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GOVERNOR

KERRY HEALEY LIEUTENANT GOVERNOR STEPHEN R. PRITCHARD

The Commonwealth of Massachusetts

Executive Office of Environmental Affairs 100 Cambridge Street, Suite 900 Boston, MA 02114-2524

August 9, 2006

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

# CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS ON THE ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME PROJECT MUNICIPALITY PROJECT WATERSHED EOEA NUMBER PROJECT PROPONENT DATE NOTICED IN MONITOR

: Thomas A. Watson Generating Station
: Potter Road - Braintree
: Weymouth/Weir Rivers
: 13830
: Braintree Electric Light Department (BELD)
: July 10, 2006

Pursuant to the Massachusetts Environmental Policy Act (G. L., c. 30, ss. 61-62H) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **requires** the preparation of a mandatory Environmental Impact Report (EIR).

According to the Environmental Notification Form (ENF), the proposed project consists of the construction of a 105 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 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) emissions. 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 2.8 acres will contain the new generating station. The 2.8 acre area is occupied by the decommissioned "Potter I" generating station (about 8,100 sf). The existing decommissioned station will be demolished. The proponent's 23-acre site also contains the "Potter II" generating station and several other buildings.

This project is subject to a mandatory EIR pursuant to Section 11.03(7)(a) of the MEPA regulations because it involves the construction of a new electric generating facility with a capacity of 100 or more megawatts (MW). The project will require a Major Comprehensive Air Plan Approval (BWP AQ13), a Modification to its Operating Permit Program, and a Chapter 91

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Waterways License from the Department of Environmental Protection (DEP). It will require an Approval to Construct Permit 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 require a Stack Registration Permit from the Federal Aviation Administration. The project may need to undergo Federal Consistency Review by the Massachusetts Coastal Zone Management (MCZM) Office. It 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, waterways, wetlands, and stormwater).

The proposed project will be connected to existing municipal water and sewer service. It will consume approximately 75,000 gallons per day (gpd) of water and will generate a nominal amount of increased wastewater flow.

#### SCOPE

As modified by this scope, the EIR should conform to Section 11.07 of the MEPA regulations for outline and content. The DEIR should resolve the remaining issues outlined below. It should address the comments listed at the end of this Certificate to the extent that they are within this scope, and it should include a copy of this Certificate and all comment letters.

#### **Project Description:**

The EIR should provide a detailed project description with a summary/history of the project. It should include existing and proposed site plans. The EIR should identify the location, capacity, and fuel type to be stored in the proposed fuel storage tanks on the project site.

The EIR should describe each local, state, and federal agency action required for the project. It should demonstrate how the project is consistent with the applicable performance standards. The EIR should contain sufficient information to allow the permitting agencies to understand the environmental consequences of their official actions related to the project.

The EIR should include a narrative addressing the following subjects:

- The Clean Air Act
- The Prevention of Significant Deterioration (PSD) Review Process including but not limited to National Ambient Air Quality Standards (NAAQS), Increments, Air Quality Analysis, Emission Control Technology – Top Down Best Available Control Technology (BACT) for all pollutants, Lowest Achievable Emission Rate (LAER) for NOx, and the

Public Participation Element

- Non-attainment Review
- Good Engineering Practice (GEP) Stack Height
- State Review Process Local, State, and Federal Regulations dealing with Water Supply, Water Discharge, Disposal of Wastes, Landfills, and Emissions from construction activities, including emissions from diesel engine construction equipment and from fugitive dust sources, noise, odor, and site access
- Resource Conservation Recovery Act (RCRA)

The EIR should identify the location (including elevations) of sensitive receptors to the proposed facility. It should identify, describe, and locate the existing major air pollution sources (100 ton sources within 10 kilometers (Km) and 1,000 ton sources within 20 Km. The EIR should identify trends in population, demographics, and industrial and commercial development, and their effects on air quality in the area.

### **Alternatives Analysis:**

In addition to the Preferred Alternative, the No-Build Alternative, the EIR should develop an alternative generating station site in a non-coastal area on the proponent's 23-acre site. The proponent should demonstrate with these three alternatives that it has evaluated alternatives with the ability to avoid or minimize air pollution and wetland related impacts. The EIR should describe the footprint for each alternative, which should include detailed plans showing the proposed versus the existing grades; quantify the amount of fill (if any) proposed; and any changes, improvements, or new construction of coastal engineering structures along the shoreline on the project site. The proponent should consider the extent of the inundation zones associated with hurricanes, called SLOSH zones (Sea, Land, and Overland Hazards associated with hurricanes). It should also consider the effect of relative sea level rise on the project site and the vulnerability of the project components to coastal flooding and storm damage. The analysis should clearly present the alternative configurations at the site and identify the advantages and disadvantages of the Preferred Alternative. The EIR should provide a comparative analysis that clearly shows the differences between the environmental impacts associated with each of the alternatives for each of areas identified in this scope. It should identify if the project is compatible with zoning, regional planning, and Executive Order 385.

