

6 NYCRR Subpart 227-3, Ozone Season Oxides of Nitrogen (NO_x) Emission Limits for Simple Cycle and
Regenerative Combustion Turbines

Assessment of Public Comment

Comments received from February 26, 2019 through 5:00 P.M., May 20, 2019

General Comments

Comment 1: Support the regulation. (Commenters: 2, 4, 5, 6, 12, 14-1955, 1957, 1958, 1959, 1960, 1962, 1963, 1965, 1966, 1971, 1974, 1976, 1979, 1980, 1981, 1985, 1990, 2003-2015, 2016, 2018, 2019, 2024, 2025, 2028, 2029, 2031)

Comment 2: Subpart 227-3 will certainly help support pollution-free air which is incredibly important for the health of everyone in the region. (Commenter: 2)

Comment 3: There is a long history of polluting power plants and other industrial facilities being placed near low-income and minority communities, and this regulation would help fight against some of these injustices. This element of environmental justice makes the regulation's success imperative because equitable access to clean air is a right that everyone deserves. (Commenter: 2)

Comment 4: I am concerned about the polluting plants located in Astoria and Long Island City, Queens. I'd like to see reduced emissions from these plants. Please cap the emissions, especially in the summer months. (Commenter: 7)

Response to Comments 1-4: The Department of Environmental Conservation (Department or DEC) thanks you for your support in lowering nitrogen oxide (NOx) emission rates from simple cycle and regenerative combustion turbines (SCCTs).

Comment 5: Even if the Environmental Protection Agency (EPA) does not ultimately reclassify the New York City metropolitan area as a “serious” nonattainment area, the DEC should still enact this rule and require that these turbines either cease operation or install pollution reduction equipment to dramatically reduce NOx emissions in order to protect local communities. (Commenter: 1959)

Response to Comment 5: The Department agrees and intends to proceed with this rulemaking as expeditiously as practicable in accordance with the State Administrative Procedures Act (SAPA).

Applicability Section (227-3.1)

Comment 6: Are existing emission limits (Part 227-2.4(e)) and system averaging (Part 227-2.5(b)) with SCCT units included still applicable during the non-ozone season? We suggest clarification of which emission limits apply to SCCTs during the non-ozone season. (Commenters: 1, 3)

Response to Comment 6: The requirements of Subpart 227-2 are unchanged and are applicable year-round. The ozone season requirements in Subpart 227-3 are applicable only during the ozone season.

Comment 7: Will SCCTs with nameplate ratings less than 15 megawatts (MW) continue to be subject to the system averaging provisions of Part 227-2. (Commenter: 1973)

Response to Comment 7: Yes, the provisions of Subpart 227-2 will still apply year-round.

Comment 8: The applicability of Subpart 227-3 should be expanded beyond the ozone season to year-round. (Commenters: 2, 1956)

Response to Comment 8: The goal of Subpart 227-3 is to reduce NOx emissions during the summer when ozone levels are at the highest levels.

Applicability: Black start/emergency operations

Comment 9: The Department should consider exempting turbines that are only used for emergency purposes from the proposed emission limits. For Con Edison, there are two types of emergencies that are addressed by turbines. One is a steam system “black start,” a situation in which a wide-scale outage requires a re-start of the steam system without the usual source of electric power. The other occurs when these same turbines provide second-order contingency support to a distribution load pocket to avert an outage. We request that second order contingency use be authorized as a permissible emergency use in the final rule. (Commenters: 1967, 1970)

Comment 10: Commenters suggest that the Department could require a unit to convert to “emergency use only” as an alternative compliance option. Specifically, DEC could add language to the proposed regulation stating that units would need to be designated “emergency use only” in a federally enforceable permit modification prior to May 2025. (Commenters: 1967, 1970)

Comment 11: The proposed rule does not specify the conditions under which SCCTs that are removed from the New York Independent System Operator (NYISO) market may operate. Long Island Power Authority (LIPA) and Public Service Enterprise Group – Long Island (PSEG-LI) suggest that such SCCTs could be maintained on standby and operate only under the following special conditions:

a. to restart the electric system in the event of a blackout (also known as “black start” operation).

b. at the request of the local system operator after the occurrence of a contingency (i.e., a failure of one or more sources of power to a local area, such as a transmission line or generator other than the SCCT in question or required equipment maintenance) in the local area in which the SCCT is located, if needed to avoid curtailing electric service to customers in that area. The SCCT would be turned on after the contingency occurred, but before any customer load is shed. In the past 6 years, SCCTs in the Long Island system operated less than 100 hours a year for these purposes, on average. (Commenter: 1973)

Response to Comments 9-11: The Department agrees that black start sources should be exempt from the requirements of this rule. In response to the comments regarding black start sources, the Department proposes to revise subdivision 227-3.1, “Applicability,” to exempt black start resources. The Department has also revised subdivision 3.2, “Definitions,” to add a definition for the term ‘black start resource.’

The Department does not agree that other services should be exempt. The Department expects that the NYISO and/or transmission/distribution owners will plan for these services based on the information contained in each facility’s compliance plan and outcomes from the NYISO 2020 Reliability Needs

Assessment (RNA), by looking for market solutions, utilizing other sources or by adding technology to support those services. In addition, the regulation provides for a reliability extension when solutions cannot be put into place and a need has been identified.

Applicability: New York Independent System Operator (NYISO) wholesale market

Comment 12: Are all of the SCCTs that bid into the NYISO wholesale market subject to Subpart 227-3 or are some SCCTs not subject to the rule? (Commenter: 1956)

Comment 13: AGC opposes the exemption for units that do not bid into the New York Independent System Operator wholesale market. (Commenter: 1961)

Response to Comments 12-13: The Department agrees that sources that do not bid into the NYISO wholesale market but inject energy into the grid should not be exempt from Subpart 227-3. The intent of this rule is to address emissions from SCCTs which inject power into the grid. In response to these comments and to clarify intent, the Department is revising subdivision 227-3.1, "Applicability." The revision ensures that the intention to capture all SCCTs, 15 MW and greater, that inject energy into the grid is referenced in the regulation.

Comment 14: The focus of this regulation should be on downstate peaking turbines operating to provide power to the grid. Peaking turbines outside the non-attainment area should be exempted from this regulation. Emissions from any peaking turbines outside New York City and Long Island will not

contribute to the observed ozone exceedances that are the primary focus of the ozone non-attainment problem. (Commenter: 1960)

Response to Comment 14: The Department disagrees with this comment and believes the regulation should apply statewide. There are upstate air quality monitors which show readings close to the 2015 ozone national ambient air quality standards (NAAQS) of 70 parts per billion (ppb). For example, a monitoring station in the Buffalo area has a 2018 design value of 69 ppb and has experienced days where the air quality monitor has measured levels greater than the 70 ppb standard.

Comment 15: Commenter opposes the applicability threshold of 15 megawatts or greater proposed for Section 227-3.1(a) and believes that all SCCTs should be required to comply. (Commenter: 1961)

Response to Comment 15: The Department has evaluated the options for managing and enforcing this regulation. The Department believes that the applicability threshold captures the bulk of SCCT emissions and will result in significant emissions reductions from this sector.

Comment 16: Proposed subsection 227-3.1(a) should be revised to substitute the word “permitted” for the word “nameplate.” A “nameplate” rating is associated with the original manufacturer’s presumption about how a unit may be operated and does not necessarily reflect how a unit is actually permitted to operate. Currently, turbine owners operate at a level authorized by their Department-issued permit; revising the language will define the unit output more accurately. (Commenter: 1967)

Response to Comment 16: The Department disagrees with this comment and believes that a nameplate rating assigned by the manufacturer is consistent with existing regulatory programs and is the most appropriate way to categorize applicable sources under this proposal.

