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September 7, 2007

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS  
ON THE  
ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME : IPA Milford Expansion Project  
PROJECT MUNICIPALITY : Milford  
PROJECT WATERSHED : Charles River  
EEA NUMBER : 14077  
PROJECT PROPONENT : IPA Charles, LLC  
DATE NOTICED IN MONITOR : August 8, 2007

Pursuant to the Massachusetts Environmental Policy Act (M.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).

Project Description

As described in the Environmental Notification Form (ENF), the proposed project consists of the construction of a 22,560 square foot (sf) 170 megawatt (MW) electric generating station operating in a simple cycle mode. The generating station will utilize natural gas as a fuel, which is available at the site. The project will be constructed entirely within the property boundaries of and adjacent to the existing 149 MW electric generating plant. The Environmental Notification Form (ENF) indicates that the project is proposed in response to the regional Independent System Operator New England (ISO-NE) 2008 Forward Capacity Market (FCM) auction. The facility will operate primarily during summertime days but the proponent will seek to minimize potential licensing restrictions to allow operating flexibility throughout the year. The project consists of construction of a combustion turbine, air intake filter, continuous emissions monitoring equipment, a single exhaust stack (no more than 125 feet tall), step-up and auxiliary transformers, fin fan cooler, and auxiliary equipment. Power from the new generating unit will feed into the existing 115 kilovolt (kV) switch yard at the site. The project also includes the reconductoring of

an existing 8-mile segment of off-site transmission lines. It requires only limited volumes of water (maximum of 0.5 gallons/minute for service needs (wash water, etc). The project doesn't require any additional water for cooling, pollution control, or other process needs.

The area of the site, which is proposed for the project, is the location of the existing 12,523 sf administration building. The administration building will be demolished for the proposed project. A new 10,400 sf administration building will be built in another area of the 7.8 acre site. The existing 149 MW power plant at the site includes associated infrastructure, such as access drives and a stormwater management system. It uses wastewater effluent from the Milford Wastewater Treatment Facility (WWTF) for cooling purposes. The project also receives water from the Milford municipal water system, and it utilizes three on-site wells to supplement these other sources when needed. Residential areas exist beyond the Charles River to the east along South Central Street.

### Jurisdiction and Permitting

This project is subject to a mandatory EIR pursuant to Section 11.03 (7)(a)(2) because it involves the expansion of an existing electric generating facility by 100 or more MW. The project requires a Non-Major Comprehensive Air Plan Approval and a Modification to its Operating Permit Program from the Department of Environmental Protection (MassDEP). It will require an Approval to Construct Permit from the Energy Facilities Siting Board (EFSB). The existing facility has an Industrial Wastewater Discharge Permit from MassDEP to discharge wastewater to the Milford Wastewater Treatment Facility (MWTF) and this permit will not be altered. The project may require a National Pollutant Discharge Elimination System (NPDES) General Permit for stormwater discharges from a construction site from the U.S. Environmental Protection Agency. It may require a Stack Registration Permit from the Federal Aviation Administration. The subject matter of the EFSB approval is sufficiently broad in scope, including socioeconomic impact analysis and quality of life issues, to confer broad scope jurisdiction to the MEPA Office to all aspects of the project that may cause damage to the environment.

Potential environmental impacts are associated with the alteration of 4,356 sf of land, the creation of 4,356 sf of new impervious surfaces, the emission of air pollutants associated with energy generation, and the generation of noise. The expansion will consume approximately 72 gpd of water, and it will generate a similar amount of wastewater.

### SCOPE

As modified by this scope, the EIR should conform to Section 11.07 of the MEPA regulations for outline and content. The Draft EIR (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 DEIR should describe in more detail the demand for the project within the context of

the project's consistency with applicable state regulations, policies and plans. This should include a discussion of ISO New England's most recent Regional System Plan and other relevant studies of the region's projected future electrical energy demands. It should address the project's contribution to the region's projected future electrical energy demands relative to other peak power generating facilities and the projected regional demand for more peaking power resources for Massachusetts.

The DEIR should provide a detailed project description with a summary/history of the project. It should include existing and proposed site plans. The DEIR should identify existing plant operations, information and data on existing air emissions for the last 5 years, the actual operating hours and the times of the day and year for the last 5 years, the permitted operating hours, existing noise levels at the nearest sensitive receptors, and the handling of stormwater runoff at the site.

The DEIR 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 DEIR should contain sufficient information to allow the permitting agencies to understand the environmental consequences of their official actions related to the project.

The DEIR should include a narrative addressing the following subjects:

- The Clean Air Act
- **The 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, Regional Greenhouse Gas Initiative (RGGI), Draft EEA Greenhouse Gas Policy, and the Public Participation Element
- Non-attainment Review
- **Good Engineering Practice (GEP)** Stack Height
- State Review Process
- **Local, State, and Federal** Regulations dealing with 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 DEIR 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

The DEIR should identify criteria used to select the project site, identify alternative sites considered and compare associated environmental (including public health and safety) impacts. It should identify how the proposed fuel and combustion technologies were selected and identify

alternative fuels/technologies that could meet demand while further minimizing emissions of air pollutants.

In addition to the Preferred Alternative, the No-Build Alternative, the DEIR should develop an alternative generating station site/or alternatives at the existing site. The proponent should demonstrate with these three alternatives that it has evaluated alternatives with the ability to avoid or minimize air pollution and related impacts. The DEIR 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, or improvements. Are the proposed sites subject to flooding? The analysis should clearly present the alternative configurations at the site and identify the advantages and disadvantages of the Preferred Alternative. The DEIR 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 DEIR should estimate and analyze air quality monitoring data for existing and proposed conditions. If air quality modeling shows that preconstruction monitoring should be done, the most recent EPA guidelines for preconstruction monitoring should be described.

