

NEW YORK STATE

DEPARTMENT OF ENVIRONMENTAL CONSERVATION (DEC)

NOTICE OF COMPLETE APPLICATION

AVAILABILITY OF DRAFT PERMITs

ANNOUNCEMENT OF PUBLIC COMMENT PERIOD

ACCEPTANCE OF SUPPLEMENTAL DRAFT ENVIRONMENTAL IMPACT STATEMENT

- and-

INTENT TO HOLD A PUBLIC HEARING

Applicant:

Astoria Gas Turbine Power LLC
31-01 20th Ave
Astoria, NY 11105

Facility:

Astoria Gas Turbine Power Replacement Project
31-01 20TH Ave
Astoria, NY 11105

Permit(s) Applied for (Application Number):

Article 19 Air Title V Facility (2-6301-00191/00003)
Article 19 Title IV (Phase II Acid Rain) (2-6301-00191/00024)
Article 17 Titles 7 & 8 Industrial SPDES - Surface Discharge - (2-6301-00191/00014)
Article 15 Title 15 Water Withdrawal (2-6301-00191/00026)

Project Description:

The New York State Department of Environmental Conservation (DEC), as lead agency, has determined that the Supplemental Draft Environmental Impact Statement (SDEIS), and applications for draft Title IV and Title V air permits, draft Industrial SPDES permit modification and water withdrawal for the proposed Astoria Replacement Project ("Replacement Project"), are complete for the purposes of public review and comment. The existing Facility currently consists of 31 older, peaking-only gas and oil-fired CTs including 24 Pratt & Whitney ("P&W") turbines and seven retired Westinghouse turbines, with a combined nameplate rating of 646 MWe (502 MWe not including the retired Westinghouse turbines). The proposed Replacement Project, as modified, will replace the nearly 50-year-old P&W and Westinghouse turbines at the Facility with a new state-of-the art simple cycle dual-fuel peaking CTG. The proposed Replacement Project will include a new CTG which will be a highly efficient, quick start, fast-ramping, General Electric ("GE") H-Class 7HA.03 or equivalent unit that has a nominal generator output of approximately 437 MWe. The new CTG will fire natural gas as the primary fuel with limited ultra-low sulfur distillate ("ULSD") liquid fuel for backup. The proposed Replacement Project will also include a ULSD-fired emergency generator, and two ULSD-fired emergency fire water pumps. All of the existing units, with the exception of one P&W Twin Pac (consisting of two combustion turbines and a single generator), will be permanently shut down once the proposed Replacement Project has completed its shakedown period. The two remaining P&W turbines will remain operational to make the site black-start capable until replaced by an approximately 24 MWe battery energy storage system. The P&W Twin Pac uses natural gas as its primary fuel with ultra-low sulfur kerosene ("ULSK") as backup. Make up water will be sourced from existing connections to the New York City water supply. No water will be withdrawn from the East River. Construction will require dewatering of the project site.

The dewatering will involve the withdrawal of approximately 0.7 MGD of groundwater. The groundwater will be treated and ultimately discharged via existing outfall 001.

Air Permits

The proposed Replacement Project includes the following air emission sources; One 7HA.03 CTG fired with natural gas as the primary fuel and ULSD as back-up fuel; Ancillary combustion equipment, including one ULSD-fired emergency generator (rated at 500 electrical kilowatts ["kWe"]); two ULSD-fired emergency fire system pumps (rated at 117 mechanical kilowatts ("kWm") and 177 kWm, respectively), and two remaining P&W combustion turbines used only to enable black start capability for the site; ULSD and ULSK tank vents; and fugitive greenhouse gas ("GHG") emissions from on-site transformers and on-site natural gas components (connectors, valves, meters, and regulators).

