STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Docket No. 370

The Connecticut Light & Power Company Application for Certificates of Environmental Compatibility and Public Need for the Connecticut Portion of the Greater Springfield Reliability Project and for the Manchester to Meekville Junction Circuit Separation Project

APPLICATION OF NRG ENERGY, INC. PURSUANT TO CONNECTICUT GENERAL STATUTES § 16-50*l*(a)(3)

March 19, 2009

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1. EXECUTIVE SUMMARY

1.1 Background of Proceeding

On October 20, 2008, The Connecticut Light and Power Company ("CL&P) filed an application for a Certificate of Environmental Compatibility and Public Need ("Certificate") with the Connecticut Siting Council ("CSC" or "Council") seeking approval to construct two related projects: the Connecticut portion of the Greater Springfield Reliability Project ("GSRP") and the Manchester to Meekville Junction Circuit Separation Project ("MMP") (the "CL&P Application").[1] The GSRP is part of a broader plan for regional transmission improvements, known as the New England East-West Solution ("NEEWS"), which purports to address reliability issues in Connecticut, Massachusetts and Rhode Island.

Connecticut law requires the Connecticut Energy Advisory Board ("CEAB") to issue a reactive Request for Proposals ("RFP") whenever the sponsor of a transmission or energy project files an application for a Certificate with the CSC.[2] The purpose of a reactive RFP is to encourage competing solutions that would meet the need to be addressed by the proposed project and to review all project proposals in a consolidated hearing process. Consistent with this mandate, the CEAB issued reactive RFP seeking alternative energy solutions to the GSRP and MMP on November 4, 2008 and received three responsive proposals:

- A 530 megawatt ("MW") combined cycle generating plant to be developed by NRG Energy, Inc. ("NRG") in Meriden, Connecticut (the "Meriden Project" or the "Meriden Facility");

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1 Collectively, the GSRP and MMP are referred to by CL&P as the Connecticut Valley Electric Transmission Project. The CL&P Application was assigned to Docket No. 370.

2 *See* Connecticut General Statutes ("C.G.S.") § 16a-7c. As modified by Section 54 of Public Act 07-242, the CEAB may exempt a project from the RFP requirement by a two-thirds vote of its members. CL&P did not request and the CEAB did not issue an exemption for the GSRP or MMP.

- A 500 MW combined cycle generating plant to be constructed by GE Energy Financial Services ("GE") in Oxford, Connecticut (the "GE Project"); and
- An ice-based thermal storage project proposed by Ice Energy, Inc. and its financing partner, Energy Capital Partners, LLP (the "Ice Energy Project").

On February 17, 2009, the CEAB issued its evaluation report to the CSC (the "CEAB Report"), concluding that each of the alternative proposals, if implemented, would have a beneficial effect on the overload conditions identified in CL&P's needs assessment for the GSRP and, therefore, all three proposals should be considered by the Council.[3]

Connecticut General Statutes ("C.G.S.") § 16-50*l*(a)(3) contemplates that respondents to a reactive RFP will require a Certificate for their projects and established a 30-day period following completion of the CEAB evaluation process to file their respective Certificate applications.[4] As the Council is aware, PDC-El Paso Meriden, LLC, the former sponsor of the Meriden Project (the "Original Applicant") applied for and received a Certificate for the Meriden Project in an April 27, 1999 Decision and Order issued by the Council in Docket No. 190 (the "Docket No. 190 Decision"). Similarly, the former sponsor of the GE Project, Towantic Energy, LLC, was awarded a Certificate for the GE Project in a June 23, 1999 Decision and Order entered in CSC Docket No. 192. Notwithstanding these previously-issued Certificates, the Council ordered in a February 27, 2009 memorandum (the "February 27, 2009 Memorandum"), that NRG and GE must submit new applications for their respective projects that conform to Regulations of Connecticut State Agencies ("R.C.S.A.") § 16a-50*l*-2, and by reference therein,

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3 Connecticut Energy Advisory Board Evaluation Report to the Connecticut Siting Council, *An Analysis of The Connecticut Light and Power Company's Proposed Greater Springfield Reliability Project and the Manchester to Meekville Project and the Non-Transmission Projects Proposed as Alternatives* (February 17, 2009) (hereinafter the "CEAB Report"), p. 2.

4 C.G.S. § 16-50*l*(a)(3).

C.G.S. § 16-50*l*.[5] The CSC reasoned that this approach would "[place] all of the applications submitted pursuant to the CEAB RFP process, as well as the application that triggered the reactive RFP, on equal footing for simultaneous consideration in a consolidated hearing process by the Council."[6]

In accordance with the February 27, 2009 Memorandum, NRG hereby submits this application for the Meriden Project (the "Application"). NRG understands that this submittal is solely for the purpose of comparing alternatives to the GSRP and will not disturb the Certificate granted by the CSC for the Meriden Project in Docket No. 190. Based on the foregoing and in accordance with the Council's February 27, 2009 Memorandum, NRG also submits herewith a request that the Council take administrative notice of the complete record in Docket No. 190, including the application materials submitted by the Original Applicant, the Docket No. 190 Decision and associated Findings of Facts, materials submitted for the Development and Management Plan for the Meriden Facility and NRG's subsequent communications with the Council regarding NRG's compliance with the terms and conditions of the Docket No. 190 Certificate (collectively the "Docket 190 Materials"). The Council's Decision and Order, Opinion and Findings of Fact in Docket No. 190 are attached hereto as Attachment A. This Application summarizes and references the pertinent information from the Docket No. 190 Materials in the context of the framework of this consolidated proceeding and provides the information required by R.C.S.A. § 16a-50*l*-2 and C.G.S. § 16-50*l*.

1.2 Local Generation Can Meet the Needs of the GSRP/MMP

C.G.S. § 16a-7c(b) contemplates that respondents to a reactive RFP will propose "alternative solutions to the need that will be addressed by the proposed facility in [the]

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5 CSC Letter to Parties and Intervenors in Docket No. 370 (Feb. 27, 2009), p. 1.

6 *Id.* at 2.

application" that triggered the reactive RFP. In this proceeding, the subject facilities are the GSRP and the MMP.

The CL&P Application states: "Although [the GSRP] is designed to work efficiently with the other NEEWS projects, the GSRP stands on its own as fulfilling urgent reliability needs in Greater Springfield and north-central Connecticut."[7] The January 2008 SNETR report prepared by ISO New England, Inc. ("ISO-NE") and included in Volume 5 of the CL&P Application suggests that there could be a possible problem in that region, but does not explain the nature or severity of it. Additionally, ISO-NE's 2008 Regional System Plan does not identify a north-central reliability need. In fact, both CL&P and ISO-NE have consistently described the GSRP as a solution to reliability problems in the Springfield, Massachusetts area.

MMP also is not needed to resolve reliability concerns in north-central Connecticut. Its purpose, instead, is to accommodate higher power flows in that region that would result from increased imports.

The CL&P Application refers to the increased import capacity that will accrue to Connecticut after completion of GSRP and NEEWS, but does not quantify the increased capacity that would result from the GSRP alone. Thus, the statutory public benefit test[8] for the GSRP, as it pertains to Connecticut, must rest on the twin assumptions that: (1) NEEWS will be implemented in its entirety; and (2) Connecticut has a capacity shortage that can best be solved by increasing import capability.

The CL&P Application suggests that GSRP/NEEWS is a better solution than local generation because the former would provide lower-cost power to be imported into the state.[9] CL&P also maintains that NEEWS is needed to allow renewable energy to be imported into

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7 CL&P Application, Vol. 1, F-15.
8 *See* C.G.S. § 16-50p(c)(3).
9 CL&P Application, Vol. 1, p. ES-2.

Connecticut,[10] but no analysis of this assertion has been provided. Nonetheless, the construction of efficient generating facilities in Connecticut can achieve the same result. That is because an increase in local capacity would free up capacity on existing transmission lines, thereby allowing renewable power to flow into the state if it is needed.

1.3 The Meriden Facility is the Most Appropriate Solution

This Application demonstrates the superiority of the Meriden Project relative to the GSRP/NEEWS. Specifically, the Project would:

- Meet the identified need for additional capacity that would be provided by GSRP and NEEWS;
- Provide economic benefits to ratepayers by displacing older, inefficient units;
- Offer a hedge against volatile energy prices through a long-term contract;
- Help Connecticut achieve its environmental goals;
- Add 25 permanent jobs and 475 construction-related jobs in the state; and
- Provide $85 million in property tax revenues to the City of Meriden.

By contrast, the economic benefits of the GSRP and NEEWS to ratepayers have not been thoroughly analyzed, and most of the jobs and tax revenues that would be created by GSRP and NEEWS would flow to other states. Consequently, the Meriden Facility would be a better choice for Connecticut ratepayers and the state at large.

2. PURPOSE OF APPLICATION

C.G.S. § 16-50p(a)(3)(F) states that, in the case of an application that was heard under a consolidated hearing process with other applications that were solicited through an RRP, the Council may not grant a Certificate for the facility described in the subject application unless it finds that such facility is the most appropriate alternative among all of the applications. NRG

[10] *Id.*

requests that the Council issue a decision and order in this proceeding finding that the Meriden Project represents the most appropriate alternative for meeting the public need that would be addressed by the GSRP.

3. STATUTORY AUTHORITY

C.G.S. § 16-50*l*(a)(3) states that "an entity that has submitted a proposal pursuant to the request for proposal process may initiate a certification proceeding by filing with the council an application containing the information required pursuant to this section . . . not later than thirty days after the [CEAB] performs the evaluation process pursuant to subsection (f) of section 16a-7c." On February 17, 2009, the CEAB submitted its evaluation report to the CSC regarding the GSRP, MMP and the alternative solutions proposed by the RFP respondents. Accordingly, the deadline for filing an application is March 19, 2009.

In the February 27, 2009 Memorandum, the Council interpreted C.G.S. § 16-50*l*(a)(3) to require NRG and GE to file an application with the Council even though a Certificate had already been issued to each of them for their proposed projects. Thus, the statutory authority for this Application is C.G.S. § 16-50*l*(a)(3), as interpreted by the Council in the February 27, 2009 Memorandum.

4. LEGAL NAME AND ADDRESS OF APPLICANT

The legal name of the applicant is NRG Energy, Inc., a Delaware corporation, with its principal offices located at 211 Carnegie Center, Princeton, New Jersey 08540. Correspondence regarding this Application should be directed to:

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5. STATEMENT OF PUBLIC NEED AND PROJECT BENEFITS

5.1 The Need Identified in the CL&P Application

The GSRP consists of numerous upgrades to the 115 kV system in the Springfield, Massachusetts area, a 345 kV "loop" around Springfield, and a 345 kV line from Agawam, Massachusetts to North Bloomfield, Connecticut. Only the Connecticut portion of the 345 kV line from Agawam to North Bloomfield is before the Council in this proceeding. The CL&P Application asserts that the GSRP, while complementary to the larger NEEWS project, can "stand on its own" and that it will improve the reliability of the electric transmission system in western Massachusetts and north-central Connecticut. This statement appears on page ES2 of Volume One of the CL&P Application, which states in part:

> Although it is designed to work efficiently with the other NEEWS projects, *the GSRP stands on its own as fulfilling urgent reliability needs in Greater Springfield and north-central Connecticut.* It is needed and will "work" whether all, some, or none of the other NEEWS projects are built. While all of the NEEWS projects have been designed to complement, and not to conflict with one another, the GSRP can stand on its own. To demonstrate this existing and independent need, NUSCO planners have performed extensive new power-flow studies of the Greater Springfield and north central Connecticut area, taking into account updated load forecasts and relevant changes in the electric supply system. These studies examine the need for, and the benefits of, the GSRP without regard to the other NEEWS projects. (Emphasis added).

Although the Springfield reliability need is well documented in studies provided as part of this proceeding, the claim that the GSRP resolves "urgent reliability needs" in north-central Connecticut is unsupported by the CL&P Application and ISO-NE studies. The January 2008 Needs Analysis performed by ISO-NE, which is included in Volume 5 of the CL&P Application (the "Needs Analysis") defines the need for the GSRP as follows:

> Springfield Reliability: The Springfield, Massachusetts, area could be exposed to significant thermal overloads and voltage problems under numerous contingencies at or near summer peak-load periods.[11]

Virtually all other references to the GSRP in the Needs Analysis are confined to reliability concerns in Springfield and surrounding Massachusetts cities and towns. The only mention of north-central Connecticut appears on page ii of the Needs Analysis, which states:

> For instance, as illustrated in Figure 1, an outage on a 345 kV line supplying the Manchester area in north-central Connecticut *could* overload facilities in the western Massachusetts–Springfield area and the northeastern Connecticut–Rhode Island area when redistributing the power flow in trying to reach the load. (Emphasis added).

ISO-NE does not explain the magnitude of the problems identified, the dispatch assumed or whether there is a violation of reliability standards. If there were urgent reliability problems in north-central Connecticut, they presumably would have been cited in ISO-NE's 2008 Regional System Plan. They were not.

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[11] CL&P Application, Vol. 5, Exhibit 1, p. iii.

The CL&P Application does refer to the increased imports that would result from NEEWS, but does not quantify the incremental capacity that Connecticut would gain from the GSRP "standing alone." Given that CL&P must prove a public benefit to the state to secure a Certificate for the GSRP,[12] the CL&P Application must rest on the notion that NEEWS will be built in its entirety, bringing 1100 MWs of additional import capability to Connecticut. Thus, the need for GSRP for which alternatives should be considered is the increased capacity that would be derived from such imports.

5.2 Localized Generation Can Meet the Same Need as Import Capacity

The need for imports is determined by an analysis of the load relative to the combined generation and import capacity into a particular region. As noted in the CL&P Application, ISO-NE studies have indicated that the generation in Connecticut plus import capability may not be sufficient to meet the state's load under all normal and contingency conditions.[13] Both CL&P and ISO-NE, however, conclude that the solution is to build more transmission.

Connecticut's load needs can be met either by building more capability to import power from remote parts of the region or by building reliable and efficient sources of power close to the load centers of the state. The CL&P Application acknowledges as much:

> In some cases, electric reliability needs can be met by means other than improvements to the transmission system. For instance, where the reliability problem is simply a lack of sufficient generation resources to reliably serve the load in a defined area, it may be possible to meet the reliability need through building new generation in the area, reducing demand in the area, increasing the capacity of the transmission system to import power into the area, or through some combination of these strategies.[14]

ISO-NE comes to the same conclusion:

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12 *See* Conn. Gen. Stat. § 16-50p(c)(3).
13 CL&P Application, Vol. 1, p. F-12.
14 CL&P Application, Vol. 1, p. ES-11.

> To the extent that the analysis [(an analysis of whether an area meets applicable reliability criteria)] determines an area's resources to be inadequate under contingency conditions, it also identifies the increase in transmission capacity or level of area resources needed in these conditions to avoid being short of supply. Area resources [that are determined to be needed] can be added either by adding new supply-side resources or new transmission capacity.[15]

The CL&P Application suggests that the GSRP/NEEWS should be preferred over local generation options because the former will "increase the security of electric supply to Connecticut customers, and provide them with better access to lower cost, low-emission, and renewable remote power sources."[16] This claim is unavailing for several reasons. First, adding a new incremental power source to the system – whether it is transmission import or local generation – will almost always improve the "security of electric supply" by introducing another supply element to the mix, thereby reducing the chance of simultaneous outages. With regard to the "lower cost" argument, the CL&P Application does not identify any remote generating units that would export power to Connecticut by virtue of GSRP/NEEWS at a more economical price than could be offered by an efficient in-state generator. Finally, if the purpose of GSRP and NEEWS is to satisfy Connecticut's Renewable Portfolio Standard ("RPS"), the physical import of power is not necessary to that goal because load serving entities can purchase renewable energy certificates associated with a renewable power source delivered anywhere within New England.[17] If there is some valid reason for physically importing renewable generation to Connecticut, local generation would advance that goal because it would free up capacity on the existing transmission lines to receive such power. For all of these reasons, NRG maintains that the GSRP and NEEWS provide no benefits to Connecticut residents that cannot be achieved through the construction of efficient in-state generation like the Meriden Facility.

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15 CL&P Application, Vol. 5, Exhibit 1, p. 8.
16 CL&P Application, Vol. 1, p. ES-2.
17 *See* C.G.S. § 16-245a(b)(1).

5.3 The Meriden Project is the most Appropriate Solution

The design and operating profile of the Meriden Facility would provide a number of benefits to Connecticut consumers, including the displacement of substantial amounts of energy currently required from older, less efficient resources. Additionally, the Meriden Project could provide ratepayers with a hedge against volatile energy prices if NRG could secure a long-term contract with features designed to attain that result. These observations accord with the CEAB Report, which found that the Meriden Project can provide net economic benefits to Connecticut ratepayers.[18] CL&P has not made a similar showing for the GSRP and NEEWS to date.

As Connecticut strives to meet the federal ambient air standard for ozone, it is important that clean, new power generation is installed within the state. Helping Connecticut to meet these standards, the Meriden Project will be among the lowest emitting fossil-fueled generation in the region, using environmental controls that represent the lowest achievable emission rate for nitrogen oxides ("NO_x") emissions and best available controls technology for sulfur dioxide ("SO_2,"), carbon monoxide ("CO") and particulate emissions.

Finally, the Meriden Project would benefit the state and local economy. A station of this type and size will require 25 full-time personnel to operate, which will equate to a local economic stimulus of approximately $10 million per year. During construction, the Meriden Project will create an additional 475 construction-related jobs in the state. And the City of Meriden would derive $85 million of new tax revenues if the Meriden Facility is completed. By contrast, a significant portion of the spending and job creation associated with GSRP and NEEWS would occur out of state as noted in the CEAB Report.[19]

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18 *See* CEAB Report, at p. 3.

19 *Id.*, at p.53.

For all of these reasons, the Meriden Facility is a better choice to meet Connecticut's generation need.

6. DESCRIPTION OF THE PROPOSED PROJECT

6.1 Project Site Description

The site of the Meriden Project (the "Meriden Site" or "Site") is a 36-acre parcel of land located off of South Mountain Road in Meriden, Connecticut, which is situated within 2,500 feet of the boundary of the Town of Berlin. Of the total site, the footprint of the Meriden Facility would require approximately 11 acres. In addition, the site includes the transmission corridor allowing for gas and electrical interconnection. NRG has the right to obtain additional rights-of-way for gas and water pipelines, as needed, based on the original land purchase arrangements. Two existing 345 kilovolt ("kV") lines owned by CL&P extend across the property, into one or both of which the Meriden Facility will interconnect. Additional information regarding the Meriden Site is set forth in the application filed by the Original Applicant in Docket No. 190 (the "Original Application") and in the Council's Findings of Facts (Nos. 11 through 19) that accompanied the Docket No. 190 Decision.

