§ 60.4390

What are my reporting requirements if I operate an emergency combustion turbine or a research and development turbine?

(a) If you operate an emergency combustion turbine, you are exempt from the NO\textsubscript{X} limit and must submit an initial report to the Administrator stating your case.

(b) Combustion turbines engaged by manufacturers in research and development of equipment for both combustion turbine emission control techniques and combustion turbine efficiency improvements may be exempted from the NO\textsubscript{X} limit on a case-by-case basis as determined by the Administrator. You must petition for the exemption.

§ 60.4395

When must I submit my reports?

All reports required under §60.7(c) must be postmarked by the 30th day following the end of each 6-month period.

§ 60.4400

How do I conduct the initial and subsequent performance tests, regarding NO\textsubscript{X}?

(a) You must conduct an initial performance test, as required in §60.8. Subsequent NO\textsubscript{X} performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test).

(1) There are two general methodologies that you may use to conduct the performance tests. For each test run:

(i) Measure the NO\textsubscript{X} concentration (in parts per million (ppm)), using EPA Method 7E or EPA Method 20 in appendix A of this part. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in appendix A of this part, and measure and record the electrical and thermal output from the unit. Then, use the following equation to calculate the NO\textsubscript{X} emission rate:

\[
E = \frac{1.194 \times 10^{-7} \times (NO_X)}{P} \times Q_{std} \quad (Eq. 5)
\]

Where:

\( E \) = NO\textsubscript{X} emission rate, in lb/MWh

\( 1.194 \times 10^{-7} \) = conversion constant, in lb/dscf/ppm

\( (NO_X) \) = average NO\textsubscript{X} concentration for the run, in ppm

\( Q_{std} \) = stack gas volumetric flow rate, in dscf/hr

\( P \) = gross electrical and mechanical energy output of the combustion turbine, in MW (for simple-cycle operation), for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines, or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to §60.4350(f)(2); or

(ii) Measure the NO\textsubscript{X} and diluent gas concentrations, using either EPA Methods 7E and 3A, or EPA Method 20 in appendix A of this part. Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in appendix A of this part to calculate the NO\textsubscript{X} emission rate in lb/MMBtu. Then, use Equations 1