Pollutants emitted from these proposed sources include the following:

Combustion Sources: Criteria Pollutants: NO_x, volatile organic compounds ("VOC"), carbon monoxide ("CO"), particulate matter less than 10 µm in diameter ("PM10"), particulate matter less than 2.5 µm in diameter ("PM2.5"), sulfur dioxide ("SO₂"); Non-Criteria Pollutants: sulfuric acid ("H₂SO₄"), GHGs, ammonia ("NH₃") (CTG only), and air toxic compounds (emitted in very small amounts);

ULSD and ULSK tank vents: VOC and air toxic compounds (emitted in negligible amounts);

Fugitive GHG sources: sulfur hexafluoride ("SF₆") from on-site circuit breakers and methane ("CH₄") from on-site natural gas components.

The air emission reduction strategy for the proposed Replacement Project is the installation of a new, highly efficient GE 7HA.03

CTG with state-of-the-art emission controls. As per the requirements of 6 NYCRR Subpart 231-5, the proposed Replacement Project is subject to NNSR review for NO_x and VOC. Based on the applicability of NNSR, the proposed Replacement Project is proposing to create 126.04 tons per year (tpy) of NO_x Emission Reduction Credits (ERCs) and 0.7 tpy of VOC ERCs from the proposed shutdown of the existing units. To comply with the rule the Replacement Project will use 75.55 tpy of NO_x ERCs and 0.5 tons of VOC ERCs.

To authorize the operation of the proposed Replacement Project the conditions in the draft Title V and Title IV air permits must assure conformance of the Facility with all applicable State and federal air pollution control regulations, including the requirements of 6 NYCRR Parts 201, 225, 227, 231, 242, and, as well as all New Source Performance Standards (NSPS) at 40 Code of Federal Regulations (CFR) Part 60. Information regarding the demonstration of the Lowest Achievable Emission Rate or Best Available Control Technology or both is included within the draft air permits.

Queens County is designated as being in non-attainment with respect to the National Ambient Air Quality Standards for ozone where NO_x and volatile organic compounds (VOC) are precursor pollutants. Based upon the potential to emit estimates, the proposed Replacement Project is subject to NNSR for NO_x and VOC. The proposed Replacement Project is utilizing some of the ERCs it is creating from the proposed shutdown of the existing turbines to net out of NNSR applicability under the provisions of 6 NYCRR 231-6.2.

The proposed Replacement Project is equipped with state-of-the-art emissions control technology, including dry low NO_x burners (for natural gas firing), oil/water emulsion injection system (for distillate oil firing), and selective catalytic reduction technology to control emissions of NO_x, and an oxidation catalyst to control CO and VOC emissions. A continuous emissions monitoring system is utilized to ensure and document proposed facility compliance with applicable emissions standards.

In accordance with 6 NYCRR Parts 621.7(b)(9) and 201-6.3(c), the Administrator of the United States Environmental Protection Agency (USEPA) has the authority to bar issuance of any Title IV Acid Rain Permit or Title V Facility Permit if it is determined not to be in compliance with applicable requirements of the Clean Air Act or 6 NYCRR Part 201.

Persons wishing to inspect the subject Title V files, including the application with all relevant supporting materials, the draft permit, and all other materials available to the DEC (the "permitting authority") that are relevant to this permitting

decision should contact the DEC representative listed below. The draft permit and permit report may be viewed and printed from the Department web site at: https://www.dec.ny.gov/dardata/boss/afs/draft_atv.html.

State Pollutant Discharge Elimination System (SPDES)

The applicant has applied for a renewal and modification of its existing SPDES permit to include the discharge of stormwater from the Replacement Project. The modified SPDES permit will include the discharge of treated stormwater from two oil water separators (OWS) and evaporative cooler blowdown to a single outfall. The discharge from the first OWS is covered by the existing SPDES permit and treats stormwater collected within the diked containment areas for the ULSK tanks and the adjacent truck unloading area. The discharge from the second OWS added to the modified SPDES permit will be treated stormwater collected in the new CTG power generation area. The pumping rate of the first OWS is 0.29 MGD and the pumping rate of the second OWS is 0.36 MGD.

