

N.J.A.C. 7:27F

CONTROL AND PROHIBITION OF CARBON DIOXIDE EMISSIONS

Statutory Authority: N.J.S.A. 13:1B-3(e), 13:1D-9, and 26:2C-1 et seq., particularly 26:2C-37 et seq.

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SUBCHAPTER 1. GENERAL PROVISIONS

7:27F-1.1 Purpose and scope

(a) This chapter establishes the criteria that shall govern and reduce emissions of carbon dioxide from the combustion of fossil fuels.

(b) The criteria governing emission reductions set forth in this chapter are part of a comprehensive strategy to reduce Statewide greenhouse gas emissions by 80 percent below the 2006 level by 2050, as required by the Global Warming Response Act, N.J.S.A. 26:2C-37 et seq.

(c) The Department may determine that the criteria governing the reduction of CO₂ emissions, as set forth in this chapter, should be supplemented and/or amended, as needed.

(d) Compliance with any subchapter of this chapter shall not relieve any person of the obligation to comply with all other statutes, rules, permits, or orders administered or issued by the Department.

7:27F-1.2 Liberal construction

This chapter, being necessary to promote the public health and welfare, and to protect the environment, shall be liberally construed to permit the Department to discharge its statutory functions under the Air Pollution Control Act, N.J.S.A. 26:2C-1 et seq., generally, including the Global Warming Response Act, N.J.S.A. 26:2C-37 et seq.

7:27F-1.3 Definitions

The following words and terms, when used in this chapter, shall have the following meanings, unless the context clearly indicates otherwise:

“Air contaminant” shall have the same meaning as the term “air contaminant” as defined at N.J.A.C. 7:27-1.4.

“ASTM” means ASTM International, formerly known as the American Society for Testing and Materials, which was formed in 1898. ASTM standards incorporated by reference are available at astm.org.

“BPU” means the New Jersey Board of Public Utilities.

“British thermal unit” or “BTU” means the quantity of heat required to raise the temperature of one pound of water by one degree Fahrenheit, at the temperature at which water has its greatest density (approximately 39 degrees Fahrenheit).

“CFR” means the United States Code of Federal Regulations.

“CO₂” means carbon dioxide.

“Distillates of air” shall have the same meaning as the term “distillates of air” as defined at N.J.A.C. 7:27-1.4.

“EPA” means the United States Environmental Protection Agency.

“Facility” shall have the same meaning as the term “facility” as defined at N.J.A.C. 7:27-8.1 or 22.1, as applicable.

“FERC” means the Federal Energy Regulatory Commission.

“Fossil fuel” means natural gas, petroleum, coal, and any form of solid, liquid, or gaseous fuel derived from such material.

“Fossil fuel-fired” means the combustion of fossil fuel, alone, or in combination with any other fuel, where the fossil fuel combusted comprises, or is projected to comprise, more than 50 percent of the annual heat input on a BTU basis during any year.

“Hr” means hour.

“Insignificant source” shall have the same meaning as the term “insignificant source” or “insignificant source operation” as defined at N.J.A.C. 7:27-8.1 or 22.1, as applicable.

“ISO” means International Organization for Standardization, iso.org.

“ISO conditions” means 288.15 Kelvin, or 15 degrees Celsius, 60 percent relative humidity, and 101.3 kilopascals pressure.

“kWh” means kilowatt hour.

“Lb” means pound.

“Modify” or “modification” shall have the same meaning as the term “modify” or “modification” as defined at N.J.A.C. 7:27-8.1 or 22.1, as applicable.

“MMBTU” means million BTU.

“MW” means megawatt.

“MWe” means megawatt electrical.

“MWh” means megawatt hour.

“Natural gas” means a fluid mixture of hydrocarbons (for example, methane, ethane, or propane), composed of at least 70 percent methane by volume or that has a gross calorific value between 35 and 41 megajoules per dry standard cubic meter (950 and 1,100 BTU per dry standard cubic foot), that maintains a gaseous state under ISO conditions. Natural gas does not include the following gaseous fuels: landfill gas, digester gas, biomass gas, biogas, refiner gas, sour gas, blast furnace gas, coal-derived gas, producer gas, coke oven gas, or any gaseous fuels produced in a process which might result in highly variable CO₂ content or heating value.

