

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@ct.gov www.ct.gov/csc

May 3, 2011

Andrew W. Lord, Esq. Murtha Cullina LLP CityPlace I, 185 Asylum Street Hartford, CT 06103

RE: **PETITION NO. 377A** - Bridgeport Energy, LLC petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the approval modification in Petition No. 377 for the existing Bridgeport Harbor Station 520 MW combined cycle gas turbine generating facility, in Bridgeport, Connecticut.

Dear Attorney Lord:

By its Decision and Order dated April 28, 2011, the Connecticut Siting Council (Council) approved modifications for the existing Bridgeport Harbor Station 520 MW combined cycle gas turbine generating facility, in Bridgeport, Connecticut.

Enclosed are the Council's Certificate, Findings of Fact, Opinion, and Decision and Order.

Very truly yours,

Linda Roberts
Executive Director

LR/CDM/laf

Enclosures (3)





CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@ct.gov www.ct.gov/csc

May 3, 2011

TO:

Parties and Intervenors

FROM:

Linda Roberts, Executive Director

RE:

PETITION NO. 377A - Bridgeport Energy, LLC petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the approval modification in Petition No. 377 for the existing Bridgeport Harbor Station 520 MW combined cycle gas turbine generating

facility, in Bridgeport, Connecticut.

By its Decision and Order dated August 28, 2011, the Connecticut Siting Council approved modifications to the existing Bridgeport Harbor Station 520 MW combined cycle gas turbine generating facility, in Bridgeport, Connecticut.

Enclosed are the Council's Findings of Fact, Opinion, and Decision and Order.

LR/CDM/laf

Enclosures (3)

c: State Documents Librarian



| STATE OF CONNECTICUT |) |
|------------------------------|---|
| ss. New Britain, Connecticut | : |
| COUNTY OF HARTFORD |) |

I hereby certify that the foregoing is a true and correct copy of the Findings of Fact, Opinion, and Decision and Order issued by the Connecticut Siting Council, State of Connecticut.

ATTEST:

Linda Roberts
Executive Director
Connecticut Siting Council

I certify that a copy of the Findings of Fact, Opinion, and Decision and Order in Petition No. 377a has been forwarded by Certified First Class Return Receipt Requested mail, on May 3, 2011, to all parties and intervenors of record as listed on the attached service list, dated December 20, 2010.

ATTEST:

Lisa Fontaine

Fiscal Administrative Officer Connecticut Siting Council Date: December 20, 2010

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LIST OF PARTIES AND INTERVENORS $\underline{SERVICE\ LIST}$

| | Status Holder Representative | | | | |
|----------------|---|---|--|--|--|
| Status Granted | (name, address & phone number) | (name, address & phone number) | | | |
| | | | | | |
| Petitioner | Bridgeport Energy | Andrew W. Lord, Esq. Murtha Cullina LLP CityPlace I, 185 Asylum Street Hartford, CT 06103 (860) 240-6180 (860) 240-5723 fax alord@murthalaw.com John Staikos, Esq. LS Power Equity Advisors, LLC 1700 Broadway, 25 th Floor New York, NY 10019 (212) 615-3456 (212) 615-3440 JStaikos@LSPower.com Scott Weis Environmental Engineer LS Power Development, LLC 400 Chesterfield Center, Suite 100 St. Louis, MO 63017 (636) 534-3245 (636) 532-2250 | | | |
| Intervenor | The Southern Connecticut Gas Company | SWeis@LSPower.com David Silverstone | | | |
| | 2 112 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 | Southern Connecticut Gas Company 855 Main Street Bridgeport, CT 06604 | | | |
| Intervenor | Connecticut Light and Power Company | Stephen Gibelli, Esq. Associate General Counsel The Connecticut Light and Power Company P.O. Box 270 Hartford, CT 06141-0270 (860) 665-5513 (860) 665-5504 fax gibels@nu.com | | | |

