February 24, 2020

Hon. Michelle L. Phillips
Acting Secretary of the Siting Board
New York State Board on Electric Generation Siting and the Environment
Three Empire State Plaza
Albany, New York 12223-1350

RE: Case 18-F-0758 – Gowanus Generating Facility
UPROSE’s Comments on Astoria Generating Company, L.P.’s Proposed
Stipulations

Dear Secretary Phillips,

Earthjustice and New York Lawyers for the Public Interest (“NYLPI”), submit these comments on behalf of UPROSE regarding the Proposed Stipulations (“Stipulations”) submitted on January 22, 2020 by Astoria Generating Company, L.P. (“AGC” or the “Company”). These comments are submitted in compliance with the New York State Board of Electric Generation Siting and the Environment’s (“the Board” or “NY Siting Board”) January 23, 2020 Notice Inviting Comments on or before February 24, 2020.

As set forth below, the Stipulations contain several flaws and indicate that AGC’s Application will fail to meet Article 10’s requirements. In particular, the Stipulations show AGC will fail to (1) demonstrate project consistency with the Climate Leadership and Community Protection Act (“CLCPA”),1 (2) undertake a robust and realistic alternatives analysis, (3) conduct a rigorous assessment of impacts to environmental justice communities, and (4) conduct a thorough analysis of impacts to air quality. AGC must correct these deficiencies and ensure that its application meets Article 10 requirements, as well as city, state, and federal laws and policies.

1 2019 N.Y. Sess. Laws Ch. 106 (S. 6599) (“CLCPA”).
I. AGC Must Demonstrate Consistency with the Climate Leadership and Community Protection Act.

AGC’s Stipulations do not demonstrate that the Company’s application will show that the proposed project will comply with the CLCPA. Instead, AGC’s Stipulation 10 merely states that the application will contain “a statement demonstrating the degree of consistency of the construction and operation of the Project with . . . long-range energy planning objectives and strategies contained in” the CLCPA. Stipulation 10. Although the language AGC included in its Stipulation is consistent with the Article 10 regulations, see 16 N.Y.C.R.R. § 1001.10, it falls far short of what is required under the CLCPA.

The CLCPA recognizes that “[c]limate change is adversely affecting economic well-being, public health, natural resources, and the environment of New York,” and that addressing climate change requires the rapid scale-up of renewable energy and aggressive statewide emissions reductions. CLCPA § 1. The law mandates that 70% of electricity generation come from renewables by 2030 and that the state’s electricity generation produce zero emissions by 2040. Id. § 4 (to be codified at N.Y. P.S.L. § 66-p(2)). The law also establishes specific benchmarks for the adoption of renewables, including nine gigawatts (“GW”) of offshore wind by 2035, six GW of solar by 2025, and three GW of energy storage by 2030. Id. (to be codified at N.Y. P.S.L. § 66-p(5)). Further, the Public Service Commission (“PSC”) is required to “design programs in a manner to provide substantial benefits for disadvantaged communities” including that the commission shall, “to the extent practicable, specify that a minimum percentage of energy storage projects should deliver clean energy benefits into NYISO zones that serve disadvantaged communities . . . and that energy storage projects be deployed to reduce the usage of combustion-powered peaking facilities located in or near disadvantaged communities.” Id. § 4 (to be codified at N.Y. P.S.L. § 66-p(7)(a). Moreover, the CLCPA
establishes a statewide greenhouse gas emissions limit of 60% of 1990 emissions levels by 2030 and 15% of 1990 emissions levels by 2050. Id. § 2 (to be codified as NY. E.C.L. § 75-0107).

AGC’s Stipulation that it will provide “a statement demonstrating the degree of consistency” between the Project and the CLCPA could result in an application that simply states that the project is not consistent with the CLCPA’s renewable energy requirements. Indeed, it is improbable that AGC could show that installing 590 megawatts (“MW”) of fossil-fired generating capacity complies with the state’s clean electricity mandates. New York State has a long way to go to meet the CLCPA’s requirements—a mere 26% of statewide electric generation came from renewables in 2018, while 42% of electricity was generated by fossil fuel plants. To achieve 70% renewable generation by 2030 and meet the CLCPA requirements for solar and offshore wind generation and storage, the State must shift radically away from reliance on fossil fuels and towards renewables and storage—the complete opposite of what AGC proposes here. Moreover, the State cannot satisfy the CLCPA’s mandate to deploy storage projects to serve disadvantaged communities and reduce usage of fossil fuel peaker plants by approving a project that does the exact opposite. The Board cannot approve a project that fails to comply with the CLCPA’s requirements for increasing statewide renewable generation capacity. However, the Stipulations fail to ensure that AGC’s application will provide the Board with the necessary to ensure that the Board’s decision here will be consistent with the renewable energy and equity requirements of the CLCPA.