Reporting and Ozone Season

Comment 17: The ozone season definition (May 1 to October 31) is a concern and a clarification is requested. Some facilities currently only report during the ozone season to EPA, how will DEC address these sources? (Commenters: 1, 3)

Comment 18: There is no justification for the ozone season change given analysis of recent ambient ozone data because monitors do not show exceedances during the month of October from 2011-2018. (Commenters: 1, 1961)

Comment 19: We recommend that the definition of ozone season remain as currently defined May 1 – September 30. (Commenters: 1, 1967, 1970)

Comment 20: Data for October will not be available or certified by November for units using continuous emissions monitors (CEMs). In addition, the proposal requires generation of a new report by November 30. Alliance members suggest the quarterly reports prepared under our existing compliance obligations obviate the need for an additional report. (Commenter: 1)

Comment 21: The proposed regulation requires operational data for each compliance period (ozone season) to be submitted to the Department by November 30 of each year. First, the SCCT owners are

already required to report such data under their permits on a calendar quarterly basis. AGC suggests that rather than imposing another layer of reporting, it would be more efficient to report the operational data in the usual quarterly reports. (Commenter: 1961)

Comment 22: If the Department continues to require submission of a November report, as the ozone season for purposes of proposed Part 227-3 ends on October 31 instead of September 30, the data for the month of October will not be certified by the U.S. Environmental Protection Agency until after November 1 (it takes approximately 30 days to receive such certification). (Commenter: 1961)

Response to Comments 17-22: The Department agrees that the ozone season for emissions reporting requirements should remain May 1st through September 30th of each calendar year. The Department has made the appropriate change to the revised proposed rule. In addition, paragraph 227-3.7(b) has been revised to change the compliance date for submitting operational data. In the revised proposed rule, operational data must be submitted as part of a facility's annual compliance report.

Definitions

Comment 23: The Department should clarify that "two or more sources" in the definition of common control encompasses one or more renewable or electric storage resources, an SCCT, and any electric stream units. (Commenter: 1975)

Response to Comment 23: The Department agrees that renewable or electric storage resources should be included and has revised the definition of common control in the revised proposed rule to clarify this intention.

Comment 24: LIPA and PSEG-LI propose adding a definition of “non-ozone season” under this section and referencing the appropriate rule(s) that will be applicable to the SCCTs referenced under 227-3.1 during this time period. (Commenter: 1973)

Response to Comment 24: The Department disagrees that there needs to be a separate definition for non-ozone season in Subpart 227-3. The definition for ozone-season is sufficient to support the requirements of this regulation. Subpart 227-3 only applies to SCCTs during the ozone season while Subpart 227-2 applies to SCCTs year-round.

Control Requirements (227-3.3)

Comment 25: Is the compliance demonstration with the new SCCT limits during the ozone season based on a 24-hour time period consistent with Part 227-2.6? (Commenter: 1)

Response to Comment 25: Compliance may be demonstrated through the use of CEMs (24-hour time period) or stack test data (1-hour period) and is consistent with Subpart 227-2.6

Comment 26: Do all existing ozone season system averaging rules under 227-2 still apply except for units regulated under 227-3? (Commenter: 1)

Comment 27: Do system averaging rules under 227-2 still apply for units not regulated under 227-3? (Commenter: 3)

Comment 28: Proposed Section 227-3.4(a) regarding “Control Requirements” requires that the proposed NOx emission limits be met based on “a facility-level average of all SCCTs at a facility.” We would like the Department to confirm that the averaging requirement under this regulation is separate and apart from and does not affect any averaging requirement of existing Part 227-2. (Commenter: 1961)

Response to Comments 26-28: Subpart 227-3 includes additional emission requirements for SCCTs during the ozone season. The existing averaging provisions under Subpart 227-2 will still apply to SCCTs as defined in that Subpart.

Comment 29: Consistent with existing emissions averaging rules, is compliance possible during the ozone season by over-controlling a unit and averaging with other uncontrolled units and with units that are not affected sources under Part 227-3? (Commenters: 1, 3)

Comment 30: Can facility-level averaging include diesel engines used for startup (which are not affected sources under Part 227-3) or must SCCTs be averaged alone for the purpose of compliance demonstration during the ozone season? (Commenter: 1)

Response to Comments 29-30: The provisions of 227-3 only allow for averaging with other applicable SCCTs at a facility. In response to comments on the proposal the Department is revising subdivision 227-3.4(a) to clarify this issue.

Comment 31: Can SCCT generators also comply by simply reducing output to the point where they meet the maximum emission limits listed (100 parts per million volume dry (ppmvd) by May 1, 2023)? Please

clarify if this is actually an option and it is just implied, or if this is not possible and the SCCTs must follow one of the two options: “ozone season stop” and “electric storage and renewable energy resource” options. (Commenter: 8)

Response to Comment 31: Reduced output will not result in reduced emission rates and therefore reduced output will not bring an SCCT into compliance or help an SCCT meet the emission limits. All SCCTs must meet the provisions in the regulation. The regulation provides several compliance options and the manners by which these provisions are met are under the purview of the facility owners.

Comment 32: The NO_x Reasonably Available Control Technology (RACT) limits are 50 ppmvd for gas-fired units and 100 ppmvd for oil-fired units. Do individual SCCTs need to meet the 50 ppmvd limit under Subpart 227-2 or the 100 ppmvd under Section 227-3.4(a)(1)? EPA believes the stricter NO_x RACT limit should apply during the ozone season. (Commenter: 1956)

Response to Comment 32: As proposed, Subpart 227-3 does not alter any provisions of Subpart 227-2. Subpart 227-3 includes additional emission requirements for SCCTs during the ozone season only. The existing ozone season averaging provisions under Subpart 227-2 will still apply to SCCTs as defined in that Subpart.

Control Requirements: Averaging

Comment 33: DEC should define how the “facility-level average of all SCCTs” is calculated. (Commenter: 1956)

Comment 34: The facility-level average should be based upon a weighted average (megawatt-hour (MWh-basis)) rather than an arithmetic average. (Commenter: 1956)

Response to Comments 33-34: The intent of subdivision 227-3.4(a) is to allow for facility averaging on a weighted average basis. Based on comments received, subdivision 227-3.4(a) was revised to clarify this issue.

Comment 35: How is a “one-hour average” defined for cases where stack testing is conducted? (Commenter: 1956)

Response to Comment 35: NO_x emission rates will be based on the average rate of three one-hour stack test runs.

Comment 36: If stack testing may be used to demonstrate compliance with emission limits, such testing should be conducted prior to the May 1, 2023 compliance date or at least very soon thereafter. (Commenter: 1956)

Response to Comment 36: The Department currently requires stack testing once during the five-year term of a Title V permit and this regulation will accept those stack tests to demonstrate compliance. The Department expects the results of the most recent stack tests to be reported in the compliance plans.

Comment 37: Do not allow averaging of emission limits at the facility level. The rule should specify NO_x emission limits at the emission unit level instead of at the facility level. (Commenter: 1976)

Comment 38: DEEP recommends that NYDEC assure that the rule prevents trading with existing units.

(Commenter: 1957)

Response to Comments 37-38: Under Subpart 227-3, the Department will not allow full facility averaging but will allow averaging only with other SCCTs at the facility on a 24-hour basis. This provision ensures that lower NOx emission rates are met while providing some flexibility in complying with the requirements of this Subpart. This regulation does not include trading as a commenter suggests, rather, it allows for averaging of emissions between SCCTs only.

Control Requirements: Timing

Comment 39: The DEC should require that the emission standards take effect on a more expedited schedule. (Commenter: 1956)

Comment 40: The new NOx requirements should be phased-in as rapidly as possible in order to protect children and vulnerable adults from the negative health impacts associated with these peaker plants.