“New York Independent System Operator” or “NYISO” means the not-for profit corporation, or any successor organization, responsible for operating New York State’s bulk electricity grid, administering New York State’s competitive wholesale electricity markets, and conducting comprehensive long-term planning for New York State’s electric power system

serving New York State. NYISO is the Federally designated electric bulk system operator in New York State.

“Operating certificate” or “certificate” shall have the same meaning as the term “operating certificate” or “certificate” as defined at N.J.A.C. 7:27-22.1.

“Operating permit” shall have the same meaning as the term “operating permit” as defined at N.J.A.C. 7:27-22.1.

“Permittee” shall have the same meaning as the term “permittee” as defined at N.J.A.C. 7:27-8.1 or 22.1, as applicable.

“Permit revision” shall have the same meaning as the term “permit revision” as defined at N.J.A.C. 7:27-8.1.

“Person” means an individual, public or private corporation, company, partnership, firm, association, society, joint stock company, international entity, institution, county, municipality, state, interstate body, the United States of America, or any agency, board, commission, employee, agent, officer, or political subdivision of a state, an interstate body, or the United States of America.

“Petroleum” means crude oil or a fuel derived from crude oil, including, but not limited to, distillate and residual oil.

“PJM Interconnection, LLC” or “PJM” means the regional transmission organization, or its successor, that coordinates the movement of wholesale electricity in all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, and the District of Columbia.

“Preconstruction permit” shall have the same meaning as the term “preconstruction permit” as defined at N.J.A.C. 7:27-22.1.

“Significant source” shall have the same meaning as the term “significant source operation” or “significant source” as defined at N.J.A.C. 7:27-8.1 or 22.1, as applicable.

7:27F-1.4 Confidentiality

All information submitted to the Department pursuant to this chapter shall be public information, unless the person submitting the information asserts a confidentiality claim in accordance with the procedures set forth at N.J.A.C. 7:27-1.6 through 1.30 and the Department determines that the information is entitled to confidential treatment. Information submitted electronically cannot be handled confidentially. Therefore, information submitted pursuant to a confidentiality claim must be submitted in paper form only, and the claims of confidentiality must be asserted by clearly marking the information as required pursuant to N.J.A.C. 7:27-1.6.

7:27F-1.5 Right to enter

(a) The Department, and its representatives, shall have the right to enter and inspect, at any time, any facility or building, or portion thereof, including all documents and equipment on the premises, in order to ascertain compliance or noncompliance with this chapter or with any preconstruction permit, certificate, operating permit, order, authorization or other legal document issued pursuant thereto, or to verify any information submitted to the Department. This right is absolute and shall not be conditioned upon any action by the Department, except the presentation of appropriate credentials as requested, and compliance with appropriate safety standards. This right includes, but is not limited to, the right to:

1. Enter upon the premises of the facility;
2. Sketch or photograph any portion of the facility;
3. Enter upon the premises of a facility where records are maintained under the conditions of this chapter or the preconstruction permit, certificate, or operating permit;

4. Review any records that must be kept under the conditions of the preconstruction permit, certificate, or operating permit;
5. Copy or photograph any records that must be kept under the conditions of this chapter or the preconstruction permit, certificate, or operating permit;
6. Inspect any part of the facility, including any equipment (including any equipment used for monitoring and any air pollution control apparatus), practices, or operations, regulated or required under this chapter or the preconstruction permit, certificate, or operating permit;
7. Interview any employee or representative of the owner or operator; and
8. Test or sample any substance or material.

(b) No person shall obstruct, hinder, or delay the Department or its representatives in its exercise of its rights pursuant to (a) above.

(c) An owner or operator of a facility, and any appropriate employee, or representative of any owner or operator, shall, upon request, assist the Department and its representatives in the performance of any inspection. Such assistance shall include, but shall not be limited to, making available sampling equipment and facilities necessary to conduct sampling to determine the nature and quantity of any air contaminant emitted by the facility.

