

NEW YORK STATE BOARD ON ELECTRIC
GENERATION SITING AND THE ENVIRONMENT

At a session of the New York State
Board on Electric Generation Siting
and the Environment held in the City
Albany on April 7, 2009

BOARD MEMBERS PRESENT:

Garry A. Brown, Chairman
New York State Public Service Commission

Louis A. Alexander, Alternate for
Alexander B. Grannis, Commissioner
New York State Department of
Environmental Conservation

G. Anders Carlson, Ph.D., Alternate for
Richard F. Daines, M.D., Commissioner
New York State Department of Health

Jacquelyn L. Jerry, Alternate for
Vincent A. DeIorio, Chairman
New York State Energy Research
and Development Authority

Keith Corneau, Alternate for
Marisa Lago, Commissioner
New York State Department of
Economic Development

CASE 08-F-1367 - Petition of Astoria Energy LLC and Astoria
Energy II LLC, for the Amendment and Transfer
of Certificate of Environmental Compatibility
and Public Need.

ORDER GRANTING TRANSFER AND AMENDMENT OF CERTIFICATE
OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED

(Issued and Effective April 7, 2009)

BY THE BOARD:

BACKGROUND

On November 21, 2001, the Board on Electric Generation
Siting and the Environment (Siting Board) for Case 99-F-1191
granted a Certificate of Environmental Compatibility and Public

Need (Certificate) to Astoria Energy LLC (Astoria Energy) authorizing, subject to conditions, the construction and operation of an approximately 1,000 MW gas-fired electric generating facility in Astoria, Queens County (the Project) (November 21, 2001 Order). On March 25, 2004, the Siting Board determined that the Certificate authorized two power blocks to be constructed in separate phases.¹ The first phase commenced commercial operation in May 2006.

PROPOSED AMENDMENTS AND CERTIFICATE TRANSFER

In a petition filed November 10, 2008 (Petition), Astoria Energy and Astoria Energy II LLC (Astoria Energy II)(collectively Petitioners) requested several amendments to the Certificate, including: 1) a change in the specified total capacity of the Project from approximately 1,000 MW to approximately 1,240 MW; 2) a modification to the interconnection point for the second power block from Consolidated Edison Company of New York, Inc's (Con Edison) 138 kV Astoria East substation to the New York Power Authority's (NYPA) Q35L and Q35M 345 kV transmission line feeders; and, 3) a revision to the construction schedule for the second power block. In addition, Petitioners request a transfer of the Certificate from Astoria Energy to Astoria Energy and Astoria Energy II jointly.

Petitioners assert that the proposed amendments constitute modifications to the Certificate, rather than

¹ Each power block contains two combustion turbines, two heat recovery steam generators, and one steam turbine.

revisions necessitating a hearing.² According to Petitioners, an output of approximately 1,240 MW will not result in any substantial adverse changes in environmental impacts from those that were identified when the Certificate was issued, since the increased rating is due to the capability of the steam turbines, which was not previously known. Thus, they indicate the overall emissions will be within the original and current permit limits, and within applicable air quality standards.

Regarding the proposed modifications to the interconnection, the size of the above-ground transmission structures approved as part of the original interconnection in the Certificate would be increased by a height of 26 feet, and a width of 24 feet, and require an additional 30 foot width of right-of-way for a distance of 1,000 feet to accommodate a new 345 kV line. This line will also require additional transmission towers to connect the second power block, cross over Luyster Creek, also know as Steinway Creek, and terminate at a new 4-bus position ring interconnecting underground with NYPA's existing Q35L and Q35M cables. All of the interconnection facilities will be constructed on property within Con Edison's Astoria utility complex. Petitioners advise that NYPA and Con Edison support the Petition.

While the first power block is connected to Con Edison's 138 kV Astoria East substation, Petitioners request authorization for the second power block to interconnect with the Q35L and Q35M feeders, which presently interconnect NYPA's

² A modification includes any amendment to a Certificate that is not a revision, while a revision is defined as "a change in the facility likely to result in any material increase in any environmental impact of the facility or a substantial change in the location of all or a portion of such facility." 16 NYCRR §1000.2(r). The criteria for determining whether a proposed amendment is a revision are set forth in 6 NYCRR §617.7(c).

Poletti Unit 1 to Con Edison's 345 kV system.³ In the event Petitioners cannot interconnect with the Q35L and Q35M feeders, they intend to interconnect with the Astoria East substation, as authorized in the Certificate.