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3 See CLCPA § 4 (to be codified at N.Y. P.S.L. § 66-p); N.Y. P.S.L. § 168(3)(a)–(b), (c) (The Board may only grant an Article 10 certificate if it determines that the facility “serve[s] the public interest,” constitutes “a beneficial addition to or substitution for the electric generation capacity of the state,” and “is designed to operate in compliance with [state law].”)
In addition, the Board cannot evaluate AGC’s application without assessing the proposed gas plant’s consistency with the CLCPA-mandated greenhouse gas emissions limits and whether the project would interfere with attainment of the aggressive cuts to statewide greenhouse emissions required by the law. CLCPA § 7(2). If the Project is inconsistent with or interfere with attainment of the CLCPA’s limits, a “detailed statement of justification as to why such limits/criteria may not be met” must be provided and “alternatives or greenhouse gas mitigation measures” must be required where the project is located. Id. Yet the Stipulations give no indication that the “statement” AGC intends to provide in its Application will contain the kind of information the Board needs to determine whether the project will be consistent with reducing emissions 40% by 2030 and 85% by 2050.

In particular, the CLCPA’s emissions limits apply to both gases “produced within the state” and “gases produced outside of the state that are associated with . . . the extraction and transmission of fossil fuels imported into the state.” Id. § 2 (to be codified as NY. E.C.L. § 75-0101). AGC must therefore perform a lifecycle analysis to quantify the greenhouse emissions from the plant itself, as well as the upstream greenhouse gas emissions that will result from the production and transmission of the fossil fuels used to power AGC’s proposed plant. Nowhere, however, do the Stipulations indicate that AGC will perform a lifecycle greenhouse gas analysis. Moreover, the Stipulations fail to even mention having to prepare a detailed statement of justification or a plan for alternatives or mitigation measures in the Sunset Park community if AGC cannot demonstrate that its project will be consistent with the CLCPA’s limits. See id. § 7(2). Any application filed by AGC without the above critical components must be declared deficient.
II. AGC Must Undertake a Robust and Realistic Alternatives Analysis.

To demonstrate that the proposed gas plant is in the public interest, see N.Y.P.S.L. § 168(3)(a)–(b); 16 N.Y.C.R.R. § 1000.12(b), AGC must first establish that there is a public need for the repowered gas plant. AGC must demonstrate that a lower level of generation is not viable and examine whether other options, such as alternatives, can most suitably meet the need while complying with state objectives and the public interest.

To that end, AGC must conduct a comprehensive alternatives analysis aimed at making these determinations and evaluating which option is best suited to promote public health and welfare. See 16 N.Y.C.R.R. § 1000.5(l)(2)(x); id. § 1001.9(d)–(i). However, AGC’s Stipulations reveal significant flaws in the Company’s approach, including the failure to assess a robust no action alternative, examine all feasible technology alternatives, and meaningfully compare—through production cost modeling—the alternatives to the proposed repowered facility. AGC must correct these deficiencies if the Company is to submit a complete application.

First, AGC must conduct a robust and realistic “no action” analysis. AGC has indicated that its no action alternative assumes that the current Gowanus and Narrows plants will continue operation after retrofitting the existing units with either selective catalytic reduction (“SCR”) equipment or water injection (“WI”) equipment to reduce nitrogen oxide (NOx) emissions in compliance with DEC’s newly adopted peaker rule.4 See Stipulation 9(2). However, AGC should not presuppose the continued operation of the existing plant, because the no action