(d) During any sampling or testing conducted by the Department, any equipment, and all components connected to, attached to, or serving the equipment, shall be operated under normal operating conditions, or under conditions set forth in any preconstruction permit, certificate, operating permit, order, or other State or Federal authorization covering the equipment.

7:27F-1.6 Severability

If any section, subsection, provision, clause, or portion of this chapter, or the application thereof to any person, is adjudged unconstitutional or invalid by a court of competent jurisdiction, such judgment shall be confined in its operation to the subchapter, section, subsection, provision, clause, portion, or application directly involved in the controversy in which the judgment was rendered and it shall not affect or impair the remainder of this chapter or the application thereof to other persons.

7:27F-1.7 Civil administrative penalties and requests for administrative hearings

Penalties for violations of the provisions of this chapter and the procedure for requesting an adjudicatory hearing are provided at N.J.A.C. 7:27A, Air Administrative Procedures and Penalties.

7:27F-1.8 Incorporation by reference

Unless specifically stated otherwise in this subchapter, when a provision of a code, rule, or a standard or requirement that originated outside of the Department, is incorporated by reference, the provision is incorporated, as supplemented or amended, and includes all notes, comments, appendices, diagrams, tables, forms, figures, publications, and cross-references. Moreover, any other changes including, without limitation, repeals or stays that affect the meaning or operational status, brought about by either judicial or administrative action and adopted or otherwise noticed by the authority are incorporated by reference.

SUBCHAPTER 2. CARBON DIOXIDE EMISSION REDUCTIONS FROM ELECTRIC GENERATING UNITS

7:27F-2.1 Definitions

The following words and terms, when used in this chapter, shall have the following meanings, unless the context clearly indicates otherwise:

“Coal” means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM in ASTM D388-99 (Reapproved 2004, incorporated herein by reference), coal refuse, and petroleum coke. Synthetic fuels derived from coal for the purpose of creating useful heat, including, but not limited to, solvent-refined coal, gasified coal (not meeting the definition of natural gas), coal-oil mixtures, and coal-water mixtures are included in this definition.

“Combined cycle unit” means an electric generating unit that uses a stationary combustion turbine from which the heat from the turbine exhaust gases is recovered by a HRSG to generate additional electricity.

“Combined heat and power unit” or “CHP unit” means an electric generating unit that uses a steam generating unit or stationary combustion turbine to simultaneously produce both electric (or mechanical) and useful thermal output from the same primary energy source. A CHP unit is also known as cogeneration.

“Commence commercial operation” or “commenced commercial operation” means, with regard to a unit that serves an EGU, to begin to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation.

“Commence construction” or “commenced construction” means that an owner or operator has undertaken a continuous program of construction or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction. Construction is no longer continuous if construction is discontinued for longer than 18 months.

"Construct" or "construction" shall have the same meaning as the term "construct" or "construction" as defined at N.J.A.C. 7:27-8.1 or 22.1, as applicable.

"Control apparatus" shall have the same meaning as the term "control apparatus" as defined at N.J.A.C. 7:27-22.1.

"EGU facility" means a facility that includes one or more new and/or existing fossil fuel-fired EGU(s) and at which the aggregate nameplate capacity of all of the EGUs at the facility is equal to or greater than 25 MWe.

"Electric generating unit" or "EGU" means a combustion or steam generating source used for generating electricity that delivers all or part of its power to NYISO or PJM for commercial sale.

"Emissions" means any air contaminant or category of air contaminants discharged, directly or indirectly, into the outdoor atmosphere.

"Emit" means to cause or release emissions.

"Existing electric generating unit" or "existing EGU" means any fossil fuel-fired electric generating unit that commenced construction before January 31, 2023, and provides more than 10 percent of its annual gross electric output to the electric grid.

"Facility code" means a five-digit code assigned by the Energy Information Agency at the United States Department of Energy to a power plant that is not owned by an electric utility.