In 2003, NRG completed substantially all of the site preparation and civil construction for the Meriden Project, including excavation and blasting to provide the necessary sized level pad, construction of the access road and the final improvements required by the Town of Meriden, the power house, control building, transformer foundations and blast walls, combustion turbine and steam turbine foundations, heat recovery system generator ("HRSG") foundations and shells, cooling tower basin, make-up and condensate water tanks, and the foundation for the ultra low sulfur distillate ("ULSD") fuel tank. Thus, completion of the Meriden Project consists primarily of equipment installation, such as the gas and steam turbines, and their connections. A map

showing the location of the Meriden Facility and photographs of the facility in its present state are included in Attachment B.

6.2 Service Life and Capacity Factor

It is expected that the Meriden Facility will have a service life of at least 30 years. In general, the capacity factor of the Meriden Facility will depend on the cost of its energy relative to other sources of energy in the New England region pursuant to economic dispatch principles administered by ISO-NE. Based on the current and anticipated mix of fuels and technologies in the region, the Meriden Facility is anticipated to have a capacity factor of 90% during on-peak hours and 50% during off-peak hours, for an overall capacity factor of approximately 70%.

6.3 Technology

The Meriden Project incorporates the latest demonstrated combustion turbine technology – two General Electric ("GE") Frame 7FA units – to produce power efficiently with minimum air emissions. The GE Frame 7FA combustion turbine has a capacity of approximately 175 MW at 59 degrees Fahrenheit and represents a commercially available advanced technology. The average heat rate for the Meriden Facility is expected to be approximately 7,000 Btu/kWh. The combustion turbine will utilize advanced dry low nitrogen oxide ("DLN") combustion for natural gas firing and water/steam injection fuel firing. The HRSG will be three-pressure, reheat type, equipped with selective catalytic reduction ("SCR") and CO oxidation catalysts to reduce emissions to the lowest achievable levels. The steam turbine will be industry proven GE D11 technology. In addition, the Meriden Facility will incorporate a wet cooling tower to enhance its efficiency and power output during the summer months beyond that of a majority of the new combined cycle plants, which have been required to install air-cooled condensers. The Meriden

Project has been permitted for the installation of inlet-air chillers, which will further increase the summer output and efficiency of the facility.

6.4 Fuel Type and Supply

Primary fuel for the project will be clean burning natural gas with ULSD as a backup. A high pressure interstate natural gas pipeline owned by Algonquin Gas Transmission Company ("AGT") and a second interstate natural gas pipeline owned by Tennessee Gas Pipeline Company ("TGP") are available via existing rights of way approximately four miles to the west of the Meriden Site.

Fuel supplies will be arranged with qualified suppliers in coordination with commitments to supply power in the daily, short-term and long-term markets. Fuel for the Meriden Facility will be purchased as a bundled service at the plant meters, or as an unbundled service at liquid physical trading points around the northeast region. NRG Power Marketing LLC ("NRG PML") will act as the fuel manager for the Meriden Facility. In that capacity, among other responsibilities, NRG PML will determine gas requirements in coordination with power marketing energy schedules and plant staff operating forecasts, procure gas, nominate and balance on interconnecting pipelines, and administer billings.

For gas that is purchased as a bundled product, delivery will take place at one of the two delivery points to be established at the Meriden Facility's dedicated gas lateral. These new delivery points are on the TGP Zone 6 300 leg and the AGT mainline.

Gas will also be sourced from upstream and downstream receipt points and transported on contracts to the dedicated plant lateral. The anticipated points are Dracut, into Tennessee, Lambertville or Hanover (Texas Eastern M-3) into Algonquin and Mendon (Tennessee) into Algonquin. Pricing for these points is published by Platt's *Gas Daily* and therefore is transparent

to the marketplace. Other alternative points will be investigated on a case-by-case basis in order to obtain least-cost supplies. Fuel will be purchased at market prices. Pricing levels and relationships in the New England marketplace are based on the capacity utilization rates on AGT and TGP, along with pricing of the underlying commodity. Capacity utilization rates are lower in the non-winter period, resulting in transportation being valued at only small premiums to variable costs. During the winter period (November through March), capacity is typically not available directly from interstate pipelines but can be purchased on a recallable basis from area local gas distribution companies. However, delivered commodity during the winter period, when procured on a term basis, is readily available.

During periods when gas supply is not available in sufficient quantity or pressure due to transportation constraints, the Meriden Facility will switch to burning ULSD to meet power generation commitments and requirements in the ISO-NE markets. Appropriate grades of fuel oil are available in the vicinity of the Meriden Facility and will be trucked to the Site's storage facility. The Meriden Project has a permit to burn ULSD for up to 720 hours at full load for both turbines combined. NRG anticipates that this backup fuel provision will be sufficient to accommodate the necessary fuel supply during gas interruptions.

6.5 Pollution Control Systems

The Meriden Facility will be equipped with emission controls for NO_x to meet the Department of Environmental Protection's ("DEP") Lowest Achievable Emission Rate ("LAER") requirements as well as meeting Best Available Control Technology ("BACT") requirements for SO_2, CO, volatile organic compounds ("VOC"), particulate matter ("PM"), particulate matter less than 10 microns ("PM_{10}") and ammonia ("NH_3"). LAER for NO_x for natural gas combustion in turbines is SCR and DLN, whereas LAER for NO_x for oil combustion

in turbines is SCR and water/steam injection. BACT for CO/VOC is an oxidation catalyst system for both natural gas and oil firing operations. BACT for SO_2, PM and PM_{10} is limiting the sulfur content of natural gas to 0.8grains/100 standard cubic foot of natural gas and that of oil to 0.0015% sulfur by weight. NH_3 has no specific control technology as BACT, although an emission limit of 5 ppmvd at 15% oxygen concentration has been accepted as BACT.

On July 29, 2008, NRG submitted a revised BACT/LAER analysis for the Meriden Project to the DEP. This filing was required because construction at the Site had ceased for more than 18 months. In late November 2008, NRG submitted a revised air permit application to supplement the BACT/LAER analysis pursuant to a DEP request.

The DEP has since orally informed NRG that particulate matter less than 2.5 microns ("$PM_{2.5}$") ambient air modeling will be required for the Meriden Project based on their Interim $PM_{2.5}$ New Source Review ("NSR") Modeling Policy and Procedure, dated February 11, 2009. NRG is in the process of engaging an environmental consultant to perform this modeling, and expects the modeling results to be available within one month after the modeling work is initiated.

6.6 Cooling System

The Meriden Project will use cost-effective and energy efficient wet-cooling towers. At present, the Meriden Project is permitted to use non-potable water to be withdrawn from wells beneath the Connecticut River. Cooling water supply rights have been secured and contractual negotiations are underway to finalize the commercial arrangements. In accordance with the already-obtained DEP permits, water will be supplied via a new 20 inch pipeline. Agreements with landowners for easement rights have been obtained or are being negotiated. All major permits for installation of the water line were secured and most are still valid. However,

agreements with the towns of Berlin and Cromwell to install the line in the public streets have lapsed. Negotiations with both towns to renew these agreements are in process and both are receiving support from the current town administrations. In addition, NRG has secured access to up to 1.1 million gallons per day of potable water supply from the City of Meriden. The water supply is sufficient to meet the Meriden Facility's needs for a wet cooling tower, emergency make-up, water injection for fuel oil firing, NO_x control and power augmentation.

NRG is currently working with the Mattabassett District Commission ("Mattabassett") to use treated effluent from the Mattabassett Wastewater Treatment Facility in Cromwell ("MWTF") as an alternative source of cooling water for the Meriden Facility. Rather than discharging the MWTF's effluent to the Connecticut River, Mattabassett would pump the water to the Meriden Facility through a new pipeline that would be built primarily within an existing utility right-of-way that Mattabassett controls. At the Meriden Facility, the treated effluent would be further treated and recirculated in the cooling towers. The DEP has offered support for this plan and NRG expects to secure any necessary permits for this alternate arrangement in a timely manner.

Discharges from the towers of the Meriden Facility, whether the cooling water source is Mattabassett or the Connecticut River, would be directed to the Meriden wastewater treatment plant for treatment and ultimately discharged to the Quinnipiac River. As the river currently suffers from chronic low flows in the summer months, additional volumes of water will be beneficial.

6.7 Transmission Interconnection

6.7.1 Interconnection Status

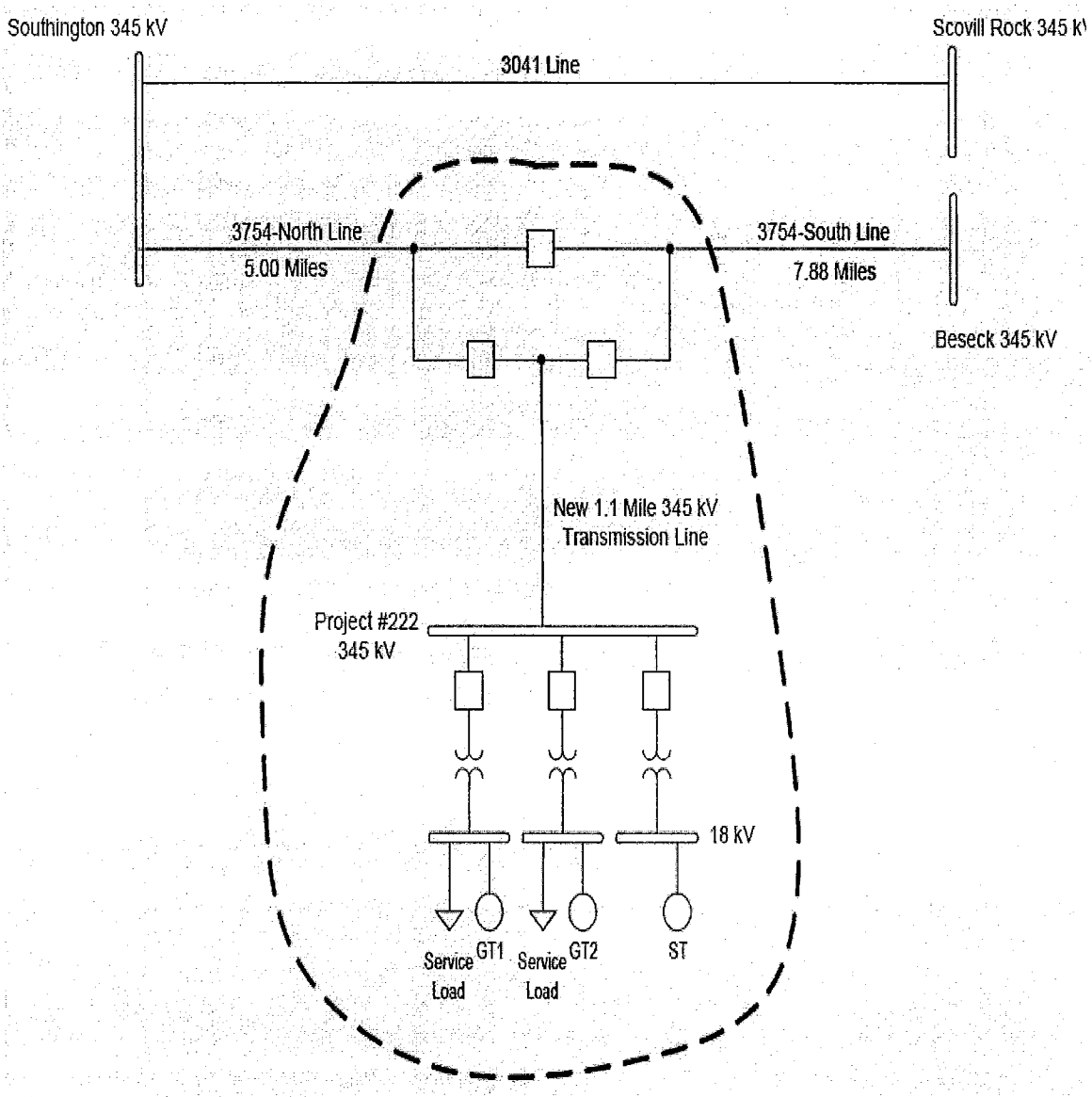
NRG submitted an interconnection application for the Meriden Project to ISO-NE in July 2007 and was subsequently assigned queue position number 222. The Feasibility Study portion of the Interconnection System Impact Study was completed in October 2008 and the subsequent Stability Study was initiated shortly thereafter. Three options for the specific interconnection point were studied in the Feasibility Study and after analysis of those options one was selected for the basis for the Stability Study.

6.7.2 Interconnection Plan

The Project will connect to the 3754 line (Southington-Beseck 345 kV) at a new 345 kV substation using a 3-breaker ring bus configuration. The new substation will be located near the 3754 line 5 miles from the Southington 345 kV substation. A radial 1.1-mile transmission line will connect the Meriden Facility to the new substation. The 3754 line is 12.88 miles long. The interconnection arrangement is illustrated in Figure 6.7.2 below.

The utility corridor covering the 1.1 mile distance from the Meriden Facility to the interconnection point is owned by NRG. It has been cleared and is easily accessible for installation of the line, and the area beneath the 3754 line has been prepared and leveled to accommodate installation of the substation.

FIGURE 6.7.2



Interconnection to 3754 Line (Southington – Beseck 345kV)

TABLE 6.7.2-1

Generator Data

Generator Data	Gas Turbine Unit	Steam Turbine Unit
Number of Generators	2	1
Generator Ratings	234 MVA, 18 kV, 0.85 PF	234 MVA, 18 kV, 0.85 PF
Greatest Unit Gross Output at Ambient Temperature of 50° F or above (Summer)	182 MW	170 MW
Greatest Unit Gross Output at Ambient Temperature of 0° F or above (Winter)	190 MW	195 MW
Overexcited Reactive Power Limit at Maximum Unit Rating (MW) at 50°F or above (Summer)	120 MVAR	120 MVAR
Underexcited Reactive Power Limit at Maximum Unit Rating (MW) at 50°F or above (Winter)	-70 MVAR	-70 MVAR
Overexcited Reactive Power Limit at Maximum Unit Rating (MW) at 0°F or above (Winter)	120 MVAR	120 MVAR
Underexcited Reactive Power Limit at Maximum Unit Rating (MW) at 0°F or above (Winter)	-70 MVAR	-70 MVAR
Station Service Load (Summer)	12 MW , 6 MVAR	0
Station Service Load (Winter)	7.5 MW, 3.7 MVAR	0
Total Project Output	**Summer**	**Winter**
Total Gross Plant Output	534	575
Total Net Plant Output	510	560

Each of the three generators was connected to the 345 kV Project Substation through its own three-phase generator step-up (GSU) transformer. Table 2-2 shows the data for the GSU transformers.

TABLE 6.7.2-2

GSU Transformer Data

Self-cooled/maximum nameplate ratings	234/390 MVA
Voltage ratio, generator side/system side	18/345.0 kV
Winding connections, low voltage/high voltage	Delta/ Wye
Fixed Taps	-5%, -2.5%, 0%, +2.5%, +5%
Impedance, Z_1 (on self-cooled MVA rating)	11.5%, X/R = 50
Impedance, Z_0 (on self-cooled MVA rating)	11.5%, X/R = 45

6.8 Estimated Project Costs

In order to provide detailed cost information for the Meriden Project, it is important to define the specific contract structure or contractual conditions that would define its revenue

stream. Additionally, until certain contract details have been determined, obtaining pricing from vendors is unlikely to bear truly competitive information. However, based on the assumptions in Table 6.8-1 below, NRG is able to provide a representative estimate of what would be required to complete the Meriden Project in the form of a price per kilowatt-month ("kW-month"). NRG has based these assumptions on its current observations in the market, but these assumptions do not in any way constitute a forecast of market prices or a firm price proposal.

With the assumptions shown in Table 6.8-1 below, construction of a plant like the Meriden Facility would have an estimated, levelized fixed cost of approximately $20/kW-month. NRG will attempt to secure a long-term off-take agreement in the form of a Contract for Differences ("CfD") pursuant to which the revenues earned in the ISO-NE markets would offset fixed costs, as well as the variable costs of production, with the buyer under the CfD being responsible for the net cost.

NRG would charge the variable costs of production (fuel, emissions costs, etc.) at market-indexed prices, and credit energy market revenues above the indexed costs against the fixed costs of the project. If, for example, one assumes capacity market revenues of $5/kW-month and energy margins of $7/kW-month, above variable costs, the net price to the off-taker would be approximately $8/kW-month (summer ISO-NE MW). Major assumptions for the Meriden Project are set forth in the table below.

Table 6.8-1 – Major Assumptions for Meriden Project

Gross Capacity	540 MW
Net Capacity (summer)	511 MW
Capital Cost per kW[1]	$1400/kW
50/50 Debt/Equity Structure	
Capital Drawn *Pari Passu* During Construction[2]	
Interest Rate on Debt[3]	8.5%
Equipment Procurement Start	June 1, 2009
Construction Notice To Proceed	June 1, 2010
COD	June 1, 2012
O&M Expenses[4]	Fixed O&M charge to cover staffing, insurance, etc. plus variable O&M charge to cover periodic major maintenance
Property Tax Current Tax Agreement	
Depreciation	30 yr life
Levelized Discount Rate	10.25%
Fuel Costs	Per index against a heat rate call plus variable O&M plus indexed emissions costs
Capacity Factor	65%
ISO New England Revenue	
Capacity	$3.00 to $7.00/kW-month
Energy[5]	$5.00 to $9.00/kW-month
Notes:	
1. Not including interest during construction	
2. Capital drawn per a three-year procurement and construction schedule.	
3. All financing conditions assume a reversion to "normal" market conditions (*i.e.*, financial market conditions experienced prior to 2008).	
4. Based on NRG's experience, for a 25-person staff in Connecticut	
5. Estimated energy revenue net of fuel and other variable production costs	

6.9 Reliability

The Meriden Facility will be a highly-reliable, fully-controllable source of electric power in Connecticut, with a net output of approximately 530 MW – in real terms, enough energy to power almost 450,000 homes. Because the Meriden Facility will be directly interconnected to

the 345 kV network, its power will be fully deliverable to the New England electric grid, especially to the highly-concentrated load pockets of southwestern Connecticut and north-central Connecticut. The Meriden Facility will be served directly by a high-pressure interstate natural gas pipeline and will also have on-site storage of ULSD as a backup fuel in the event of gas supply disruptions or high gas prices.