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4 AGC’s Stipulation’s refer to DEC’s peaker rule as proposed, however, the rule was adopted in late December 2019, and is now final. 6 N.Y.C.R.R. 227-3, https://www.dec.ny.gov/regulations/116131.html
analysis must assess “the likely circumstances at the project site if the project does not proceed.” 5 Since the Gowanus and Narrows units are nearly 50 years old (they were installed in 1971 and 1972) and rarely operate, it is most likely that AGC either will replace or retire the units rather than retrofitting them. 6 See AGC Preliminary Scoping Statement (“PSS”) at 2.2.1. The 2018 capacity factors for the 32 units at the Gowanus gas plant range from 0 to 1.1%, respectively, with a mean capacity factor of 0.32%. 7 At the Narrows facility, the capacity factors for the 16 units range from 1.40% to 3.63%, with a mean capacity factor of 2.31%, respectively. 8 The fact that the existing plants run so infrequently makes it substantially less likely that AGC would make the expenditures necessary to retrofit the units. In order to present an appropriate point of comparison, AGC therefore must revise Stipulation 9(f) to confirm the no action alternative will not presuppose the continued operation of the existing plant.

To that end, AGC must analyze statewide emissions and model renewable generation uptake both with and without the proposed project as well as in the absence of the existing plant. To the extent AGC determines there is a need for increased generation capacity, the Company must assess whether that need could be met by announced renewable installations to date, any

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5 DEC, The SEQR Handbook 129 (4th ed. 2019 (draft)), (“SEQR Handbook”) https://www.dec.ny.gov/docs/permits_ej_operations_pdf/deseqrhandbook.pdf. Although Article 10 projects are technically exempt from SEQR review, SEQR precedents remain instructive. The State Legislature exempted Article 10 projects to avoid redundancy in recognition of the Board’s existing “SEQR-like analysis processes incorporated into [the Board’s] review”; at no point did the Legislature find that project impacts were likely minimal or that environmental review was otherwise unnecessary. SEQR Handbook at 53; see also Application of Hecate Energy Greene 1 LLC, No. 17-F-0619, 2018 WL 6918967, at *8 (N.Y. Siting Bd. Dec. 21, 2018) (dual Article 10 and SEQRA review “would frustrate the intent of Article 10 to provide for one comprehensive review of the potential environmental, health, safety and other impacts resulting from a proposed project”); cf. In the Matter of the Application of Ramapo Energy Ltd. P’ship, No. 3-3926-00377/00001, 2001 WL 470659, at *2 (N.Y. D.E.C. Apr. 4, 2001) (determining that environmental review under Article X, the precursor to Article 10, is “rigorous and thorough, and in some instances even more stringent, than a SEQRA review”).

6 See 6 N.Y.C.R.R. Part 227-3 (Revised Regulatory Impact Statement), https://www.dec.ny.gov/regulations/116175.html (indicating that DEC expects that most facilities impacted by the new NOx regulations “will choose to replace or shutdown the older, non-compliant [units].”).

7 See NYISO 2019 Gold Book at 52–53. A capacity factor is the ratio of a plant’s actual output over a period for time compared to the plant’s potential output at full capacity. These capacity factors were calculated using NYISO’s 2019 Gold Book values for net energy and nameplate capacity.

8 Id.
additional renewable generation, demand side resources, or storage anticipated in the absence of the proposed plant.

AGC must also conduct a more thorough review of technology alternatives, including a more expansive analysis of battery storage. 16 N.Y.C.R.R. § 1001.9(c)(2); see Stipulation 9(3)(Alternative 3a). Although the Company states in Stipulation 9 that it will undertake “a comparative evaluation of Alternatives 3a, 3b and 3c,” when it considers the “objectives and capabilities” of the project, AGC does not plan to include Alternatives 1 and 2 in its comparative evaluation. See Stipulation 9(e). To perform a robust and exhaustive evaluation, the Company must include the proposed repowered facility (Alternative 1) and the “no build” alternative (Alternative 2) in the comparative evaluation, along with the three additional alternatives. In its Stipulations, the Company promises to conduct an analysis (including advantages and disadvantages) of the proposed facility and the three alternatives that will allow for a comparative assessment of each of the criteria described in 9(f). See Stipulation 9(f). However, the Company’s analysis would be incomplete. AGC must create a decision matrix and incorporate into its analysis a quantitative or qualitative assessment for all the criteria found in Stipulation 9(f), which will help aid in the evaluation methodology. Once this assessment has been applied to all the alternatives, the Company can identify the preferred alternative. Notably, because the existing AGC peaker plant is quite old and has been in operation since 1971, it is particularly well suited to be replaced with battery storage, solar PV, or a combination of the two.9

When AGC evaluates the use of battery storage, it is crucial that the Company examines storage portfolios with longer durations. See Stipulation 9(3)(Alternative 3a). Instead of modeling batteries with a four-hour and eight-hour durations, AGC should model longer duration options of eight to twelve hours. Moreover, long duration and diverse battery technologies should be considered in addition to the popular lithium-ion battery.