"Gasifier" means an emission source that converts a hydrocarbon feedstock into a fuel.

"Gross electric output" means the total amount of electric energy produced by a generating unit and measured at the generating terminal in kWh or MWh.

"Gross energy output" means:

1. For stationary combustion turbines and integrated gasification combined cycle (IGCC) facilities, the gross electric and/or mechanical output from both the EGU (including, but not limited to, output from steam turbine(s), combustion turbine(s), and gas expander(s)) plus 100 percent of the useful thermal output;
2. For steam generating units, the gross electric and/or mechanical output from the affected EGU(s) (including, but not limited to, output from steam turbine(s), combustion turbine(s), and gas expander(s)) minus any electricity used to power the feedwater pumps, plus 100 percent of the useful thermal output; and
3. For combined heat and power facilities where at least 20 percent of the total gross energy output consists of electric and/or mechanical output and 20 percent of the total gross energy output consists of useful thermal output on a 12-operating-month rolling average basis, the gross electric or mechanical output from the affected EGU, including, but not limited to, output from steam turbine(s), combustion turbine(s), and gas expander(s), minus any electricity used to power the feedwater pumps (the electric auxiliary load of boiler feedwater pumps is not applicable to IGCC facilities), that difference divided by 0.95, plus 100 percent of the useful thermal output.

“Heat recovery steam generating unit” or “HRSG” means an EGU in which hot exhaust gases from the combustion turbine engine are routed in order to extract heat from the gases and generate useful output. Heat recovery steam generating units can be used with or without duct burners.

“Install” or “installation” shall have the same meaning as the term “install” or “installation” as defined at N.J.A.C. 7:27-22.1.

“Integrated gasification combined cycle,” “IGCC,” or “IGCC facility” means a combined cycle facility that is designed to burn fuels containing 50 percent, by heat input, or more solid-derived fuel not meeting the definition of natural gas, plus any integrated equipment that provides electricity or useful thermal output to the affected EGU or auxiliary equipment. No solid fuel is directly burned in the EGU during operation.

“Mechanical output” means the useful mechanical energy that is not used to operate the affected EGU(s), generate electricity, generate thermal energy, or enhance the performance of the affected EGU. Mechanical energy measured in horsepower hour should be converted into MWh by multiplying the number of horsepower hours by 745.7 then dividing by 1,000,000.

“Nameplate capacity” means the maximum electrical output in MWe that an EGU can sustain over a specified period of time, under specific conditions designated by the manufacturer, when not restricted by seasonal or other deratings as measured in accordance with the United States Department of Energy standards.

“Natural gas curtailment period” means a period of time during which the supply of natural gaseous fuel to an affected electric generating unit is restricted or halted for reasons beyond the control of the EGU facility. The act of entering into a contractual agreement with a supplier of natural gas established for curtailment purposes does not constitute a reason that is under the control of an EGU facility for the purposes of this definition. An increase in the cost or unit price of natural gas due to normal market fluctuations not during periods of supplier delivery restriction does not constitute a period of natural gas curtailment or supply interruption. On-site gaseous fuel system emergencies or equipment failures qualify as periods of supply interruption when the emergency or failure is beyond the control of the EGU facility.

“New electric generating unit” or “new EGU” means any fossil fuel-fired electric generating unit on which the owner or operator commenced construction or on which reconstruction commenced on or after January 31, 2023, and provides more than 10 percent of its annual gross electric output to the electric grid.

“Operating month” means a calendar month during which any fuel is combusted in the affected EGU at any time.

“ORIS code” means a number assigned by the Energy Information Agency at the United States Department of Energy to power plants owned by electric utilities.

“Output-based emission limit” is an emission limit that relates emissions to the productive output of the process. An output-based emission limit uses units of measure, such as lb of emissions/MWh generated or lb of emissions/MMBTU of steam generated.

“Power purchase agreement” means an agreement that was executed prior to January 1, 2002, is for a duration of more than 15 years from its effective date, and provides that the party to the agreement that purchases energy from the facility has rights to the electric energy output of the facility.