## Air Quality:

The EIR should estimate and analyze air quality monitoring data for existing and proposed conditions. PSD regulations require one year of preconstruction monitoring unless monitoring data of sufficient quantity and quality already exists. If modeling shows that preconstruction monitoring should be done, the most recent EPA guidelines for preconstruction monitoring should be described.

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The EIR should estimate controlled and uncontrolled emissions; including criteria and non-criteria pollutants, carbon monoxide and carbon dioxide. It should develop a top down BACT analysis for all pollutants. The EIR should consider all of the potential toxic air pollutants. It should evaluate zero ammonia technologies in its BACT analysis, and the potential emissions, impacts, and the risks should be assessed. The proponent should suggest measures to alleviate dust, noise, and odor nuisance conditions during and after construction. The EIR should identify why the facility does not include a heat recovery steam generator/electric turbine. It should also identify the number of operating hours the proposed facility would be used for a worst case scenario. Because the number of operating hours will determine the amount of air pollutants, the EIR should identify the number of operating hours proposed for the facility.

The EIR should present a thorough discussion of the meteorology and climatology for the area. Previous meteorological data from the surrounding area should be presented and evaluated for its appropriateness for use with this project. Climatology of the area should be discussed including the kind, number and intensity of episodes of elevated pollution levels.

The EIR should present a generic design for the generating station. Schematic diagrams should be prepared showing volume, direction, temperatures, and residence times of all gases and liguids through the facility.

The EIR should include dispersion modeling using EPA-approved models for all relevant air pollutants. The modeling protocol should be prepared and submitted to DEP and EPA for review and approval prior to submitting the EIR. The areas of significant impacts should be identified in the EIR. An interactive analysis should be done to take into account other large sources in the area. Elevated terrain features and nearby building heights should be identified in the EIR. The Division of Air Quality Control (DAQC) Source Review Criteria for Allowable Ambient Nitrogen Oxide Concentration (short-term NOx policy) will apply to this project.

The EIR should address whether the proponent will comply with DEP's Clean Air Construction Initiative.

#### Wetlands/Waterways:

The Commonwealth has endorsed a "No Net Loss Policy" that requires that all feasible means to avoid and reduce the extent of wetland alteration be considered and implemented. The Wetland Section of the EIR should conform to this approach by first examining options that avoid impacts to inland and coastal wetland resource areas, their associated buffer zones, riverfront protection areas and 100-year flood plain areas. Where it has been demonstrated that impacts are unavoidable, the EIR should illustrate that the impacts have been minimized, and that the project will be accomplished in a manner that is consistent with the Performance Standards of the Wetlands Regulations (310 CMR 10.00).

The EIR should address the significance of the wetland resources on site, including public

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and private water supply; riverfront areas; flood control; storm damage prevention; fisheries; shellfish; and wildlife habitat. It should identify the location of nearby public water supplies and wells. The EIR should identify any fencing proposed in areas where tidal movements may encumber debris. It should have a plan to deal with the blockage of tidal flow material.

All resource area boundaries, riverfront areas, applicable buffer zones, and 100-year flood elevations should be clearly delineated on a plan. Bordering Vegetated Wetlands that have been delineated in the field should be surveyed, mapped, and located on the plans. Each wetland resource area and riverfront area should be characterized according to 310 CMR 10.00. The text should explain whether the local conservation commission has accepted the resource area boundaries, and any disputed boundary should be identified. The EIR should provide an accurate measurement of the wetland resource areas that will be affected by the project. In the ENF, the proponent has identified that the project may impact approximately 1.4 acres of Land Subject to Coastal Storm Flowage (LSCSF) and 6,098 sf of Riverfront Area.

The EIR should also identify the amount of former filled tidelands to be impacted by the project, and this area should be identified on plans. It should describe the work within this tideland area as well as the structures proposed for licensing. The EIR should address the need to provide for public access along the waterfront as part of its Chapter 91 Licensing in spite of the proponent's desire for security and public safety. In its comment letter, DEP has determined that the proposed facility is a water dependent project. In the ENF, the Preferred Alternative is to be constructed on the waters edge with no buffer or setback provided.

For any amount of required wetlands replication, a detailed wetlands replication plan should be provided in the EIR that, at a minimum, includes: replication location(s) delineated on plans, elevations, typical cross sections, test pits or soil boring logs, groundwater elevations, the hydrology of areas to be altered and replicated, list of wetlands plant species of areas to be altered and the proposed wetland replication species, planned construction sequence, and a discussion of the required performance standards and monitoring.

### Water Consumption:

The EIR should identify the alternatives of recycling process water. It should analyze measures to minimize potable water usage with attention given to the feasibility of condensate return, process water recycling, and other non-potable sources of water. The EIR should analyze the alternative of pretreating stormwater runoff from the roofs and parking areas and using this as cooling water to supplement potable water.

## **Drainage:**

The EIR should evaluate potential drainage impacts on water resources from the project. It should include a detailed description of the existing site's drainage system design in the construction area and identify any proposed changes, including a discussion of the alternatives considered along with their impacts. The EIR should present drainage calculations such as the

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rates for stormwater runoff for the 10, 25, and 100-year storm events. It should identify the quantity and quality of flows. The proponent should consider recharge rather than discharge to the river.

