

NESCAUM Emission Performance Standard (EPS) Model Rule

(Note: In previous versions, this Model Rule has been called "Generation Performance Standard" or GPS Model Rule)

(a) Purpose

The purpose of this regulation is:

- (1) To prevent degradation of air quality in the state of [INSERT STATE NAME] by maintaining consistent emission standards for electricity supplied to retail customers in the state of [INSERT STATE NAME].
- (2) To improve air quality in the Northeast region and reduce adverse impacts of electricity generation on the region's public health and the environment; and
- (3) To augment environmental regulations applicable to individual electricity generating facilities in order to prevent disparities in such regulations from creating a competitive advantage for high emitting electric generators.

(b) Applicability

The provisions and requirements of this section are applicable to:

- (1) Any person or entity who applies for a license to sell electricity at retail to any end-user within the state, and
- (2) Any person or entity licensed to sell electricity at retail to any end-user within the state unless specifically noted as exempt in subsection (c).

(c) Exemptions

Any person or entity specifically exempted from the requirements to comply with emission performance standards by state law is exempt from this section.

(d) Definitions

For purposes of this section, the following definitions shall apply:

"Aggregator" means an entity that, for retail sale purposes, groups demand from various end-users except for the following: public entities, quasi-public entities or authorities and subsidiary organizations thereof, established pursuant to the laws of the state.

"Applicant" means a person or entity that has submitted an application to the state licensing authority to operate as a retail supplier in the state.

"Attributes" means the characteristics assigned to each MWh of electricity generation consistent with the requirements of the generation information system and including but not limited to emissions for each regulated pollutant.

"Combined Heat and Power System" means a generation unit that generates electricity sequentially with either thermal or mechanical energy from one common heat input (also known as cogeneration).

“Company Resource Portfolio” means all generation resources assigned to a retail supplier as determined through the generation information system to meet the retail supplier’s load obligations to retail end-users in the state.

“Department” means [INSERT NAME OF STATE ENVIRONMENTAL REGULATORY AGENCY].

“EIA” means the Energy Information Administration of the United States Department of Energy

“Electricity” means the amount of electrical energy used over a calendar year typically measured in kilowatt hours or megawatt hours.

“End-User” means a person or entity that purchases electricity at retail from a retail supplier.

“Generation Information System” means any system used to match electricity generation and attributes with sales of electricity to retail end-users.

“Generation Information System Administrator” means a person or entity with the responsibility and capability to administer the generation information system.

“Emission Performance Standards” means the air pollution emission standards as provided in subsection (f), Table 1.

“Generation Resource” means electricity generated by a generation unit and purchased by a wholesale provider or a retail supplier as determined through the generation information system.

“Generation Unit” means any equipment that generates electricity.

“Licensing Authority” means the [INSERT NAME OF STATE AGENCY] charged with the responsibility of licensing retail suppliers under [INSERT CITATION TO STATE STATUTE].

“MWh” means a unit of electricity measured in megawatt hours.

“Officer” means a President, Vice President, Chief Executive Officer, Chief Financial Officer, Secretary or Treasurer of a retail supplier.

“Regulated Pollutant” means any pollutant for which the Department has adopted an emission performance standard in subsection (f).

“Retail Electricity Product” means an electricity commodity that is distinguished by unique price, fuel or emission characteristics and that is sold by a retail supplier to one or more retail end-users. If a retail supplier sells more than one retail electricity product, then the generation resource(s) assigned to each retail electricity product shall be a subset of the generation

resource(s) in the company resource portfolio consistent with the generation information system¹.

“Retail Supplier” means any person or entity, including but not limited to aggregators, generation companies, generation marketers, distribution companies or participating municipal electric companies that sells electricity to retail end-users.

“USEPA” means the United States Environmental Protection Agency.

“Wholesale Provider” means any person or entity that sells electricity at wholesale to another wholesale provider or to a retail supplier. An entity that is a wholesale provider for some transactions may be classified as a retail supplier when the person or entity sells electricity to retail end-users.

(e) General Requirements

(1) On or after the implementation date of each emission performance standard set forth in subsection (f) of this section, each applicant shall submit to the Department concurrent with the application made to the licensing authority, a description of the applicant’s plan to comply with the applicable emission performance standards of subsection (f).

(2) Any applicant who obtains a license from the licensing authority prior to the implementation date of an emission performance standard in Table 1 of subsection (f), shall submit to the licensing authority and the Department, the demonstration required by paragraph (1) of this subsection within sixty (60) days of the implementation date of the applicable emission performance standard.

(3) GPS Reporting

(A) Quarterly Performance Report

1. Each retail supplier shall submit a written performance report to the Department for each calendar quarter. Said report shall be submitted no later than sixty (60) days after the last day of the calendar quarter.

2. Each quarterly performance report shall provide the Department electricity generation and emissions data as available for each retail electricity product and a calculation of the emissions on a megawatt hour basis for each retail electricity product for both the calendar quarter being reported and the calendar year to date.