The Meriden Facility will be operated in accordance with all applicable planning and scheduling procedures of ISO-NE, including requirements to notify and coordinate all planned maintenance outages with ISO-NE. In addition to the market incentives that encourage high availability of the unit, ISO-NE also will be implementing stringent limits on generator planned outage durations starting in 2010.[20]

Forced outages for this type of unit in New England average between 5-6% each year, and planned maintenance also averages approximately 5-6% of the hours in each year.[21] In other words, the Meriden Facility would be available to the ISO-NE system operators 88-90% of the time, with approximately half of the unavailable hours subject to ISO-NE review and approval of maintenance outage schedules. Assuming that it operates at a 90% capacity factor in on-peak hours, and at a 50% capacity factor in off-peak hours, the Meriden Facility is expected to provide approximately 3,127 GWh of energy per year to the system.

6.10 Project Milestone Schedule

The Milestone Schedule for the Meriden Project is included in Attachment C of this Application.

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20 *See* http://www.iso-ne.com/committees/comm_wkgrps/relblty_comm/pwrsuppln_comm/mtrls/2007/dec212007/iso_recommended_maintenancestandards_12192007_clean_revised.pdf

21 *See* http://www.iso-ne.com/genrtion_resrcs/gads/class_avg_2007.pdf

7. SAFETY INFORMATION

7.1 Provisions for Emergency Operations and Shutdown

Provisions for the emergency operations and shutdown of the Meriden Facility are set forth in Section 3.9 of the Original Application. Procedures to implement these provisions will be described in the Operations Plan for the Meriden Facility that will be filed with the Council prior to commencement of operations pursuant to Order No. 3 of the Docket No. 190 Decision (the "Operations Plan").

7.2 Fire Suppression Technology

A description of the fire protection systems for the Meriden Facility is set forth in Section 3.10 of the Original Application. This information will be confirmed and updated as necessary in the Operations Plan.

7.3 Safety Planning Systems

Section 3.11 of the Original Application includes an overview of the safety planning systems for the Meriden Facility, including its safety features, medical facilities at the Site, employee training and instrumentation and monitoring controls. This information will be confirmed and updated as necessary in the Operations Plan.

7.4 Proximity to Municipal Fire Stations

Section 3.12 of the Original Application describes the distance between the Meriden Site and the five municipal fire stations in Meriden. This information will be confirmed and updated as necessary in the Operations Plan.

7.5 Protective Gear & Control Systems

Workers at the Meriden Site will comply with all applicable safety standards and codes, and employees will be trained to properly respond to emergency events. Safety procedures for the daily operation of the Meriden Facility will be developed and described in the Operations Plan.

8. SITE IDENTIFICATION AND EVALUATION PROCESS

The Original Applicant selected the Meriden Site based on the criteria summarized in the CSC's Finding of Fact No. 10 in Docket No. 190:

> Criteria used by PDC-El Paso in its site selection process included proximity to natural gas facilities and electric transmission lines of 115-kV or greater, a minimum of 30 acres of buildable land, availability of a minimum of three million gallons of water per day, the ability to discharge up to 250,000 gallons per day of treated wastewater, soils without the potential for differential settling, a site without structures of archaeological or historical significance, and no records of threatened or endangered species or their habitats occurring at the site. PDC-El Paso examined eleven sites in Connecticut, including the proposed site. (PDC-El Paso 1, pp. 2-15 to 2-16; Tr. 3, p. 17)

NRG proposed the Meriden Facility as the most appropriate alternative to the GSRP because:

- it would meet the need to be addressed by the GSRP as discussed in Section 5 of this Application;
- it would maximize use of the existing infrastructure at the Site;
- the Meriden Project has already been awarded a Certificate in Docket No. 190; and
- permits required for the Meriden Project either have been obtained or can be obtained in reasonably short order (See Section 11 of this Application).

All of these factors would allow NRG to bring the Meriden Facility online quickly and cost-effectively to the benefit of Connecticut ratepayers.

9. ENVIRONMENTAL AND COMMUNITY EFFECTS OF PROPOSED PROJECT AND MITIGATION MEASURES

9.1 Air Quality

9.1.1 Applicable Regulatory Requirements

On May 5, 2000, the DEP issued to the Original Applicant two permits to construct and operate approvals for the construction and operation of the Meriden Project. NRG plans to install GE 7FA combustion turbines, rather than the Asea Brown Boveri ("ABB") units chosen by the Original Applicant. As a result, NRG applied for a revision to the permits for the use of the GE units. On December 13, 2001, the DEP issued to NRG the revised permits for the Meriden Facility.

On July 29, 2008, NRG submitted to the DEP a revised BACT analysis for the Meriden Project. This filing was required because construction had ceased for more than 18 months. In late November 2008, per a verbal request from DEP, NRG submitted a revised air permit application to supplement the BACT analysis.

The Meriden Project's units fall under the requirements of the federal Acid Rain Program, and NRG has previously filed the required Acid Rain permit application with the DEP. Additionally, the units will be regulated under the DEP's Clean Air Interstate Rule ("CAIR") Ozone Season NO_x trading program. NRG will file the CAIR permit application within the required timeline of the CAIR regulations. The Meriden Project's units also fall under the DEP's Control of Carbon Dioxide Emissions/Carbon Dioxide Budget Trading Program ("RGGI") and will comply with the notification requirements of these regulations. Finally, the Meriden Project will be required to obtain a Title V air permit under the DEP's regulations. This permit application must be filed with the DEP no later than one year after the start of operations.

The Meriden Project is subject to New Source Performance Standards ("NSPS") Subpart KKKK for combustion turbines. The Project meets the NSPS limits through the controls described in Section 6.5 above.

9.1.2 Air Quality Modeling Analysis

In order to obtain the December 2001 revised permits, NRG performed ambient air modeling to reflect the use of the GE units. The modeling showed no exceedances of ambient air quality standards. No additional modeling was required as part of the November 2008 revised permit application. Since that time, DEP has orally requested that NRG perform $PM_{2.5}$ air quality modeling.

9.1.3 Air Emissions and Mitigation Measures

Air emissions from the Meriden Facility will be low given the various mitigation measures being utilized. The units will operate on natural gas with the ability to operate ULSD for no more than 720 hours per year. The turbines will be equipped with low NO_x combustors on gas firing and water/steam injection for ULSD firing, with the HRSG equipped with an SCR for NO_x control. CO/VOC emissions will be controlled through the use of an oxidation catalyst control system. SO_2, PM, PM_{10} and $PM_{2.5}$ emissions are controlled through the use of natural gas and ULSD.

9.1.4 Regional Air Quality Benefits

The Meriden Site is located in a portion of New Haven County that is currently designated as non-attainment for ozone with respect to the 8-hour National Ambient Air Quality Standard for ozone and a recommendation of non-attainment for $PM_{2.5}$. The Meriden Project can

be an integral part of the state's effort to meet the Environmental Protection Agency's ("EPA") ozone and $PM_{2.5}$ standard.

9.1.5 Conclusion on Air Quality

Based on the foregoing, the air emissions will meet all applicable state and federal requirements and will not have a substantial adverse environmental effect on Connecticut's air resources.

9.2 Noise

Section 3.2 of the Original Application presents the results of a noise assessment conducted by an expert in acoustics who was commissioned by the Original Applicant. This assessment captured the background noise levels in the vicinity of the Meriden Facility before construction began and predicted how they would change during construction and after commencement of operations.

9.2.1 Construction Noise Impacts

Following the issuance of the Docket No. 190 Decision, construction at the Site commenced and continued until 2003. During that time, the majority of the blasting and rock splitting activities required for the Meriden Project were completed. To the extent that any remaining construction activities are likely to impact noise levels in the vicinity of the Site, NRG will comply with all applicable noise regulations and will observe the mitigation measures described in the Original Application.

9.2.2 Operational Noise Impacts

The Council found that the adverse noise impacts of the Meriden Facility under normal operations would not be significant and would conform to applicable regulations. To that end, the Council entered the following Findings of Fact:

88. Major exterior noise sources from the operation of the proposed plant would include air intakes and exhaust from the combustion turbines, the mechanical draft cooling towers, main transformers, roof exhaust fans, ventilation openings in the turbine building tower, and circulating pumps. (PDC-El Paso 1, pp. 4-34 to 4-36)

89. Gas turbine exhaust stack noise would be attenuated within the heat recovery steam generators and by additional mufflers if required. Remaining noise would be radiated from the top of the exhaust stacks. Noise from the gas turbine inlets would be attenuated by inlet air mufflers, filters, and ducting systems. Noise from transformers, a potential source of tonal noise, may be mitigated by the walls acting as noise barriers. The cooling tower and circulating water pumps would require additional noise control. (PDC-El Paso 1, pp. 4-34 to 4-36)

90. Existing background noise levels in the vicinity of the proposed site are as follows:

Existing Noise Levels (in dBA)

Location	Daytime	Nighttime
Hicks/Bailey Avenue int.	40	41
Falcon Lane/Oriole Way	46	43
Sam's Road	48	38
Route 71	48	38

(PDC-El Paso 1, pp. 4-25 to 4-27)

92. The estimated nighttime noise levels, excluding ambient noise, from the proposed plant in the vicinity of the proposed site are as follows:

Proposed Noise Levels (in dBA)

Location	Estimated Project Noise
Hicks Avenue terminus	39
Falcon Lane	37
Sam's Road	40
Route 71	33
Metacomet Trail	48

(PDC-El Paso 1, p. 4-37)

93. State DEP noise regulations limit noise from fixed industrial sources to 51 dBA during nighttime hours at residential properties. (PDC-El Paso 1, p. 4-37)

9.3 Electronic and Magnetic Fields

The Council made the following Findings of Fact with regard to electronic and magnetic fields in Docket No. 190 based on data set forth in Section 4.3 of the Original Application:

95. The centerlines of transmission line 348 and transmission line 362 are separated by 85 feet along an existing 250-foot wide transmission line ROW across the northern portion of the 821 acre site. Both circuits on this east to west line are suspended on two-pole H-frame structures. (PDC-El Paso 5, Bailey Testimony, Att. B, pp. 1-2)

96. Assuming a connection on the 362 line at a summer peak load of 1600 amps and 1063 amps on the l348 line, magnetic fields would decrease from a present level of 25 milligauss to an expected level of 17 milligauss on the northern edges of the ROW east of the proposed interconnection. To the west of the interconnection, magnetic fields would increase from a present level of 25 milligauss to an expected level of 47 milligauss. When the proposed plant is meeting electric demands in southwestern Connecticut, power flows on line 362 between the plant and the Southington Substation to the west of the interconnection would increase, while power flows between the plant and Haddam Neck would decrease. (Tr. 1, pp. 96-98; Tr. 3, pp. 136-137; PDC-El Paso 5, Bailey Testimony, Att. B, pp. 6-7)

NRG will update its analysis of the existing transmission lines at the Meriden Site upon completion of the electric interconnection. Any measures that are required to mitigate impacts to electronic and magnetic fields at off-site locations will be set forth in the Operations Plan.

9.4 Water Supply

The Meriden Project will use cost-effective and energy efficient wet-cooling towers. This technology is considered "Best Technology Available" by both the DEP and EPA Region I for new facilities. Cooling towers recycle needed cooling water, and the only need for additional water is to replace water lost due to blow-down of solids and evaporation.

At present, the Meriden Project is permitted to use non-potable water to be withdrawn from wells beneath the Connecticut River in Cromwell for cooling tower make-up water. This water will be conveyed to the Site through a 20-inch piping system that will be installed through Cromwell and Berlin streets and a Meriden easement right of way to the Meriden Facility. NRG has secured access for up to 1.1 million gallons per day of potable water supply from the City of Meriden. The water supply is sufficient to meet the Meriden Project's needs for a wet cooling tower emergency make-up, water injection for fuel oil firing, NO_x control, power augmentation and sanitary uses. The piping system for this supply is installed on the Site.

As previously described in Section 6.6, NRG is currently working with Mattabasset to use treated effluent from the MWTF as an alternative source of cooling water for the Meriden Facility.

9.5 Wastewater Discharge

All discharges from the Meriden Facility, including from the cooling towers blow-down, low-volume industrial waste water or sanitary discharge would be directed to the Meriden wastewater treatment plant for treatment and ultimately would be discharged into the Quinnipiac River. NRG has an agreement with that plant to take the discharge, and piping systems have been installed on the Site and are connected to the City of Meriden system. The DEP permit for this pre-treatment discharge has been drafted and is ready for public notice.

9.6 Geology, Topography and Soils

As part of the Original Application, the Original Applicant performed an extensive study of the impact of construction of the Meriden Project on the geology, topography and soils on or around the Site. The infrastructure of the Meriden Project was constructed in a manner that minimized these impacts to the extent possible, consistent with the mitigation measures described in Section 5.6 of the Original Application. As NRG proceeds to complete the interconnection at the Site, it will continue to follow the mitigation measures described in the Original Application as required.

9.7 Stormwater Management

The Stormwater management plan for the Meriden Project is set forth in Section 4.7 of the Original Application. NRG will confirm and update this plan, if necessary, in the Operations Plan.

9.8 Ecological Management

As part of the Original Application, the Original Applicant commissioned an extensive ecological assessment of the impact of construction of the Meriden Project on species, vegetation, wildlife and invertebrates on or around the Site. The infrastructure of the Meriden Project was constructed in a manner that minimized ecological impacts to the extent possible, consistent with the mitigation measures described in Section 5.8 of the Original Application. NRG does not anticipate that the remaining construction activities at the Site will have a pronounced impact on the ecological resources at or around the Site, but will continue to follow the mitigation measures described in the Original Application to the extent applicable.

9.9 Traffic

9.9.1 Traffic Volumes During Construction

Section 3.14.1 of the Original Application projected that traffic volumes during construction of the Meriden Project would be the heaviest during the peak construction period anticipated to occur in months 13 through 16. This peak period occurred prior to cessation of construction at the Site in 2003. As noted in Section 6.1 of this Application, the remaining work to complete the Meriden Project will consist principally of installing turbines and other equipment and completing the electrical interconnection. The traffic volumes attributable to these remaining construction activities are expected to be nominal.

9.9.2 Traffic Volumes During Operation

Data presented in Section 3.14.2 of the Original Application further reveals that the increased traffic volumes resulting from the Meriden Project once operational will be insignificant; only 33 daily vehicle trips are expected for employees, visitors and operations trucks combined.

9.10 Visual Impact

With regard to the visibility of the exhaust stacks of the Meriden Project, the Council entered Finding of Fact No. 94 in Docket No. 190.

> As identified in the chart below, the two exhaust stacks would be visible from portions of Berlin and Meriden.

Stack Visibility

Location	Approximate Distance (ft.)	Stack Visible
Route 71, Berlin	4,000	Yes
Turkey Hill, Berlin	18,000	No
Beaver Pond, Meriden	4,000	No
Reynolds Drive/Shady Crest	10,000	Yes

Road, Meriden		
Kensington Avenue, Meriden	5,000	Yes
North Colony Street/Amity Street, Meriden	5,000	Yes
Buckwheat Hill, Meriden	15,000	Yes
Elm Street/Silver Street, Meriden	13,000	No
City Hall, Meriden	11,000	Yes

(PDC-El Paso 1, Figs. 4.10-1 to 4.10-11)

9.11 Historical/Archaeological Resources

In Finding of Fact No. 80 in Docket No. 190, the Council noted that "[t]he Connecticut Historical Commission does not anticipate any adverse impacts from the proposed project." NRG has no reason to believe that this situation has changed.

10. GOVERNMENTAL APPROVALS

Table 10.1 below contains a listing of the status of the permits required for the Meriden Project.

Table 10.1 Permits

PERMIT AND PURPOSE	STATUS
Connecticut Siting Council (CSC) Certificate of Environmental Compatibility and Public Need Permit for the construction, maintenance and operation of the proposed Meriden Power Project located in the City of Meriden and Town of Berlin, Connecticut	Project approved in 1999 and such approval extended in 2006 until 2011.
DEP Recommended Final Determination DEP decision to issue Wastewater Discharge Permit No. SP0002358 for a discharge in Meriden, Connecticut.	DEP wrote draft of permit in 2002-03. DEP will issue a final permit following receipt of additional information regarding the specific characteristics of the discharge.

CTDEP Air Permits Nos. 100-0088 and 100-0089 Permits to construct two General Electric Frame 7FA combustion turbine trains with natural gas fired chillers	Permits issued 5/5/2000 for ABB Turbines and revised the permit for General Electric Turbines in December, 2001. DEP is currently reviewing revisions to the air permits to reflect changes to the BACT analysis and has requested Ambient air modeling for $PM_{2.5}$. The modeling will be conducted within the next month or so. It is expected that DEP will issue the permit revisions within six months of receipt of the modeling data.
DEP Title V Operating Permit Application Permit for two General Electric Frame 7FA combustion turbine trains with four natural gas fired chillers	Title V permit is not required to be submitted until twelve months after the commencement of operation.
DEP General Permit Registration for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities and Application	DEP reissued General Permit on 10/1/08. General Permit Expires 4/1/2010 and may require re-registration at that time.
DEP General Permit Registration for the Discharge of Stormwater Associated with Industrial Activities	NRG will register for the General Permit prior to commencing operations.
DEP Permit for Water Diversion from the Connecticut River	Permit approved for 3.5 million gallons on April 13, 2000.
Army Corps of Engineers Permit for combined water supply pipeline and collector wells	Permit issued on June 21, 2002.
Environmental Protection Agency Acid Rain Permit, administered by DEP	An application has been submitted to DEP and is pending until a start date for operations is identified.
Meriden Inland Wetlands Watercourse Commission approval for Joint Utility Corridor	Permit issued on October 6, 1999, revised May 7, 2002; work has not yet been completed. NRG will apply for any necessary permit.
Berlin Inland Wetlands Permit for Joint Utility Corridor	Permit issued October 5, 1999 and extended. Work has not yet been completed. NRG will apply for any necessary permit.

Cromwell Inland Wetlands Permit for Cooling Water Facilities	NRG will apply for any necessary permits depending on the cooling water alternative that is selected.

