



The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

DEVAL L. PATRICK
GOVERNOR
TIMOTHY P. MURRAY
LIEUTENANT GOVERNOR
IAN A. BOWLES
SECRETARY

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Tel: (617) 626-1000
Fax: (617) 626-1181
<http://www.mass.gov/envir>

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
FINAL ENVIRONMENTAL IMPACT REPORT

PROJECT NAME : Thomas A. Watson Generating Station
PROJECT MUNICIPALITY : Potter Road - Braintree
PROJECT WATERSHED : Weymouth Fore River
EEA NUMBER : 13830
PROJECT PROPONENT : Braintree Electric Light Department (BELD)
DATE NOTICED IN MONITOR : July 11, 2007

As Secretary of Energy and Environmental Affairs, I hereby determine that the Final Environmental Impact Report (FEIR) submitted on the above project **adequately and properly** complies with the Massachusetts Environmental Policy Act (G. L., c. 30, ss. 61-62H) and with its implementing regulations (301 CMR 11.00).

According to the FEIR, the proposed project consists of the construction of a rated 116 megawatt (MW) quick-start, simple-cycle, electric generating station (approximately 17,000 square feet (sf)). The generating station will have the capability to fire natural gas or ultra-low sulfur diesel (ULSD) oil, both of which are available at the site. It will be equipped with water injection and a Selective Catalytic Reduction (SCR) System for Nitrogen Oxide (NOx) control and an oxidation catalyst for control of carbon monoxide (CO2) and Volatile Organic Compounds (VOC) emissions. The two vent stacks are anticipated to be approximately 100-feet in height. Power from the new generating unit will feed into the existing on-site 115 kilovolt (kV) switch yard. The proponent's site contains approximately 23 acres of which about 2.8 acres will contain the new generating station. The 2.8 acre area was occupied by the decommissioned "Potter I" generating station (about 8,100 sf). The decommissioned station has been demolished. The proponent's 23-acre site also contains the "Potter II" generating station and several other buildings.

This project requires a mandatory EIR. The project will require a Major Comprehensive Air Plan Approval (BWP AQ13), a Modification to its Operating Permit Program, and a Chapter

91 Waterways License for a nonwater-dependent use from the Department of Environmental Protection (MassDEP). It will require an Approval to Construct and Operate from the Energy Facilities Siting Board (EFSB). The project will need to obtain an Above Ground Storage Tank Permit (502 CMR 5.00) from the State Fire Marshal's Office. On March 23, 2006, the proponent received legislative authorization for a design-build project. The project must comply with the National Pollutant Discharge Elimination System (NPDES) General Permit for stormwater discharges from a construction site and a Prevention of Significant Deterioration (PSD) Permit from the U.S. Environmental Protection Agency (EPA). It may need to undergo Federal Consistency Review by the Massachusetts Coastal Zone Management (MCZM) Office. The project will require an Order of Conditions from the Braintree Conservation Commission. MEPA jurisdiction is limited to those aspects of the project within the subject matter of state permits and that may have significant environmental impacts (air quality/noise, waterways, wetlands, stormwater, and energy generation).

The proposed project will be connected to existing municipal water and sewer service. It will consume between 106,000 to 117,000 gallons per day (gpd) of water and will generate a nominal amount of increased wastewater flow.

Review of the FEIR

The FEIR included a detailed description of the project with a summary/history of the project, and it contained existing and proposed site plans. It included a conceptual-level landscaping plan. The FEIR described each state agency action required for the project and how the project is compatible with the performance standards.

The FEIR estimated the operating hours for the proposed power plant and the actual operating hours for the existing Potter II Station. It identified the operating hours for the existing Potter II Station for the last five years. The FEIR described the times of day and the times of the year that most operations are or will be occurring. It also discussed when both facilities might be operated simultaneously.

The FEIR addressed MassDEP's comments on air quality.

The FEIR identified the location of the noise receptors in Figure 4.2-1. The noise tables were expanded to include all mapped receptors. Because noise levels may increase by 10-11 dBA over existing conditions at the closest residences when both power plants are operated at the same time, the FEIR completed a Best Available Noise Control Technology (BANCT) analysis (Appendix B). This analysis compared the other acoustical design options to reduce noise such as an enhanced enclosure package and some type of noise barrier. Based on this BANCT analysis, the proponent determined that these measures were not cost effective and did not represent BANCT. The proponent discussed limiting operating hours and closing all facility doors. The FEIR responded to the comment letter from the Mayor of Weymouth regarding the testing of noise levels twice per year after the proposed plant is operating to confirm the noise

level projections. The proponent has stated its willingness to conduct another sound level test during their second year of operation and at the same time of year to minimize seasonal differences. The receptor stations would include the three nearest residences to the South and the Weymouth neighborhoods to the North and East.