“Process unit” shall have the same meaning as the term “process unit” as defined at N.J.A.C. 7:27-22.1.

"Reconstruct" or "reconstruction" shall have the same meaning as the term “reconstruct” or “reconstruction” as defined at N.J.A.C. 7:27-8.1 or 22.1, as applicable.

“Renewal” shall have the same meaning as the term “renewal” as defined at N.J.A.C. 7:27-22.1.

“RMR” means reliability must-run.

“RMR unit” means a unit that is requested by PJM or NYISO to remain operational beyond its announced retirement date, or come back into operation, to maintain reliable operation of the transmission system, pursuant to a duly approved section of a PJM or NYISO Tariff or a FERC-approved service agreement.

“Simple cycle combustion turbine” shall have the same meaning as the term “simple cycle combustion turbine” as defined at N.J.A.C. 7:27-19.1.

“Source emission testing” shall have the same meaning as the term “source emission testing” as defined at N.J.A.C. 7:27-22.1.

“Source operation” or “source” shall have the same meaning as the term “source operation” or “source” as defined at N.J.A.C. 7:27-22.1.

“Stack or chimney” shall have the same meaning as the term “stack or chimney” as defined at N.J.A.C. 7:27-22.1.

“Standard ambient temperature and pressure” or “SATP” conditions means 298.15 Kelvin (25 degrees Celsius or 77 degrees Fahrenheit) and 100.0 kilopascals (14.504 psi, 0.987 atm) pressure.

“Standard conditions” means 70 degrees Fahrenheit (21.1 degrees centigrade) and one atmosphere pressure (14.7 pounds per square inch absolute or 760.0 millimeters of mercury).

“Stationary combustion turbine” means all equipment including, but not limited to, the turbine engine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), heat recovery system, fuel compressor, heater, and/or pump, post-combustion emission control technology, and any ancillary components and sub-components comprising any simple cycle stationary combustion turbine, any combined cycle combustion turbine, and any combined heat and power combustion turbine-based system plus any integrated

equipment that provides electricity or useful thermal output to the combustion turbine engine, heat recovery system, or auxiliary equipment. Stationary means that the combustion turbine is not self-propelled or intended to be propelled while performing its function. It may, however, be mounted on a vehicle for portability. A stationary combustion turbine that burns any solid fuel directly is considered a steam generating unit.

“Steam generating unit” means any furnace, boiler, or other device used for combusting fuel and producing steam, plus any integrated equipment that provides electricity or useful thermal output to the affected EGU(s) or auxiliary equipment. The term does not include nuclear steam generators.

“Use” shall have the same meaning as the term “use” as defined at N.J.A.C. 7:27-22.1.

“Useful thermal output” shall have the same meaning as the term is defined at 40 CFR 60.5580, which is incorporated herein by reference.

“Valid data” shall have the same meaning as the term is defined at 40 CFR 60.5580.

7:27F-2.2 Scope and applicability

(a) This subchapter establishes requirements and procedures concerning the control and prohibition of CO₂ emissions from fossil fuel-fired EGUs and EGU facilities subject to this subchapter.

(b) The provisions of this subchapter shall apply to any owner and operator of an existing fossil fuel-fired EGU with a nameplate capacity equal to or greater than 25 MWe, a new fossil fuel-fired EGU with a nameplate capacity equal to or greater than 25 MWe, and a new fossil fuel-fired EGU with a nameplate capacity less than 25 MWe that is located at an EGU facility.

7:27F-2.3 General provisions

(a) The owner and operator of each fossil fuel-fired electric generating unit subject to this subchapter that is required to have a preconstruction or operating permit pursuant to N.J.A.C.