(Commenter: 1959)

Comment 41: DEC's proposed standard does not come fully into force until 2025. This is too long to wait. (Commenter: 1959)

Comment 42: In order to allow for a smoother planning process and to reduce uncertainty, we recommend that the DEC extend each compliance deadline by two years. (Commenter: 1969)

Comment 43: System averaging should be phased-out no later than 2021 and full implementation of the new NOx limits should take place no later than May 1, 2023. (Commenter: 1972)

Comment 44: The implementation dates are far too late to address the ozone air quality problems that the shared NNJ-NY-CT non-attainment area is now facing. (Commenter: 1976)

Comment 45: The new NOx limits on peaking units in New York City should take effect as soon as possible. (Commenters: 1972, 2017, 2026)

Comment 46: The sooner New Yorkers are spared exposure to emissions from peaker units the better. (Commenter: 1959)

Response to Comments 39-46: The Department consulted with stakeholders including environmental justice (EJ) organizations, environmental groups, impacted source owners, the NYISO, the Department of Public Service (DPS) and the New York State Energy Research and Development Authority (NYSERDA) during the development of this regulation. The proposed timeframe includes considerations for improving air quality while striving to maintain electric system reliability. The Department has factored in permitting and other issues, such as stack testing and has determined that the compliance schedule in the regulation is appropriate.

Comment 47: We recommend that the 2025 emission limits be revised to 40 ppmvd on gas and 50 ppmvd on oil. The limits are consistent with Connecticut's Phase 2 NOx reduction program. (Commenter: 1969)

Response to Comment 47: The Department considered several options and presented them during the stakeholder process. In addition to the commenter's example, the 2016 Ozone Transport Commission (OTC) Model Rule recommends NO_x emission limits 25 ppmvd for gas and 42 ppmvd for oil. The Department believes that the limits in the proposed regulation will result in meaningful NO_x reductions in the NYMA and further New York's ozone nonattainment mitigation efforts.

Comment 48: Commenter suggests that some dual fueled SCCTs may meet the proposed NO_x targets while running on oil but may not be able to do so while running on natural gas which may force the SCCT to produce more NO_x while running on oil to comply with the targets. (Commenter: 1973)

Response to Comment 48: The Department received data from the commenter stating that they may be able to meet oil limits with controls but not the gas limits. However, the Department believes that the control requirements in the regulation will result in lower overall NO_x emissions. It is anticipated that sources will operate on oil when it is economical to do so or when directed to by the distribution utility.

Comment 49: The Department should further define and provide the detailed justification for the proposed NO_x emissions limits. The Department should provide some flexibility and higher limits in Subpart 227-3. (Commenter: 1975)

Response to Comment 49: The Department believes it has provided sufficient justification for the NO_x emission limits in the rulemaking support documents, more specifically the Needs and Benefits section of the Regulatory Impact Statement (RIS). The documentation presented in the RIS demonstrates that SCCTs have contributed significantly to the high ozone readings at downwind monitors. Further, the

Department believes that it has provided sufficient flexibility and compliance options in the regulation to allow for multiple compliance pathways, including averaging with renewable and storage resources.

Comment 50: Prohibit oil firing in dual fuel peaking turbines on predicted high ozone days unless there is a gas curtailment. (Commenter: 1976)

Response to Comment (50): The Department considered multiple options during the development of this regulation. At this time, the Department believes that the NO_x limits in the regulation will result in NO_x emission reductions while providing flexibility to maintain electric system reliability. The Department does not believe that a prohibition on the firing of fuel oil in SCCTs on high ozone days is warranted at this time.

Comment 51: The Department should provide assurances for regulated entities that undertake the expenditure to install water injection controls but still are unable to meet the limits by providing the additional time required to adopt other measures and recoup their investment. Such a provision would provide the requisite certainty to prompt the investment required for timely and substantial reductions in NO_x emissions without undermining grid reliability. (Commenter: 1975)

Response to Comment 51: The regulation requires a compliance plan to be submitted to the Department by March 2, 2020 and contains staggered compliance dates beginning in 2023. Furthermore, the regulation allows for several compliance options. The Department believes that the compliance plans, staggered compliance dates and the options available to affected facilities provides sufficient time and flexibility for each affected facility to comply with Subpart 227-3.

Comment 52: The proposal allows for the prolonged use of older SCCTs and may not assure that New York will meet its obligation to prevent these sources from significantly contributing to nonattainment in downwind states. (Commenter: 1957)

Response to Comment 52: The Department believes that the proposed schedule and compliance requirements set forth in this regulation will result in reduced NOx emissions as expeditiously as practicable without jeopardizing electric system reliability. This regulation combined with other New York strategies will decrease emissions impacts on downwind states.

Compliance Options (227-3.4)

Comment 53: The inclusion of renewable electricity generation as part of compliance plans is a very important part of this regulation. (Commenter: 2)

Comment 54: By rewarding operators who use electric storage, this regulation could help lay the infrastructure for a grid that is more supportive of renewable energy generation. Electric storage would help improve grid reliability and address diurnal and seasonal variations that are concerns with renewables like solar and wind. (Commenter: 2)

Comment 55: We support the inclusion of energy storage and renewable energy within the compliance options. (Commenters: 1957, 1968)

Comment 56: We support the concepts incorporated in 227-3.5(b) “electrical and renewable energy resources” allowing electric storage and renewable energy resources to be averaged with SCCTs to meet emissions limits. (Commenter: 1965)

Comment 57: We support the compliance option outlined in subsection 227-3.5(b)(2) which would provide a strong incentive for the development of renewable energy and energy storage facilities that support the State’s Green New Deal initiative while achieving the desired reductions in NOx emissions. (Commenter: 1973)

Response to Comments 53-57: The Department thanks you for supporting this compliance option. The Department believes this option supports the Governor’s goals for improved air quality and renewable energy and storage infrastructure.

Comment 58: How were the pound per MWh (lb/MWh) standards in Section 227-3.4 calculated? What are the equivalent limits in units of ppmvd? (Commenter: 1956)

Response to Comment 58: The calculation used to convert ppmvd to pounds per million British thermal units (lb/mmBtu) is derived from 40 CFR Part 75 Appendix F. The equation used by the Department is:

$$ppmvd = \frac{\left[\left(\frac{lb}{mmBtu}\right)\right] \times 10^6}{\left[MW \left(\frac{g}{mol}\right)\right] \left[F_{dry} \left(\frac{dscf}{mmBtu}\right)\right] [O_2 correction(atm)] \left[\frac{1}{\left(0.7302 \left(\frac{atm - ft^3}{lb_mol - R}\right)\right) (515R)}\right]}$$

Where:

$ppmvd$ is the concentration in parts per million by volume, dry basis, of NO_x or CO;

MW is the molecular weight for NO_x (= 46 lb/lb-mole) or CO (= 28 lb/lb-mole);

$F_{dry\ factor}$ for natural gas = 8,710 dscf/MM BTU; for residual or fuel oil = 9,190 dscf/MMBTU; and

$O_2\ correction\ factor = (20.9\%)/(20.9\% - O_2\ measured)$; where $O_2\ measured$ is percent oxygen on a dry basis.

The equivalent units are converted between ppmvd to lb/MWh by first converting ppmvd to lb/mmBtu using the equation derived from 40 CFR Part 75 Appendix F. Then, lb/mmBtu is converted to lb/MWh using a heat rate. The Department converted from lb/mmBtu to lb/MWh using the average heat rate for New York SCCTs, 15,000 mmBtu/MWh.

Comment 59: When using energy generated to calculate an equivalent emission rate, is the electricity generated (MWh) based on gross energy produced or net energy produced? (Commenter: 1956)

Response to Comment 59: Electricity generated is net energy produced as supported by the regulatory language in paragraph 227-3.5(a)(3) of Subpart 227-3, which states: "energy delivered...."

Comment 60: There would be no additional benefit accrued by the rule if combustion turbine emissions are averaged with clean sources that would operate regardless of the rule. (Commenter: 1957)

Comment 61: DEC should amend the proposal to require that 'renewable generation resources' and 'electric storage resources' available for averaging must be units that began construction after the date of the rule adoption. (Commenter: 1957)

Response to Comments 60-61: The Department believes that owners of SCCTs have not typically invested in renewable or storage resources under common control. The Department believes that providing this compliance option, as written, will bring new renewable and storage resources into New York's infrastructure.

