

State Environmental Quality Review  
Positive Declaration  
Notice of Intent to Prepare a Draft EIS  
Determination of Significance

October 8, 2008

This notice is issued pursuant to Part 617 of the implementing regulations pertaining to Article 8 (State Environmental Quality Review Act) of the Environmental Conservation Law. The New York State Department of Environmental Conservation (DEC), as lead agency, has determined that the proposed action described below may have a significant impact on the environment and that a Draft Environmental Impact Statement (DEIS) will be prepared.

Name of Action.

Astoria Gas Turbine Power LLC

SEQR Status.

Type I

Scoping.

DEC will conduct formal scoping for this action. A draft scoping document, dated October 8, 2008, has been prepared by the project sponsor. A public scoping session will be conducted on November 12, 2008 at the following location:

Riccardo's Restaurant  
21-01 24th Avenue  
Astoria, New York

Scoping sessions will be held at 4 PM and 7 PM.

DEC will accept comments on the draft scope until close of business, November 26, 2008. Comments can be delivered by hand, or sent by regular mail, commercial delivery service, fax transmittal or email, to the DEC contact person listed at the end of this notice.

The draft scope is available for public review at the DEC office listed above, and is also available online at DEC's website: <http://www.dec.ny.gov/permits/6061.html>

Copies of this Draft Scope of Work can be viewed at the following locations:

New York State DEC Region 2 Office  
47-40 21<sup>st</sup> Street  
Long Island City, New York 11101

The Steinway Branch  
21-45 31<sup>st</sup> Street  
Long Island City, New York 11105

The Astoria Branch  
14-01 Astoria Boulevard  
Long Island City, New York 11102

Description of Action.

NRG proposes to repower the Astoria Gas Turbine Power LLC facility in Astoria, Queens County, New York City. The repowering project will be conducted in two phases. Phase 1 will consist of replacement of the seven operating 35+ year old Westinghouse peaking turbines (approximately 120 MW capacity) with two new state-of-the-art, intermediate operating systems (approximately 520 MW total) provided by either General Electric or Siemens. The new equipment will have very high thermal efficiencies in excess of 48% and will produce electricity at approximately 8000 Btu's per kilowatt hour heat rate. Phase 2 of the Proposed Project will consist of replacing the 24, more than 35+ year old, Pratt & Whitney turbines (approximately 480 MW capacity) with two additional state-of-the-art turbines. Thus, the repowering will result in the replacement of the 600 MW capability of the 35+ year old electric generating capacity with new state-of-the-art units capable of producing 1040 MW. The new equipment will include advanced emission control technology with ultra low NOx burners, rapid ramp rates, SCR, and CO catalysts. The new equipment will be fired primarily on natural gas with a very small contingency fuel oil firing capability on ultra low sulfur diesel fuel. The existing 31 operating stacks (38+ ft stack height) will be replaced by just 4 stacks set at USEPA's good engineering practices (GEP) stack height.

Location.

31-01 20<sup>th</sup> Avenue, Queens, New York.

Reasons Supporting this Determination.

The proposed action requires Potential environmental impacts associated with the proposed action were identified in the Full Environmental Assessment Form. These impacts, which may be reasonably expected to result from the Project, have been compared to the criteria for determining significance identified in 6 NYCRR § 617.7(c)(1) and in accordance with 6 NYCRR § 617.7(c)(2) and (3). The Project may result in one or more significant impacts on the environment, and an Environmental Impact Statement (EIS) will be prepared to address those potential impacts.

Air quality.

The proposed action will require air permits from DEC. The project is expected to result in a substantial net reduction of nitrogen oxides (NOx), a criteria air pollutant, compared to the currently permitted operating facility. Other criteria pollutants, VOC and PM 2.5, are anticipated to experience a slight increase sufficient to trigger thresholds related to Non-attainment New Source Review.

### Water resources.

Portions of the project site are located in a FEMA-designated Special Flood Hazard Area (SFHA). The project proposes site modification to reduce flood hazard potential at the site. Operation of the proposed new power generation units will require approvals for increase in water use, and may require sewer discharge permit(s), from New York City Department of Environmental Protection (NYCDEP). The project must also comply with terms of the SPDES Stormwater General Permit for Construction Activities.

### Traffic/transportation.

The proposed action will require the removal of existing equipment and the installation of new equipment. Some of the larger equipment can be delivered by barge. However, truck delivery will also be necessary.

### Noise.

The proposed action has the potential to increase noise levels compared to the existing facility.

### Aesthetic/Visual resources.

The proposed action will eliminate the 31 short stacks for the existing units and install a maximum of four taller stacks at good engineering practice (GEP) height for the new units.

### Energy resources.

The proposed action will be built in two phases, resulting ultimately in increased generation capacity from the existing 600 megawatts (MW) to 1040 MW. This will be accomplished by installing higher efficiency equipment and changing the type and amount of fuel used for electrical generation at this facility. In addition to the effects of the proposed action on the emission of criteria air pollutants, an assessment of the proposed action on greenhouse gas emissions is also warranted.

### Environmental Justice.

The project site is in close proximity to communities that have been designated as Environmental Justice (EJ) areas. In accordance with DEC Commissioner's Policy 29, an EJ Analysis and Public Information Program must be carried out for the proposed project. An analysis and discussion of the health outcome data is also required in accordance with *Guidance for Health Outcome Data Review and Analysis Relating to NYSDEC Environmental Justice and Permitting*, July 21, 2008.

### Cumulative impacts.

The proposed action may potentially affect cumulative impacts to the community, e.g., electric generating capacity and reliability, and local air quality and greenhouse gas emissions.

For further information, contact:

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A copy of this notice must be sent to:

Chief Executive Officer, NYC Mayor's Office  
Any person requesting a copy  
All involved agencies  
Environmental Notice Bulletin, 625 Broadway, Albany, NY 12233