Date: December 20, 2010

Petition No. 377a Page 2 of 2

LIST OF PARTIES AND INTERVENORS $\underline{SERVICE\ LIST}$

| | Status Holder | Representative |
|----------------|-------------------------------------|--|
| Status Granted | (name, address & phone number) | (name, address & phone number) |
| Intervenor | Connecticut Light and Power Company | John R. Morissette Manager, Transmission Siting & Permitting The Connecticut Light and Power Company P.O. Box 270 Hartford, CT 06141-0270 (860) 665-2036 morisjr@nu.com Christopher R. Bernard Manager, Regulatory Policy (Transmission) The Connecticut Light and Power Company P.O. Box 270 Hartford, CT 06141-0270 |
| | | (860) 665-5967 (860) 665-3314 fax |
| | | bernacr@nu.com |

PETITION NO. 377A - Bridgeport Energy, LLC petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the approval smodification in Petition No. 377 for the existing Bridgeport Harbor Station 520 MW combined cycle gas turbine generating scaling facility, in Bridgeport, Connecticut.

April 28, 2011

Findings of Fact

Background

- 1. On November 17, 2010, Bridgeport Energy LLC (BE), pursuant to Connecticut General Statutes (CGS) § 4-181a(b) and § 16-50k and §§ 16-50j-38 to 16-50j-40 of the Regulations of Connecticut State Agencies, submitted a petition to the Connecticut Siting Council (Council) requesting that the Council render a declaratory ruling, based on changed conditions, modifying its approval of Petition No. 377 to allow the Bridgeport Energy electric generating facility (Facility) in Bridgeport, Connecticut to operate exclusively on natural gas and to eliminate the requirement to maintain the ability to operate on No. 2 fuel oil. (BE 1, p. 1)
- 2. On July 7, 1997, the United Illuminating Company (UI) submitted a petition to the Council, on behalf of BE, for a declaratory ruling that modifying UI's Bridgeport Harbor Station by constructing a nominally-rated 520 Megawatt (MW) combined cycle electric generating facility in Bridgeport, Connecticut would not have a substantial adverse environmental effect and that no Certificate of Environmental Compatibility and Pubic Need would be required. (BE 1, p. 2)
- 3. UI's proposed facility was to operate primarily on natural gas with No. 2 fuel oil as a back-up in the event of a physical interruption or in the event that natural gas was not available at favorable prices. (BE 1, pp. 2-3)
- 4. At the time UI's petition was submitted to the Council, BE had not determined how natural gas would be delivered to the Facility and proposed to operate on No. 2 fuel oil until the gas supply could be finalized and constructed. (BE 1, p. 3)
- 5. The Council issued a decision approving the proposed Facility on August 6, 1997. As part of its approval, the Council included a condition that:

"the project shall operate on natural gas except during curtailment of natural gas when such project may operate on No. 2 fuel oil as permitted by the Department of Environmental Protection."

(BE 1, p. 3)