Comment 62: Preliminary analysis indicates that it may be feasible to retrofit the units at both Gowanus and Narrows facilities in order to comply with the proposed regulations and commenter states that they will continue to pursue such plans for compliance. (Commenter: 1961)

Response to Comment 62: Thank you for the comment. In response, the indirect references to the Gowanus and Narrows facilities have been removed from the supporting documents.

Compliance Options: Charging Storage

Comment 63: We recommend that the charging of storage devices be limited to 'renewable generation resources' or, at very least, that the emissions from charging be attributed to the storage device for averaging as it is discharged. Charging of batteries from barely compliant turbines or other high emitting units in the days or hours prior to an ozone episode will do little to alleviate emissions of critical ozone precursors and may worsen a high ozone episode by increasing the elevated reservoir of ozone. (Commenter: 1957)

Comment 64: Do not allow fossil fuel-powered plants to charge storage. (Commenters: 14-1955, 1958, 2003-2015, 2031)

Response to Comments 63-64: The Department consulted with stakeholders including, EJ organizations, environmental groups, impacted source owners, the NYISO, DPS and NYSERDA during the development of this regulation. The option to offer storage and renewable resources is expected to reduce NO_x emissions and allowing charging from different sources is intended to address reliability. While some charging may come from fossil fuel units, from an economic perspective, the Department believes that recharging battery storage units with power generated by SCCTs will be cost prohibitive.

Compliance Options: Proximity

Comment 65: The one-half mile restriction in Section 227-3.5(b) for renewable and storage projects which may be used by an SCCT owner in order to comply with the Part 227-3 standards is arbitrary and overly restrictive. (Commenter: 1961)

Comment 66: Electric storage and renewable energy projects located more than one-half mile from a SCCT facility should be allowed for compliance with Part 227-3 if the SCCT owners can demonstrate that such projects will service the communities where the SCCTs are located. (Commenter: 1961)

Comment 67: Commenter is concerned that the proposed conditions set forth in paragraph 227-3.5(b)(2) will not fully recognize the ability for the objective to be achieved because a project may be in a location that is within “electrical proximity” of existing generation but still would not qualify for “averaging” under the proposed rule because it is not within a ½ mile radius. (Commenter: 1965)

Comment 68: Locations have been identified in the Long Island electric system where resources could be connected to substations other than the SCCTs substation and still directly reduce the dispatch of the SCCT. (Commenter: 1965)

Comment 69: We recommend the following modifications to 227-3.5 to enable “electrical proximity” resources to be averaged:

The first sub-clause identified above should be replaced with “(i) The renewable generation resource and/or the electric storage resource must be directly connected to the same physical substation as the SCCT with which it is being averaged or to a substation that is electrically proximate to the SCCT substation as certified by the NYISO.” The absence of such flexibility may significantly limit the opportunity for storage and renewable energy resources to facilitate compliance with the proposed rule. To do so, the commenter suggests that NYISO and stakeholders work to define a test that a transmission owner could employ to demonstrate to NYISO that the energy produced by electrically proximate renewable and storage resources will be able to reduce operation of their intended SCCT. (Commenters: 1965, 1973)

Comment 70: The numbering in subsection 227-3.5(B)(2) (i)-(iii) should be revised to make the requirement clear that physical connection to the same substation is not necessary. Specifically, the wording should make clear that a renewable generation resource and/or the electric storage resource must be either: (i) directly connected to the same physical substation as the SCCT, or (ii) within one-half mile radius of the SCCT, with which it is being averaged. Another option would be to eliminate (i), the need to be physically connected to same substation, to allow more flexibility in the regulation will encourage use of this compliance option. (Commenter: 1975)

Response to Comments 65-70: The Department worked with multiple stakeholders on the issue of where to allow placement of renewable and storage resources under this compliance option. The Department felt it was important that the emissions reductions realized benefit the locally impacted communities. The language presented in the proposed rule resulted from stakeholder input and is not arbitrary. The one-half mile radius is derived from 6 NYCRR Part 487.4(a)¹ which refers to assessing impacts on communities, it states: “At a minimum, the impact study area must be the geographic area that is encompassed within a one-half mile radius around the proposed location of the facility.”

Comment 71: Biodiesel could significantly help existing combustion turbines achieve compliance without major capital expense and encourages NYSDEC to recognize and implement a significant role for biodiesel under its proposed NOx regulations for combustion turbines. (Commenter: 1962)

Comment 72: DEC could establish an additional compliance option, using biodiesel, for combustion turbines that might be designated by NYISO as a reliability resource. (Commenter: 1962)

Response to Comments 71-72: The Department believes that it has afforded each facility with the flexibility to determine how to comply with the regulation. Each affected facility will decide which fuel(s) will be used as part of their compliance plans.

Comment 73: Con Edison requests that the Department revise the definition of the “ozone season stop” compliance option in the proposed 227-3.5(a) to make clear that the units can be available to provide

¹ 6 NYCRR Part 487. “Analyzing Environmental Justice Issues in Siting of Major Electric Generating Facilities pursuant to Public Service Law Article 10”.

emergency service during the ozone season and also bid into the wholesale market the rest of the year. Thus, to conform proposed 227-3.5(a) with the applicability requirements in proposed 227-3.1, we request that the “ozone season stop” be rewritten as follows: ‘Ozone season stop.’ An owner or operator of an existing SCCT may opt to comply with this Subpart by not bidding the SCCTS into the NYISO wholesale market during the ozone season. (Commenter: 1967)

Response to Comment 73: The Department agrees that black start sources should be exempt from the requirements of this rule. In response to the comments regarding black start sources, the Department proposes to revise Section 227-3.1, “Applicability,” to exempt black start resources. The Department has also revised Section 3.2, “Definitions,” to add a definition for ‘black start resource.’

The Department’s intent is to capture all SCCTs with nameplate ratings of 15 MW or greater that inject energy into the grid. In response to these comments and to clarify the intent, the Department revised Section 227-3.1.

Comment 74: Commenters caution that while current energy storage technology could serve as a complement to a peaking turbine, it may not serve as a complete replacement for the capacity provided by such a turbine. Peaks during the hottest months can run as long as twelve hours – from noon to midnight – over consecutive days and the current capacity of energy storage units is not sufficient to meet energy demands during such a sustained multi-day period. As a result, a proposal by an SCCT owner to install energy storage equipment as a replacement option for a particular turbine may be inadequate to meet reliability requirements. (Commenters: 1967, 1970)

Response to Comment 74: The Department has provided multiple compliance options including averaging with renewable and storage resources. Each affected source has the flexibility to determine

how best to comply with the regulation. In addition, the regulation requires a compliance plan which we anticipate will be considered by the NYISO during the 2020 RNA and the results of that analysis may identify reliability concerns that can be addressed either through the development of market solutions or, if necessary, through the reliability provisions in section 227-3.6.

Comment 75: The “effective rate” for facilities that utilize the “electric storage and renewable energy resources” pathway to compliance must result in actual and substantial reductions in NOx emissions.
(Commenter: 1968)

Response to Comment 75: The Department agrees and believes that the rule, as written, will accomplish that goal.

Comment 76: We urge DEC to modify the second compliance option in the regulation – which permits averaging of output-based daily nitrogen oxide emissions with approved battery storage or renewable energy – by limiting the allowable averaging period to the NYISOs definition of the “Peak Load Window.”
(Commenter: 1971)

Comment 77: Averaging of SCCT emissions with renewables or battery storage should be limited to peak hours. (Commenter: 2025)

Response to Comments 76-77: The Department considers the proposed daily compliance metric to be the best approach to reduce emissions while providing for operational flexibility for affected sources.