Petitioners request a modification of the construction schedule to accommodate the second power block. Assuming a single phase of construction, Astoria Energy estimated that construction would last approximately 33 months. Due to the separate phases, construction of the second power block is anticipated to last approximately 28 months. Petitioners maintain that completing construction of the second power block will not result in any material increase in environmental impacts.

In support of Petitioners request to transfer the Certificate, they indicate that a new operating company, Astoria Energy II, was formed to develop, construct, own, and operate the second power block of the Project.⁴ In order to obtain financing, Petitioners indicate that the lenders and equity owners will require that the Certificate include Astoria Energy and Astoria Energy II. Accordingly, they request transfer of the Certificate to the Petitioners jointly.

³ The Q35L and Q35M feeders will become unused and available with the anticipated retirement of Poletti Unit 1, by January 31, 2010.

⁴ Astoria Energy is wholly owned by Astoria Project Partners, which, in turn, is owned by SNC-Lavalin Generation Inc., CDPQ Investments (U.S.) Inc., EIF Astoria LLC, AE Investor LLC and Suez Energy Astoria LLC.

COMMENTS

The Building & Construction Trades Council of Greater New York, Boilermakers Local No. 5, and the International Association of Heat & Frost Insulators & Asbestos Workers filed comments generally supporting the construction of the second power block. Comments were also filed by Assemblyman Michael N. Gianaris, requesting that the Siting Board determine whether there are environmental issues raised by the Petition that necessitate additional hearings, or, alternatively, further investigation and/or appropriate terms and conditions. Assemblyman Gianaris contends that an increase in the total capacity of 240 MW is substantial, and requests a hearing or further investigation to determine the necessity and desirability of such a change. Regarding the request to transfer the Certificate, Assemblyman Gianaris indicates that Petitioners have not provided a copy of any proposed transfer agreement, and suggests that they have not demonstrated that Astoria Energy II is qualified to carry out the provisions of the Certificate. Moreover, Assemblyman Gianaris notes that Petitioners have not indicated the actual owners of Astoria Energy II.

DISCUSSION AND CONCLUSION

Upon consideration of the proposed amendments to the Certificate and the criteria set forth in 6 NYCRR §617.7(c), and the comments received, we find and determine that the amendments constitute modifications that will not result in any material increase in environmental impacts and that there are no environmental impact issues that warrant a hearing. A Certificate amendment specifying a maximum output of approximately 1,240 MW is consistent with the Siting Board's findings supporting the issuance of the Certificate. The

increased designated output more accurately reflects the capability of the selected steam turbines. Because overall air emissions will still be within permit limits and applicable air quality standards, there will not be any material increase in air quality impacts. Therefore, the second ordering clause in the November 21, 2001 Order should be amended to reference an approximately 1,240 MW gas-fired electric generating facility.

The modified transmission structures required to accommodate the new interconnection are in substantially the same location as approved in the Certificate. Con Edison's Astoria complex is already heavily utilized for various utility infrastructure, including many overhead and underground transmission facilities and substations. Considering the existing industrial character of the Project location, the additional height and width of the modified transmission structures, and the additional transmission tower, the Project will have minimal visual and aesthetic impacts.

The modified electrical transmission interconnection will be designed, engineered, constructed, and operated in compliance with the electric and magnetic field strength standards established by the New York Public Service Commission, as required by Certificate Condition V.A., which is appended to the November 21, 2001 Order. However, we will condition approval of the modified interconnection upon approval of the revised System Reliability Impact Study by the Operating Committee of the New York Independent System Operator, Inc. This condition will ensure that the modifications to the interconnection will not have any adverse impacts on the electric system. We will also require compliance with several other conditions intended to ensure the safe and reliable interconnection and operation of the second power block.

We also find that the modified construction schedule is reasonable and will not result in any material increases in the probable environmental impacts that were previously determined to result from the Project. While we authorize construction of the Project utilizing this general schedule, given the length of time between the separate construction phases, we will require Petitioners to submit a detailed compliance filing covering the second power block. In addition, we will require compliance with other conditions designed to keep us informed of construction progress and delays in the schedule.

