

# STATE OF CONNECTICUT

## 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

April 15, 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.

As stated at the hearing in New Britain on March 8, 2011, after the Council issues its draft findings of fact, parties and intervenors may identify errors or inconsistencies between the Council's draft findings of fact and the record; however, no new information, evidence, argument, or reply briefs will be considered by the Council.

Parties and Intervenors may file written comments with the Connecticut Siting Council on the Draft Findings of Fact issued on this petition by April 21, 2011.

LR/CDM/laf

Enclosure



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 8, 2011

## **DRAFT**

### **Findings of Fact**

#### Background

- 1. On November 17, 2010, Bridgeport Energy LLC (BE), pursuant to Connecticut General Statutes (CGS) § 4-181 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)

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Findings of Fact

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- 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 to serve the BE's Facility. The Council approved this petition (No. 381) on November 12, 1997. (BE 1, p. 3)
- 7. 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)
- 8. Following the Council's approval, the BE Facility was constructed and certain components that would allow for oil firing were included or incorporated into the Facility's design. (BE 1, p. 3)
- 9. 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)
- 10. At the time of the submission of Petition 377A, the BE Facility had incorporated certain components needed for oil-burning, but there remains a significant amount of work that would be needed to allow operation on No. 2 fuel oil. 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)
- 11. It would take approximately 24 months for BE to install the capability to burn No. 2 fuel oil. (Tr. 1, p. 26)
- 12. On February 3, 2000, BE submitted a "Natural Gas Curtailment and Oil-Firing Contingency Plan Study" (Study) to the Council to address its concerns about potential electric supply reliability issues that could arise in the event of a curtailment of natural gas without 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 the natural gas capacity margins in New England. Between 1997 and 2001, New England's capacity margins ranged from 19 to 47 percent. (BE 1, p. 5)
- 14. The Council approved BE's Contingency Plan on March 22, 2000. (BE 1, p. 5)
- 15. BE submitted an updated analysis of the natural gas capacity margin for the years 2003 through 2008 on October 17, 2005. The lowest capacity margin in this period was 62 percent. (BE 1, p. 6)

#### Administrative Procedure

- 16. 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.)
- 17. Notice of the Council's hearing was published in the <u>Connecticut Post</u> on February 3, 2011. (Tr. 1, pp. 5-6)
- 18. 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)
- 19. 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**

- 20. 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)
- 21. 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)
- 22. The Council did not receive comments from any of the other state departments and agencies from which comments were solicited. (Record)

### **Air Permitting Issues**

23. BE's submittal of this petition to eliminate the requirement to 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 reflect the addition of controls for carbon monoxide emissions. At this meeting, DEP informed BE that it was not opposed to removing those terms of its air permit that relate to the required oil-firing capacity. DEP's reasons for supporting the removal of the oil-firing 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)

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- 24. Federal regulations for particulate matter developed over a period of several years following the approval of BE's facility. (BE 1, p. 7)
- 25. Under the federal regulations, DEP was required to submit State Implementation Plans for PM 2.5 in 2008 that included control measures to achieve compliance with the National Ambient Air Quality Standards (NAAQS) by April 2010. (BE 1, p. 7)
- 26. 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)
- 27. 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)
- 28. If BE is unable to remove the requirement to retain the capability to burn No. 2 fuel oil, DEP will require it to conduct a lengthy analysis of the Best Available Control Technology (BACT) for PM 2.5 and to perform all new modeling for emission from the BE facility. (BE 1, p. 8)
- 29. The difference in pollutant emission levels for producing 374,000 megawatt-hours on gas versus oil is shown in the table below:

<u>Pollutant</u>	Amount Produced	Amount Produced
	Using Gas (tons)	Using Oil (tons)
PM 2.5	2.8	23.8
Carbon dioxide	235,665	337,000
Volatile Organic Compounds	3.97	7.93
Nitrous Oxides	29.96	67.81

(Tr. 1, p. 15)

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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 <sup>th</sup> 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 SWeis@LSPower.com
Intervenor	The Southern Connecticut Gas Company	David Silverstone 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

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	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
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