11. COMMUNITY RELATIONS

As previously mentioned, the Council in Docket No. 190 issued a Certificate for the Meriden Project on April 27, 1999 to the Original Applicant. As part of the Original Application for the Certificate, the Original Applicant met and consulted with municipal officials in the Town of Berlin and the City of Meriden as required by C.G.S. § 16-50*l*(e). As stated in the Council's Findings of Fact (Finding No. 98) in Docket No. 190:

> The Town of Berlin Town Council voted unanimously to support the proposed project. The City of Meriden Zoning Commission and Inland Wetland Commission all voted unanimously in favor of the proposed project. The final site plan of the proposed project was approved by the Meriden Planning and Zoning Commission on September 16, 1998. (Transcript 1, pp. 7-8, Transcript 2, pp. 3-4, PDC El-Paso 4, Q. 24).

Since acquiring the Meriden Project in December 2000, NRG has maintained close contacts with the municipal officials in both Meriden and Berlin. For example, NRG has attended numerous local regulatory proceedings in connection with extensions and local permits required for the Meriden Project. In addition, NRG has fulfilled its obligations under the Council's approval to transfer approximately 700 acres of land to Meriden and Berlin, including 30 acres of trap rock ridges under a conservation restriction, 60 acres for use as open space for recreation and education and 14.6 acres under conservation restriction for vernal pool protection. Those land transfers occurred in 2006.

More recently in 2007, NRG completed negotiations with the City of Meriden on a long-term tax agreement for the project. The agreement contains incentives for both the City and NRG to ultimately complete the project.

Additionally, NRG is in discussions with Berlin and Cromwell regarding a revised cooling water line for the facility. This revised plan includes the use of "gray water" from the Matabassett waste water processing plant. The proposed new pipeline would connect with Matabassett and run through Cromwell and Berlin to the site. This route would utilize fewer public roads than the previously permitted route. Both towns and the DEP have been very receptive to this proposal. NRG expects to have this route permitted this year.

Finally, NRG is in regular contact with officials in the City of Meriden regarding the status of the MGT project, access to the property and other land-related issues. NRG will continue to work closely with the City of Meriden officials on this Application leading up to the Siting Council's consolidated public hearing.

12. STATEMENT OF LOADS AND RESOURCES

As previously described, the Meriden Project is a 530 MW dual-fuel combined cycle generating facility that was approved by the Council. Due to the delay in developing the Project, the Council did not include this facility in its Demand/Supply Balance Analysis in the Council's "Review of the Ten Year Forecast of Connecticut Electric Loads and Resources" 2008-2017.

13. ADMINISTRATIVE NOTICE AND SERVICE

13.1 Administrative Notice

NRG respectfully requests that the Council take administrative notice of the complete record in Docket No. 190, including the application materials submitted by the Original Applicant, the Docket No. 190 Decision and associated Findings of Fact, materials submitted for the Development and Management Plan for the Meriden Facility and NRG's subsequent communications with the Council regarding NRG's compliance with the terms and conditions of the Docket No. 190 Certificate.

13.2 Service

NRG has complied with all notice and service requirements set forth in C.G.S. § 16-50*l*(b) R.C.S.A. § 16-50*l*-1(e).

Attachment D, attached hereto, includes all of the following documents demonstrating compliance with applicable notice and service requirements:

- Certificate of Service
    - Exhibit A: lists all of the municipal, state and federal agencies and officials, as well as the community organizations, to whom a copy of this Application was sent.
    - Exhibit B: lists the abutting property owners that received notice of NRG filing this Application.
    - Affidavits of Publication from *Hartford Courant* will be provided immediately upon receipt.
- Affidavits of Public Notice: An Affidavit is provided for each date of publication.
    - A copy of the Legal Notice, published in the *Hartford Courant* on March 18, 2009 and March 19, 2009, is attached to each Affidavit.
- Affidavit of Notice to Abutting Landowners.
    - List of abutting property owners.
    - A copy of the notice letter sent to the listed abutter.

DOCKET NO. 190 - An application by PDC - El Paso Meriden LLC for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of the proposed Meriden Power Project located in the City of Meriden and the Town of Berlin, Connecticut.	}	Connecticut
	}	Siting
	}	Council
	}	April 27, 1999

Decision and Order

Pursuant to Connecticut General Statutes (CGS) § 16-50p, the application submitted by PDC-El Paso Meriden, LLC (PDC-El Paso) to construct, operate, and maintain a 544 MW natural gas-fired combined cycle facility off of Sam's Road in Meriden, Connecticut is hereby approved. A Certificate of Environmental Compatibility and Public Need (Certificate) as required by CGS 16-50k, shall be issued, subject to the following conditions and requirements.

1. Conditions

a) The facility shall be constructed and operated substantially as specified by the Certificate Holder in the application and record, except where otherwise ordered by the Council;

b) The exhaust stacks shall be no higher than necessary, consistent with air emission modeling conducted by the Department of Environmental Protection (DEP);

c) Unless incompatible with provisions ordered by the DEP, selective catalytic reduction shall be used to reduce nitrogen oxide levels, an oxidation catalyst shall be used to reduce carbon monoxide, and water injection shall be used in the combustion turbines while firing on fuel oil and dry low-nitrogen oxide combustion shall be used in the combustion turbines while firing natural gas to reduce nitrogen oxide levels;

d) The project shall operate on natural gas, except during curtailment of natural gas when the project may operate on low sulfur (0.05 percent) distillate fuel oil as permitted by the DEP;

e) Submittal of a petition, amendment, or an application pursuant to CGS section 16-50g et seq., for Council approval, for development of the electric interconnection or modifications to existing electric transmission structures with sufficient detail to determine the jurisdiction, route, type and location of all such changes, and to confirm environmental and health effects consistent with the Council's Electric and Magnetic Field Best Management Practices; and

f) Submittal of a petition, amendment, or an application pursuant to CGS 16-50g et seq., for Council approval, for construction of any new natural gas pipeline to the facility, with sufficient detail to determine the jurisdiction, route, type, and location of all support equipment, effect on and changes necessary to existing infrastructure, health and safety effects, and possible alternative configuration and routes for the proposed new pipeline.

2. Development and Management Plan

To ensure compliance with the Council's Decision and Order, the Certificate Holder shall not commence construction until it has secured Council approval of a Development and Management Plan (D&M Plan) with the following elements:

a) Provisions for 1) water diverted from the Connecticut River, including the acquisition of all required rights-of-way; permits from the Department of Environmental Protection, Army Corps of Engineers, Amtrak, Connecticut Department of Transportation, and local municipalities; final engineering plans for the water pipeline and intake structures; and access for public recreation along the transmission line right-of-way or, 2) dry cooling for the facility including a revised site plan to accommodate the dry cooling equipment;

b) A final site plan showing all roads, structures and other improvements on the site. The final site plan shall, to the greatest extent possible, maximize placement of facility components within the existing quarry; preserve the existing natural vegetation on the site; establish open space buffer areas; develop conservation easements over traprock ridges, vernal pools, seeps, and areas with habitat for species of special concern; and minimize impacts on inland wetlands;

c) Detailed project schedules for all work activities with weekly work plans;

d) Provisions for adequate oil storage, unloading, and pumping facilities including tanker queuing and turn-around areas sufficient to allow for the arrival of five trucks per hour, to ensure continuous burn on oil for up to 720 hours per year during natural gas curtailment;

e) Plans for landscaping, including preservation of the existing natural vegetation; configuration of earthen berms; and planting of new coniferous vegetation to provide ecological habitat, visual screening, and acoustical buffers;

f) Provisions for architectural treatment of all building components, especially, but not limited to, those components, such as the exhaust stacks, which can be seen from off-site locations, to minimize visual effects on scenic resources;

g) Detailed erosion and sedimentation control and stormwater management plans with provisions for inspection, enforcement, and revision;

h) A spill prevention and countermeasure plan;

i) A construction blasting plan; and

j) A final site plan and engineering details for the electrical interconnection with measurements of pre- and post-construction electric and magnetic field (EMF) levels, and provisions for optimum phasing and compact spacing to maximize cancellation of EMF to the greatest extent practically possible.

3. Operations Plan

To ensure compliance with the Council's Decision and Order, the Certificate Holder shall not commence operation of the facility until it has secured approval of an Operations Plan with components to include base line testing, performance objectives, post-construction operations monitoring, enforcement protocol, and the development of mitigation measures to ensure compliance with regulatory requirements and/or performance objectives for each of the following components:

a) noise emissions;

b) water usage;

c) water discharges;

d) air and water vapor emissions;

e) odors;

f) plant lighting;

g) traffic management;

h) physical plant and site management; and

i) EMF exposure to uncontrolled areas adjacent to the electric interconnection.

4. Notification

The Certificate Holder shall provide the Council notification of the following events not less than two weeks in advance of their occurrence:

a) commencement of facility construction;

b) commencement of facility testing;

c) commencement of commercial operations; and

d) permanent termination of any operation of the project.

5. Reporting

The Certificate Holder shall provide the following reports:

a) Quarterly progress reports to include the status of all permits, starting with the effective date of this Decision and Order and ending with the commencement of facility operation, or as directed by the Council; and

b) A first year operating report, to be submitted to the Council within three months after the conclusion of the first year of operation, to include:

1. The number of hours when operation on natural gas was curtailed and fuel oil was burned, facility capacity and availability, and the number of and reasons for any interruption in electric generation;

2. Overall condition and reliability of the facility; and

3. Any exceedence of regulatory requirements and/or performance objectives developed consistent with Condition 3 of this Decision and Order.

6. The Certificate Holder shall provide to the Council, when available, the final DEP air emissions, water discharge, and water diversion permits.

7. Unless otherwise approved by the Council, this Decision and Order shall be void if all construction authorized herein is not completed within four years of the effective date of this Decision and Order or within four years after all appeals to this Decision and Order have been resolved.

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 published in The Hartford Courant, The New Britain Herald, and the Meriden Record-Journal.

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:

Applicant	**Its Representative**
PDC - El Paso Meriden, LLC	John DeTore, Esq. Rubin & Rudman 50 Rowes Wharf Boston, MA 02110 (617) 330-7000

Intervenor	**Its Representative**
The Connecticut Light and Power Company	Daniel P. Venora Senior Counsel Northeast Utilities Service Company P.O. Box 270 Hartford, CT 06141-0270 (860) 665-3395

Intervenor	**Its Representative**
Rivers Alliance of Connecticut Farmington River Watershed Association	Margery Winters Rivers Alliance of Connecticut 111 Main Street Collinsville, CT 06022 (860) 693-1602 Kevin Case Farmington River Watershed Association 749 Hopmeadow Street Simsbury, CT 06070 (860) 658-4442

Party	**Its Representative**
Quinnipiac River Watershed Association	Sigrun N. Gadwa Executive Director Quinnipiac River Watershed Association 99 Colony Street Meriden, CT 06451 (203) 237-2237

DOCKET NO. 190 - An application by PDC - El Paso Meriden LLC for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of the proposed Meriden Power Project located in the City of Meriden and the Town of Berlin, Connecticut.	}	Connecticut
	}	Siting
	}	Council
	}	April 27, 1999

Findings of Fact

Introduction

1. On August 27, 1998, PDC-El Paso Meriden, LLC (PDC-El Paso) a joint venture of the Power Development Company of Boston and El Paso Energy of Houston Texas, applied to the Connecticut Siting Council (Council) for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance, and operation of a 544 MW natural gas-fired combined cycle facility in the City of Meriden, Connecticut. (PDC-El Paso 1, p. 1-1, p. 1-8)

2. The parties in this proceeding are the applicant and the Quinnipiac River Watershed Association (Quinnipiac). Intervenors are the Connecticut Light and Power Company (CL&P), Rivers Alliance of Connecticut (Rivers), and the Farmington River Watershed Association (Farmington). (Transcript of January 25, 1999, 3:00 p.m.(Tr.1), pp. 1-2)

3. Public notice of the application was published in the Meriden Record-Journal, on August 24, 1998. (PDC-El Paso letter of September 10, 1998)

4. Pursuant to General Statutes § 16-50m, the Council, after giving due notice thereof, held a public hearing on January 25, 1999, beginning at 3:00 p.m. and continued at 7:00 p.m in the auditorium of Platt High School, 220 Coe Avenue, Meriden, Connecticut. The hearing was continued on January 26, 1999, in Hearing Room Two, Ten Franklin Square, New Britain, Connecticut, beginning at 11:00 a.m. (Tr. 1; Transcript of January 25, 1999, 7:00 p.m. (Tr. 2); and Transcript of January 26, 1999 (Tr. 3), 11:00 a.m.)

5. The Council and its staff made an inspection of the proposed site on January 25, 1999. (Council Hearing Notice, December 21, 1998)

Need for Additional Generating Capacity

6. By the year 2001, Connecticut is expected to have a need for approximately 966 MW of additional generating capacity to ensure the reliability of its electrical supply system, based on an adjusted reference load of 6268 MW, a 15 percent required reserve margin, and a base supply of 6242 MW. (PDC-El Paso 1, Table 2.4.2)

7. Connecticut now relies on generating capacity from sources both in and out of Connecticut that include fossil generating facilities which are aging, more polluting, and less efficient than the proposed project. Competitive and environmental factors may lead to the retirement of some fossil units. (PDC-El Paso 1, p. 2-1; PDC-El Paso 4, Q. 1)

8. Pursuant to Public Act 98-28, An Act Concerning Electric Restructuring, generators of electricity will compete with each other for the development of in-state generation. (Public Act 98-28)

Proposed Site

9. In its site selection process, PDC-El Paso narrowed its site search to Connecticut because of the State's need for new, low cost electric generation; existing transmission constraints in southwestern Connecticut; Connecticut ambient air quality and implementation of the 1990 Clean Air Act Amendments; and the restructuring of Connecticut's electrical industry by the State legislature. (PDC-El Paso 1, p. 2-14)

10. Criteria used by PDC-El Paso in its site selection process included proximity to natural gas facilities and electric transmission lines of 115-kV or greater, a minimum of 30 acres of buildable land, availability of a minimum of three million gallons of water per day, the ability to discharge up to 250,000 gallons per day of treated wastewater, soils without the potential for differential settling, a site without structures of archaeological or historical significance, and no records of threatened or endangered species or their habitats occurring at the site. PDC-El Paso examined eleven sites in Connecticut, including the proposed site. (PDC-El Paso 1, pp. 2-15 to 2-16; Tr. 3, p. 17)

11. The proposed site is a 36-acre parcel of land north of Sam's Road in Meriden, Connecticut, within an 821-acre parcel controlled by the applicant within the City of Meriden and the Town of Berlin. The footprint of the proposed facility would require approximately 11 acres. Approximately 375 acres is within Meriden, with the remaining 446 acres within Berlin. The proposed site is zoned as a Planned Development District. The objectives of development in this zone include the application of design techniques to foster attractive, functionally efficient, and well-planned development which will be aesthetically integrated with adjacent areas. The provision of appropriate landscaping, screening, and buffers is also required. This district is primarily intended for residential development; sixty percent of the land area must be used for residential purposes. (PDC-El Paso 1, pp. 1-1 to 1-2, p. 4-74; PDC-El Paso 4, Q. 18, Map; City of Meriden Zoning Regulations, sec. 213.26.5; Tr. 3, p. 130)

12. The proposed site is within the Quinnipiac River Basin system, on Cathole Mountain, between two traprock ridgelines running southwest to northeast. Most of the proposed 36-acre site was used for gravel operations, with elevations ranging from 320 feet to 430 feet above mean sea level (AMSL). The final grade would be 375 feet. The proposed site is underlain by Holyoke basalt or traprock. (PDC-El Paso 1, p. 4-45 to 4-46)

13. Under the Connecticut Conservation and Development Policies Plan, traprock ridges are designated as Conservation Areas. (Connecticut Conservation and Development Policies Plan, 1998-2003, Locational Guide Map)

14. The proposed site and larger parcel have been disturbed from the development of a network of unpaved roads, past logging and quarrying, and use by dirt bikes. However, the larger parcel also contains a large block of undeveloped forest land with highly variable topography, and is relatively pristine in terms of vegetation, species diversity, and a lack of invasive species. (DEP Comments, January 21, 1999)

15. The nearest residences to the proposed site are at lower elevations off of Hicks Avenue, Meriden, approximately 1,000 feet northeast from the boundary of the proposed site. (PDC-El Paso 4, Q. 9, Q. 17, Q. 18, Map; PDC-El Paso 7)

16. The Metacomet Trail enters the southwest portion of the 821-acre parcel and continues north. Approximately 1.9 miles of the Metacomet Trail are within the boundaries of the 821-acre parcel.

The nearest portion of Metacomet Trail lies approximately 200 feet northwest of the boundary of the proposed site. (PDC-El Paso 1, Fig. 1.5-1, p. 4-48; PDC El Paso 7)

17. Land uses surrounding the proposed site include the Meriden Square Mall approximately 4,000 feet to the south; Route 71 or the Chamberlain Highway 1000 feet to the west; residential development in the Town of Berlin 10,500 feet to the northeast; residential areas and Beaver Pond, a recreational area, 3,000 feet to the northeast; and mixed land use, including apartment houses on Sam's Road, 2,000 feet to the south. (PDC-El Paso 1, Fig. 1.1-1, p. 4-73)

18. Access to the proposed site would be via South Mountain Drive, an existing unpaved roadway which enters the proposed site off Route 71. Sam's Road would be used for emergency access and the delivery of heavy equipment. (Tr.1, pp.61-62)

19. The proposed site would be enclosed by a security fence. The plant would be staffed 24 hours a day with security cameras mounted along the site perimeter. (Tr. 1, p. 36, p. 38; PDC-El Paso 1, p. 3-23)

Proposed Project

20. Two identical single shaft power islands, each with a combustion turbine, a heat recovery steam generator, a steam turbine, and an electric generator, would be installed. The two power islands would exhaust to two 180-foot stacks. (PDC-El Paso 1, p. 1-3)

21. The proposed combined cycle facility would be rated at 544 MW (annual net nominal). Electricity would be provided by two generators rated for 280 MVA at 21 kV each, with a step-up transformer on each generator lead. (PDC-El Paso 1, p. 3-4)

22. The heat recovery steam generator would be heated by combustion turbine exhaust, drive the steam turbine, then pass steam to a surface-mounted condenser. Condensed water would then be recycled from the condenser back to the heat recovery steam generator. Cooling for the condenser would be provided by water through a mechanical draft evaporative cooling tower. (PDC-El Paso 1, pp. 3-2 to 3-3)

Water Issues

23. As shown below, the proposed facility would use an average of approximately 2,643,840 gallons of water per day for normal operation on natural gas or 4,163,040 gallons of water (maximum case) operating on oil fuel. Facility water requirements would include approximately 360,000 gallons per day that would be available for the service/fire water storage with 300,000 gallons reserved exclusively for fire protection.