The FEIR addressed how this project will meet the Chapter 91 Nonwater-Dependent standards. It provided information on the project's compliance with the Waterways Regulations. It identified the mitigation measures proposed by the proponent. The FEIR addressed the need to provide for public access along the waterfront as part of its Chapter 91 Licensing.

Summary of FEIR Mitigation

The FEIR included a separate chapter on mitigation measures. This chapter on mitigation provided a proposed generic Section 61 Findings for all state permits. The proposed mitigation chapter contained a clear commitment to mitigation, an estimate of the individual costs of the proposed mitigation and the identification of the parties responsible for implementing the mitigation.

In the FEIR, the proponent has committed to the following mitigation measures:

- The project emissions will be controlled to BACT/LAER levels. The proponent proposes to use water injection and SCR to minimize NO_x emissions. Combustion controls and an Oxidation Catalyst will be used to minimize CO and VOC emissions. SO₂, PM₁₀, and PM_{2.5} emissions will be controlled via use of the cleanest fossil fuels. The proponent estimates that the cost for the above air quality mitigation will be approximately \$5.3 million, which includes some incremental noise controls.
- A weatherproof, baseplate-mounted enclosure will house the gas turbine and ventilation air systems. The acoustical treatment for the turbines is estimated to cost approximately \$600,000. The gas turbine air inlet filter will be fitted with an inlet silencer and an evaporative cooler unit. It will exhaust into an SCR and Carbon Monoxide (CO) catalyst system with an inlet silencer. The inlet silencer will be increased in length. The SCR shell steel will be doubled. The exhaust stack will include a stack silencer. Natural gas compressors will be located within a building to reduce sound levels. The acoustical treatment of the gas compressor building is estimated to cost approximately \$300,000. A weatherproof, baseplate-mounted enclosure will house the AC generator. Sound barrier walls will be installed along the south side of the project site. The gas turbine air inlets will be reoriented by 180 degrees to face north away from the residential area to the south. The proponent estimates that the cost for the above supplemental noise mitigation at approximately \$1 million.
- The proponent will bring the site to elevation 14 to 15 feet NGVD above the 500-year floodplain to protect the infrastructure. It estimates the cost for this fill at approximately \$350,000.
- The proponent will continue its shade tree planting program.

- The proponent will install a 400,000 gallon demineralized water tank to limit withdrawal from the Town water system during high demand periods. The proponent has estimated that the cost for the above tank and foundations at approximately \$750,000. The annual cost of the demineralizer operation is approximately \$300,000.
- The project will be designed to meet MassDEP Stormwater Management Guidelines and to maximize on-site recharge. The proponent has estimated the cost for erosion control and dust management at approximately \$50,000.
- The construction contractor will comply with MassDEP's Clean Air Construction Initiative.
- Aqueous ammonia will be stored in a fully diked tank with safety controls. The proponent has estimated that the cost for the dike and other spill control measures for the aqueous ammonia storage is approximately \$120,000.
- To address the concern of the potential exceedance of MassDEP's 10dBA noise policy limit at receptor R2A with both power plants in operation, the proponent has agreed to an operating permit condition that precludes the operation of the Potter II facility on Sundays between the hours of midnight and 5:00 am and rely solely on ISO-NE to dispatch the unit as a result of a local or regional system contingency.
- The proponent will provide access to the shoreline and will improve the landscaping with native shrub species in the riverfront area at a cost of approximately \$80,000.

The FEIR described the proponent's efforts to work with the Town of Braintree (which owns the Allen Station site) to establish a public use facility at the nearby Allen Station site, a former generating facility on the Monatiquot River just north of Quincy Avenue in East Braintree. The proponent has committed to clearing this site of existing buildings and turning control of the parcel back to the Town of Braintree. As the owner of this site, the Town of Braintree will determine the future use of the site and whether it gets integrated into Watson Park.

I encourage the project proponent to consider and implement measures to avoid, minimize, and mitigate the Greenhouse Gas (GHG) Emissions from this project. The MEPA Office recently released a draft GHG policy, which can be accessed at: <http://www.mass.gov/envir/mepa/secondlevelpages/currentissue.htm>.

August 17, 2007
DATE


Ian A. Bowles

Comments received:

Joseph G. Finn –Quincy Councillor-at-Large, 7/12/07
Charles Ryan – Braintree Board of Selectmen, 7/12/07
United Brotherhood of Carpenters and Joiners of America, 7/13/07

EEA #13830

FEIR Certificate

August 17, 2007

Laborer's International Union of North America Local No. 133, 7/13/07

Braintree Board of Selectmen, 7/20/07

Senator Michael W. Morrissey, 7/23/07

Quirk Auto Dealerships, 7/26/07

Form Letters Supporting the Project (5), 7/30/07

Sheet Metal Workers' International Association Local Union No. 17, 7/31/07

MassDEP/SERO, 8/10/07

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