(B) Annual Compliance Report

1. On or before March 1 of each year, each retail supplier shall provide the Department an annual compliance report for the previous calendar year that demonstrates compliance for each retail electricity product with the emission performance standards at subsection (f).

¹ Standard Offer Service is considered a retail electricity product for purposes of this rule.

2. The annual compliance report shall demonstrate the weighted average emission rate per MWh for each retail electricity product in the reported calendar year, calculated in accordance with subsection (g)(4).
3. The annual compliance report shall include, but shall not be limited to, the following information for each generation resource in the company resource portfolio and in each retail electricity product:
 - a. Name and location; and
 - b. The amount of electricity obtained; and
 - c. The average annual emission rate of each regulated pollutant; and
 - d. The method used to identify or determine the emission rate.
4. The information required by (3)(B) of this subsection shall be summarized in a table format prescribed by the Department.
5. Each annual compliance report shall include any other information as may be required by the Department.

(C) The annual compliance report will be submitted to the Department under the signature of an officer of the company and shall carry the following statement:

"I hereby certify under penalty of law, that I have personally examined the foregoing and am familiar with the information contained in this document and all attachments. Further, based on my inquiry of those individuals immediately responsible for obtaining this information and my examination of this document and all attachments, I believe that the information is true, accurate and complete".

(D) The Department may establish an electronic data reporting protocol for use by retail suppliers to satisfy the reporting requirements of this section.

(E) Any retail supplier who, upon performing an annual compliance calculation finds that one or more retail electricity products exceed one or more of the emission performance standards in Table 1 of subsection (f), shall notify the Department immediately upon determination of exceedence. Said notification shall identify the extent of the exceedence, the pollutant(s) for which an exceedence was noted, and if known, the cause or reason for the exceedence.

(f) Emission Performance Standards

- (1) On or after the effective date of this regulation, each retail supplier shall provide retail electricity products that meet the emission performance standards identified in Table 1.

Table 1

Pollutants	Emission Performance Standards (in pounds per MWh)
Oxides of Nitrogen	1
Sulfur Dioxide	4
Carbon Dioxide	1100
Mercury	Actual Emission Rate - See (f)(2)
Carbon Monoxide	<i>Reserved</i>

(2) Each retail supplier shall meet an emission performance standard for mercury equal to the actual emission rate in pounds per MWh for the reporting calendar year.

(3) The Department may review and revise the method of calculating the emission performance standards in Table 1 of this subsection, the pollutants for which emission performance standards are identified, and the combined heat and power factor described in subsection (g)(3)(B) 1.a., pursuant to subsection (j) of this regulation.

(g) Compliance Determination

(1) The weighted average emission rate of each retail electricity product offered by a retail supplier shall comply with the emission performance standards identified in Table 1 of subsection (f) of this section on a calendar year basis.

(2) Each retail supplier shall calculate compliance of each retail electricity product with each emission performance standard. In performing this compliance calculation, the retail supplier shall use information supplied by the generation information system, if available.

(3) *[Note: States may choose to eliminate this paragraph from state-adopted rules based on the design and content of the previously mentioned generation information system]*
Should a generation information system not be available, each retail supplier shall use the following assumptions and procedures to calculate compliance for each retail electricity product with each emission performance standard.

(A) Characterization of Emission Attributes

1. Emission and generation information necessary to assign attributes to generation resources shall be obtained from the USEPA, EIA and/or other publicly available information sources as approved by the Department; or

2. If information is not available from sources described at (3)(A)1. of this subsection, each retail supplier will obtain and use generation unit-specific emission monitoring data supplied by the generation resource owner or operator. Emission monitoring data shall reflect measurements taken from continuous emission monitoring equipment that is installed, operated and certified in accordance with a permit, order or regulation issued or administered by the Department, its designee or by another governmental regulatory agency authorized to regulate the generation resource; or

3. If continuous emission monitoring as defined by (3)(A) 2. of this subsection is not available, generation emission data used by each retail supplier shall be obtained from the following sources, with prior review and written approval of the Department

a. Stack test data shall be used to determine the emission rate provided that stack testing was conducted in accordance with the procedures contained in 40 CFR 51, Appendices M and P, 40 CFR 60, Appendices A and C, or through a procedure approved by the USEPA, with the concurrence of the Department; or

b. If stack test data is not available, emissions shall be calculated using data supplied by the manufacturer of the subject generation unit, provided that the unit manufacturer obtained such data through emission testing performed on the subject generation unit or a generation unit of the same manufacturer, model, fuel type and in the same state as the subject generation unit, using an method approved by the USEPA Administrator; or

c. If data from the manufacturer is not available, emissions shall be calculated using data derived from an analysis of fuel and combustion characteristics and pertinent material balances conducted by a person with appropriate knowledge of the subject process; or,

d. If data identified in subparagraphs (a) through (c) is not available or is not approved for use by the Department, emissions shall be calculated in accordance with a method to be proposed by the retail supplier or a designated third party and approved by the Department in writing.