Water Requirements
(in gallons per day)

Operating on Natural Gas	Operating on Fuel Oil
Average 2,643,840	Average 2,687,040
Maximum 3,290,400	Maximum 4,163,040

(PDC-El Paso 1, p. 3-10, Fig. 3-2, Fig. 3-3)

24. The eight cell cooling tower would be constructed south of the generation buildings, and would be approximately 390 feet by 52 feet and 50 feet in height. The cooling tower would require approximately 2,571,840 gallons of water per day (average case) or 3,218,400 per day (maximum case). The average amount of water lost to evaporation and drift from the cooling tower would be

approximately 2,404,800 gallons per day with a maximum loss of 3,008,160 gallons per day. (PDC-El Paso 1, Fig. 3-2, Fig. 3-3, p. 3-13 to 3-14, p. 4-83)

25. To control potential growth of algae in the condenser, sodium hypochlorite, sulfuric acid, and scale inhibitors would be used for cooling tower water treatment. (PDC-El Paso 1, p. 3-13, p. 3-19)

26. While the evaporative cooling towers would not emit a continuous steam plume, the cooling tower plume would contain water vapor and under certain conditions, such as cold air and high humidity, a fine mist of water droplets may form. High efficiency mist eliminators would be installed within the cooling tower. (Tr. 1, p. 62; PDC-El Paso 4, Q. 10)

27. Modeling by the applicant based on five years of meteorological data indicates there would be no instances of off-site fogging or icing on area roadways, residential areas, and access roads. (PDC-El Paso 4, Q. 28)

28. A dry cooled system for the facility is feasible, but was not pursued by the applicant due to higher costs; efficiency reductions of 11 percent at 90°F, 4.5 percent at 59°F, and 2.1 percent at 20°F; increased noise; and additional space requirements. Capital improvements for dry cooling would cost approximately $25,000,000 to $30,000,000 more than wet cooling. (PDC-El Paso 4, Q. 13, Q. 28, Table 2-28-B, Revised Table 2-28-C)

29. A comparison of wet and dry cooling options is as follows:

Cooling Option Comparison

	Wet Cooling		Dry Cooling
	Potable Supply	Connecticut River	Power Augmentation
Facility Output[1]	Base	-0.8 MW[3]	-26 MW
Heat Rate Impact[1]	Base	+10 btu/kwh	+661 btu/kwh
Annual Air Pollution Impact[2]	NOx - Base SO2 - Base CO2 - Base	+2.8 tons +12 tons +980 tons	+115 tons +398 tons +32,710 tons
Added Capital Cost	Base	+$20 M	+$26 M
Average Summer Potable Water Use	2.4 MGD	.08 MGD	1.1 MGD
Space Requirements	400'L x 50'W x 50'H for both units		180'L x 100'W x 90'H for each single unit

[1] Performance based on a 90°F summer day for total facility output
[2] Air Pollution Impacts assume lost MW are replaced by typical NEPOOL oil-fired unit
[3] Reflects additional loss in output due to pumping requirements

(PDC-El Paso 4, Q. 28, Revised Table 2-28-C)

30. The Meriden Water Department would supply potable water to the proposed plant. The project would use approximately 4,320 gallons per day of potable water for potable water and sanitary waste use. The Meriden Water Department safe yield is estimated at 8,200,000 gallons per day with a current average daily water use of 6,200,000 gallons per day. (Tr. 3, p. 40; PDC-El Paso 1, Fig. 3-2, p. 3-10)

31. The applicant assessed 17 alternative sources of cooling water for the proposed project. These sources included transfers from the Meriden Water Department, New Britain Water Department, Berlin Water Department, Cromwell Water Department, Middletown Water Department, Southington Metropolitan District Commission, Wallingford Water Department, South Central Connecticut Regional Water Authority, Meriden Sewage Treatment Plant, Sodom Brook, Quinnipiac

River, Mattabassett Sewage Treatment Plant, the Connecticut River, Belcher Brook, Stocking Brook, transfer from the Meriden Sewage Treatment plant in conjunction with transfer from the New Britain Water Department, and the development of on-site wells. (Tr. 1, pp. 67-69)

32. Of the 17 water sources assessed, the Connecticut River was chosen by the applicant because of its size, designation as a class B water source, and proximity to the Algonquin Gas Transmission line corridor. (PDC-El Paso 4, Q. 12, Supplemental Response)

33. The applicant has not yet determined how water would be withdrawn from the Connecticut River, believing it would be determined later in the DEP water diversion permit process. The DEP has stated that diversion of water may require a Diversion Permit, and may be acceptable providing there are no resource implications connected to the chosen supply. (PDC-El Paso 4, Q. 12, Supplemental Response; Tr. 3, p. 80; DEP Comments, January 21, 1999).

34. Water could be withdrawn from the Connecticut River via a 10.5 mile water pipeline for direct intake from the river, or by horizontal wells beneath the bed of the river. The average flow of the Connecticut River is approximately 16,000 cfs. The transfer of approximately 3,000,000 gallons per day from the river is approximately 4.62 cfs, which is 0.43 % of lowest river flow. (PDC-El Paso 4, Q. 12, Supplemental Response; Tr. 1, p. 70)

35. PDC-El Paso would have to design its intake structure and related facilities such as access roads to avoid the back-up of flood water along the Connecticut River. (Tr. 3, p. 120)

36. PDC-El Paso would have to ensure to the Army Corps of Engineers that the intake structure would not obstruct navigation on the Connecticut River. (Tr. 3, p. 120)

37. PDC-El Paso cannot install any type of pipe or structure which would block the normal movement of sediment along the Connecticut River channel. (Tr. 3, p. 120)

38. PDC-El Paso cannot create a structure or access road which would block the flow of water along the Connecticut River flood plain. (Tr. 3, p. 121)

39. PDC-El Paso would have to install an intake structure to lessen or avoid fish impingement and entrainment impacts. (Tr. 3, p. 121)

40. PDC-El Paso would have to design an intake structure which would not impede the flow of ice along the Connecticut River. (Tr. 3, p. 121)

41. PDC El Paso must have its water supply and water diversion fully permitted in order to receive financing for the proposed project. (Tr. 3, p. 127)

42. PDC-El Paso has not finalized the design or precise locations of the intake structures and related equipment. (Tr. 3, p. 120)

43. PDC El Paso would need to obtain local permits including inland wetlands permits, street opening permits, permits from both the State and federal Departments of Transportation, and approval from Amtrak in order to construct the water pipeline from the Connecticut River to the proposed site. (Tr. 1, pp. 78-79)

44. The engineering for the water pipeline is a conceptual design that has not yet been completed. Although a detailed schedule for the water pipeline has not been prepared, the applicant believes it can permit and construct the water pipeline within a sufficient amount of time. (Tr. 1, p. 47)

45. The proposed water pipeline route would traverse the Towns of Cromwell, Middletown, Berlin, and Meriden beginning in Cromwell at a point south of where the Algonquin Gas Transmission (Algonquin) pipeline intersects the Connecticut River. The route would then join the Algonquin corridor, cross Coles Brook, cross underneath Route 3, cross Route 9 through a horizontal drilling process, cross Evergreen Road, follow Coles Road, and then cross I-91 through directional drilling, or alternatively, pass underneath North Road. The route would then deviate around a culturally sensitive area, cross Route 372, then cross the Mattabasset River with directional drilling. In Middletown, the route would cross Middle Street, and then cross the lower foothills of Lamentation Mountain. In Berlin, the route would cross Spruce Brook in the Algonquin corridor, cross Lamentation Brook, cross under the Berlin Turnpike with directional drilling, cross Orchard Road twice, cross Belcher Brook, cross the Amtrak right-of-way (ROW) via directional drilling, pass in a joint corridor through Metacomet Drive, cross Crooked Brook, then join the proposed gas interconnection route to the proposed site. (PDC-El Paso 4, Q. 12, Supplemental Response)

46. The applicant has not discussed directional boring under the Amtrak line with Amtrak officials, or the directional boring under various State and interstate roads with the Connecticut Department of Transportation (CDOT). The applicant has not discussed using Orchard Road as a pipeline route with Berlin officials. It is not certain whether the Federal Energy Regulatory Commission would have any jurisdiction over the construction of the water pipeline. (Tr. 1, p. 79, pp. 87-88)

47. The water pipeline would require permission for street cuts from all local municipalities. (Tr. 1, p. 83)

48. The applicant has not yet received permission from or established a contract with Algonquin. (Tr. 1, p. 84)

49. The proposed water pipeline would be generally placed alongside of the existing Algonquin easement. However, the existing easement would require PDC-El Paso to obtain the permission of those landowners who granted Algonquin an easement. PDC-El Paso does not have the right of eminent domain. (Tr. 1, pp. 87-91)

50. The new ROW for the proposed water pipeline would be approximately five feet in width, needed for permanent maintenance. PDC-El Paso would need to use the Algonquin ROW to place construction spoils during pipeline excavation. The existing Algonquin ROW varies in width from 50 to 75 feet. (Tr. 1, pp. 75-76)

51. The water pipeline would be approximately two feet in diameter. Pumps, expected to be required only at the intake structure, would have a parasitic load of 0.8 MW. The cost of the waterline is estimated as $20,000,000, to be depreciated over approximately 30 years. (Tr. 1, pp. 70, 83, 93; PDC-El Paso 4, Q. 28, Revised Table C)

52. Wastewater from the proposed project would be directed to the Meriden Wastewater Treatment Facility, four miles from the proposed site. The pH of project water would be adjusted to neutral prior to discharge. The proposed project would discharge a maximum of approximately 270,000 gallons per day into the Meriden Wastewater Treatment Facility, which now processes approximately

10,700,000 gallons of water daily and can accommodate 11,600,000 gallons daily. (PDC-El Paso 1, p. 4-43; PDC-El Paso 4, Q. 3)

53. The wastewater would be discharged into a tie-in at Sam's Road or Quarry Lane. After leaving the Meriden Wastewater Treatment Facility, the water would be discharged into the Quinnipiac River. The discharge of 0.42 cfs of water into the Quinnipiac River would represent a 1.5 percent increase in the seven-day low river flow, occurring once in every ten year period. The lowest flow recorded at this location is 8.0 cfs. A discharge of 0.42 cfs during this period would represent a 5 percent increase in river flow. (PDC-El Paso 4, Q. 12, Supplemental Response)

54. Stormwater on the proposed site would be routed through drainage ditches to a 0.7 acre detention basin. The detention basin would have sufficient storage capacity to detain the volume from a 100-year 24-hour storm for 4 to 6 hours. Discharge from the basin would be directed to a second detention basin of 0.3 acres from which stormwater would be piped and discharged into a vegetated wetland buffer around the proposed site. (PDC-El Paso 1, p. 3-16, p. 4-47; PDC-El Paso 4, Q. 24)

55. Impervious surfaces on the proposed site would total approximately 5.9 acres. (Tr. 1, p. 47)

56. Demineralized water would be stored in a 1,220,000 gallon storage tank with sufficient capacity for about 36 hours of operation while on No. 2 fuel oil. Mobile demineralization units would be required for operation of the facility on fuel oil for periods longer than 36 hours. (PDC-El Paso 1, p. 3-14; Tr. 1, pp. 63-64)

57. All discharges from plant drains in areas where chemicals would be used would be collected and routed to a neutralization tank. Wastewater from demineralizer units would also be routed to this tank. The average volume of wastewater piped into the neutralization tanks is estimated at approximately 4,320 gallons per day during gas-fired operation. (PDC-El Paso 1, p. 3-14)

Fuel

58. Natural gas would be the primary fuel for the proposed plant, to be supplied via a dual connection to both the Tennessee Gas pipeline and the Algonquin Gas Transmission pipeline. PDC-El Paso has entered into negotiations for the transport of gas on both pipelines, but has not confirmed how or where the gas would be provided to the facility. (PDC-El Paso 5, Mitchell Testimony, pp. 3-4)

59. Natural gas would be supplied to the proposed plant at about 680 psig. (PDC-El Paso 1, p. 3-1)

60. The distance between the proposed facility and the Tennessee Gas Pipeline is approximately 4.3 miles. For about 3.3 miles, a new gas lateral would parallel the existing CL&P electric transmission corridor. The route would then follow the planned electric transmission line corridor that would interconnect with the proposed facility, for one mile. CL&P is concerned that any water or gas pipelines be located to ensure the continued safe operation of its nearby 345-kV lines. (PDC-El Paso 5, Mitchell Testimony, pp. 5-6; CL&P Late File 1; PDC-El Paso 4, Q. 15)

61. The proposed interconnection with the Algonquin pipeline is approximately 1.5 miles northeast from the proposed site. The route would follow the planned electric transmission line corridor that would interconnect with the proposed facility for one mile and would continue to the north to the existing Algonquin ROW for an additional 4200 feet. The pipeline would be placed within a 50-foot wide

permanent corridor, following existing cleared corridors as much as possible. (PDC-El Paso 1, pp. 3-6 to 3-7; PDC-El Paso 4, Q. 15)

62. The proposed plant would have dual fuel capacity, with low sulfur (0.05 percent) distillate oil as a back-up fuel for a maximum of 720 hours per year. Approximately 1,300,000 gallons of fuel oil would be stored on-site, with 4 to 5 trucks per hour required to keep the facility operating at full load. The two oil delivery terminals would each be capable of unloading a tanker in 20 to 25 minutes. The storage tank and unloading areas would be provided with secondary containment. (PDC-El Paso 4, Q. 14; PDC-El Paso 1, pp. 3-1 to 3-2)

Electrical System Interconnection

63. Two existing 345-kV lines, line 348, which serves the Millstone power plants, and line 362, which serves the Haddam Neck power plant, are owned by CL&P and traverse the project site. The CL&P ROW is approximately 250 feet in width; approximately 185 to 200 feet of the ROW is cleared to maintain the existing electric lines, with a buffer of 15 to 25 feet on both the north and the south edges of the ROW. The proposed site is approximately 5,700 feet south of the existing transmission lines. The proposed multiple use corridor for the interconnection to the existing CL&P transmission lines would be 150 feet in width to accommodate the proposed gas, electric, and water service lines. (PDC-El Paso 1, p. 3-5; PDC-El Paso 4, Q. 15; CL&P Late File 1)

64. The proposed electric interconnection generator leads would pass underneath line 348, which would be raised, to connect with line 362. The line would be overhead on 75-foot wood H-frame poles. Detailed engineering studies would be conducted to ensure that any electric interconnection would not compromise safety within the service corridor that would also contain gas and water pipelines. CL&P's strong preference is that the proposed Tennessee Gas Pipeline interconnection not be located within the CL&P ROW. (CL&P, LFI; Tr. 2, pp. 77-78; PDC-El Paso 6)

65. The final electric interconnection would be based on a final study by ISO New England. (CL&P, Late File 1; Tr. 1, p. 28)

66. A small substation would be constructed on the northeast portion of the proposed power plant site. The substation would use a four position 345-kV ring bus configuration. (PDC-El Paso 1, p. 3-5)

67. CL&P would pay for some or all of the protective relay switches and changes to CL&P lines. (Tr. 2, p. 82)

68. The proposed plant would be dispatched to run whenever available, based on economic analysis. The guaranteed availability of the proposed facility is 92-93 percent. Electricity generated would flow predominantly to Connecticut load centers in proximity to the plant. (Tr. 3, pp. 57-58; PDC-El Paso 4, Q. 1)

69. Decommissioning costs for the proposed facility would range from $12,000,000. to $14,000,000. (Tr. 3, p. 77)

Environmental Considerations

70. Three vertebrate species of special concern were identified on the 821 acre parcel: the Jefferson salamander, eastern ribbon snake, and eastern box turtle. The Connecticut Natural Diversity Database identified on the parcel plants of special concern including: the narrow-leaved glade fern

(Diplazium pycnocarpon), squirrel corn (Dicentra canadensis), Hitchcock's sedge (Carex hitchcockiana), (Carex squarrosa) a sedge, and (Carex hirsutella) a sedge. Carex hirsutella would be directly impacted by this project. (PDC-El Paso 1, p. 4-51, Attachment B; DEP Comments, January 21, 1999, p. 2)

71. Birds found in a survey of the forest interior of the 821-acre parcel included the scarlet tanager, ovenbird, wood thrush, black and white warbler, and worm-eating warbler. (Tr. 2, p. 44)

72. The ecology of the proposed site includes a variety of unique and valuable biological and geological features, including numerous talus slopes, ephemeral seeps, vernal pools, and relatively unfragmented forest land with diverse habitat. It is likely that secondary impacts associated with the proposed project would have a detrimental effect on the remaining undeveloped property. (DEP Comments, January 21, 199, p. 2; PDC-El Paso 1, pp. 4-48 to 4-49; Tr. 2, pp. 36-37, p. 61)

73. Approximately nine acres of trees on the 36-acre site would be cleared. Approximately 252,000 cubic yards of earth material would be cut from the slopes in the western portion of the site and approximately 108,000 cubic yards of fill added to the eastern portion. (PDC-El Paso 4, Q. 5, Q. 6)

74. The proposed 36-acre site contains 17 wetlands. Three small heavily disturbed wetlands are located within the former quarry portion of the site, with three large wetlands located immediately adjacent to the quarry. One vernal pool lies approximately 100 feet west of the 36-acre site, and includes breeding habitat for the Jefferson salamander. Two other vernal pool wetlands are habitat for amphibians such as the wood frog and spotted salamander. (PDC-El Paso 1, pp. 4-61 to 4-62, Fig. 4.8-1)

75. Construction of the proposed project would eliminate one highly disturbed wetland of approximately 4,275 square feet. All other wetlands would be avoided by construction. However, project construction could interfere with the dispersal of wood frogs and marbled salamanders after breeding. (PDC-El Paso 1, p. 4-65)

76. To compensate for wetlands loss, the applicant would create additional wetlands as part of the stormwater management system. Approximately 33,500 square feet of scrub shrub, wet meadow, marsh, and aquatic habitat would be created in the stormwater detension basin for wetland mitigation. A second wetland mitigation area would provide approximately 2,000 square feet of wet meadow and shallow marsh. (PDC-El Paso 1, p. 4-66; PDC-El Paso 4, Q. 20)