Petition 377A: Bridgeport Findings of Fact

Page 2

- 6. On September 19, 1997, shortly after the Facility was approved by the Council, Southern Connecticut Gas Company submitted a petition for a declaratory ruling for the approval of a natural gas distribution pipeline that would provide service for BE's Facility. The Council approved this petition (No. 381) on November 12, 1997. (BE 1, p. 3)
- 7. During construction of the BE Facility, certain components that would allow for oil firing were included or incorporated into the Facility's design. (BE 1, p. 3)
- 8. The BE Facility also obtained an air permit from the Department of Environmental Protection (DEP) that would allow operation on No. 2 fuel oil for approximately 60 days per year. (BE 1, p. 4)
- 9. On December 16, 1997, in a quarterly status report to the Council, BE informed the Council that the construction of the No. 2 fuel oil system was being deferred and that BE intended to run only on natural gas. (BE 1, p. 3)
- 10. After receiving a quarterly progress report dated March 30, 1999, Council staff conducted a field review of BE's facility on April 5, 1999. As a result of observations made during the field review, the Council sent correspondence dated April 16, 1999 requesting additional information from BE regarding the status of the required capability to use No. 2 fuel oil during times of natural gas curtailment. (Petition 377 Staff Report dated March 22, 2000)
- 11. BE responded to the Council's request for additional information by proposing to prepare and submit a study evaluating the circumstances under which a natural gas curtailment could occur and under what circumstances BE would implement the steps required to enable its facility to run on oil. (BE 1, Exhibit 1 June 14, 1999 Letter to Joel Rinebold, p. 2)
- 12. On February 3, 2000, BE submitted a "Natural Gas Curtailment and Oil-Firing Contingency Plan Study" (Study) to address the Council's concerns about potential electric supply reliability issues that could arise in the event of a curtailment of natural gas without the capability to operate on No. 2 fuel oil as a back-up. The Study included an "Oil-Firing Contingency Plan" that outlined the steps to be taken if it appeared that a natural gas supply shortage could result in a curtailment. (BE 1, pp. 4-5)
- 13. In the Contingency Plan Study, BE provided an analysis of natural gas's supply and demand in New England. Between 1997 and 2001, New England's capacity margins for natural gas (the excess of supply over demand) ranged from 19 to 47 percent. (BE 1, p. 5)
- 14. The Council approved BE's Contingency Plan Study on March 22, 2000. (BE 1, p. 5)
- 15. On October 17, 2005, BE submitted an updated Natural Gas Curtailment and Oil Firing Contingency Plan Study, dated March 11, 2005, that examined the natural gas capacity margin for the years 2003 through 2008. The lowest capacity margin in this period was 62 percent. (BE 1, p. 6)

Petition 377A: Bridgeport

Findings of Fact

Page 3

16. Since the commencement of commercial operations, the BE facility has operated solely on natural gas, and although some of the components needed to operate on No. 2 fuel oil are in place, a significant amount of work would be needed to fully comply with this condition of the Council's original approval. The height of the exhaust stacks would have to be raised 30 feet—from 130 feet to 160 feet—to meet air permit requirements. It would also be necessary to construct the No. 2 fuel oil delivery, storage and control systems, including tank storage with a capacity of at least 1.5 million gallons; install all new piping, pumping and control systems; perform extensive software upgrades and modifications; and make significant adjustments and additions to the burners. (BE 1, p. 4)

17. It would take approximately 24 months for BE to install the capability to burn No. 2 fuel oil. (Tr. 1, p. 26)

Administrative Procedure

- 18. Pursuant to provisions of Title 16 of the CGS and of the Uniform Administrative Procedures Act, the Council, after giving due notice thereof, held a public hearing on March 8, 2011, beginning at 2:10 p.m., in Hearing Room One in the Council's offices at Ten Franklin Square in New Britain, Connecticut. (Transcript, March 8, 2011, 2:10 p.m. [Tr. 1], pp. 3 ff.)
- 19. Notice of the Council's hearing was published in the <u>Connecticut Post</u> on February 3, 2011. (Tr. 1, pp. 5-6)
- 20. Ten days prior to the Council's hearing, BE posted a sign at the gate of its Facility informing the passing public of the time, date, and place of the hearing on this petition. (Tr. 1, pp. 40-41)
- 21. The party in this proceeding is the petitioner, Bridgeport Energy. Intervenors are the Southern Connecticut Gas Company and the Connecticut Light and Power Company. (Petition 377A Service List, dated December 15, 2010.)