The Draft NYISO 2019 Master Plan² is in draft form and currently calls for a deliverable for a “A report by the consultant and NYISO recommendations for the durations, capacity values, and Peak Load Windows associated with Resources with Energy Duration Limitations.” Therefore, a current “Peak Load Window” is not available for assessment. Furthermore, peak times vary from one area to the next which is especially pronounced in downstate communities where the Staten Island peak load may go well into the night while the Manhattan peak load is early afternoon. Setting a peak load requirement is not well defined currently.

For commenters suggesting an averaging of renewables for a timeframe of less than 24 hours, the Department did seek further information to assess this suggestion. While the commenter did not specify concerns regarding the 24-hour average, the Department researched several possible concerns. If the commenter is concerned that storage sources will charge during peak times using older high emitting sources, time of use (TOU) costs of electricity do not support charging storage resources during peak hours during the day and discharging at night. Consolidated Edison’s TOU system is discussed in an article in Habitat Magazine as follows: “(f)rom June 1 through September 30, electricity during the “off-peak” hours of midnight to 8 AM will cost 1.54 cents per kilowatt/hour. During the “peak” hours of 8 A.M. to midnight, the rate will soar to 21.80 cents. Rates will be even higher during the “super-peak hours” of 2 to 6 P.M. on summertime weekdays. (During non-summer months, the off-peak rate is unchanged, and the peak rate is 8.07 cents. Customers who are not in the time-of-use program pay roughly 18 cents per kilowatt/hour.).”³ The Department does not believe that owners of affected sources would choose to charge storage resources at 21.80 cents per kWh and then sell that power at 1.54 cents per kWh. This difference in cost does not include any storage loss or invested capital.

² <https://www.nyiso.com/documents/20142/6665211/2019%20Master%20Plan%20draft%20v2.pdf/d5e26efd-3860-ec4c-dbd-9c39d4161d3f>

³ <https://www.habitatmag.com/Publication-Content/Legal-Financial/2018/2018-April/Time-of-Use>

If the commenter was concerned about battery storage performing multiple discharges so that older high emitting sources may emit more, the Department reviewed available data and consulted with the DPS and NYSERDA with respect to the operation of the SCCTs and what is expected with the averaging option. Based on the information gathered and the newly released Peak Study Analysis⁴ developed by NYSERDA and filed by DPS on July 1, 2019, the Department believes that a 24-hour time frame is reasonable. However, the regulation requires the submission of data on the operation of renewable energy and energy storage resources to the Department annually. The Department will monitor how the averaging option is being utilized to ensure that emission reductions are being realized. If the Department finds that this option allows for circumvention of the rule, the Department may propose changes through the SAPA rulemaking process.

Comment 78: We recommend that the following provisions be put into Subpart 227-3 so that exceedance of the emissions limits would not be treated as a violation under either one of the following conditions:

- a) avoidance of electric service curtailment (also known as load shedding) would be a permissible occurrence for emissions exceedance, provided that the operation of the SCCT in such an event is requested by the NYISO or local system operator as an emergency operating procedure before load shedding, but after all other remedial steps have been taken.

⁴ NYSDPS website: <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7BFDE2C318-277F-4701-B7D6-C70FCE0C6266%7D>

b) The emissions exceedance would not have occurred but for the unexpected failure of equipment or intermittency of supply issues occurring due to wind or solar availability being lower than forecast; and such event(s) could not have been predicted in time to adjust the operation of the SCCT. Absent such provisions, SCCT owners may perceive risks in this compliance option that they are unable to control. (Commenter: 1973)

Comment 79: National Grid appreciates DEC's concept to incorporate renewable energy and energy storage as partial solutions to help reduce emissions from the peaking turbines. However, given the intermittent nature of renewable energy and/or operational issues with this new technology, it is possible that an affected source complying with these regulations in accordance with Section 227-3.5(b) may be required to run in order to avoid a load shedding situation if the renewable resource is not available or lower than forecast. National Grid is requesting that 227-3.7(b)(3) be modified to identify that in this limited situation, emissions that result from this scenario would be exempt from the emission standards of Part 227-3.5(b). (Commenter: 1969)

Response to Comments 78-79: The Department does not agree that SCCTs that cannot comply with the requirements should be allowed to operate to provide the services that the commenters describe. The intent of the regulations was to capture all SCCTs that provide energy to the grid. Consistent with this intent, the applicability section has been revised accordingly. The Department expects that the NYISO and/or transmission/distribution owners will plan for these services based on the information contained in each facility's compliance plan and outcomes from the NYISO's 2020 RNA by looking for market solutions, utilizing other sources or by adding technology to support those services. In addition, the regulation provides for a reliability extension when solutions cannot be put into place within the time requirements of the regulation and a reliability need has been identified.

Comment 80: Do not allow old peaker plants to be replaced with new fossil-fuel burning peakers.

(Commenters: 14-1955, 2003-2015)

Response to Comment 80: The Department consulted with stakeholders including, EJ organizations, environmental groups, impacted source owners, the NYISO, DPS and NYSERDA during the development of this regulation. The Department believes that allowing the flexibility for multiple compliance pathways, including repowering with significantly lower emitting sources will result in lowered NO_x emissions while ensuring electric grid reliability.

It should be noted that such repowering projects would also require environmental review pursuant to the State Environmental Quality Review Act, ECL Article 8 (SEQRA) or may be subject to review and approval by the State Board on Electric Generation Siting and the Environment pursuant to Article 10 of the Public Service Law (Article 10). Both the SEQRA and Article 10 review process would consider carbon dioxide (CO₂) emissions as well as additional potential environmental impacts associated with any repowering proposal. The Department participates as a statutory party in all Article 10 proceedings, including to ensure compliance with all applicable environmental standards. In addition, the Article 10 process includes numerous opportunities for public input.

Comment 81: The term “sources” is not defined but is used in 227-3.5 in reference to averaging renewable and electric storage resources with emissions of all SCCTs at the permitted facility. However, the permitted facility may also have electric steam units and therefore the effective rate should account for the MWh of steam units in the denominator and the corresponding NO_x emissions each day of the steam units at the permitted facility in the numerator. Providing for these other units at the same

facility allows for obtaining the NO_x reductions sought by the proposed peaker rule from the facility at potentially lower cost to ratepayers. (Commenter: 1975)

Response to Comment 81: In the proposed revisions to the regulation, the term ‘sources’ has been replaced with the term ‘emission sources’ which is defined at 6 NYCRR Part 200.1(f) as: “Any apparatus, contrivance or machine capable of causing emission of any air contaminant to the outdoor atmosphere, including any appurtenant exhaust system or air cleaning device. Where a process at an emission unit uses more than one apparatus, contrivance or machine in combination, the combination may be considered a single emission source.”

To better address emissions from SCCTs, the emissions averaging provisions under Subpart 227-3 are limited to only SCCTs at each facility.

Comment 82: Additional flexibility should be incorporated to allow for performance-based compliance alternatives. For example, New Jersey’s compliance demonstration protocol allowed for “[a]ny other measure, approved by the Department that provides NO_x emission reductions and ozone air quality benefits to New Jersey. The Model OTC Rule provides for an alternative RACT determination. Similarly, the Department should provide flexibility for an alternative of net air quality benefit projects under common control upon demonstration that the cost exceeds an economic threshold of \$5,885 per ton of NO_x removed, which is the Department’s inflation adjusted cost effectiveness threshold for RACT. (Commenter: 1975)

Response to Comment 82: The regulation places additional ozone season requirements on SCCTs. It is not a RACT regulation. The Department believes that it has provided sufficient flexibility in the

regulation which allows for multiple compliance pathways including averaging with renewable and storage resources.

Comment 83: Compliance with Subpart 227-3 should not occur simply by averaging emissions from existing SCCTs with battery storage (Commenter: 2029).

Response to Comment 83: Averaging emissions of SCCTs with battery storage is only one compliance option of this proposed regulation. The NOx limits in the proposed regulation are stringent and the Department provides multiple compliance options in the proposed regulation.