77. To protect the vernal pools in the area, the applicant would maintain an undisturbed vegetative buffer equal to the average height of the dominant trees, or 50 feet, whichever is greater, around the vernal pools, and prevent the discharge of stormwater runoff from impervious surfaces to the vernal pools. Silt fencing would be removed from vernal pool areas following construction. Failure to remove the silt fencing could impact amphibian breeding success. (PDC-El Paso 1, p. 4-67)

78. The applicant would be required to submit construction plans to the DEP indicating the locations of the State listed plants in relation to the proposed work on the site, and submit a mitigation plan, if necessary, for their protection. Avoidance of State-listed species would have to be ensured by the applicant, with locations identified on final plans submitted to the DEP. (DEP Comments, January 21, 1999, p. 2)

79. Approximately 700 acres of land would be deeded to Berlin and Meriden on title interest. Some 30 acres of traprock ridges would be under a conservation restriction. About 60 acres around Beaver Pond in Meriden would be restricted to use as open space, recreational purposes, or educational use. An additional 14.6 acres of land would be placed under conservation restriction for vernal pool protection west of the 36-acre site. (Tr. 3, p. 30; Tr. 1, p.20; PDC-El Paso 7; Tr. 2, p. 42)

80. The Connecticut Historical Commission does not anticipate any adverse impacts from the proposed project. (Tr. 1, p. 34)

81. To control air emissions from the proposed plant, various emissions controls would be employed, including dry low-nitrogen oxide (NO_x) combustion in the combustion turbines while firing natural gas, and selective catalytic reduction and water injection to reduce NO_x levels while firing No. 2 fuel oil. A carbon monoxide (CO) oxidation catalyst would control CO. (PDC-El Paso 1, p. 1-7, pp. 4-13 to 4-18)

82. The proposed project would annually displace 13,713 tons of sulfur dioxide (SO_x) 3,523 tons of NO_x, and 3,600,000 tons of carbon dioxide (CO_2). (PDC-El Paso 1, p. 2-13)

83. To comply with the requirements of non-attainment new source review for NO_x emissions from the proposed turbines, the proposed project would acquire NO_x offsets at a ratio of 1.2 to 1.0. (PDC-El Paso 1A, pp. 4-18 to 4-19; PDC-El Paso 4, Q. 8)

84. Exhaust stack emissions would be monitored by a continuous emissions monitoring system to ensure that the facility has operated in compliance with air regulations. (PDC-El Paso 1, p. 3-2)

85. Air emissions from the proposed facility, based on maximum potential annual emissions, using worst case load conditions with evaporative cooling, are as follows:

Facility Emissions

Pollutant	Emissions (tons per year)
Nitrogen Oxides	143
Carbon Monoxide	265
Volatile Organic Compounds	48
Total Particulates	210
PM-10	210
Sulfur Dioxide	110

(PDC-El Paso 1A, p. 3-1)

86. No noticeable odors would be caused by the proposed project. Dispersion modeling did not identify any condition that would violate air quality standards. (PDC-El Paso 4, Q. 9)

87. The proposed facility would have two 180-foot exhaust stacks, the minimum height acceptable under good engineering practice. Final determination of the stack height would be based on air quality analysis. (Tr. 1, p. 60; PDC-El Paso 1, p. 4-83)

Noise

88. Noise may occasionally be heard during project construction at nearby homes, especially during periods of steam blows, rock splitting, or blasting. Mitigation would be achieved by scheduling such activities during daytime hours. (PDC-El Paso 1, p. 3-20)

89. Major exterior noise sources from the operation of the proposed plant would include air intakes and exhaust from the combustion turbines, the mechanical draft cooling towers, main transformers, roof exhaust fans, ventilation openings in the turbine building tower, and circulating pumps. (PDC-El Paso 1, pp. 4-34 to 4-36)

90. Gas turbine exhaust stack noise would be attenuated within the heat recovery steam generators and by additional mufflers if required. Remaining noise would be radiated from the top of the exhaust stacks. Noise from the gas turbine inlets would be attenuated by inlet air mufflers, filters, and ducting systems. Noise from transformers, a potential source of tonal noise, may be mitigated by the walls acting as noise barriers. The cooling tower and circulating water pumps would require additional noise control. (PDC-El Paso 1, pp. 4-34 to 4-36)

91. Existing background noise levels in the vicinity of the proposed site are as follows:

Existing Noise Levels (in dBA)

Location	Daytime	Nighttime
Hicks/Bailey Avenue int.	40	41
Falcon Lane/Oriole Way	46	43
Sam's Road	48	38
Route 71	48	38

(PDC-El Paso 1, pp. 4-25 to 4-27)

92. The estimated nighttime noise levels, excluding ambient noise, from the proposed plant in the vicinity of the proposed site are as follows:

Proposed Noise Levels (in dBA)

Location	Estimated Project Noise
Hicks Avenue terminus	39
Falcon Lane	37
Sam's Road	40
Route 71	33
Metacomet Trail	48

(PDC-El Paso 1, p. 4-37)

93. State DEP noise regulations limit noise from fixed industrial sources to 51 dBA during nighttime hours at residential properties. (PDC-El Paso 1, p. 4-37)

Visibility

94. As identified in the chart below, the two exhaust stacks would be visible from portions of Berlin and Meriden.

Stack Visibility

Location	Approximate Distance (ft.)	Stack Visible
Route 71, Berlin	4,000	Yes
Turkey Hill, Berlin	18,000	No
Beaver Pond, Meriden	4,000	No
Reynolds Drive/Shady Crest Road, Meriden	10,000	Yes
Kensington Avenue, Meriden	5,000	Yes
North Colony Street/Amity Street, Meriden	5,000	Yes
Buckwheat Hill, Meriden	15,000	Yes
Elm Street/Silver Street, Meriden	13,000	No
City Hall, Meriden	11,000	Yes

(PDC-El Paso 1, Figs. 4.10-1 to 4.10-11)

Electric and Magnetic Fields

95. The centerlines of transmission line 348 and transmission line 362 are separated by 85 feet along an existing 250-foot wide transmission line ROW across the northern portion of the 821 acre site. Both circuits on this east to west line are suspended on two-pole H-frame structures. (PDC-El Paso 5, Bailey Testimony, Att. B, pp. 1-2)

96. Assuming a connection on the 362 line at a summer peak load of 1600 amps and 1063 amps on the l348 line, magnetic fields would decrease from a present level of 25 milligauss to an expected level of 17 milligauss on the northern edges of the ROW east of the proposed interconnection. To the west of the interconnection, magnetic fields would increase from a present level of 25 milligauss to an expected level of 47 milligauss. When the proposed plant is meeting electric demands in southwestern Connecticut, power flows on line 362 between the plant and the Southington Substation to the west of the interconnection would increase, while power flows between the plant and Haddam Neck would decrease. (Tr. 1, pp. 96-98; Tr. 3, pp. 136-137; PDC-El Paso 5, Bailey Testimony, Att. B, pp. 6-7)

Project Schedule

97. Although a detailed construction schedule has not been prepared, the applicant expects to begin construction in the first quarter of the year 2000 with commercial operation expected to begin in the first quarter of 2002. The project is expected to have a service life of 30 years. (PDC-El Paso 1, p. 3-1; Tr. 1, p. 21; Tr. 3, p. 47, p. 68)

Municipal Approvals

98. The Town of Berlin Town Council voted unanimously to support the proposed project. The City of Meriden Zoning Commission, Planning Commission and Inland Wetland Commission all voted unanimously in favor of the proposed project. The final site plan of the proposed project was approved by the Meriden Planning and Zoning Commission on September 16, 1998. (Tr. 1, pp. 7-8; Tr. 2, pp.3-4; PDC-El Paso 4, Q. 24)

DOCKET NO. 190 - An application by PDC - El Paso Meriden LLC for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of the proposed Meriden Power Project located in the City of Meriden and the Town of Berlin, Connecticut.	}	Connecticut
	}	Siting
	}	Council
	}	April 27, 1999

Opinion

On August 27, 1998, PDC-El Paso Meriden LLC, (PDC-El Paso) applied to the Connecticut Siting Council (Council) for a Certificate of Environmental Compatibility and Public Need (Certificate) to construct a proposed 544 MW natural-gas fired combined cycle electric generation facility in the City of Meriden, Connecticut. This is the third of several gas-fired plants whose developers are expected to seek Council approval in the wake of the passage of Public Act 98-28, "An Act Concerning Electric Restructuring," which took effect July 1, 1998.

Reliability of electric supply is of great importance in Connecticut, a service-oriented state that has become increasingly dependent on high technology and a reliable electric supply. To improve the reliability of the electric supply system of the state, the proposed facility would operate on natural gas with a proven technology to augment and replace other existing generation facilities in the state. Some of these existing plants that would be replaced are over 40 years old and approaching retirement. These existing facilities to be replaced also include nuclear facilities that have retired prematurely.

We are confident that the proposed technology and natural gas fuel will improve reliability. However, for those times when adequate volumes of natural gas are not available, the facility would operate on low sulfur fuel oil; a situation not expected to exceed a total of 720 hours per year. The use of oil as a backup fuel will necessitate four to five trucks delivering oil to the site per hour; therefore, adequate facilities must be planned and developed on site to allow sufficient access and egress for such trucks, an area for truck queuing and unloading, and sufficient space for truck turn-around. The ultimate result is expected to include increased reliability to both the state and regional electric energy supply.

The Council is aware that air quality in Connecticut is in need of improvement, which may be possible through the replacement of aging oil-burning generation plants with new, highly efficient gas-fired units. As the proposed and other new gas-fired plants displace older plants, nitrogen oxides and sulfur dioxide will decrease, improving both state and regional ambient air quality and the health of Connecticut residents. In addition, levels of carbon dioxide, a greenhouse gas, will decrease. These results can be best achieved by employing advanced emissions controls, including dry low-nitrogen oxide combustion and water injection in the combustion turbines and selective catalytic reduction to reduce nitrogen oxide levels, and an oxidation catalyst to reduce carbon monoxide. To ensure full-time compliance with air quality standards, exhaust stack emissions would be monitored by a continuous emissions monitoring system.

The project, as designed, would consume an average of 2,700,000 gallons of potable water daily, of which over 2,600,000 gallons would be destined solely for cooling. Initially, the project was to have used potable water from a local water company as a source. After submitting the application, PDC – El Paso found this source was no longer available, and had to postpone the hearing process to find a substitute source of water. The nearest source the applicant could find was the Connecticut River. The Council is concerned by this out of basin transfer of water proposed by the applicant. The Council is

also troubled by the precedent-setting nature of the transfer of water from the Connecticut River basin to the Quinnipiac River basin. The Connecticut River nurtures wetlands of international significance, and long-term diversions of water during low-flow periods can have significant impacts on aquatic ecosystems. Future withdrawals of greater quantity could lead to the degradation of the Connecticut River wetlands. Furthermore, the applicant has yet to quantify the environmental impact from the diversion or from construction of the pipeline, nor has it determined how the water would be withdrawn from the Connecticut River, believing it would be determined later in the Department of Environmental Protection (DEP) Water Diversion Permit process. If an intake structure were used, it would have to be designed to not retard flood waters or ice flow, obstruct navigation, block water flows along the flood plain, cause fish impingement or entrainment, or block the normal flow of sediment in the river channel. Although this information would be provided during the DEP permitting process and the DEP would have jurisdiction to regulate this diversion, the lack of this information before the Council at this time undermines the entire siting process. Although the water itself is free, its withdrawal is not without cost. Connecting the proposed plant to the Connecticut River would require a 24-inch diameter pipeline ten and one-half miles in length through the Towns of Cromwell, Middletown, Berlin and Meriden. In its route through central Connecticut, the diverted water must pass through a pipeline to be constructed under various state, local, and interstate highways, an Amtrak right-of-way, a river and five brooks, and across the lower foothills of Lamentation Mountain. The applicant has yet to receive permission for street cuts from municipalities, a contract with the pipeline company whose right-of-way would be partially shared, or the permission of various landowners whose properties would be crossed. In short, the Council is being asked to approve the proposed facility, but without confirmation of water to cool the facility. Indeed we do not even know if the proposed water pipeline is environmentally feasible or technically practical.

The use of dry cooling technology would alleviate these concerns completely. However, the use of dry cooling for this project was opposed because of additional engineering difficulties, an increase in facility size, and additional costs. Nonetheless, we believe that an air-cooled project redesigned to better fit the confines of the existing quarry on the site would be economically and environmentally sound and technically viable.

Air quality will be regulated by the DEP through a final air permit which will include construction of an exhaust stack of sufficient height to adequately disperse emissions, installation of a continuous emissions monitoring system, and the installation of the air pollution control equipment previously mentioned.

The proposed facility must be interconnected with the existing electric grid. The proposed interconnection would be located within a corridor containing existing electric and gas rights-of-way and is consistent with the Council's Electric and Magnetic Field Best Management Practices. This interconnection is not expected to have a significant adverse environmental effect or an effect on public health; however we lack evidence on the exact route, type of structures, and construction methods to review this interconnection. Consequently, the Council will require more specific information in the form of a petition, amendment, or application, before granting approval for the electric interconnection or any modification to existing electric transmission line structures.

The two gas suppliers to the proposed plant have been determined, but the Council cannot approve the construction of any new pipeline facilities without more evidence regarding the exact route, construction methods, and environmental effects of any such new pipeline. The existing Algonquin gas pipeline, which crosses the site, offers a considerable advantage for ease of connection, while the existing Tennessee Gas Pipeline is 4.3 miles distant. Consequently, the Council will require more specific

information in the form of a petition, amendment, or application, before granting approval for a gas pipeline connection that includes the construction of a new pipeline.

The location of the proposed facility is within a traprock ridge complex that forms an undesignated greenbelt around the northern perimeter of the City of Meriden and a north-south greenway corridor through central Connecticut. This area hosts vernal pools, species of special concern, and unique habitat that contributes to high quality ecological integrity and balance. The proposal before us presents an interesting opportunity to acquire a large portion of the site for public recreational uses, but this opportunity is only possible through the financing to be made possible with the development of the proposed power plant. With the power plant developed on 36 acres, approximately 700 acres will be made available to the City of Meriden and the Town of Berlin. The development of the power plant will have some effect on site ecology, but such is the cost for public ownership and long-term protection. Nonetheless, environmental effects in this project can be minimized by confining most construction to the abandoned quarry, where environmental resources have already been substantially disturbed. Without the facility there is no guarantee nor is it likely that another developer will make the same concessions to give large tracts to the public. Indeed, if developed residentially, it is likely that much of the 821-acre site would become substantially modified and not available for public use. We are encouraged that the City of Meriden and Town of Berlin will recognize and protect the long-term potential of this unique site as an ecological and recreational preserve.

Despite some concerns, it is possible that this project can be developed in a manner to provide a clean and reliable source of electric generation, minimize community and environmental impacts, and provide welcome economic benefits to the City of Meriden and the State of Connecticut. While residential development exists to the north and south of the proposed facility, generous buffers will protect these residential areas. Furthermore, the Council will require detailed plans to ensure that the facility is built and operated as proposed with minimal impact on adjacent land uses. Uncertainty can be further reduced if the applicant redesigns the project for dry cooling and further confines construction to the existing quarry.

This proposed project offers substantial benefits to the public that outweigh potential environmental damage. Consequently, the Council will issue a Certificate for this facility, accompanied by orders including a detailed Development and Management Plan (D&M Plan) with elements designed to protect resources on site and mitigate impacts off site. The D&M Plan will include specific provisions for: water diverted from the Connecticut River, including acquisition of all required rights-of-way, required project permits, final water pipeline engineering plans, or, dry cooling for the facility, including a revised site plan to accommodate dry cooling equipment; protection of inland wetlands and watercourses, vernal pools, traprock ridges, and habitat for species of special concern on the site; development of conservation easements; detailed project schedules for all work activities; provisions for adequate oil storage, unloading, and pumping facilities; landscaping and the use of existing forested areas as buffers; architectural treatment of all buildings and structures; detailed erosion and sedimentation control and stormwater management plans; spill prevention; construction blasting; and management of electric and magnetic fields (EMF). The Council will also require an Operations Plan with baseline testing, monitoring, and protocol to address public complaints, noise emissions, water usage, water discharges, air and water vapor emissions, odors, plant lighting, traffic management, physical plant and site management, and EMF exposure. The project shall not commence construction until the Council has considered and approved the D&M Plan. The project shall not commence operations until the Council has approved an Operations Plan for this project. To undertake inspection and evaluate the progress of the project, the Council will require advance notification of the commencement of facility construction,

testing, and commercial operations, and the permanent termination of any operation of the project; quarterly progress reports; a first year operating report; and submittal of final DEP permits.

Based on the record in this proceeding we find that the effects associated with the construction, operation, and maintenance of the electric generating facility at the proposed site, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate either alone or cumulatively with other effects when compared to benefit, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the proposed project. Therefore, we will issue a Certificate for the construction, operation, and maintenance of a natural gas-fired electric generating facility at the proposed site located off of Sam's Road in Meriden, Connecticut.

DOCKET NO. 190 - An application by PDC - El Paso Meriden LLC for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of the proposed Meriden Power Project located in the City of Meriden and the Town of Berlin, Connecticut.	}	Connecticut
	}	Siting
	}	Council
	}	April 27, 1999

Dissenting Opinion

In this brave new world of deregulation the question of the public need for a new electric generating plant will be determined by the market, not a state agency. If the proposed plant is not built, Connecticut residents will not be without power. If there is an actual need for more power, the market will respond, and another power plant will be built somewhere by someone, here in Connecticut or elsewhere. Unlike a certain baseball movie "if it is built, they may not come!" The market risk of overbuilding power plants is on the proponents; but the environmental risks are on the public. That being so, the Council should be very selective in siting a plant of uncertain need that is by its very nature environmentally unfriendly.

The applicant asks us to site its proposed facility near the top of Cathole Mountain, which is defined by the Conservation and Development Policies Plan for Connecticut 1998-2003 as a Conservation Area. This designation has been placed on this area because it is a traprock ridge and, additionally, is viewed as a resource corridor or greenway.

The exhaust from the proposed facility would be vented by two 180 foot stacks, which along with other structural features such as the generating building and cooling tower will be visually conspicuous. While the facility is partially screened from the adjacent residential neighborhood, the facility will be a distant visual feature for a large area.

The traprock ridge that would host the proposed facility has been disturbed by past logging and quarrying activity. Nevertheless, the parcel remains a cohesive ecological unit that possesses highly variable topography and is relatively pristine in terms of vegetation, species diversity and a lack of invasive species. The parcel contains three vertebrate species of special concern and three plant species of special concern that are listed on the Connecticut Natural Diversity Data Base. In addition, the site would adversely impact a listed sedge as well as birds which require a large forest canopy expanse.