(B) Characterization of Emission Attributes from Identified Generation Resources:

1. The following assumptions and procedures shall be used for the purpose of determining the emission attributes from the following generation resource types:

a. Combined heat and power system emissions shall be assigned an emission rate calculated by allocating emissions on a pro-rata basis between 1) electric energy output and 2) thermal energy output multiplied by a combined heat and power factor. The combined heat and power factor is initially set at 50%. Said factor shall be reviewed and revised on the schedule defined in subsection (f)(3) and any revision shall be consistent with regulations adopted by the Federal Energy Regulatory Commission pursuant to the Public Utilities Regulatory Policy Act (18 CFR Ch.1, Part 292.205).

b. Pumped storage system emissions shall be calculated by assigning emission attributes consistent with the treatment of pumped storage electricity generation in the generation information system or as otherwise directed by the Department.

c. Electricity imported from an identified power pool shall be assigned emissions attributes consistent with the method described in subsection (g)(2)(A) if the Department determines an essentially equivalent generation information system is in use for that power pool.

d. Electricity imported from an identified power pool but for which the Department has determined that no essentially equivalent generation information system exists, shall be assigned default emission attributes equivalent to the weighted average emissions of the power pool of origin or as determined by the Department.

e. Electricity imported from an unknown power pool shall be assigned emission attributes equivalent to the combined weighted average emission rate of the power control areas covered by East Central Area Reliability Coordination Agreement (ECAR) and Southeast Reliability Coordination Agreement (SERC).

(4) Compliance Calculation

(A) Each retail supplier shall demonstrate annual compliance of each retail electricity product with each emission performance standard using the following formula:

$$R_c = \frac{(P_g \times E_{g,c})}{(P_g)}$$

Where:

- R = the weighted average emission rate of the retail electricity product in pounds per megawatt hour
- P = electricity supplied in MWh
- E = emission rate in pounds per MWh
- g = each generation resource in the retail electricity product
- c = each regulated pollutant

(B) Results of the calculation will be recorded on a form provided by the Department.

(5) Any retail supplier who, upon performing the compliance calculation in accordance with this subsection finds that one or more retail electricity products exceed the standards in Table 1 of subsection (f), shall implement the measures in either (A), or (B) that will result in the greatest reduction in mass emissions:

(A) Acquire lower emission generation resources for inclusion in the retail electricity product so as to "net" the excess mass emissions caused by the exceedence of the standard by an equal or greater reduction in mass emissions in the following calendar year. Excess mass emissions shall be calculated as follows:

$$\text{Excess Mass Emissions} = (R_c - \text{EPS}) \times \text{MWh}$$

Where:

- R_c = weighted average emission rate (in pounds per MWh) for each regulated pollutant
- EPS = emission performance standard for each regulated pollutant (in pounds per MWh)
- MWh = megawatt hours of generation sold at retail during the calendar year.

(B) Implement other measures designed to achieve the same or greater reduction in mass emissions as approved by the Department.

(h) Recordkeeping

(1) Each retail supplier shall make and keep records of the electricity provided in MWh and associated attributes for each generation resource, each retail electricity product, and the company resource portfolio in a manner consistent with the emission information system.

(2) Records required by this subsection shall be maintained for a period of five years and shall be made available to the Department upon request.

(3) At the time there is a Department approved and fully implemented national generation information system, the retail supplier may use data from this system for purposes of complying with this section.

(i) Violations

(1) Any violation of this section may cause the Department to make a formal recommendation to the licensing authority to take enforcement action that may include, but not be limited to, suspension or review of license, fines and prohibition on accepting new customers.

(2) Any violation of this section may subject the retail supplier to an enforcement action to prevent or abate air pollution and collect civil penalties as provided by law and criminal penalties for willful or criminally negligent violations.

(j) Program Evaluation

(1) The Department, in consultation with the licensing authority, shall periodically evaluate the emission performance standards in Table 1 of subsection (f), the generation information system and other provisions of this regulation in order to determine if the standards at subsection (f) are sufficient to meet the purpose and intent of this regulation and applicable state law.

(2) The Department evaluation and revision of all effective emission performance standards in Table 1 of subsection (f) shall be conducted in accordance with the schedule contained in Table 3.

Table 2

Year of Department Review	Year Revised Standards take effect
2003	2005
2008	2010
2013	2015
2018	2020
and every five years thereafter	

(3) The Department evaluation of the emission performance standards in Table 1 of subsection (f) will consider existing and proposed emission control programs as well as data on emissions, electric generation and retail sales.

(4) The Department shall publish revised emission performance standards in a document of general circulation in the state, at least one year prior to the effective date of the revised standards.

(5) Should the USEPA or other federal agency adopt a national program that implements an emission performance standard for the competitive electricity market, the Department shall evaluate the efficacy of this section and recommend its termination, if appropriate.

(k) Effective Date

These regulations shall become effective on [INSERT EFFECTIVE DATE OF REGULATION].