7:27-8 or 22 shall:

1. Submit to the Department a complete application for a new, renewed, or modified preconstruction or operating permit, in accordance with the requirements and deadlines specified in this subchapter, N.J.A.C. 7:27-8 or 22, as applicable;
2. Submit in a timely manner any supplemental information that the Department determines is necessary to review the application and issue or deny an initial or modified preconstruction or operating permit or operating permit renewal that includes the applicable emissions limitation and other requirements as set forth in this subchapter;
3. Operate the EGU in compliance with the emission limits of this subchapter as incorporated in the permit;
4. Comply with the following requirements of this subchapter:
 - i. Monitoring;
 - ii. Compliance demonstration procedure; and
 - iii. Recordkeeping requirements of this subchapter; and
5. Submit reports as required pursuant to N.J.A.C. 7:27-8 and 22 and the applicable preconstruction or operating permit and as requested by the Department.

(b) The Department will use the emissions measurements recorded and reported in accordance with this subchapter to determine the EGU's compliance with the emission limits set forth at N.J.A.C. 7:27F-2.5.

(c) For purposes of determining compliance with the emission limits set forth in this subchapter, the Department will use a 12-operating-month rolling average basis, calculated by dividing the annual total of CO₂ emissions over the relevant 12-month period by the annual electric and/or the mechanical output plus the useful thermal output (output-based limit) over the same 12-month period. If a fossil fuel-fired electric generating unit subject to this subchapter temporarily combusts fuel oil or other liquid fuel in place of natural gas pursuant to a natural gas curtailment period, the CO₂ emissions from that EGU during the period of curtailment shall not be included in the 12-operating-month rolling average used to determine compliance with the emission limits of this subchapter, so long as:

1. The EGU's permit authorizes fuel switching pursuant to N.J.A.C. 7:27-19;
2. The owner or operator is not practicably able to obtain a sufficient supply of natural gas;
3. The owner or operator's inability to obtain natural gas is due to circumstances beyond the control of the owner or operator, such as a natural gas curtailment;
4. The EGU ceases using fuel oil or other liquid fuel in place of natural gas and resumes using natural gas as soon as a sufficient supply of natural gas becomes practicably available; and
5. The owner or operator keeps records of curtailment periods and incorporates such records into the reports submitted to the Department as required by N.J.A.C. 7:27-22.

Such records shall include the following information:

- i. Information sufficient to identify each EGU for which the owner or operator claims an exemption under this section, including a brief description of the source (for example, "dry-bottom coal-fired boiler serving an electric generating unit"), its

- location, its permit number, any other identifying numbers, and any other information necessary to distinguish it from other equipment also owned or operated by the owner or operator of the electric generating unit;
 - ii. A statement that the owner or operator is not practicably able to obtain a sufficient supply of natural gas;
 - iii. The date and time at which the owner or operator first became practicably unable to obtain natural gas; and
 - iv. A description of the circumstances causing the owner's or operator's inability to obtain natural gas.
- (d) A renewal or modification of the operating permit or preconstruction permit of an EGU source will not cure a violation of the requirements of this subchapter if that renewal or modification is effective after the violation occurs.

7:27F-2.4 Permits

- (a) In order to incorporate the applicable emission limit and other requirements set forth in this subchapter, the owner and operator of an existing EGU subject to this subchapter shall submit a complete application for a modification or renewal of its permit pursuant to N.J.A.C. 7:27-8 or 22, and in conformance with the requirements of this subchapter.
- (b) The owner and operator of a new EGU subject to this subchapter shall submit an application for an initial or modified preconstruction or operating permit, as applicable, that shall include the following information, in a format prescribed by the Department:
1. Identification of the facility with the EGU(s) subject to this subchapter, including facility name and the assigned ORIS or facility code, if applicable;

2. Identification of each EGU at the facility; and
3. The monitoring, compliance demonstration, and recordkeeping requirements set forth at N.J.A.C. 7:27F-2.6.

(c) In addition to the requirements at (b) above, an owner or operator of an EGU subject to this subchapter and required to comply with N.J.A.C. 7:27F-2.5(c) shall propose for Department review and approval, a limit that meets the requirements at N.J.A.C. 7:27F-2.5(c)1, 2, and 3 and submit information necessary to support the proposed emission limit.