The direct impact of inserting a 36 acre generating facility and utility corridor (150' x 6,000' plus) along the axis of this traprock ridge would be significant. The indirect impact may actually be more disruptive, however, because fragmentation of the parcel will negatively affect the flora and fauna within the parcel.

Approximately 700 acres of the 821 acre parcel owned by the applicant would be conveyed to the City of Meriden and the Town of Berlin. Approximately 100 acres of the land transferred to the municipalities will be subject to restrictions but the remaining 600 plus acres will not be so restricted with development remaining a district possibility. The preservation of all 700 acres

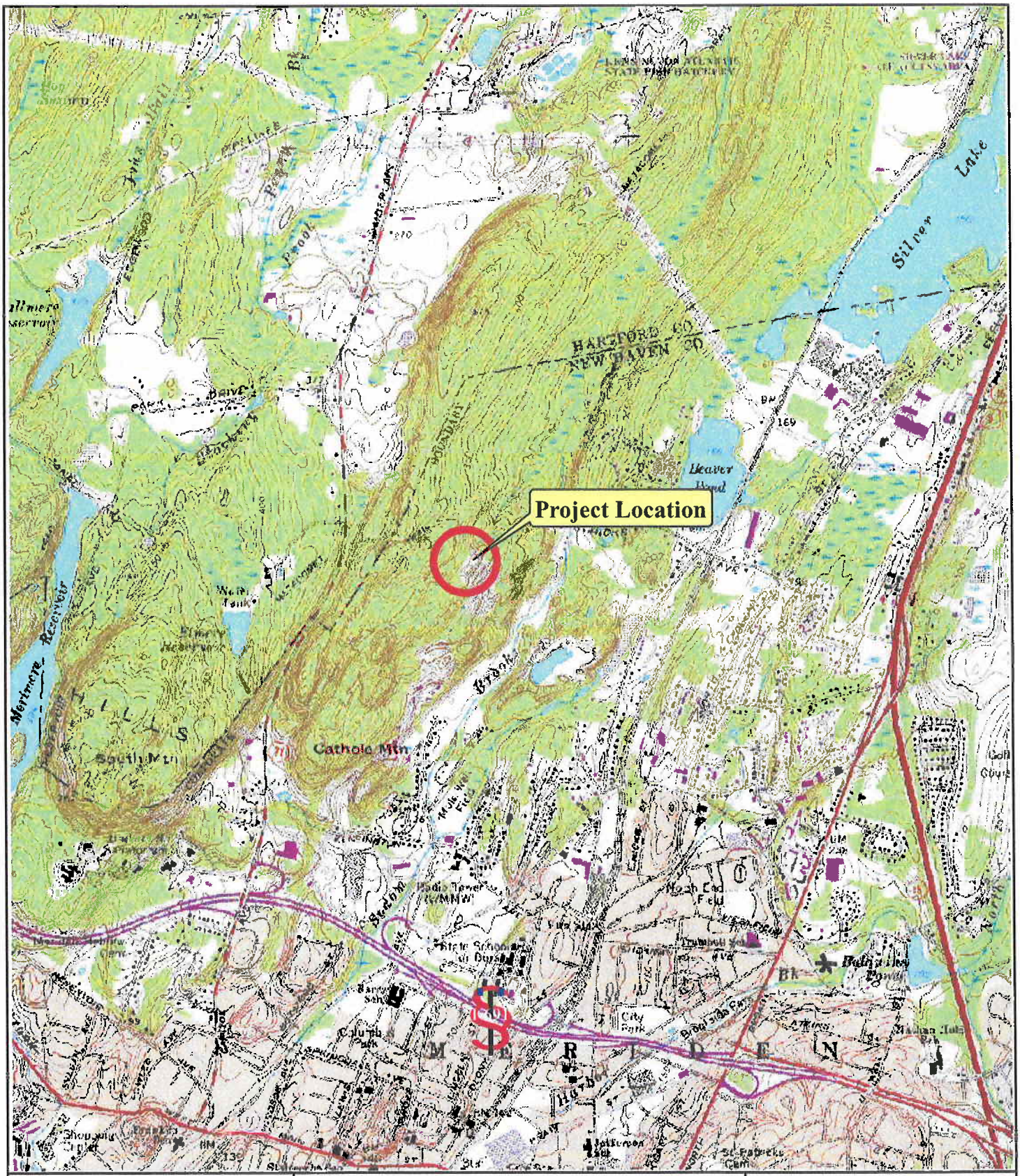
would have secured the ecological attributes of the entire parcel. Were this part of the Council's decision, our opinion might have been different.

To cool the plant, the applicant has selected a water cooled system and to operate that system, the applicant proposes to acquire a new right-of-way that would be over 10 miles in length, and to divert water from the Connecticut River. This proposed pipeline right-of-way is still only conceptual in nature, but would apparently have to cross several watercourses and wetlands and other potentially sensitive areas (lower foothills of Lamentation Mountain) all without the right of eminent domain!

The applicant has selected disturbed portions of the parcel for development and proposes to the transfer undeveloped acreage to the municipalities of Meriden and Berlin. While the donation of such acreage is commendable, not only is the land to be transferred largely without restriction on development, such a donation evades the basic question before this Council. Is this site an appropriate location for the proposed facility? There are already at least 12 gas fired generating plants on the drawing board just in Connecticut, and there will undoubtedly be more. Five applications for such plants have been filed with the Council in the past six months. Where should these plants go? Should we accept marginal sites? Aren't there alternative sites which would be less environmentally degrading? Can't we do better?

To ask these questions is to answer them. This application should be denied.

Brian Emerick
Colin C. Tait



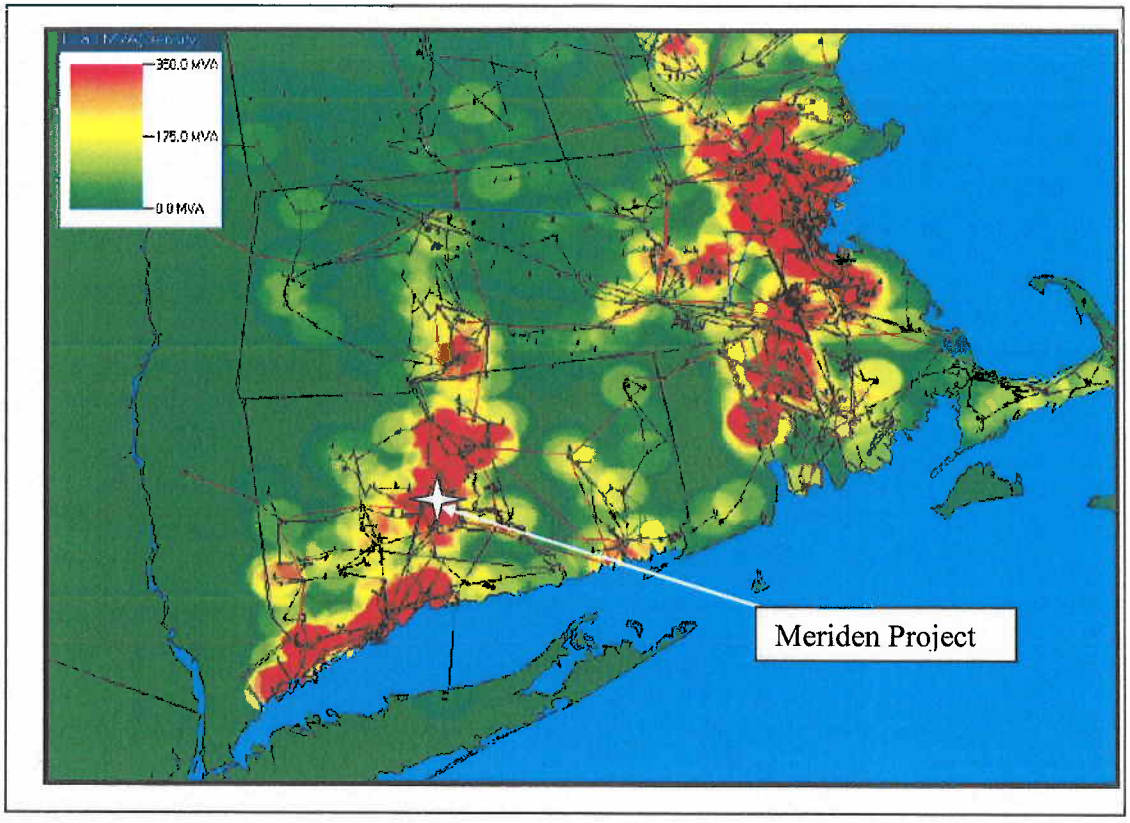
Engineering, Landscape Architecture and Environmental Science MILONE & MACBROOM® 99 Realty Drive Cheshire, Connecticut 06410 (203) 271-1773 Fax: (203) 272-9733 www.miloneandmacbroom.com	**NRG** **Natural Gas Fired Combined Cycle Plant**	**LOCATION:** **Meriden, CT**
MMI#: 2148-01-1 **MXD:** G:Location.mxd **SOURCE:** DEP Bulletin No.40	**USGS Quadrangle Location Map**	**DATE:** MARCH 2009 **SCALE:** 1" = 2,000' **SHEET:** Figure 1

Connecticut Energy Advisory Board RFP
Template for Required Information

Project: Meriden Combined Cycle Project

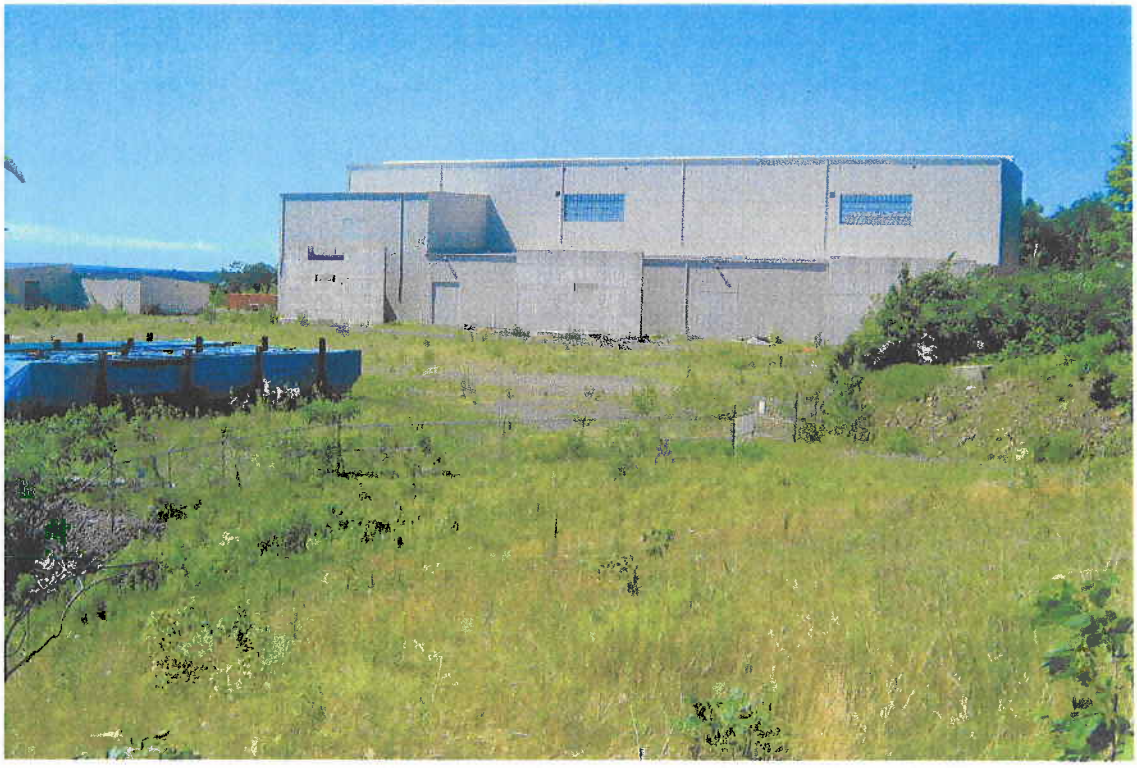
Optional Template Attachment

Meriden Project Location on a Map of Load Density



Connecticut Energy Advisory Board RFP
Template for Required Information

Project: Meriden Combined Cycle Project



Existing Power House and GSU Platforms

Connecticut Energy Advisory Board RFP
Template for Required Information

Project: Meriden Combined Cycle Project

Existing HRSG Foundations and Shells

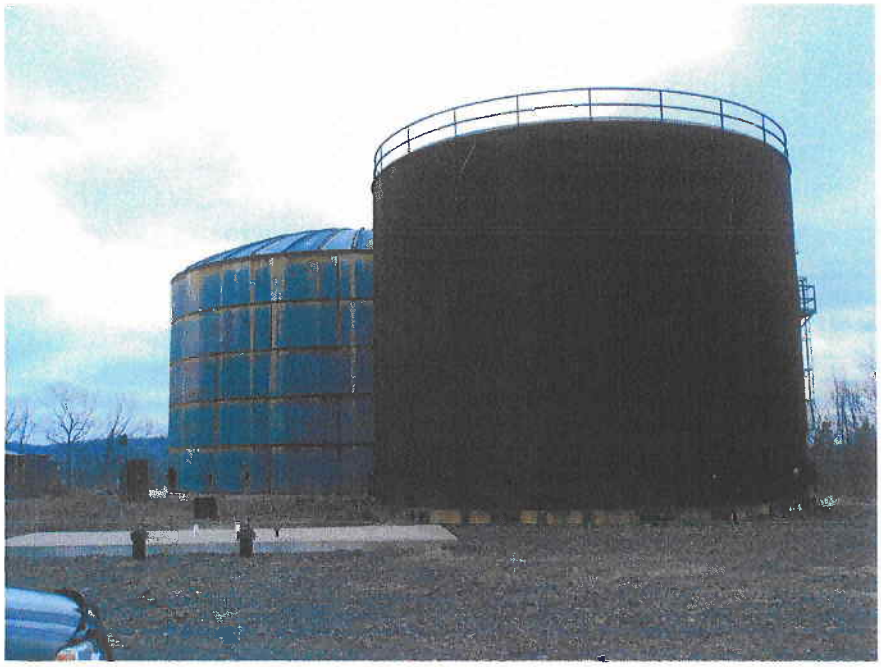
Connecticut Energy Advisory Board RFP
Template for Required Information

Project: Meriden Combined Cycle Project

Existing Cooling Tower Basis Looking Towards HRSGs

Connecticut Energy Advisory Board RFP
Template for Required Information

Project: Meriden Combined Cycle Project



Existing Water Tanks

Connecticut Energy Advisory Board RFP
Template for Required Information

Project: Meriden Combined Cycle Project

Power House Interior

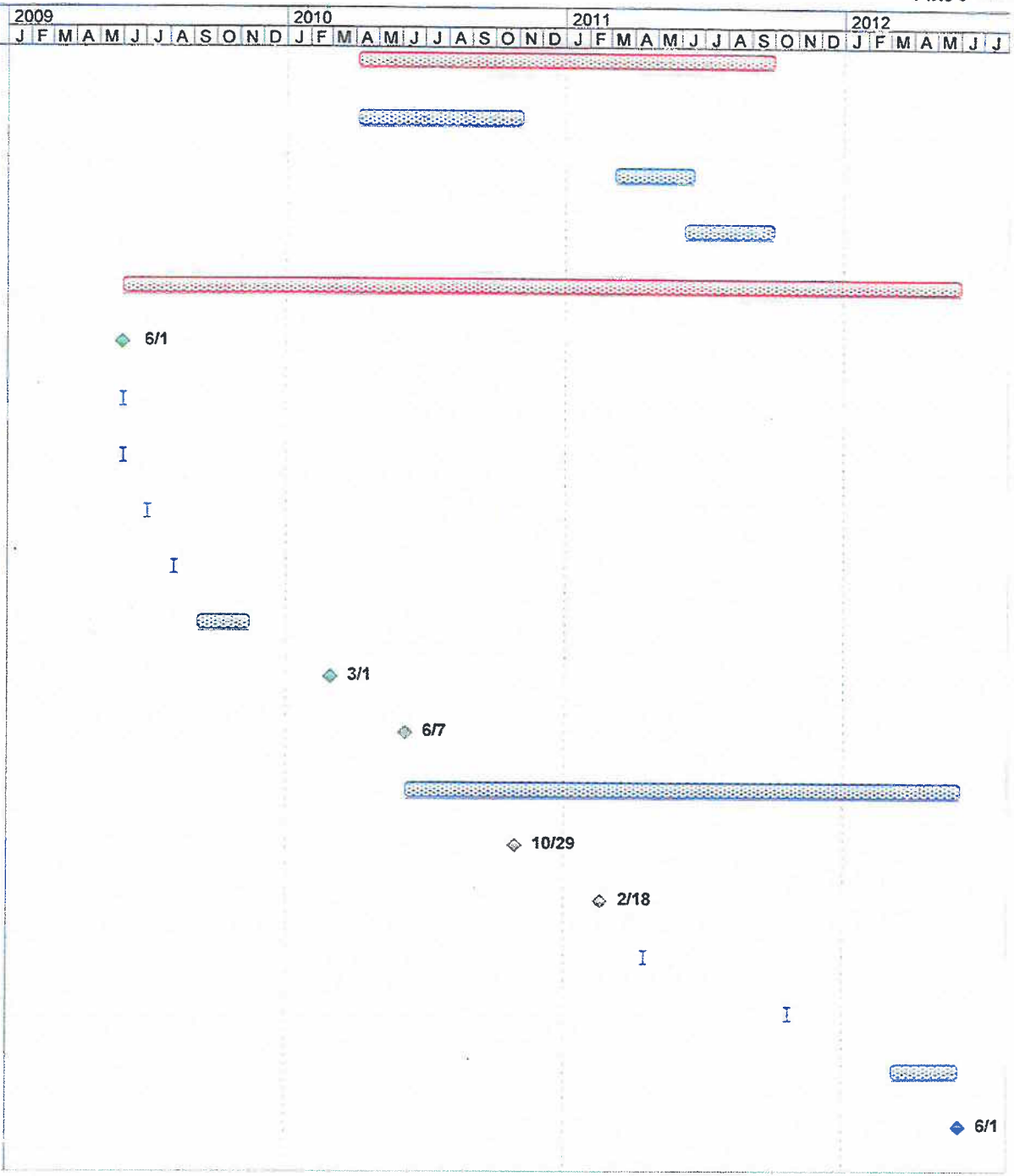
Connecticut Energy Advisory Board RFP
Template for Required Information

Project: Meriden Combined Cycle Project

Existing Parts Stored on Site

Template 9
Attachment

ID	Task Name
1	**Utility Interconnections**
2	Install Water Line
3	Install Gas Line
4	Install 345kV Transmission Line
5	**EPC**
6	Award Major Equipment Contracts
7	Award ST Contract
8	Award GSU Contract
9	Award CT Contract
10	Award HRSG Contract
11	Prepare EPC RFP
12	Award EPC Contract
13	Site Mobilization
14	Plant Construction
15	Delivery of CTs
16	Delivery of HRSGs
17	Delivery of ST
18	Delivery of GSUs
19	Commissioning and Testing
20	**Commercial Operation Date**



Attachment D

To

Application of NRG Energy, Inc.