AGC must likewise commit to modeling each alternative considered in the Company’s stipulations. Stipulation 8 does not specify whether AGC intends to model project alternatives, however the Company must do so if it is to present a detailed and comprehensive assessment of project alternatives. Compare 16 N.Y.C.R.R § 1001.8(a) (Exhibit 8 modeling must analyze statewide emissions of air pollutants, spot prices in all NYISO zones, facility production outputs, and effects on existing must-run resources), with id. § 1001.9(h) (Exhibit 9 alternatives analysis must include, inter alia, a comparison of “reliability and electric system effects,” “environmental impacts,” and “economic considerations”) and N.Y.P.S.L. § 168(4)(b) (in making its determinations, the Board must consider “the nature and economics of reasonable alternatives”).

Finally, AGC’s modeling must also assess project impacts between the date of commercial operation and the facility’s anticipated decommissioning date (presumably 2040, when the CLCPA mandates a zero emissions electric sector). AGC’s proposal to model only one year (2024), see Appendix A to Stipulation 8 provides neither a complete assessment of project impacts nor a holistic comparison of project alternatives. Any meaningful comparison of project alternatives must assess costs incurred (including fuel costs) and benefits accrued over the entirety of the lifetime of the project (lifetime of the project will vary based on technology type and CLCPA compliance obligations). In contrast to AGC’s proposed repowering project, clean energy alternatives would have no fuel costs and would continue to operate and provide benefits
well beyond 2040 as part of a zero emissions electric sector. Further in light of the CLCPA mandates and evolving public policy requirements, AGC must consider key factors that will affect the functionality of the facility, including the interconnection of the 816 MW Equinor offshore wind farm and the presumed achievement of New York State’s energy storage targets as well as the state’s emissions and carbon-free energy targets of 2030 and 2040—all of which should occur within the expected lifetime of the project (or the alternatives). Although not all system changes can be studied or even expected, the year 2024 and the year 2030 or 2040 will look dramatically different and modeling only one year will not allow for a comparative analysis of the alternatives over their lifetime.

AGC’s Stipulations reveal significant deficiencies in the Company’s approach to assessing alternatives. The Company must revise Stipulations 8 and 9 to integrate their production cost modeling into the alternatives analysis, commit to a searching review of technology alternatives, evaluate those alternatives across project lifetime (as affected by technology type and the CLCPA’s mandate for a zero emissions electric sector by 2040), and clarify that the no action analysis will not assume the continued operation of the existing plant.

III. AGC Must Conduct a Rigorous Assessment of Impacts to Environmental Justice Communities.

As AGC has recognized, the impact study area here includes environmental justice areas, and thus an environmental justice analysis is required pursuant to 6 N.Y.C.R.R. § 487.5(d). A thorough environmental justice analysis is essential because historically, in the United States, low-income communities and communities of color bear a disproportionate share of the harms of polluting facilities.10 Recognizing this, the New York law’s purpose is to “reduce

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disproportionate environmental impacts in overburdened communities.” *Id.* § 487.1(b). An Article 10 environmental justice analysis is meant to ensure that proposed repowering does not have significant disproportionate adverse impacts on frontline communities and that, where they cannot be avoided entirely, any such impacts are mitigated. An adequate environmental justice analysis must consider “significant and adverse disproportionate environmental impacts of the proposed facility,” as well as a cumulative impact analysis of air quality, and a comprehensive demographic, economic, and physical description of the community within which the facility is located. N.Y. P.S.L. § 164(1)(f)–(h).

While AGC’s Stipulations include a lengthy environmental justice analysis methodology, the Company still fails to demonstrate that the analysis will be adequate under the law. AGC states in Stipulation 28 that its Application will include an identification and evaluation of significant and adverse environmental impacts of the proposed facility “in a manner that is in accordance with the requirements of 6 NYCRR Part 487.” Stipulation 28(a). However, neither the stipulation itself nor the environmental justice analysis methodology included as Appendix E to Stipulation 28 set forth the steps required by these regulations, nor does AGC explain how the steps of the analysis described in Appendix E comply with each regulatory provision. Appendix E includes a bullet point list in its introduction that only makes reference to the Part 487 regulations but does not enumerate all the required steps or information to be included. This makes it very difficult to assess whether each regulatory provision is in fact addressed by the methodology and whether the Application will be complete.