Electric System Reliability

Comment 84: We want to express our strong support for Part 227-3.6 and granting the NYISO the ability to designate resources and permitting them to continue to operate if necessary to maintain electric grid reliability. (Commenter: 11)

Comment 85: National Grid recommends that the DEC retain the provisions of 227-3.6 Electric System Reliability. (Commenter: 1969)

Comment 86: The New York State Reliability Council (NYSRC) respectfully requests that the DEC implement the final rule as expeditiously as possible. The timely implementation of the final rule will provide the NYISO's Reliability Planning Process and the state's utilities and energy providers the ability to ensure that the resources necessary to maintain electric system reliability are available. (Commenter: 11)

Comment 87: Timely adoption of a final rule that includes the proposed compliance schedule is necessary for the NYISO and affected transmission owners to develop effective plans to maintain electric system reliability. (Commenter: 1964)

Comment 88: The DEC should adopt the proposed rule provision enabling the NYISO to select generators needed for reliability to continue operating until permanent solutions can be built. (Commenter: 1964)

Comment 89: The Long Island Power Authority (LIPA) and Public Service Electric and Gas – Long Island (PSEG-LI) recommend that the DEC coordinate with NYISO such that the timing and implementation of these regulations coincide with the NYISO Comprehensive Resource Planning and Generator Deactivation Processes. (Commenter: 1973)

Comment 90: Approximately 3,300 MW of generation could be impacted by the rule. If this generation were to withdraw from NYISO's market as a result of the implementation of the rule, the addition of substantial resources in both New York City and on Long Island may be necessary in order to maintain the reliability of the state's bulk power electric system. These needed resources could be in the form of new generation or transmission facilities, or load reduction measures. The planning and development of these resources could take years to complete. (Commenters: 11, 13)

Comment 91: The NYISO 2019-2028 Comprehensive Reliability Plan (CRP) addresses the possible requirements of this proposal and concluded that if all affected sources chose to shut down that there

would be reliability issues with respect to transmission and capacity. These concerns must be incorporated in the implementation of this rule. (Commenter: 1960)

Comment 92: My biggest concern is that NYISO has identified numerous reliability issues, the schedules for retiring Indian Point, the NYISO RNA process and implementing solutions may be incompatible with the compliance plan in Part 227-3.6. I encourage DEC to ensure that they are compatible. (Commenter: 1960)

Response to Comments 84-92: The Department thanks you for your comments. The March 2, 2020 compliance date for submitting Compliance Plans was coordinated with stakeholders, including the NYISO, to support the upcoming NYISO 2020 RNA and allow flexibility to maintain reliability of the electrical grid.

The Department expects that the NYISO and/or transmission/distribution owners will plan for any issues based on the information contained in each facility's compliance plan and outcomes from the NYISO's 2020 RNA by looking for market solutions, utilizing other sources or by adding technology to ensure reliability. In addition, the regulation provides for a reliability extension when solutions cannot be put into place and a need has been identified.

Comment 93: Section 227-3.6 "Electric System Reliability" should be altered because it hinders the conversion of the electrical grid towards renewable energy. (Commenter: 2)

Response to Comment 93: The Department consulted with stakeholders including EJ communities, environmental groups, impacted source owners, the NYISO, DPS and NYSERDA during the development

of this regulation. The Department has provided multiple compliance options including averaging with renewable and storage resources to ensure reduced NOx emissions while maintaining electric grid reliability. The Department disagrees with the commenter that the proposed regulation hinders the conversion of the electrical grid to renewable energy. Incentives for installing renewable energy and energy storage are included in the proposed regulation and if utilized, would result in a step towards reaching the goal cited in the comment.

Comment 94: A provision should be included in the rule to account for the inevitable delays of permitting in New York City that could easily delay implementation of solutions to all the reliability issues detailed by NYISO in the CRP and that may arise in the NYISO RNA. (Commenter: 1960)

Comment 95: It is important for the Department to retain the latitude to address the potential for unforeseen events beyond the four-year extension period described. We recommend the addition of a new paragraph 227-3.6(c) as follows:

“(c) On a case-by-case basis, the Department may extend the compliance deadlines beyond the time frames allotted in 227-3.6(a) and (b) if all of the provisions of those sections have been met but the permanent solution is not yet online.” (Commenter: 1967)

Response to Comments 94-95: The Department consulted with stakeholders including impacted source owners, the NYISO, DPS and NYSERDA during the development of this regulation. The Department believes that the provisions set forth in paragraph 227-3.5(b) reflect the outcome of the stakeholder process and allows for multiple options for compliance without the need for additional extensions and delayed compliance. Subpart 227-3 requires a compliance plan in 2020 and NOx emission limit

requirements beginning in 2023 and 2025. With an up to four-year extension, this would result in compliance in 2027 and 2029 and the Department believes that this gives affected sources enough time to comply.

Comment 96: Compliance options should only be considered in the context of addressing electric system reliability and an overarching, compelling and independent demonstration that such continued operation of any given peaking unit is critical to system reliability. This analysis must demonstrate energy storage and other clean energy resources could not feasibly meet the system needs.

(Commenter: 1972)

Response to 96: The short- and long-term solutions to system reliability issues will be developed as part of the NYISO's Comprehensive Reliability Plan (CRP).

Comment 97: The proposed rule should make clear that the local transmission/distribution owner may designate an SCCT as a "reliability source" even where an owner has not self-identified its SCCT as such in the compliance plan submitted under proposed 227-3.3(b). (Commenter: 1967)

Comment 98: As SCCTs providing power to a local transmission/distribution owner comply with proposed Part 227-3, circumstances may arise that lead to a new determination that a specific unit has become a "reliability source" needed to temporarily resolve a reliability need after a compliance plan is submitted. Proposed 227-3.6(b) as written could be interpreted to require NYISO to separately determine that a reliability need exists so as to preclude a transmission/distribution owner from triggering the additional two-year extension it deems necessary. Since NYISO would have a role in designating both a reliability source and the selection of a permanent solution, Con Edison requests that

clause (b)(1) be deleted to remove this potential conflict and obstacle to an orderly phase out of non-compliant SCCTs. (Commenter: 1967)

Response to Comments 97-98: To clarify its intent, the Department has added transmission/distribution owner to Subpart 227-3.6(b)(1) in the proposed revisions to the regulation.

Comment 99: We urge DEC to further ensure the meaningful inclusion of Environmental Justice communities in exceptions for reliability, actual and substantial reductions in NOx emissions and just transition to a fossil-fuel free future. (Commenter: 1968)

Comment 100: Exceptions for reliability must require stakeholder involvement and agency transparency. (Commenters: 1968, 2031)

Comment 101: The process by which NYISO and electric utilities may designate an SCCT as a “reliability source” so as to permit temporary noncompliance must require consultation with Environmental Justice community stakeholders, transparency, and mitigation. (Commenter: 1968)

Response to Comments 99-101: The NYISO’s CRP is developed through an open stakeholder process where EJ groups may participate. During the CRP process, the issues which the commenters raised are typically addressed. The CRP is typically developed over many months offering multiple meetings where Environmental Justice community stakeholders may participate and offer feedback.

Comment 102: Another compliance option would be to allow an affected source to demonstrate compliance by showing that its total NOx emissions were reduced during the ozone season as a result of energy storage being dispatched either on-site or nearby. Importantly, we believe that such an alternative compliance option should be limited to only those units determined necessary for reliability in an effort to minimize the public health impacts of their continued operations. (Commenter: 1972)

Response to Comment 102: As discussed in the Needs and Benefits Section of the RIS, in order to reduce the design values, emissions on high ozone days must be reduced. Therefore, a daily emissions standard has been proposed. Limiting the NOx emissions from SCCTs subject to this regulation on a seasonal basis (rather than daily) will likely have little impact on the ozone design values. The Department believes that by adopting stringent emission rates as set forth in the proposed regulation, the design values may be reduced significantly.