State Agency Comments

- 22. Pursuant to CGS § 16-50*l*, the Council solicited comments on BE's petition from the following state departments and agencies: Department of Agriculture, Department of Environmental Protection (DEP), Department of Public Health, Council on Environmental Quality, Department of Public Utility Control, Office of Policy and Management, Department of Economic and Community Development, the Department of Transportation, and the Department of Emergency Management and Homeland Security. The Council's letters requesting comments were sent on January 31, 2011 and March 9, 2011. (CSC Hearing Package dated January 31, 2011; Letter to State Department Heads dated March 9, 2011)
- 23. In response to the Council's solicitation for comments, the Department of Transportation submitted a letter stating that it had no comments. (Department of Transportation letter, dated March 8, 2011)

24. The Council did not receive comments from any of the other state departments and agencies from which comments were solicited. (Record)

Air Permitting Issues

- 25. BE's submittal of this petition to eliminate the requirement that it retain the capability for operating on No. 2 fuel oil was prompted, in large part, by a meeting with DEP to discuss modifications to its air permit to add controls for carbon monoxide emissions. At this meeting, DEP informed BE that it was not opposed to removing the terms of BE's air permit related to the required oil-firing capacity. DEP's reasons for supporting the removal of these aspects of BE's permit relate to federal regulatory requirements for particulate matter: specifically, solid matter or liquid droplets with an aerodynamic diameter of 2.5 microns or less (PM 2.5). (BE 1, p. 7)
- 26. Federal regulations for particulate matter developed over a period of several years following the 1997 approval of BE's facility. (BE 1, p. 7)
- 27. In 2008, DEP was required by federal regulations to submit State Implementation Plans for PM 2.5 that included control measures to achieve compliance with the National Ambient Air Quality Standards (NAAQS) by April 2010. (BE 1, p. 7)
- 28. Under the State Implementation Plan, DEP must model the potential emissions from operations on oil (as if the BE plant were operating 60 days per year on oil), not the actual emissions generated operating on gas. (BE 1, pp. 7-8)
- 29. Because the Bridgeport area is non-attainment for PM 2.5, models that include BE's plant running on oil present problems for DEP in its efforts to achieve compliance with the NAAQS. (BE 1, p. 8)
- 30. If the Council does not remove the requirement that BE retain the capability to burn No. 2 fuel oil, DEP will require BE to conduct a lengthy analysis of the Best Available Control Technology (BACT) for PM 2.5 and to perform all new modeling for PM 2.5 emission from the BE facility. (BE 1, p. 8)
- 31. The difference in pollutant emission levels for producing 374,000 megawatt-hours on gas versus oil is shown in the table below:

| Amount Produced | Amount Produced |
|------------------|-----------------------------------|
| Using Gas (tons) | Using Oil (tons) |
| 2.8 | 23.8 |
| 235,665 | 337,000 |
| 3.97 | 7.93 |
| 29.96 | 67.81 |
| | Using Gas (tons) 2.8 235,665 3.97 |

(Tr. 1, p. 15)

PETITION NO. 377A - Bridgeport Energy, LLC petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the approval modification in Petition No. 377 for the existing Bridgeport Harbor Station 520 MW combined cycle gas turbine generating facility, in Bridgeport, Connecticut.

April 28, 2011

Opinion

On November 17, 2010, Bridgeport Energy, LLC (BE) submitted a petition to the Connecticut Siting Council (Council) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required to modify the approval of Petition No. 377 for the existing Bridgeport Harbor Station 520 MW combined cycle gas turbine generating facility, in Bridgeport, Connecticut. In the current petition, BE is seeking to eliminate the requirement, stipulated in the Council's approval of the original Petition 377, that it maintain the ability to operate on No. 2 fuel oil. Instead, BE asks that it be allowed to operate its electric generating facility exclusively on natural gas. As a basis for this request, BE is citing changed conditions, namely the increased availability of natural gas and a more dependable gas delivery system in New England. The Southern Connecticut Gas Company and The Connecticut Light and Power Company were intervenors in the original petition's proceeding. Neither of these intervenors participated in the current petition.

Shortly after approving Petition 377 for BE's facility, the Council also approved a petition (number 381) submitted by Southern Connecticut Gas Company to extend a natural gas distribution pipeline to the BE facility.