Proposed activities, including construction mitigation, erosion and sedimentation control, phased construction, and drainage discharges or overland flow into wetland areas, should be evaluated. The locations of detention/infiltration basins and their distances from wetland resource areas, and the expected water quality of the effluent from said basins should be identified. This analysis should address current and expected post-construction water quality of the predicted final receiving water bodies. Sufficient mitigation measures should be incorporated to ensure that no downstream impacts would occur. The drainage analysis should ensure that on- and off-site wetlands are not impacted by changes in stormwater runoff patterns.

The EIR should address the performance standards of DEP's Stormwater Management Policy. It should demonstrate that the project is consistent with this policy. The proponent should use the DEP Stormwater Management Handbook when addressing this issue.

The EIR should discuss consistency of the project with the provisions of the National Pollutant Discharge Elimination System (NPDES) General Permit from the U.S. Environmental Protection Agency for stormwater discharges from construction sites. It should include discussion of best management practices employed to meet the NPDES requirements, and should include a draft Pollution Prevention Plan.

A maintenance program for the drainage system will be needed to ensure its effectiveness. This maintenance program should outline the actual maintenance operations, sweeping schedule, responsible parties, and back-up systems.

## Noise:

The EIR should describe the existing noise levels at the site. It should estimate projected noise levels at the site during construction and with the operation of the new generating station. The EIR should identify the nearest sensitive receptors.

#### **Construction Issues:**

The EIR should include a construction management plan that describes the project's phasing, erosion and sedimentation controls, monitoring, and contingencies. It should identify the amount of fill material required to bring the 2.8 acre site above the 500-year flood level or 14 feet mean sea level (MSL) and estimate the number of truck trips per day to complete the filling. Truck routes to the proposed construction site should be identified in the EIR. The EIR should identify demolition and construction hours and any impacts expected during peak travel hours on local roadways.

Visual/Aesthetics:

The EIR should include a visual resource assessment . The visual resource assessment should include a conceptual-level landscaping plan and building elevations from all sides. The height of any vent stack should be identified in the EIR.

### **Hazardous Wastes:**

The EIR should present a summary of the results of hazardous waste studies and remediation efforts undertaken at the project site by the proponent to comply with the Massachusetts Contingency Plan, 310 CMR 40.0000.

The EIR should provide a detailed description of the handling of all wastes from the generating station. The demineralizer system resins will be periodically removed offsite for regeneration. The EIR should identify the schedule for the removal and the receiver of these resins.

#### Mitigation:

The EIR should include a separate chapter on mitigation measures. This chapter on mitigation should include a proposed Section 61 Finding for all state permits. The proposed Section 61 Finding should contain 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. A schedule for the implementation of mitigation should also be included.

The EIR should describe the proponent's efforts to establish a public use facility at the Allen Station, a former generating facility on the Monatiquot River just north of Quincy Avenue in East Braintree and how this area would be integrated into Watson Park. It should describe the proponent's efforts to work with the community regarding the types of public facilities to be provided at this location. The proponent should consider working with the Fore River Watershed Association (FRWA) to improve the anadromous fish run and assist in working to restore the herring run in the Monatiquot River.

#### **Response to Comments:**

The EIR should respond to the comments received to the extent that the comments are within the subject matter of this scope. Each comment letter should be reprinted in the EIR. I defer to the proponent as it develops the format for this section, but the Response to Comments section should provide clear answers to the questions raised.

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### **Circulation:**

The EIR should be circulated in compliance with Section 11.16 of the MEPA regulations and copies should also be sent to the list of "comments received" below and to Braintree officials. It should be sent to the Mayors of Quincy and Weymouth. A copy of the EIR should be made available for public review at the Braintree Public Library.

August 9, 2006 DATE

Stephen R. Pritchard

Cc: Sharon Stone, DEP/SERO Senator Michael W. Morrissey

Comments received:

MA Division of Marine Fisheries, 7/12/06 BELD, 7/20/06 BELD, 7/27/06 MCZM, 7/27/06 Braintree Board of Selectmen, 7/27/06 Michael J. Cheney, 7/28/06 Laborer's International Union of North America, 7/28/06 United Brotherhood of Carpenters and Joiners of America, 7/28/06 Senator Michael W. Morrissey, 7/28/06 John Lanzendorfer, 7/28/06 Fore River Watershed Association (FRWA), 7/28/06 CITGO, 7/28/06 Local 7 - AFL-CIO, 7/31/06 Dave Curley, 7/31/06 FRWA, 7/31/06 DEP/SERO, 7/31/06 Dave Curley, 7/31/06 Joe Finn – Quincy Councillor at Large, 7/31/06 David M. Madden, Mayor of Weymouth, 7/31/06 South Shore Chamber of Commerce, 7/31/06 Sheet Metal Workers' International Association Local Union No. 17, 8/2/06 Howard K. Chadbourne, 8/2/06

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