) East Texas Region - All counties traversed by or east of Interstate Highway 35 or Interstate Highway 37, including Bosque, Coryell, Hood, Parker, Somervell and Wise Counties.

(B) Installed - a generating unit is installed on the site when it begins generating electricity.

(C) West Texas Region - Includes all of the state not contained in the East Texas Region.

(3) Administrative Requirements

(A) Electric generating units shall be registered in accordance with 30 TAC Section 116.611, Registration to Use a Standard Permit, using a current Form PI-1S. Units which meet the conditions of this standard permit do not have to meet 30 TAC Section 116.610(a)(1), Applicability.

(B) Registration applications shall comply with 30 TAC Section 116.614, Standard Permit Fees, for any single unit or multiple units at a site with a total generating capacity of 1 MW or greater. The fee for units or multiple units with a total generating capacity of less than 1 MW at a site shall be $100.00. The fee shall be waived for units or multiple units with a total generating capacity of less than 1 MW at a site that have certified NO_x emissions that are less than 10 percent of the standards required by this standard permit .

(C) No owner or operator of an electric generating unit shall begin construction and/or operation without first obtaining written approval from the executive director.

(D) Records shall be maintained and provided upon request to the TNRCC for the following:

(i) Hours of operation of the unit; and

(ii) Maintenance records and/or testing reports for the unit to document re-certification of emission rates as required below.

(E) Electric generators powered by gas turbines must meet the applicable conditions, including testing and performance standards, of 40 Code of Federal Regulations Part 60, Subpart GG, Standards of Performance for Stationary Gas Turbines.

(F) Compliance with this Standard Permit does not exempt the owner or operator from complying with

any applicable 30 TAC Chapter 117 requirements.

(4) General Requirements

(A) Emissions of nitrogen oxides (NO_x) from the electric generating unit shall be certified by the manufacturer or owner or operator in pounds of pollutant per megawatt hour (lb/MWh). This certification must be displayed on the name plate of the unit or on a label attached to the unit. Test results from Environmental Protection Agency (EPA) Reference Methods, California Air Resources Board methods, or equivalent testing used to verify this certification shall be provided upon request to the TNRCC.

(B) Electric generating units that use combined heat and power (CHP) may take credit for the heat recovered from the exhaust of the combustion unit to meet the emission standards in paragraphs (4)(C), (4)(D), and (4)(E) . Credit shall be at the rate of one MWh for each 3.4 million BTUs of heat recovered. To take credit for CHP, the owner or operator of units not sold and certified as an integrated package by the manufacturer:

(i) must provide as part of the application documentation of the heat recovered, electric output, efficiency of the generator alone, efficiency of the generator including CHP, and the use for the non-electric output, and

(ii) the heat recovered must equal at least 20 percent of the total energy output of the CHP unit.

(C) Except as provided in paragraph (4)(E), NO_x emissions for units 10 MW or less shall meet the following limitations based upon the date the unit is installed and the region in which it operates:

East Texas Region:

(i) Units installed prior to January 1, 2005 and

(a) operating more than 300 hours per year - 0.47 lb/MWh;

(b) operating 300 hours or less per year - 1.65 lb/MWh;

(ii) Units installed on or after January 1, 2005 and

(a) operating more than 300 hours per year - 0.14 lb/MWh;

(b) operating 300 hours or less per year - 0.47 lb/MWh;

West Texas Region:

(i) Units installed and operating more than 300 hours per year - 3.11 lb/MWh;

(ii) Units installed and operating 300 hours or less per year - 21 lb/MWh.

(D) Except as provided in paragraph (4)(E), NOx emissions for units greater than 10 MW shall meet the following limitations based upon the mode of operation:

(i) Units installed and operating more than 300 hours per year - 0.14 lb/MWh;

(ii) Units installed and operating 300 hours or less per year - 0.38 lb/MWh.

(E) In the East Texas Region, electric generating units that use as fuel landfill gas, digester gas, or oil field gases containing less than 1.5 grains hydrogen sulfide or 30 grains total sulfur compounds shall meet a NO_x emission of 1.77 lb/MWh.

(F) To ensure continuing compliance with the emissions limitations, the owner or operator shall re-certify a unit every 16,000 hours of operation, but no less frequently than every three years. Re-certification may be accomplished by following a maintenance schedule that the manufacturer certifies will ensure continued compliance with the required NOx standard or by third party testing of the unit using appropriate EPA Reference Methods to demonstrate that the unit still meets the required emission standards.

(G) Gaseous fuels combusted in these electric generating units shall contain no more than ten grains total sulfur per 100 dry standard cubic feet. Liquid fuels shall not be a blend containing waste oils or solvents and shall contain less than 0.05 percent by weight sulfur.