The applicant has also applied for a modification to include a discharge of treated groundwater from the construction of proposed Replacement Project as a result of dewatering the site during construction. The volume of the discharge during construction will be a maximum of 0.7 MGD.

The draft SPDES permit and the effluent limitations; monitoring and reporting requirements; other provisions and conditions are in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State, its implementing regulations; 6 NYCRR Part 750-1.2(a) and 750-2 and with the Clean Water Act, as amended, (33 U.S.C. §1251 et.seq.).

The draft permit and fact sheet may be viewed and printed from the Department website at: <https://www.dec.ny.gov/permits/6054.html>.

Water Withdrawal Permit

The applicant has applied for a water withdrawal permit as part of proposed construction operations. Construction of the proposed Replacement Project will require the dewatering of the project site and the applicant has applied for a water withdrawal permit to withdraw approximately 0.7 MGD of groundwater. The groundwater will be treated and discharged via existing outfall 001. The water withdrawal application is complete and available for review. The application is being reviewed pursuant to Article 15, Title 5 of the Environmental Conservation Law of New York State and its implementing regulations; 6 NYCRR Part 601. The application is available for review at <https://www.nrg.com/legal/astoria-peaking-generation-station-project.html>.

Additional Regulatory Provisions

NYS ECL and Implementing Regulations:

In addition to the specific statutes and regulations cited above, the subject air permit applications, the SPDES permit and the water withdrawal permit are being processed by the DEC pursuant to ECL Article 3, Title 3 (General Functions), ECL Article 17 (Water Pollution Control), Article 15, Title 5 (Water Withdrawal), ECL Article 19 (Air Pollution Control), and 6 NYCRR Subparts 201-6 (Permits and Registrations) and 231-2 (Requirements for Emission Sources Subject to §§172 and 173 of the Clean Air Act, 42 USC §7502 and §7503 on or after November 15, 1992), Part 621 (Uniform Procedures), Parts 750-758 (State Pollutant Discharge Elimination System) and the Clean Water Act.

State Environmental Quality Review (SEQR) Determination:

The Applicant previously proposed to replace all of the units at the existing facility and was subject to a review pursuant to SEQR with the NYS DEC serving as lead agency for the coordinated review of the project. The project was the subject of a Draft Environmental Impact Statement (Accepted: April 16, 2010) and FEIS (Accepted September 22, 2010). As lead agency, NYS DEC issued a Findings Statement (October 4, 2010) concluding that all potential environmental impacts had been minimized or mitigated to the maximum extent practicable. All NYS DEC permits were issued at the

time the Findings Statement was issued. The project was never constructed, and the existing facility continues to operate in accordance with its existing permits.

Astoria seeks to modify its previously approved replacement project. In accordance with the June 12, 2019 Declaratory Ruling of the New York State Board on Electric Generation Siting and the Environment, the proposed Replacement Project remains subject to the requirements of SEQRA. As such, DEC coordinated for lead agency on May 20, 2020 and ultimately assumed lead agency based on the responses received from the other potential involved agencies.

DEC, as the lead agency, determined the proposed Replacement Project could potentially have significant environmental impacts and issued a Notice of Positive Declaration and Notice of Public Scoping that appeared in the Environmental Notice Bulletin on July 1, 2020. The Draft Scope was also made available on the Project website. Public and agency comments were accepted through September 4, 2020. The Final Scoping Document was issued by the NYSDEC on September 18, 2020. DEC has determined the SDEIS is complete for purposes of public review and comment.

State Historic Preservation Act (SHPA) Determination:

A cultural resources survey has been completed. The report of the survey is on file. No archaeological sites or historic structures were identified at the project location. No further review in accordance with SHPA is required.

Coastal Management:

This proposed Replacement Project is located in a Coastal Management area and is subject to the Waterfront Revitalization and Coastal Resources Act.

