

980 CMR 12.00: TECHNOLOGY PERFORMANCE STANDARDS

Section

12.01: General

12.02: Procedures

12.03: Technology Performance Standards

12.01: General

(1) Purpose. The purpose of 980 CMR 12.00 is to streamline the Energy Facilities Siting Board's review of petitions to construct generating facilities that have state of the art environmental performance characteristics.

(2) Scope. 980 CMR 12.00 applies to any application to construct a generating facility as that term is defined in M.G.L. c. 164, § 69G, filed for review pursuant to M.G.L. c. 164, § 69J¼. These regulations shall not in any way supersede or impair the authority of the Massachusetts Department of Environmental Protection with respect to such facilities.

(3) Statutory Authority. 980 CMR 12.00 is adopted pursuant to M.G.L. c. 164, § 69J¼, added by St. 1997, c. 164, § 210, which requires the Energy Facilities Siting Board to establish a technology performance standard for electric generating facility emissions, including, but not limited to, emissions of sulfur dioxide, nitrogen oxides, particulate matter, fine particulates, carbon monoxide, volatile organic compounds, and heavy metals.

12.02: Procedures

(1) Application of Technology Performance Standards. Any petition for approval to construct a generating facility that is filed for review pursuant to M.G.L. c. 164, § 69J¼ must include an analysis of the proposed facility's expected emissions of the criteria and non-criteria pollutants listed in 980 CMR 12.03. Such analysis shall include a summary of the proposed facility's expected emissions, a description of the modelling or other analyses used to derive the expected emissions, and where performance guarantees are available from the equipment manufacturer, a description of the performance guarantees. If the expected emissions of the proposed generating facility exceed the levels set forth in 980 CMR 12.03 for any pollutant or pollutants, the applicant also must provide the information listed in 980 CMR 12.02(2) as part of its petition.

The Energy Facilities Siting Board may request copies of guarantees, work papers, or other documents to verify expected generating facility emissions; however, applicants proposing the use of fuel types that do not contain pollutants specified in the TPS and that when burned do not result in pollutants specified in the TPS, will not be required to provide modelling or testing results, guarantees, work papers or other similar documents with respect to those pollutants.

Emissions testing shall be conducted in accordance with the Massachusetts Department of Environmental Protection's "Guideline for Source Emission Testing" and in accordance with U.S. Environmental Protection Agency tests as specified in 40 CFR Part 60, Appendix A; 40 CFR Part 60, Subpart GG; 40 CFR Parts 72 and 75; or in accordance with another methodology approved by the Massachusetts Department of Environmental Protection.

(2) Additional Information Requirements. An applicant proposing to construct a generating facility with one or more emissions in excess of the emission levels set forth in 980 CMR 12.03 must provide the following additional information with its petition:

(a) The applicant shall document the reliability of the proposed generation technology throughout the industry and evaluate the reliability of the proposed fuel supply in Massachusetts.

(b) The applicant shall provide the cost of the technology per megawatt hour (inclusive of capital costs, operating and fuel costs, and decommissioning costs) relative to other fossil fuel generating technologies.

(c) The applicant shall discuss how the proposed facility will enhance New England's energy mix and prevent overdependence on one or more fuel sources.

(d) The applicant shall provide information comparing the overall environmental impacts associated with the proposed facility with the overall environmental impacts of facilities using other fossil fuel generating technologies.

12.03: Technology Performance Standards

(1) Technology Performance Standards for Criteria Pollutants. The following are the technology performance standards for criteria pollutants:

Name of Pollutant	Technology Performance Standard (Pounds per Megawatt-Hour Burning Primary Fuel 100% base load at 50 degrees Fahrenheit)
Sulfur Dioxide	0.021
Nitrogen Oxides	0.120
Fine Particulates - PM10	0.081
Particulate Matter	0.081
Carbon Monoxide	0.077
Volatile Organic Compounds	0.035

(2) Technology Performance Standards for Non-Criteria Pollutants. The following are the technology performance standards for non-criteria pollutants:

Pollutant	Technology Performance Standard (Pounds per Megawatt-Hour Burning Primary Fuel)
Antimony	0.000171
Arsenic	0.00004
Beryllium	0.0000037
Cadmium	0.000033
Chromium	0.00033
Cobalt	0.00007
Copper	0.01
Lead	0.00045
Manganese	0.0026
Mercury	0.0000074

12.03: continued

Pollutant	Technology Performance Standard (Pounds per Megawatt-Hour Burning Primary Fuel)
Nickel	0.0093
Nickel Oxide	0.012
Phosphorus	0.0023
Selenium	0.00004
Vanadium	0.000037
Vanadium Pentoxide	0.00012

(3) Updating to the Technology Performance Standards. The Energy Facilities Siting Board will update the technology performance standards as necessary to reflect improvements in fossil fuel generating and control technologies. Any such updates or new technology performance standards will not apply retroactively to a proposed generating facility with expected emissions that satisfied the technology performance standards in effect on the date the applicant filed its petition for approval to construct the facility.

REGULATORY AUTHORITY

980 CMR 12.00: M.G.L. c. 164, § 69H; c. 164, § 69J¼; St. 1997, c. 164, § 210.