According to PSL §162(2), "[a] certificate may be transferred, subject to the approval of the [Siting Board], to a person who agrees to comply with the terms, limitations and conditions contained therein." The regulations implementing this provision, contained at 16 NYCRR §1000.16, also require the transferee to demonstrate its qualifications to carry out the provisions of the Certificate and any subsequent Order issued thereunder. Astoria Energy has demonstrated through its construction and operation of the first power block that it is qualified to own, operate and maintain the Project in full compliance with the Certificate. Given that the owners of Astoria Energy II will be substantially the same as Astoria Energy, we find that both companies are qualified to properly administer the Siting Board's requirements. Moreover, both companies will be responsible for compliance with the Certificate, and all subsequent orders issued thereunder, both jointly and severally. Therefore, we will approve a transfer of the Certificate to Astoria Energy and Astoria Energy II jointly. This should assist the Petitioners in obtaining financing for the second power block.

However, we share Assemblyman Gianaris' concern that Petitioners have not designated the actual owners of Astoria Energy II, and will therefore require the filing of corporate ownership and affiliate information. We will also require the timely submission of any transfer agreement.

The New York State Board on Electric
Generation Siting and the Environment orders:

1. The Certificate of Environmental Compatibility and Public Need held by Astoria Energy LLC is amended, as discussed in the body of this Order.
2. The Certificate of Environmental Compatibility and Public Need held by Astoria Energy LLC may be transferred to Astoria Energy LLC and Astoria Energy II LLC, as joint Certificate Holders.
3. Astoria Energy LLC and Astoria Energy II LLC shall each file, within 30 days after the issuance of this Order, a written verified statement accepting the certificate, as amended, and agreeing to comply with the terms, limitations, and conditions contained therein and in every subsequent order issued thereunder. The statement shall also include the names and contact information of the officers of Astoria Energy LLC and Astoria Energy II LLC.
4. The Certificate Holders shall file, at least six months prior to commercial operation, a list of all companies with ownership interests in Astoria Energy LLC and Astoria Energy II LLC, including, but not limited to, parent companies, holding companies and affiliates. A diagram illustrating the companies' relationships to one another shall be included therewith, along with a statement of any other electric transmission and electric generation facilities owned by such companies. The Certificate Holders shall file an update, within

10 days of any changes to the information provided in accordance with this ordering clause.

5. The Certificate Holders shall file, within 10 days after execution, any transfer agreements and common facilities ownership agreements.

6. The Certificate Holders shall file, within 10 days after approval by the Operating Committee of the New York Independent System Operator, Inc, a copy of the System Reliability Impact Study, and all appendices thereto, reflecting the interconnection of the second power block to the New York Power Authority's Q35L and Q35M feeders.

7. The Certificate of Environmental Compatibility and Public Need, and Certificate Condition I.D., shall be amended, upon compliance with the previous ordering clause, to authorize the construction of the electric transmission facilities described in the body of this Order, and interconnection of those facilities to the New York Power Authority's Q35L and Q35M 345 kV transmission feeders.

8. The Certificate Holders shall file, pursuant to Certificate Condition II.C., and 16 NYCRR Part 1003, a compliance filing addressing the construction and operation of the second power block, including but not limited to, final Site Plans and construction drawings for the project components, turbine sites, access roads, and electric lines associated with the project, which must be approved prior to commencing construction.

9. Prior to commencing construction of the substation and transmission interconnection, excluding minor activities required for testing and development of final engineering and design information, the Certificate Holders shall file final design plans and profile drawings of the substation and the transmission interconnection, and proof of

acceptance of the design by Consolidated Edison Company of New York, Inc. (Con Edison).

10. The authorized electric plant shall be subject to inspection, pursuant to §66(8) of the Public Service Law, by authorized representatives of Staff of the Department of Public Service.

11. The Certificate Holders shall incorporate, and implement as appropriate, the standards and measures for engineering design, construction, inspection, maintenance and operation of its authorized electric plant, including features for facility security and public safety, utility system protection, plans for quality assurance and control measures for facility design and construction, utility notification and coordination plans for work in close proximity to other utility transmission and distribution facilities, vegetation and facility maintenance standards and practices, emergency response plans for construction and operational phases, and complaint resolution measures.

12. The Certificate Holders shall file, within three days after commencement of commercial operation of the electric plant, an original and three copies of written notice thereof.