Pursuant to Connecticut General Statutes § 16-50*l* (a)(3)

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

APPLICATION OF NRG ENERGY, INC.	:	DOCKET NO. 370
PURSUANT TO CONNECTICUT GENERAL	:	
STATUTES § 16-50*l* (a)(3)	:	MARCH 19, 2009

CERTIFICATE OF SERVICE

I hereby certify that notice of the above-referenced application was served in accordance with Section 16-50*l*(b) of the Connecticut General Statutes, as follows:

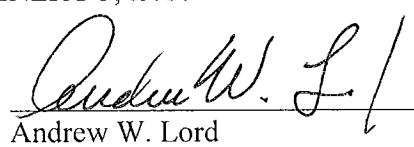
1. A copy of the Application was served by United States certified mail return receipt requested, on the municipal, state and federal officials and agencies and the community organizations listed on Exhibit A, attached hereto.

2. Prior to filing the application, notice of the application was sent, certified mail, return receipt requested, to each person appearing of record as an owner of property which abuts the proposed facility site. A list of all persons to whom notice was mailed is attached hereto as Exhibit B.

3. Notice to the general public of the application was published in the *Hartford Courant* on March 18 and 19, 2009. Affidavits of Publication from the *Hartford Courant* will be filed with the Connecticut Siting Council immediately upon receipt.

Respectfully Submitted,

NRG ENERGY, INC.

By: 
Andrew W. Lord

Murtha Cullina LLP
CityPlace I - 185 Asylum Street
Hartford, Connecticut 06103-3469
Telephone: (860) 240-6000
Its Attorney

Exhibit A

C.G.S. § 16-50*l* (b) Service List

STATE AGENCIES	
Office of the Attorney General	The Honorable Richard Blumenthal Attorney General 55 Elm Street Hartford, CT 06106
Department of Environmental Protection+	Gina McCarthy, Commissioner Department of Environmental Protection 79 Elm Street Hartford, CT 06106-5127
Department of Public Health	J. Robert Galvin, Commissioner Department of Public Health 410 Capitol Avenue Hartford, CT 06134
Council on Environmental Equality	Barbara C. Wagner, Chair Council on Environmental Equality 79 Elm Street Hartford, CT 06106-5127
Department of Public Utility Control	Donald W. Downes, Chairman Department of Public Utility Control Ten Franklin Square New Britain, CT 06051
Office of Policy and Management	Robert L. Genuario, Secretary Office of Policy and Management 450 Capitol Avenue Hartford, CT 06106-1379
Department of Economic and Community Development	Joan McDonald, Commissioner Department of Economic and Community Development 505 Hudson Street, Hartford, CT 06106
Department of Agriculture	F. Philip Prelli, Commissioner Department of Agriculture 165 Capitol Avenue Hartford, CT 06106
Department of Transportation	Joseph F. Marie, Commissioner Department of Transportation 2800 Berlin Turnpike Newington, CT 06131-7546
FEDERAL AGENCIES	
United States Environmental Protection Agency	Ira W. Leighton, Acting Regional Administrator United States Environmental Protection Agency, Region I, New England 1 Congress Street, Suite 1100

	Boston, MA 02114-2023
MERIDEN: ***Local Agencies***	
Chief Elected Official	Mayor Michael S. Rohde Meriden City Hall 142 East Main Street Meriden, CT 06450
Conservation (Land) Commission	Maryellen Mordarski, Chairperson Meriden City Hall 142 East Main Street Meriden, CT 06450
Inlands Wetlands Watercourse Commission	Daniel Reardon, Chairman Meriden City Hall 142 East Main Street Meriden, CT 06450
Planning Commission	Enrico Buccilli, Chairman Meriden City Hall 142 East Main Street Meriden, CT 06450
Water Division	David Lohman, Director of Public Utilities Meriden City Hall 142 East Main Street Meriden, CT 06450
Zoning Board of Appeals	Edwin J. Jones, Chairman Meriden City Hall 142 East Main Street Meriden, CT 06450
MERIDEN: ***Elected Representatives***	
State Senatorial District	Senator Thomas P. Gaffey, 13th District Legislative Office Building, Room 3100 Hartford, CT 06106-1591
State Assembly Districts	Representative Emil Altobello, Jr., 82nd District Legislative Office Building, Room 4015 Hartford, CT 06106-1591
	Representative Catherine Abercrombie, 83rd District Legislative Office Building, Room 4113, Hartford, CT 06106-1591
	Representative Christopher G. Donovan, 84th District Legislative Office Building, Room 4106, Hartford, CT 06106-1591
BERLIN: ***Local Agencies***	
Chief Elected Official	Denise McNair, Town Manager Berlin Town Hall 240 Kensington Road Berlin, CT 06037

Conservation Commission	Michael DeLorenzo, Chairman Berlin Town Hall 240 Kensington Road Berlin, CT 06037
Inlands Wetlands and Watercourse Commission	Michael DeLorenzo, Chairman Berlin Town Hall 240 Kensington Road Berlin, CT 06037
Planning and Zoning Commission	Bruce A. Moore, Chairman Berlin Town Hall 240 Kensington Road Berlin, CT 06037
Water Control Commission Department	Jack Ross, Manager Berlin Town Hall 240 Kensington Road Berlin, CT 06037
Zoning Board of Appeals	Antonio J. Francalangia, Chairman Berlin Town Hall 240 Kensington Road Berlin, CT 06037
BERLIN: ***Regional Agencies***	
Central Connecticut Regional Planning Agency	Carl J. Stephani, Executive Director Central Connecticut Regional Planning Agency 225 North Main Street, Suite 304 Bristol, CT 06010-4993
The Mattabassett District	Brian W. Armet, P.E., Executive Director 245 Main Street, Cromwell, CT 06416
BERLIN: ***Elected Representatives***	
State Senatorial District	Senator Donald J. DeFronzo, 6th District Legislative Office Building, Room 2300 Hartford, CT 06106-1591
State Assembly Districts	Representative Joseph Aresimowicz, 30th District Legislative Office Building, Room 5002 Hartford, CT 06106-1591
	Representative Catherine Abercrombie, 83rd District (see above)
COMMUNITY ORGANIZATIONS	
Rivers Alliance of Connecticut	Margaret Miner, Executive Director Rivers Alliance of Connecticut P.O. Box 1797, Litchfield, CT 06759
Farmington River Watershed Association	Eileen Fielding, Executive Director Farmington River Watershed Association 749 Hopmeadow Street, Simsbury, CT 06070
Quinnipiac River Watershed Association	Mary Mushinsky, Executive Director Quinnipiac River Watershed Association

	290 Pratt Street, Meriden, CT 06450
Connecticut Forest & Park Association	Eric Hammerling, Executive Director Connecticut Forest & Park Association 16 Meriden Road, Rockfall, CT 06481
Citizens Against Overhead Power Line Construction	Citizens Against Overhead Power Line Construction 1204 Newgate Road, West Suffield, CT 06093
Connecticut River Watershed Council	Chelsea Reiff Gwyther, Executive Director Connecticut River Watershed Council 15 Bank Row Greenfield, MA 01301

Exhibit B

List of Abutting Property Owners

Property Owner	*Addressee*
City of Meriden	Mayor Michael S. Rohde Meriden City Hall 142 East Main Street Meriden, CT 06450

AFFIDAVIT OF PUBLIC NOTICE

I, Andrew W. Lord, Esq., being duly sworn hereby depose and say:

1. I am over the age of eighteen (18) years and understand the obligations of an oath.

2. The following is a true and accurate statement concerning the publication of a legal notice stating the intent of NRG Energy, Inc. to file an Application with the Connecticut Siting Council pursuant to Section 16-*50l*(a)(3) of the Connecticut General Statutes on March 19, 2009.

3. A legal notice, as described above, was published in the *Hartford Courant* on March 18, 2009, and is attached hereto.

Andrew W. Lord, Esq.

STATE OF CONNECTICUT :
: ss. Hartford
COUNTY OF HARTFORD :

Subscribed and sworn to before me this 19th day of March, 2009.

Commissioner of the Superior Court
Notary Public
My Commission Expires:

Connecticut

LEGAL NOTICE
NRG ENERGY, INC.

Notice is hereby given, pursuant to Section 16-50l(b) of the Connecticut General Statutes and Section 16-50l-1(e) of the Regulations of Connecticut State Agencies, of an application to be submitted to the Connecticut Siting Council ("Siting Council") on March 19, 2009 by NRG ENERGY, INC. (the "Applicant") with regard to an electric generating facility to be located at a site in Meriden, Connecticut (the "Project"). The Project is located on a 36-acre parcel of land north of Sam's Road in Meriden and within 2500 ft. of the Town of Berlin. The Applicant presently holds a valid certificate of Environmental Compatibility and Public Need for the Project. NRG is now filing an Application with the Siting Council to allow the Project to be evaluated as an alternative to a transmission project proposed by The Connecticut Light and Power Company known as the Greater Springfield Reliability Project ("GSRP"), which is the subject of Docket No. 370, Con-struction of the infrastructure of the Meriden project was largely completed by the Applicant in 2003. The remaining construction work required for the Project consists pri-marily of installing equipment, such as gas and steam tur-bines, and interconnecting the generating facility to the electric grid. The Application, which is being filed with the Siting Council pursuant to Section 16-50l(a)(3) of the Con-necticut General Statutes, will explain the need, purpose and benefits of the Project compared to the GSRP. A public hearing regarding the Application will be held by the Sit-ing Council. Notice of the public hearing date will be pro-vided by the Siting Council. Interested parties and resi-dents of the City of Meriden and the Town of Berlin are invited to review the Application during normal business hours at any of the following offices: Connecticut Siting Council, 10 Franklin Square, New Britain, CT 06051; Meri-den City Clerk, 142 East Main Street, Meriden, CT 06450; Berlin Town Clerk, 240 Kensington Road, Berlin, CT 06037; or the office of the undersigned. All inquiries should be addressed to the Siting Council or to the undersigned. An-drew W. Lord, Esq. alord@murthalaw.com, Murtha Cullina LLP, 185 Asylum Street, CityPlace I, Hartford, CT 06103 Ph. (860) 240-6180 Fax (860) 240-6150 Attorney for NRG En-ergy, Inc.

AFFIDAVIT OF PUBLIC NOTICE

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3. A legal notice, as described above, was published in the *Hartford Courant* on March 19, 2009, and is attached hereto.

Andrew W. Lord, Esq.

STATE OF CONNECTICUT :
: ss. Hartford
COUNTY OF HARTFORD :

Subscribed and sworn to before me this 19th day of March, 2009.

Commissioner of the Superior Court
Notary Public
My Commission Expires:

LEGAL NOTICE

NRG ENERGY, INC.

Notice is hereby given, pursuant to Section 16-50*l*(b) of the Connecticut General Statutes and Section 16-50*l*-1(e) of the Regulations of Connecticut State Agencies, of an application to be submitted to the Connecticut Siting Council ("Siting Council") on March 19, 2009 by NRG ENERGY, INC. (the "Applicant") with regard to an electric generating facility to be located at a site in Meriden, Connecticut (the "Project"). The Project is located on a 36-acre parcel of land north of Sam's Road in Meriden and within 2500 ft. of the Town of Berlin. The Applicant presently holds a valid Certificate of Environmental Compatibility and Public Need for the Project. NRG is now filing an Application with the Siting Council to allow the Project to be evaluated as an alternative to a transmission project proposed by The Connecticut Light and Power Company known as the Greater Springfield Reliability Project ("GSRP"), which is the subject of Docket No. 370. Construction of the infrastructure of the Meriden Project was largely completed by the Applicant in 2003. The remaining construction work required for the Project consists primarily of installing equipment, such as gas and steam turbines, and interconnecting the generating facility to the electric grid. The Application, which is being filed with the Siting Council pursuant to Section 16-50*l*(a)(3) of the Connecticut General Statutes, will explain the need, purpose and benefits of the Project compared to the GSRP. A public hearing regarding the Application will be held by the Siting Council. Notice of the public hearing date will be provided by the Siting Council. Interested parties and residents of the City of Meriden and the Town of Berlin are invited to review the New Application during normal business hours at any of the following offices: Connecticut Siting Council, 10 Franklin Square New Britain, CT 06051; Meriden City Clerk, 142 East Main Street, Meriden, CT 06450; Berlin Town Clerk, 240 Kensington Road, Berlin, CT 06037; or the offices of the undersigned. All inquiries should be addressed to the Siting Council or to the undersigned. Andrew W. Lord, Esq. alord@murthalaw.com, Murtha Cullina LLP, 185 Asylum Street, CityPlace I, Hartford, CT 06103 Ph. (860) 240-6180 Fax (860) 240-6150 Attorney for NRG Energy, Inc.

AFFIDAVIT OF NOTICE TO ABUTTING LANDOWNERS

I, Andrew W. Lord, Esq., being duly sworn, do hereby depose and say:

1. I am over the age of eighteen (18) years and understand the obligations of an oath.

2. The following is a true and accurate statement concerning the notification of owners of record of real property abutting or in the immediate vicinity of the site of a proposed natural gas fired combined cycle electric generating facility located in Meriden, Connecticut and within 2500 feet of Berlin, Connecticut.

3. Based on property owner and abutters lists provided by the City of Meriden Tax Assessor and the Town of Berlin Tax Assessor, and an independent review of property and tax records on file with the City of Meriden, all identified abutters have been notified of the intent of NRG Energy, Inc. to file an Application with the Connecticut Siting Council pursuant to Section 16-*50l*(a)(3) of the Connecticut General Statutes on March 19, 2009. A list of persons notified, including their addresses is attached.

4. The notice letter, which was delivered by certified mail, return receipt requested to the abutter is attached hereto.

5. Proof of service of the notice letter to the abutter will be filed with the Connecticut Siting Council upon receipt.

6. The notice to abutters, as described above, complies with the notification requirement of Section 16-50*l*(b) of the Connecticut General Statutes.

Dated this 19th day of March, 2009.

Andrew W. Lord, Esq.

STATE OF CONNECTICUT:

: ss. Hartford

COUNTY OF HARTFORD :

Subscribed and sworn to before me this 19th day of March, 2009.

Commissioner of the Superior Court
Notary Public

My Commission Expires:

List of Abutting Property Owners

Property Owner	*Addressee*
City of Meriden	Mayor Michael S. Rohde Meriden City Hall 142 East Main Street Meriden, CT 06450

ANDREW W. LORD
860.240.6180 DIRECT TELEPHONE
860.240.5723 DIRECT FACSIMILE
ALORD@MURTHALAW.COM

March 18, 2009

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

City of Meriden
Mayor Michael S. Rohde
Meriden City Hall
142 East Main Street
Meriden, CT 06450

Re: Notice of Application of NRG Energy, Inc.

Dear Mayor Rohde:

I am writing on behalf of NRG Energy, Inc. ("NRG") to inform you that NRG is filing an application, pursuant to Section 16-*50l* (a)(3) of the Connecticut General Statutes, with the Connecticut Siting Council on March 19, 2009.

This notice is being provided pursuant to Section 16-50*l*(b) of the Connecticut General Statutes which requires that a notice of such an application be provided to each person appearing of record as an owner of property which abuts the site of the proposed facility. Based upon our review of the most recent certified records obtained from the Town of Meriden Assessor's Office, we are providing you with this notice. A legal notice will appear in the *Hartford Courant* on Wednesday, March 18, 2009 and Thursday, March 19, 2009. A copy of the notice is enclosed.

Please contact the undersigned if you have any questions.

Very truly yours,

Andrew W. Lord

Enclosure

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LEGAL NOTICE

NRG ENERGY, INC.

Notice is hereby given, pursuant to Section 16-50*l*(b) of the Connecticut General Statutes and Section 16-50*l*-1(e) of the Regulations of Connecticut State Agencies, of an application to be submitted to the Connecticut Siting Council ("Siting Council") on March 19, 2009 by NRG ENERGY, INC. (the "Applicant") with regard to an electric generating facility to be located at a site in Meriden, Connecticut (the "Project"). The Project is located on a 36-acre parcel of land north of Sam's Road in Meriden and within 2500 ft. of the Town of Berlin. The Applicant presently holds a valid Certificate of Environmental Compatibility and Public Need for the Project. NRG is now filing an Application with the Siting Council to allow the Project to be evaluated as an alternative to a transmission project proposed by The Connecticut Light and Power Company known as the Greater Springfield Reliability Project ("GSRP"), which is the subject of Docket No. 370. Construction of the infrastructure of the Meriden Project was largely completed by the Applicant in 2003. The remaining construction work required for the Project consists primarily of installing equipment, such as gas and steam turbines, and interconnecting the generating facility to the electric grid. The Application, which is being filed with the Siting Council pursuant to Section 16-50*l*(a)(3) of the Connecticut General Statutes, will explain the need, purpose and benefits of the Project compared to the GSRP. A public hearing regarding the Application will be held by the Siting Council. Notice of the public hearing date will be provided by the Siting Council. Interested parties and residents of the City of Meriden and the Town of Berlin are invited to review the New Application during normal business hours at any of the following offices: Connecticut Siting Council, 10 Franklin Square New Britain, CT 06051; Meriden City Clerk, 142 East Main Street, Meriden, CT 06450; Berlin Town Clerk, 240 Kensington Road, Berlin, CT 06037; or the offices of the undersigned. All inquiries should be addressed to the Siting Council or to the undersigned. Andrew W. Lord, Esq. alord@murthalaw.com, Murtha Cullina LLP, 185 Asylum Street, CityPlace I, Hartford, CT 06103 Ph. (860) 240-6180 Fax (860) 240-6150 Attorney for NRG Energy, Inc.