Electric System Reliability: Extension timing

Comment 103: DEC should implement a process to allow further extension of individual SCCT compliance deadlines in the event that the NYISO determined that additional time is needed to complete a permanent reliability solution. (Commenter: 1973)

Comment 104: While the proposed peaker rule provides resources necessary for reliability an additional 2-4 years to operate beyond the May 1, 2023 effective date, the 2-4 year extension is arbitrary. (Commenter: 1975)

Comment 105: Resources necessary for reliability should be able to continue to operate until appropriate solutions are put into place. (Commenter: 1975)

Comment 106: The 2-4 year extension for continued operation of units needed for reliability should be extended to allow those units to operate until a solution is in place. (Commenter: 1975)

Response to Comments 103-106: The Department consulted with stakeholders including source owners, the NYISO, DPS and NYSERDA during the development of this regulation. The Department believes that new resources needed to resolve a reliability need(s) will be on line within the schedule set forth in Subpart 227-3.

Comment 107: Do not allow a blanket exemption from emission limits for reliability concerns. Instead, allow facility specific emission limits or alternative emission limits. (Commenter: 1976)

Comment 108: The regulation should be clarified to state that the emission limits in Section 227-3.4 do not apply to an SCCT while it is continuing to operate under Section 227-3.6 (i.e. that it is not operating out of compliance.) (Commenter: 1975)

Response to Comments 107-108: The Electric System Reliability section supports renewable and storage resources in preparation for a future electrical grid with lower or zero emitting electricity generating resources. SCCTs that operate pursuant to 227-3.6 will be operating for a limited period of time to address a reliability need(s). The Department added language in Section 227-3.6 to clarify that the emission limits in 227-3.4 do not apply to an SCCT while it is continuing to operate under 227-3.6.

Comment 109: It is unclear if the common control definition and this requirement of the compliance plan apply to restrict management of an electric energy storage resources state of charge. If it is intended to restrict the management of the state of charge to the owner or operator then it may conflict with what is eventually approved for NYISO's compliance with FERC Order 841. The Department should make it clear that the proposed peaker rule does not require that an electric storage resource self-manage its state of charge. (Commenter: 1975)

Response to Comment 109: The Department consulted with stakeholders including impacted source owners, the NYISO, PSC and NYSERDA during the development of this regulation. As written the regulation language does not require that an electric storage source must self-manage its state of charge.

Compliance Plan: Schedule

Comment 110: The DEC should make sure that the timing of this regulation enables the development of appropriate resources after a full evaluation of the impact of Indian Point closure. (Commenter: 1960)

Comment 111: The DEC should adopt the compliance schedule in the proposed rule to enable the NYISO to plan for the long-term reliability of the New York bulk power system. (Commenter: 1964)

Comment 112: The Department's regulations should not, in effect, impose a deadline on the PSC in adopting and implementing a plan to address unit retirement. The extension in section 227-3.6(b) of

proposed peaker rule should coincide with the period actually required for the permanent solution coming online. (Commenter: 1975)

Response to Comments 110-112: The Department consulted with stakeholders including impacted source owners, the NYISO, DPS and NYSERDA during the development of this regulation. The March 2, 2020 compliance plan date was selected specifically to coincide with the development of NYISO's 2020 RNA schedule which begins in March of 2020. The extension in Subpart 227-3.6(b) was developed with the consideration of the amount of time required for a permanent solution to come online.

Compliance Plan: Modifications

Comment 113: LIPA and PSEG-LI recommend that the DEC consider adding provisions to the regulations which would allow owners to amend or update their compliance plans to account for changing conditions and unforeseeable events. (Commenter: 1973)

Comment 114: The Department should clarify if the March 2, 2020 compliance plan submission statement can be amended. (Commenter: 1975)

Response to Comments 113-114: The March 2, 2020 date for submitting compliance plans corresponds with NYISO's 2020 RNA schedule. The Department expects that the NYISO will use these compliance plans in the development of the 2020 RNA. To ensure that the 2020 RNA produces a meaningful and dependable analysis, the Department does not believe that provisions to amend compliance plans should be included in the regulation.

Permitting

Comment 115: I encourage DEC to fully support active proposals for re-powering projects.

(Commenter: 1960)

Response to Comment 115: The Department thanks you for your comment and will continue to review permit applications as set forth in the Environmental Conservation Law and applicable regulations.

Comment 116: We recommend that the term “common control of the permittee” be modified to “common control.” The compliance plan submitted by the affected facility owner would then be required to identify the entity that has common control. (Commenter: 1969)

Comment 117: LIPA and PSEG-LI propose that the phrase “of the permittee” be deleted in order to be compatible with the concept of common control in section 227-3.3(b)(5), which refers to the entity to whom dispatch rights have been provided. (Commenter: 1973)

Response to Comments 116-117: The Department’s relationship with affected sources is through a permit with the associated permittee. The Department disagrees with the requested removal of the phrase “of the permittee” from the regulation language. However, the Department did make changes to Subpart 227-3.3 to address any confusion with entities by removing the language referencing the ability to bid into the NYISO wholesale market.

Comment 118: It is not clear if the Department intends to limit the corporate entity undertaking the development of renewable or storage resources to the permittee. The requirements in 227-3.3(b)(5), that the “entity that owns the asset must provide a letter regarding dispatch rights,” suggest that this is not the intent. Restricting ownership to the permittee would unnecessarily restrict intra-company organization and project development. The use of special purpose entities for project development is not unusual and in many instances required. The Department should clarify that common control by an ultimate parent entity is sufficient for the compliance option of average output-based emission limits. (Commenter: 1975)

Response to Comment 118: The Department does not intend to limit the corporate entity undertaking the development of renewable or storage resources to the permittee. As stated in the regulation, the output-based emission averaging may include resources under common control with the affected SCCT. The Department has revised the language in Subpart 227-3.3(b)(5) to clarify that both emission sources and renewable/storage resources may be averaged.

A permittee is not required to own or operate a renewable energy or energy storage resource. However, it would need to have the ability to control the quantity of energy, renewable energy or energy storage resources inject into the grid in order to comply with the provisions of Subpart 227-3.5.

Comment 119: Under the proposed peaker rule, the compliance plan must be submitted by March 2, 2020 and incorporated into the facilities existing operating permit prior to May 1, 2023. Similarly, the proposal requires that the “ozone season stop” compliance option be incorporated into the permit by the applicable compliance deadline. However, applicants do not control the issuance of the permits. It should be sufficient that the applicant submits an application by a date certain. (Commenter: 1975)

Comments 120: The proposed peaker rule should be modified to incorporate an assurance provision that after a regulated entity has committed the resources to attain compliance, rather than elect to retire a unit, that delays that can arise in obtaining the necessary governmental approvals or equipment procurement and construction will not result in non-compliance. Section 227-3.4(a) can be modified to provide the Department with this flexibility by inserting “unless the Department has approved a phased compliance plan or an order or the permit provides otherwise,” in Sections 227-3.4(a) and (b)(1).

(Commenter: 1975)

Response to Comments 119-120: The Department believes that enough time has been allowed in the regulation to address permitting and reliability. In the event that a Title V permit is not issued by the 2023 or 2025 compliance date for a specific SCCT such SCCT must be operated or retired as specified in the compliance plan.

Comment 121: The proposed peaker rule should include sufficient flexibility so as not to undermine mechanisms adopted by PSC to advance the integration of energy storage and distributed energy resources and to adapt to the development of the NYISO’s compliance with FERC Order 841.

(Commenter: 1975)

Response to Comment 121: The Department consulted with DPS during this rulemaking process and will continue to do so during the implementation phase of Subpart 227-3. As such, the Department does not believe that any provisions of the regulation will impact or undermine the mechanisms adopted by PSC to advance the integration of energy storage and distributed energy resources. Rather, the Department believes that this regulation will support DPS goals.