7:27F-2.5 Emission limits

- (a) An owner or operator of an electric generating unit subject to this subchapter shall ensure that the unit complies with the applicable CO₂ emission limit established at (b) through (e) below. Unless otherwise specified, the emission limits apply as of January 31, 2023.
- (b) A new electric generating unit with a nameplate capacity equal to or greater than 25 MWe shall meet an emission rate of 860 pounds of CO₂ per MWh gross energy output.
- (c) A new electric generating unit with a nameplate capacity less than 25 MWe that is located at an EGU facility shall meet a case-specific output-based emission limit for CO₂ that shall:
 1. Be based on air pollution control technology, pollution prevention methods, and process modifications or substitutions that will provide the greatest emission reductions that are technologically and economically feasible;
 2. Not have greater than 50 percent of the heat input be derived from solid fossil fuel or oil, unless the CO₂ emission rate meets the CO₂ emission limit at (b) above; and
 3. Include the CO₂ emissions from the gasifier, if the emission source(s) are directly attached to a gasifier.

(d) An existing EGU with a nameplate capacity equal to or greater than 25 MWe shall meet the following emission limits by the specified compliance date:

1. On or before June 1, 2024, an emission rate of 1,700 pounds of CO₂ per MWh gross energy output;
2. On or before June 1, 2027, an emission rate of 1,300 pounds of CO₂ per MWh gross energy output; and
3. On or before June 1, 2035, an emission rate of 1,000 pounds of CO₂ per MWh gross energy output.

(e) An owner or operator of an electric generating unit subject to this subchapter that applies for a modification of its permit after January 31, 2023, shall comply with (c) above, subject to the following conditions:

1. A new EGU with a nameplate capacity equal to or greater than 25 MWe must not exceed the emission limit required at (b) above; and
2. An existing EGU with a nameplate capacity equal to or greater than 25 MWe that is subject to (d) above must not exceed the emission limit required pursuant to the compliance schedule set forth at (d) above.

(f) The owner or operator of an electric generating unit required to comply with the limits at (d) above may request an extension of the compliance date at (d)1, 2, or 3 for any of the following reasons:

1. The BPU issues an order determining that the unit is needed to maintain reliable grid operations;
2. The EGU is designated as an RMR unit or PJM or NYISO has requested, in writing, that the EGU remain operational to maintain reliable grid operations; or

3. The electric generating unit is subject to a power purchase agreement that is in its initial term and in effect as of January 31, 2023.

(g) An owner or operator of an existing electric generating unit who requests an extension pursuant to (f) above shall submit documentation to the Bureau of Stationary Sources verifying the basis for which the extension is requested. If the owner or operator provides such verification and, after consultation with the BPU, the Department confirms the EGU meets the applicable condition at (f) above, the Department will extend the compliance date for the EGU for the term of the order or designation, or as identified in the written request by PJM or NYISO as described at (f)1 or 2 above, or the initial term of the power purchase agreement described at (f)3 above, as applicable.

(h) The Department will issue a general extension of the compliance date(s) at (d) above, if the BPU notifies the Department in writing that an extension is necessary to ensure reliability of the electric transmission or distribution system in the State. The Department will extend the applicable compliance date for the term specified in the BPU notice. The Department will publish notice of the general extension on its website within five business days of receipt of the BPU's notice.

7:27F-2.6 Monitoring, compliance demonstration, and recordkeeping

(a) An owner or operator of an EGU subject to this subchapter shall demonstrate compliance with the applicable emission limits specified at N.J.A.C. 7:27F-2.5 and/or in its permit through compliance with the monitoring, compliance demonstration, and recordkeeping requirements at 40 CFR 60.5535, 60.5540, and 60.5560, as incorporated herein by reference, including all notes, comments, appendices, diagrams, tables, forms, figures, publications, and cross-references. The

monitoring, compliance demonstration, and recordkeeping requirements at 40 CFR 60.5535, 60.5540, and 60.5560 shall be adhered to in a manner consistent with the purpose of monitoring and recording for output-based CO₂ emissions and determining compliance with the applicable output-based emission limit set forth at N.J.A.C. 7:27F-2.5.