Since the commencement of its commercial operations, the BE facility has operated solely on natural gas. Although some of the components needed to operate on No. 2 fuel oil are in place, a significant amount of work would be needed to fully comply with the Council's condition requiring that the facility retain the ability to burn fuel oil. Among the changes BE would have to be make in order to burn fuel oil would be to raise the height of its exhaust stacks 30 feet—from 130 feet to 160 feet—to meet air permit requirements. BE would also have to construct the No. 2 fuel oil delivery, storage and control systems, including tank storage with a capacity of at least 1.5 million gallons; install all new piping, pumping and control systems; perform extensive software upgrades and modifications; and make significant adjustments and additions to the burners. It would take approximately two years to complete all of the improvements needed to run on fuel oil.

In response to Council concerns about the BE facility's ability to operate in the event of a curtailment of the natural gas supply, BE completed a "Natural Gas Curtailment and Oil-Firing Contingency Plan Study." The Study was submitted to the Council in February 2000. It examined potential electric supply reliability issues that could arise in the event of a natural gas curtailment without the ability to burn fuel oil as a back-up. The Study also included a Contingency Plan that would be followed if shortages in the supply of natural gas appeared likely. The Council approved the Contingency Plan in March 2000.

Petition 377A: Bridgeport Opinion Page 2

Under the terms of the Contingency Plan, BE conducted a review of the supply and demand for natural gas in New England for the years from 1997 to 2001. In this period, the excess of supply over demand (the capacity margin) ranged between 19 and 47 percent. BE submitted an updated analysis in October 2005 that analyzed the supply and demand of gas for the years from 2003 through 2008. In this time period, the lowest capacity margin was 62 percent.

An important impetus for BE's submittal of the current petition was provided by DEP, which informed BE that it was not opposed to removing the fuel oil condition. DEP's reasons for supporting the elimination of this condition relate to federal air quality regulatory requirements for particulate matter: specifically, solid matter or liquid droplets with an aerodynamic diameter of 2.5 microns or less (PM 2.5).

In 2008, DEP was required by federal air quality regulations to submit State Implementation Plans for PM 2.5 that specified control measures to achieve compliance with the National Ambient Air Quality Standards (NAAQS) by April 2010. The State Implementation Plan would require DEP to model the potential emissions from BE's facility as if it were operating 60 days per year on oil, as it is allowed to do by its DEP air permit, and not the facility's actual emissions generated when operating on gas. Because the Bridgeport area is non-attainment for PM 2.5, models that include BE's plant running on oil present problems for DEP in its efforts to achieve compliance with the NAAQS. If the Council were not to remove its requirement that BE retain the capability to burn No. 2 fuel oil, DEP will require BE to conduct a lengthy analysis of the Best Available Control Technology (BACT) for PM 2.5 and to perform all new modeling for PM 2.5 emissions from the BE facility.

In the time since the original BE petition was approved by the Council, the availability and reliability of the supply of natural gas in New England has increased significantly, thereby reducing the likelihood of a natural gas curtailment and alleviating the concern behind the Council's requirement that the facility include the capability to operate on fuel oil. Air quality standards have also changed since BE's approval. Stricter air quality standards would require the facility to incorporate updated air pollution control technology if it were to operate on fuel oil. If the facility actually did operate on fuel oil, it would generate more pollutants in an area that currently does not comply with air quality standards for PM 2.5. For these reasons, the Council will grant BE's petition on the grounds of changed conditions and eliminate the requirement that the facility maintain the capability to operate on No. 2 fuel oil.

| PETITION NO. 377A - Bridgeport Energy, LLC petition for a | } | Connecticut |
|--|---|----------------|
| declaratory ruling that no Certificate of Environmental | | |
| Compatibility and Public Need is required for the approval | } | Siting |
| modification in Petition No. 377 for the existing Bridgeport | | |
| Harbor Station 520 MW combined cycle gas turbine generating | } | Council |
| facility, in Bridgeport, Connecticut. | | |
| | | April 28, 2011 |

Decision and Order

Pursuant to the foregoing Findings of Fact and Opinion, the proposed modifications to Bridgeport Energy Generating Facility will not have a substantial adverse environmental effect and pursuant to General Statutes § 16-50k, will not require a Certificate of Environmental Compatibility and Public Need.