Comment 122: A renewable energy or energy storage project under development for purposes of compliance with Section 227-3.5 may not yet have completed the interconnection process by March 2, 2020. The Department should clarify that this requirement does not limit renewable resources and electric storage resources available to averaging only to those that already have completed the interconnection process by March 2, 2020. (Commenter: 1975)

Response to Comment 122: As written, the regulation allows for renewable and storage resources to be used in averaging regardless of the date that they complete the interconnection process.

Comment 123: The proposed peaker rule should be revised to encourage new investment by acknowledging that not all development plans proceed according to schedule or achieve the desired results. A review of the pace and outcome of the Article 10 proceedings bears out that such implementation flexibility is warranted. (Commenter: 1975)

Response to Comment 123: The compliance timeframes in the regulation were developed with multiple stakeholders including DPS and offers implementation flexibility. The Department believes that there is sufficient time to comply with the regulatory requirements even when considering the current Article 10 process. The Department believes that the provisions set forth in paragraph 227-3.5(b) reflect the outcome of the stakeholder process and allows for multiple options for compliance without the need for additional extensions and delayed compliance. Subpart 227-3 requires a compliance plan in 2020 and NOx emission limit requirements beginning in 2023 and 2025. With an up to four-year extension, this would result in compliance in 2027 and 2029 and the Department believes that this gives affected sources enough time to comply.

Comment 124: The installation of emission controls for NO_x on existing units, particularly front-end controls such as water injection, will likely result in increased CO emissions. The Department should consider exempting the installation of the NO_x reduction controls in compliance with the proposed peaker rule from Part 231 as a pollution control project. Absent clarity on the exemption of such controls from modeling, the undertaking of the investment in front end controls also face a highly uncertain timeline. Companies cannot begin site preparation without a revised permit. There will not be enough time to complete engineering, procurement, construction, and start-up of any conceivable installations to meet the schedule absent such steps to facilitate permitting. (Commenter: 1975)

Response to Comment 124: 6 NYCRR Part 231 does not allow exemptions for pollution control projects. However, the Department has determined, as part of the development of Subpart 227-3, that reductions in NO_x emissions were environmentally beneficial and that associated potential and minor increases in other pollutants (e.g., CO) are acceptable. Based on this determination, no new source review evaluations under Part 231 will be required for increases in emissions of another pollutant. Regardless of whether a facility is subject to Part 231, modeling is required to demonstrate that activities at a facility do not contravene a NAAQS.

Environmental Justice

Comment 125: SCCTs subject to Subpart 227-3 are clustered in EJ communities, where poor air quality has the highest health impacts. This proposed regulation will directly improve the lives of some of the City's most vulnerable residents. (Commenters: 1959, 2030)

Response to Comment 125: The Department considered this when formulating the regulation and agrees that it will help to improve air quality in environmental justice communities.

Clean Air Act

Comment 126: DEEP encourages DEC to finalize this rule, and others proposed in its August 2018 state implementation plan to reduce interstate pollution transport, without further delay. (Commenters: 1957)

Response to Comment 126: The Department intends to finalize the regulation as expeditiously as practicable while ensuring all SAPA requirements are met.

Comment 127: The timeframe for implementation of the rule should be condensed to be more consistent with the attainment dates for the nonattainment area. (Commenter: 1957)

Response to Comment 127: The Department consulted with stakeholders including EJ communities, environmental groups, impacted source owners, the NYISO, DPS and NYSERDA during the development of this regulation. The proposed timeframe includes considerations for improving air quality while striving to maintain electric system reliability. The Department has factored in permitting and other issues, such as stack testing and has determined that the timing in the regulation is appropriate.

Comment 128: The downstate peaking turbines need to be replaced as part of the process of ozone attainment. (Commenter: 1960)

Response to Comment 128: The Department has provided multiple compliance pathways including averaging with renewable and storage resources. Each affected source has the flexibility to determine how best to comply with the regulation. One possible option may involve the replacement of peaking turbines.

Comment 129: The Department has not shown the proposed rule will put the State in compliance with the regional ozone requirements. (Commenter: 1975)

Comment 130: NYSDEC needs to adopt control measures for the area to move towards attainment of both, 2008 75 ppb and 2015 70 ppb, ozone NAAQS as expeditiously as possible. (Commenter: 1976)

Response to Comments 129-130: As stated in the RIS, the proposed regulation is a step towards attaining the ozone standards in the New York City metropolitan area. It is estimated that this regulation could reduce ozone levels at downwind monitors by as much as 4.8 parts per billion on high ozone days.

It should be noted that the Department has a number of regulatory initiatives in progress to further reduce ozone precursor emissions of both NO_x and volatile organic compounds. In addition, the Department, working with the Office of the Attorney General and other states in the northeast, is pursuing a number of remedies under the Clean Air Act to press EPA to address transport into New York.

Comment 131: Ensure that emission sources comply with requirements of all NAAQS, including 1-hour NO₂ and 1-hour sulfur dioxide. (Commenter: 1976)

Response to Comment 131: Thank you for your comment. The Department has proposed this Subpart to address air quality with respect to nonattainment of the ozone standard and recognizes that reduced NOx emissions will positively impact other NAAQS.

Comment 132: What is the magnitude of the emissions on the high ozone days (2011-2017) from older SCCTs that are not subject to the rule? (Commenter: 1956)

Response to Comment 132: This regulation and the analysis associated with it focused on emissions on what are sometimes known as high electric demand days or high ozone days. These sources input electricity into the grid. The Department does not believe that there are significant emission sources outside of these parameters, the Department focused on known and permitted SCCTs with emissions data known to impact downwind air monitors.

Comment 133: DEEP cautions NYDEC that this rule may not preclude the need for Clean Air Act petitions against these sources. (Commenter: 1957)

Response to Comment 133: The Department takes note of the comment and believes that this regulation will result in significant NOx reductions from these sources.

Replace SCCTs with storage and renewables only

Comment 134: The rule must be framed as a step towards the goal of phasing out fossil fuel burning infrastructure and justly transitioning to renewable and resilient energy resources in a manner that achieves equitable air quality and community resilience. (Commenter: 1968)

Comment 135: The proposed regulation must be paired with aggressive efforts to promote energy storage, distributed solar, utility scale solar, energy efficiency, and offshore wind to ensure older, dirty fossil fuel peakers are not replaced with newer, dirty fossil fuel peakers. (Commenter: 1971)

Comment 136: We urge the Department to close New York City's gas-fired peaker plants and replace them with energy storage and electricity from renewable sources. (Commenters: 1979, 1980, 1981, 1982, 1983, 1984, 1989)

Comment 137: Please also consider requiring replacing SCCTs with battery storage in order to reduce NOx emissions. (Commenters: 5, 6, 1958, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2027, 2028, 2029, 2030, 2031)

Comment 138: Go further by mandating a transition to renewable, non-polluting energy generation in order to alleviate the unfair burden that these plants impose on the communities faced with disproportionate cumulative and aggregate impacts from multiple polluting sources. (Commenters: 1959)

Comment 139: We urge DEC to commit to phasing out fossil fuel-burning infrastructure. (Commenter: 1968)

Response to Comments 134-139: The purpose of this rulemaking is to lower NOx emissions from SCCTs. As a result, it is not in the scope of this rulemaking to require a phase-out of a specific type of electricity generation or to require a specific type of electricity generation.

Beyond the Scope

Comment 140: The use of biodiesel as a replacement for distillate oil or natural gas would yield the additional benefit of reducing greenhouse gas emissions. (Commenter: 1962)

Comment 141: The earning of Renewable Energy Credits under the New York Renewable Energy Standard could provide an economic incentive for the use of biodiesel in place of distillate oil or natural gas. (Commenter: 1962)

Comment 142: DEC should install an ozone monitoring station in Nassau County. (Commenter: 2007, 2017)

Comment 143: Subpart 227-3 will also lead to a reduction in cooling water used by SCCTs. This in turn will prevent larval fish and eggs from being entrained in the cooling water systems. (Commenter: 2023)

Response to Comments 140-143: These comments are beyond the scope of this rulemaking.