DEC Commissioner Policy 29, Environmental Justice and Permitting (CP-29):

The proposed action is subject to CP-29. A supplemental enhanced public participation plan was submitted by the applicant and has become part of the complete application. The applicant has held two public participation meetings as part of the compliance with the supplemental enhanced public participation plan.

Climate Leadership and Community Protection Act:

This permitting action constitutes a significant modification to the facility's Title V permit. Pursuant to the requirements of Section 7(2) of the Climate Leadership and Community Protection Act, Chapter 106 of the Laws of 2019 (CLCPA or Climate Act), the Department has requested and received information regarding the project's purported consistency with the CLCPA.

While the Department is making a draft Air Title V permit, draft SPDES permit, and the draft SDEIS available for public review and comment, the Department has not made a tentative or final determination to issue any final permit, Final SEIS, or Findings Statement for the proposed Replacement Project. Prior to issuing any final permit for the proposed Replacement Project, the Department would need to, among other things, ensure that its action is either consistent with the requirements of the Climate Leadership and Community Protection Act, Chapter 106 of the Laws of 2019 (Climate Act) or otherwise sufficiently mitigated or justified. The Department has yet to make such a determination regarding the Replacement Project's consistency with the Climate Act.

There are potentially substantial GHG emissions associated with the existing and proposed Replacement Project. Based on the information currently available, it appears that the proposed Replacement Project would be inconsistent with or would interfere with the attainment of the Statewide GHG emission limits established in the Climate Act. Environmental Conservation Law Article 75; 6 NYCRR Part 496.

Pursuant to Section 7(2) of the Climate Act, if an agency's decision would be inconsistent with or would interfere with the Statewide GHG emission limits, then the agency must also: (1) provide a detailed statement of justification of the project notwithstanding inconsistency with the Climate Act; and (2) identify alternatives or GHG mitigation measures to be required. Based on the information provided to date, the Department is not currently able to satisfy either of these two elements with respect to the proposed Replacement Project absent additional information.

As referenced above, the proposed Replacement Project is subject to review under SEQR and a SDEIS was prepared to address the potential impacts of the project, including the potential impacts from GHG emissions on climate change.

Pursuant to SEQR, the applicant is required to assess the potential impacts from the proposed Replacement Project, and where impacts cannot be avoided, propose mitigation for those unavoidable impacts.

As part of its Application and the SDEIS, the Applicant has not currently provided a sufficient GHG mitigation plan to meet the requirements of the Climate Act. The Department anticipates that additional GHG mitigation measures will likely be necessary to meet the requirements of the Climate Act, should a final permit be issued for the proposed Replacement Project. The draft permit contains a condition addressing potential GHG mitigation requirements, requiring the applicant to identify and propose additional potential GHG mitigation measures for Department approval.

In addition to public comments on the draft permits and SDEIS, the Department also seeks comments on the proposed Replacement Project's compliance with the Climate Act, including: (1) whether the proposed Replacement Project would be inconsistent with or would interfere with the attainment of the Statewide GHG emission limits; (2) the potential need or justification for the proposed Replacement Project; (3) appropriate alternatives or GHG mitigation measures to be required; and (4) the adequacy of the SDEIS in assessing the proposed Replacement Project's consistency with the Climate Act and reviewing the potential impacts from GHG emissions.

Document Availability:

In addition to online locations identified above, the application materials, draft Air and SPDES permits, fact sheets, and the SDEIS are available for review online at <https://www.nrg.com/legal/astoria-peaking-generation-station-project.html>

Public Hearing Sessions

DEC has made a determination to hold a public statement hearing on the air permit applications and draft permits and will provide a notice of the time, date and location of such hearing in the near future. A copy of the Department's [permit hearing procedures](#) is available upon request or on the Department web site at: <http://www.dec.ny.gov/permits/6234.html>.

Written Comments: All written comments regarding the permit applications, proposed draft permits, fact sheets and SDEIS must be postmarked by August 29 2021 and submitted to the comment.nrgastoriagas@dec.ny.gov.