Moreover, because the steps outlined in Appendix E do not map directly on to the regulatory requirements, the Stipulations fail to demonstrate that the Application will include basic categories of required information. For example, the section of the methodology that might
correlate with the required physical description of the study area and comparison areas fails to state that it will include the number and concentration of each type of polluting facility enumerated in 6 N.Y.C.R.R. § 487.9(b)(4)(iii). See Appendix E at 13–14 (Section 2.4). Similarly, the methodology makes reference to the required cumulative air impacts analysis, but does not specify that this analysis will include all categories of emission sources required by 6 N.Y.C.R.R. § 487.7(d).

The methodology set forth in Appendix E is also flawed in several respects. Perhaps most importantly, while the methodology goes into significant detail about how AGC will determine whether an impact is “significant,” it does not address how it will determine whether an impact is a “disproportionate” impact. AGC must compare and contrast the physical description of the study area, including the impacts of the proposed facility during both construction and operation, with the comparison areas. Id. § 487.10(b). Nowhere in Appendix E is it clear at what point, and how, AGC plans to conduct such a comparison, which is the core of the environmental justice analysis.

Finally, the framework described in Appendix E for evaluating the significance of potential impacts contains several thresholds that are set artificially high, making it less likely that any impact will be found to be “significant.” For example, likelihood of impacts is divided into three categories: unlikely (less than 50% chance of occurring); likely (between 50 and 99% chance of occurring); and certain (100% chance of occurring). Appendix E at 7 (Table 2). Similarly, the threshold for a “high” magnitude air quality impact is an increase of 100% or more of Ambient Air Quality Standards. Id. at 11 (Table 6). While the methodology is helpful in understanding how AGC plans to determine the significance of impacts and thresholds/categorization of these impacts is necessary, AGC should not use thresholds for
identifying levels or likelihood of impact that make it artificially unlikely that any potential impacts will fall into the highest category.

IV. AGC Must Conduct a Thorough Analysis of Impacts to Air Quality.

Given the proximity of the proposed facility to the Sunset Park community, it will be imperative for AGC to conduct a robust analysis of the project’s potentially adverse effects to air quality and public health. Article 10 requires that AGC assess the facility’s compliance with federal, state, and local requirements for air emissions; assess existing regional ambient air quality levels and trends; and provide the hourly emission rate and annual potential to emit for a set of listed pollutants. 16 N.Y.C.R.R. § 1001.17(a)–(c). AGC’s application also must assess the potential impacts the facility may have on ambient air quality, including maximum potential air concentrations with the facility in operation. 16 N.Y.C.R.R. § 1001.17(d).

Contrary to the assertions in the Stipulations, the protocol prepared by Jacobs Engineering Group (“Jacobs Protocol”) and attached to the Stipulations does not demonstrate “how each requirement of [Article 10] will be met” or “how the analysis to support the issuance of [the Project’s air permit] will be consistent with guidance provided by the Environmental Protection Agency.” See Stipulation 17. The Jacobs Protocol in fact does not provide sufficient information or detail to allow for any kind of clear and transparent understanding of what AGC’s air quality impacts analysis will look like. In particular, actual emissions from the facility—and therefore actual impacts to air quality—will be highly dependent on the number of start-up and shut down events, as well as the number of hours that the facility will operate. The Jacobs Protocol provided information about start-ups and shutdowns based on information from the manufacturer of the turbines but did not indicate how AGC will calculate the expected or maximum number of start-ups, shutdowns, or operations hours. See Addendum 1 to Appendix B
at Section 4.1.1. Without that information, it is impossible to evaluate the veracity of AGC’s claims in the Stipulations or whether its Application materials will comply with Article 10.

CONCLUSION

Any application submitted in accordance with the Stipulations would contain significant deficiencies and fail to comply with Article 10 requirements. AGC must amend its Stipulations to address these deficiencies before proceeding with its application. If AGC refuses to amend the Stipulations, the Board should direct the Company to do so or issue a notice of deficiency upon receipt of the Company’s application.

Respectfully submitted,

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