The modifications to the August 7, 1997 Decision and Order shall be implemented substantially as specified in the Council's record in this matter and subject to the following conditions:

- 1. Condition 1 of the August 7, 1997 Decision and Order is hereby modified as follows: the project shall no longer be required to maintain the capability of operating on No. 2 fuel oil pursuant to the conditions of any applicable air permit issued by the Department of Environmental Protection (DEP).
- 2. All other conditions included with the Council's August 7, 1997 approval of Petition 377 shall remain in place.

We hereby direct that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below, and notice of issuance shall be published in <u>Connecticut Post.</u>

By this Decision and Order, the Council disposes of the legal rights, duties, and privileges of each party named or admitted to the proceeding in accordance with Section 16-50j-17 of the Regulations of Connecticut State Agencies.

The parties and intervenors to this proceeding are:

PETITIONER

ITS REPRESENTATIVE

Bridgeport Energy

Andrew W. Lord, Esq. Murtha Cullina LLP CityPlace I, 185 Asylum Street Hartford, CT 06103

INTERVENOR

ITS REPRESENTATIVE

The Southern Connecticut Gas Company

David Silverstone Southern Connecticut Gas Company

855 Main Street

Bridgeport, CT 06604

INTERVENOR

ITS REPRESENTATIVE

Connecticut Light and Power Company

Stephen Gibelli, Esq. Associate General Counsel The Connecticut Light and Power Company P.O. Box 270

Hartford, CT 06141-0270

CERTIFICATION

The undersigned members of the Connecticut Siting Council (Council) hereby certify that they have heard this case, or read the record thereof, in **PETITION NO. 377A** - Bridgeport Energy, LLC petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the approval modification in Petition No. 377 for the existing Bridgeport Harbor Station 520 MW combined cycle gas turbine generating facility, in Bridgeport, Connecticut; and voted as follows to approve modifications to the August 7, 1997 Decision and Order.

| Council Members | Vote Cast |
|---|-----------|
| Robert Stein, Chairman | Abstain |
| Colin C. Tait, Vice Chairman | Absent |
| Commissioner Kevin M. DelGobbo Designee: Larry P. Levesque | Yes |
| Bridgewyw Acting Commissioner Dan Esty Designee: Brian Golembiewski | Yes |
| Philip T. Ashton | Yes |
| Daniel P. Lynch, Jr | No |
| James J. Murphy, Jr. | Yes |
| Barbara Currier Bell Dr. Barbara Currier Bell | Yes |
| Edward S. Wilensky | Yes |



CONNECTICUT SITING COUNCIL

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www.ct.gov/csc

May 2, 2011

TO:

Classified/Legal Supervisor

377A110308

The Connecticut Post 410 State Street

Bridgeport, CT 06604-4560

FROM:

Lisa A. Fontaine, Fiscal Administrative Officer

RE:

PETITION NO. 377A - Bridgeport Energy, LLC petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the approval modification in Petition No. 377 for the existing Bridgeport Harbor Station 520 MW combined cycle gas turbine generating

facility, in Bridgeport, Connecticut.

Please publish the attached notice as soon as possible, but not on Saturday, Sunday, or a holiday.

Please send an affidavit of publication and invoice to my attention.

Thank you.

LAF





CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@ct.gov www.ct.gov/csc

NOTICE

Pursuant to General Statutes § 16-50p (e), the Connecticut Siting Council (Council) announces that, on April 28, 2011, the Council issued Findings of Fact, an Opinion, and a Decision and Order approving a petition from Bridgeport Energy, LLC for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the approval modification in Petition No. 377 for the existing Bridgeport Harbor Station 520 MW combined cycle gas turbine generating facility, in Bridgeport, Connecticut. This petition record is available for public inspection in the Council's office, Ten Franklin Square, New Britain, Connecticut.