The DEIR 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 DEIR 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 DEIR 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 DEIR should identify the number of operating hours proposed for the facility.

The DEIR 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 DEIR 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 liquids through the facility.

The DEIR should include dispersion modeling using EPA-approved models for all relevant air pollutants. The modeling protocol should be prepared and submitted to MassDEP and the EPA for review and approval prior to submitting the DEIR. The areas of significant impacts should be identified in the DEIR. 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 DEIR. The Division of Air Quality Control (DAQC) Source Review Criteria for Allowable Ambient Nitrogen Oxide Concentration (short-term NO<sub>x</sub> policy) will apply to this project.

The DEIR should address whether the proponent will comply with DEP's Clean Air Construction Initiative. It should demonstrate that the project will not have significant impacts on air quality, and it should include relevant modeling and analysis to demonstrate consistency with regulatory standards. The DEIR should include air dispersion modeling, prepared consistent with MassDEP guidance, to demonstrate compliance with applicable Massachusetts and National Ambient Air Quality Standards. This section should include a Best Available Control Technology (BACT) analysis to demonstrate how air emissions will be controlled consistent with regulatory requirements.

As a natural gas plant with a capacity greater than 25 MW, the project will be subject to the Regional Greenhouse Gas Initiative (RGGI). RGGI is a cap-and-trade program aimed at stabilizing and then reducing carbon dioxide (CO<sub>2</sub>) emissions from large fossil-fuel-fired electric generating facilities. Any power plants above the nameplate capacity of 25 megawatts will be subject to RGGI carbon dioxide implementation mechanisms. The DEIR should include projections of annual carbon dioxide emissions.

In addition, to address growing concern about the impacts of climate change and the development of solutions, MEPA recently drafted a Greenhouse Gas Policy that is undergoing public review. This Policy will require a quantitative analysis of greenhouse gas emissions and associated mitigation measures. Currently, MEPA is requiring a qualitative analysis of greenhouse gas emissions and mitigation measures from a specific class of projects including those that are required to develop an EIR and require an air permit. The DEIR should identify the project's greenhouse gas emissions and identify measures to avoid, minimize and mitigate these emissions. The proponent may refer to the Draft EEA Greenhouse Gas Policy for guidance in developing this analysis.

I encourage the proponent to consult with MassDEP prior to the filing of the DEIR to discuss permit requirements and ensure that the information and analysis included in the DEIR will adequately address its requirements.

### Drainage

The DEIR 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 DEIR should present drainage calculations such as the 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 nearest water body/resource area.

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 DEIR 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 MassDEP Stormwater Management Handbook when addressing this issue.

The DEIR should discuss the 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 it 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 DEIR 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 DEIR should identify the nearest sensitive receptors.

The DEIR should include an analysis of noise impacts and should demonstrate consistency with MassDEP regulations and policies regarding noise (i.e. CMR 7.09 and Policy 90-001). It should analyze existing and proposed conditions. The DEIR should also estimate noise levels if both plants are operated simultaneously and it should estimate how often this might occur.

The DEIR should discuss mitigation measures associated with the existing power plant and discuss its effectiveness. The proponent should commit to implementing all feasible noise attenuation measures to mitigate the project's potential noise impacts to existing residences in the project area.

### Water Use/Wastewater

As noted previously, the project will use minimal amounts of water (72 gallons per day) and will not require any additional water for cooling, pollution control or other process needs. The ENF indicates that water will be supplied by the Town of Milford water system, recycled wastewater from the Milford WWTF, and three on-site wells. As requested by MassDEP, the DEIR should include documentation from the Milford Water Department demonstrating that adequate hydraulic capacity is available consistent with the Public Water System's Water Management Registration and/or Permit requirements. Additional consideration for requirements for fire flow, minimum distribution pressure, storage capacity, etc., should also be adequately

addressed.

The DEIR should provide information regarding the treatment and discharge of existing wastewater flows and the status of the Sewer Connection Permit for the existing power plant.

#### Construction Issues

The DEIR 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 at the project site 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 DEIR should identify demolition and construction hours and any impacts expected during peak travel hours on local roadways. The proponent should consider utilizing the adjacent rail spur for the delivery of construction components and equipment such as the turbine to reduce truck traffic to the site.

Participation in the MassDEP Diesel Retrofit Program is a way to mitigate adverse construction-period impacts from diesel emissions. I encourage the proponent to work with MassDEP to implement construction-period diesel emission mitigation, which could include the addition of after-engine emission controls such as oxidation catalysts or particulate filters. Additional information is available at: <http://www.mass.gov/dep/water/wastewater/diesel.pdf>. In addition, the proponent should consider requiring contractors to use on-road low sulfur diesel (LSD) fuel in their off-road construction equipment.

#### Visual/Aesthetics

The DEIR 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 DEIR 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. It should provide a detailed description of the handling of all wastes from the generating station. The DEIR should identify the schedule for the removal and the receiver of these resins.

#### Mitigation

The DEIR 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.

Response to Comments

The DEIR 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 DEIR. 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.

Circulation

The DEIR 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 Milford and Hopedale officials. A copy of the DEIR should be made available for public review at the Milford and Hopedale Public Libraries.

September 7, 2007

Date



Ian A. Bowles

## Comments received:

MassDEP/CERO, 8/16/07

Mark Mitsock, 8/21/07

Kathleen M. Tosches, 8/25/07

Milford Water Company, 8/27/07

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IAB/WTG