(b) An owner and operator of an EGU subject to this subchapter shall, in accordance with 40 CFR 60.5535:

1. Install all monitoring systems necessary to monitor CO₂ emissions;
2. Successfully complete all certification test requirements applicable to the monitoring systems installed;
3. Record and quality-assure the data from the monitoring systems required;
4. Use monitoring procedures pertaining to EGUs with an output-based emission limit for CO₂ except that the hourly CO₂ mass emission rates may be calculated in pounds instead of kilograms, using the conversion factor of one short ton equals 2,000 lbs; and
5. The submission of the monitoring plan required by 40 CFR 60.5535(a) will be submitted to the Department as part of any permit action required pursuant to N.J.A.C. 7:27F-2.4.

(c) An owner or operator of an EGU subject to this subchapter shall use the compliance demonstration procedures at 40 CFR 60.5540 that pertain to EGUs with an output-based emission limit for CO₂.

(d) An owner or operator of an EGU subject to this subchapter shall comply with the recordkeeping requirements at 40 CFR 60.5560 that pertain to EGUs with an output-based emission limit for CO₂.

(e) An owner or operator of a fossil fuel-fired EGU subject to this subchapter shall meet the monitoring requirements at (b) above and shall record, and quality-assure, the data from the monitoring systems according to the following schedule:

1. For the owner or operator of an affected EGU that commences commercial operation before July 31, 2022, on and after January 31, 2023
2. For the owner or operator of an affected EGU that commences commercial operation on or after July 31, 2023, on and after the later of the following dates:
 - i. July 31, 2023; or
 - ii. 180 calendar days after the date on which the EGU commences commercial operation.

7:27F-2.7 Reporting

(a) An owner or operator of a fossil fuel-fired EGU subject to this subchapter shall comply with the reporting requirements at N.J.A.C. 7:27-8 and 22 and the applicable preconstruction or operating permit. In accordance with N.J.A.C. 7:27-8.15 and 22.19, the owner or operator shall, upon the Department's request, submit any record relevant to the operating permit or to the emission of CO₂ from the EGU within 30 days, or within a longer time period if approved, in writing, by the Department.

SUBCHAPTER 3. CARBON DIOXIDE EMISSION REDUCTIONS FROM FUELS

7:27F-3.1 Definitions

The following words and terms, when used in this subchapter, shall have the following meanings unless the context clearly indicates otherwise.

“Fuel oil” means a liquid or liquefiable petroleum product derived directly or indirectly from crude oil, which is produced, manufactured, used, or sold for the generation of heat or power.

“No. 4 fuel oil” means a distillate fuel oil made by blending distillate fuel oil and residual fuel oil stocks. It conforms with ASTM Specification D 396 or Federal Specification VV-F-815C and is used extensively in industrial plants and in commercial burner installations that are not equipped with preheating facilities. It also includes No. 4 diesel fuel used for low- and medium-speed diesel engines and conforms to ASTM Specification D 975.

“No. 6 fuel oil” means fuel oil that includes Bunker C fuel oil and is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes.

7:27F-3.2 Carbon standard for fuels

No person shall store, offer for sale, sell, deliver, or exchange in trade, No. 4 fuel oil or No. 6 fuel oil, for purposes of combustion in New Jersey on or after January 31, 2023, except that No. 4 fuel oil or No. 6 fuel oil that was stored in New Jersey before January 31, 2023, may be combusted used, stored, offered for sale, sold, delivered, or exchanged in trade, in New Jersey, for two years after January 31, 2023.

7:27F-3.3 Exemption

This subchapter shall not apply to any person that stores, offers for sale, sells, delivers, or exchanges in trade No. 4 fuel oil or No. 6 fuel oil that meets Emission Control Area (ECA) marine fuel criteria established by federal regulation at 40 CFR 80.2 and is for use by interstate and international shipping lines.

THIS IS A COURTESY COPY OF THIS RULE. ALL OF THE DEPARTMENT'S RULES ARE COMPILED IN TITLE 7 OF THE NEW JERSEY ADMINISTRATIVE CODE.