13. The Certificate Holders shall work with Con Edison, and any successor Transmission Owner (as defined in the New York Independent System Operator, Inc. Agreement), to ensure that, with the addition of the electric plant (as defined in the Interconnection Agreement between the Certificate Holders and Con Edison), the system will have power system relay protection and appropriate communication capabilities to ensure that operation of Con Edison's Transmission System is adequate under Northeast Power Coordinating Council (NPCC) Bulk Power System Protection Criteria, and meets the protection requirements at all times of the North American Electric Reliability Council

(NERC), NPCC, New York State Reliability Council (NYSRC), New York Independent System Operator, Inc. (NYISO), and New York Power Authority (NYPA), and any successor Transmission Owner (as defined in the NYISO Agreement). The Certificate Holders shall ensure compliance with applicable NPCC criteria and shall be responsible for the costs to verify that the relay protection system is in compliance with applicable NPCC, NYISO, NYSRC and NYPA criteria.

14. The Certificate Holders shall be in full compliance with the applicable reliability criteria of the New York State Public Service Commission, Con Edison, NYISO, NPCC, NYSRC, NERC and any successor organizations. If the Certificate Holders fail to meet the reliability criteria at any time, the Certificate Holders shall notify the NYISO immediately, in accordance with NYISO requirements, and shall simultaneously provide the New York Public Service Commission and Con Edison with a copy of the NYISO notice.

15. The Certificate Holders shall operate the generating units in compliance with NYSRC local reliability rules for the Con Edison service area. The generating units shall have the equipment required, including storage tanks and control systems, to perform fuel switching. The Certificate Holders shall maintain automatic capability to switch within 60 seconds or less, fuel usage from natural gas to fuel oil, at any output level of the generating unit and without interrupting that output, upon experiencing a sudden loss of gas or low gas pressure condition. This automatic fuel switching capability shall be physically tested each year during both the Summer and Winter Capability Periods. Upon completion of these tests, the Certificate Holders shall provide a technical description of the results of such automatic fuel switching capability testing to Con Edison and Staff of the Department of Public Service. In

addition, the Certificate Holders shall immediately initiate the switching from natural gas to fuel oil upon notification from the Con Edison System Operator. If at any time the unit fails to switch over and the unit trips off line, the Certificate Holders shall investigate and make necessary repairs to bring the unit in conformance. If, at any time, the generating units fail to fuel swap, a written report shall be submitted within 30 days to the Staff of the Department of Public Service and Con Edison, detailing the action(s) taken to prevent future occurrences, including drawings and technical descriptions of changes or modifications that were made. Staff of the Department of Public Service may request, while Con Edison engineers are present, a demonstration of a fuel swap following the submission of the report.

16. The Certificate Holders shall file a copy of the following documents:

- (a) all facilities agreements with Con Edison, and any successor Transmission Owner throughout the life of the plant (as defined in the NYISO Agreement);
- (b) any documents produced as a result of the updating of requirements by the NYSRC;
- (c) the Relay Coordination Study, which shall be filed not later than twelve months prior to the projected date for commencement of commercial operation of the facilities; and a copy of the manufacturers' "machine characteristics" of the equipment installed (including test and design data);
- (d) a copy of the facilities design studies for the electric plant, including

all updates (throughout the life of the plant);

(e) a copy of the Interconnection Agreement and all updates or revisions (throughout the life of the electric plant); and,

(f) if any equipment or control system with different characteristics is to be installed, the Certificate Holders shall provide that information before any such change is made (throughout the life of the authorized electric plant).

17. The Certificate Holders shall obey unit commitment and dispatch instructions issued by NYISO, or its successor, in order to maintain the reliability of the transmission system. In the event that the NYISO encounters communication difficulties, the Certificate Holders shall obey dispatch instructions issued by the Con Edison Control Center, or its successor, in order to maintain the reliability of the transmission system.

18. Except for periods during which the authorized facilities are unable to safely and reliably convey electrical energy to the New York transmission system (e.g., because of problems with the authorized facilities themselves or upstream electrical equipment) the Certificate Holders' electric plant shall be exclusively connected to the New York transmission system over the facilities authorized herein.

19. After commencement of construction of the authorized electric plant, the Certificate Holders shall file with Staff of the Bulk Electric Systems Section of the Department of Public Service and Con Edison with a monthly report on the progress of construction and an update of the

construction schedule, and file copies of current construction progress reports during all phases of construction.

20. The Certificate Holders shall file, no more than two months after the commencement of construction, a detailed progress report. Should that report indicate that construction will not be completed within twelve months, the Certificate Holders shall include in the report an explanation of the circumstances contributing to the delay and a demonstration showing why construction should be permitted to proceed.

21. The Certificate Holders shall work with Con Edison system planning and system protection engineers to discuss the characteristics of the transmission system before purchasing any system protection and control equipment related to the electrical interconnection of the Project to Con Edison's transmission system. This discussion is designed to ensure that the equipment purchased will be able to withstand most system abnormalities. The technical considerations of interconnecting the electric plant to Con Edison's transmission facility shall be documented by the Certificate Holders and provided to Staff of the Bulk Electric Systems Section of the Department of Public Service and Con Edison prior to the installation of transmission equipment. Updates to the technical information shall be furnished as available (throughout the life of the plant).

22. The Certificate Holders shall work with Con Edison engineers and safety personnel on testing and energizing equipment in the authorized substation. A testing protocol shall be developed and provided to Con Edison for review. A copy shall be provided to Staff of the Bulk Electric Systems Section of the Department of Public Service following Con

Edison's approval. The Certificate Holders shall make a good faith effort to notify Staff of the Department of Public Service (Staff) of meetings related to the electrical interconnection of the Project to Con Edison's transmission system and provide the opportunity for Staff to attend those meetings. The Certificate Holders shall provide a copy of the testing design protocol to Staff of the Bulk Electric Systems Section of the Department of Public Service.

23. The Certificate Holders shall call and report to the Staff of the Bulk Electric Systems Section of the Department of Public Service within six hours of any transmission related incident that affects the operation of the electric plant. The Certificate Holders shall submit a report on any such incident within seven days to the Bulk Electric Systems Staff and Con Edison. The report shall contain, when available, copies of applicable drawings, descriptions of the equipment involved, a description of the incident and a discussion of how future occurrences will be prevented. The Certificate Holders shall work cooperatively with Con Edison, NYISO and the NPCC to prevent any future occurrences.

24. The Certificate Holders shall make modifications to its Interconnection Facility, if it is found by the NYISO or Con Edison to cause reliability problems to the New York State Transmission System. If Con Edison or the NYISO bring concerns to the New York Public Service Commission, the Certificate Holders shall be obligated to address those concerns.

25. In the event that an equipment failure of the authorized electric plant causes a reduction in the capability of such plant to deliver 50% of its maximum winter output rating, the Certificate Holders shall promptly provide to the Bulk Electric System Section Staff and Con Edison, copies of all notices, filings, and other substantive written communications

with the NYISO as to such reduction, any plans for making repairs to remedy the reduction, and the schedule for any such repairs. The Certificate Holders shall report monthly to Staff and Con Edison on the progress of any repairs. If such equipment failure is not completely repaired within nine months of its occurrence, the Certificate Holders shall provide a detailed report to the Secretary to the Public Service Commission, within nine months and two weeks after the equipment failure, setting forth the progress on the repairs and indicating whether the repairs will be completed within three months; if the repairs will not be completed within three months, the Certificate Holders shall explain the circumstances contributing to the delay and demonstrate why the repairs should continue to be pursued.

26. Within 60 days prior to commencement of commercial operation, the Certificate Holders shall file with the Secretary to the Public Service Commission, Operation and Maintenance Plan(s) for the electric plant.

27. The Certificate Holders shall file, within 60 days prior to commencement of commercial operation, a report with the Secretary to the Public Service Commission regarding implementation of any Special Protection System that is designed to mitigate possible overloads from certain transmission outages, as well as copies of all studies that support the design of such system. In addition, the Certificate Holders shall provide all documentation for the design of special protection system relays, with a complete description of all components and logic diagrams. Prior to commencement of operations, the Certificate Holders shall demonstrate through appropriate plans and procedural requirements that the relevant components of the Special Protection System will provide effective protection.

28. In the event the plant trips offline, the Certificate Holders shall notify Staff, within one hour, of the incident. Following the incident, the Certificate Holders shall notify Staff and Con Edison of the cause of the trip, and what actions the Certificate Holders is taking to rectify the cause. Should a turbine generator unit be forced out of service for more than one week, the Certificate Holders shall notify the Bulk Electric System Section of the Department of Public Service, in writing, of the cause of the outage, steps being taken to bring the unit(s) back to service, and the expected date(s) for a return to service.

29. The Certificate Holders shall provide the Bulk Electric System Section of the Department of Public Service with a copy of its emergency procedures and contacts, and an updated copy shall be provided upon any modifications thereto.

30. The Certificate Holders and its affiliates shall comply with the Public Service Law in conformance with the requirements set forth in the body of this Order.

31. This proceeding is continued.

By the New York State Board
on Electric Generation Siting
and the Environment

(SIGNED)

JACLYN A. BRILLING
Secretary to the Board