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December 3, 2007

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

PROJECT NAME : Stony Brook Energy Center – Phase II  
PROJECT MUNICIPALITY : Ludlow  
PROJECT WATERSHED : Chicopee  
EOEA NUMBER : 13889  
PROJECT PROPONENT : **Massachusetts Municipal Wholesale Electric Company**  
(MMWEC)  
DATE NOTICED IN MONITOR : October 27, 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).

Project Description

As described in the Final EIR, the project involves the construction of a 280 megawatt (MW) (nominal) natural gas and #2 distillate-oil (ultra low sulfur) fired combined cycle energy facility that will supply electricity into the New England Power Pool (ISO) system. The Massachusetts Municipal Wholesale Electric Company (MMWEC) has identified a need among its 26 member municipal utilities for approximately 500 MW of new energy resources by 2012, including 300 MW of “baseload” capacity. The system will consist of a single General Electric Frame 7FB (or equivalent) Combustion Turbine/Generator with exhaust stack, a heat recovery stream generator as well as a separate steam turbine with an electric generator and the necessary ancillary equipment. The F-Class unit is the most recent gas turbine technology. The plant will be fueled with natural gas, obtained via an existing on site gas pipeline and compressed to

approximately 500 psi. The MMWEC site consists of approximately 417 acres of industrially zoned property which is currently used for the MMWEC corporate offices and the existing Stony Brook Plant. Approximately 10 acres will be used for the footprint of the new facility and ancillary structures.

### Thresholds and Jurisdiction

The project is undergoing review and requires the preparation of a mandatory EIR pursuant to section 11.03 (7)(a)(2) of the MEPA regulations, because the project involves the expansion of an existing electric generating facility by 100 or more megawatts. This project is also subject to review pursuant to Sections 11.03 (1)(b)2 , 11.03 (2)(b)1 , 11.03 (4)(b)2 , and 11.03 (5)(b)4.a of the MEPA regulations, because the project will create 5 or more acres of impervious area, alter designated habitat, expansion in withdrawal of greater than 500,000 gallons per day (gpd) from a water supply system above the lesser of current system wide withdrawal volume, and expansion in discharge of industrial wastewater by more that 100,000 gpd. The project will also require numerous state permits and agency actions, including: Approval to Construct from the Energy Facilities Siting Board (EFSB); a Major Comprehensive Approval under 310 CMR 7:00 from the Department of Environmental Protection (MassDEP); a New Source Approval and a Sewer Connection/Extension Permit from MassDEP; a permit for tank of capacity greater than 10,000 gallons (527 CMR; 502 CMR 5) from the State Fire Marshall Office and an Order of Conditions from the Ludlow Conservation Commission (and hence a Superseding Order from MassDEP if the local Order were appealed). The project will also require several federal environmental permits including a Prevention of Significant Deterioration permit from the U.S. Environmental Protection Agency (US EPA) and Federal Aviation Administration (FAA) Approval for Stack and Construction Cranes.

Because the proponent is not seeking financial assistance from the Commonwealth for the project, MEPA jurisdiction is limited to those aspects of the project that are likely to directly or indirectly cause Damage to the Environment and that are within the subject matter of required or potentially required state permits or agency actions. Given the numerous permits and agency actions (and the broad scope of the EFSB and MassDEP permit reviews), MEPA subject matter jurisdiction exists over virtually all of the potential environmental impacts of the project.

### 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. The FEIR described each state agency action required for the project and how the project is compatible with the performance standards.

In response to comments on the Draft EIR the FEIR included a more detailed discussion of stormwater discharge issues. The FEIR contained a Sanitary Sewer Capacity Analysis relating to the wastewater discharge into the Town of Ludlow Sanitary Sewer System. The FEIR also included a more detailed description of the emergency diesel generator that will be utilized to supply back-up power during periods when the transmission line serving the plant is out of service or local power is unavailable.

The project site is located within Priority Habitat and Estimated Habitat and therefore requires review through a direct filing with the Natural Heritage & Endangered Species Program (NHESP) for compliance with the Massachusetts Endangered Species Act (MESA, MGL c131A) and its implementing regulations (321 CMR 10.00). The Blue-spotted Salamander, (*Ambystoma laterale*), has been documented to occur on the project site or within close proximity. This species is state-listed and protected as "Special Concern" in accordance with MESA. The proponent should attempt to avoid a "take" of the species. If a "take" cannot be avoided then the proponent must apply for a Conservation & Management Permit. I encourage the proponent to continue working closely with NHESP as they have done the review of the ENF, Draft EIR and FEIR. Provided that the proponent comply with the conditions noted in the comment letter from NHESP and there are no changes to the project plans, NHESP projects that this project will not result in a "take" of state listed species.

Since the review of the Draft EIR, the proponent submitted to MassDEP a Request for Determination of Applicability (RDA) as to the extent and boundaries of all jurisdictional resource areas at the site. MassDEP received it June 8, 2007. On July 26, 2007, the Ludlow Conservation Commission issued a Determination approving the boundaries of Bordering Vegetative Wetlands, Bank, Isolated Land Subject to Flooding and a vernal pool habitat. The Commission also issued a Negative 3 Determination on the work with the requirement that the applicant meet all NHESP requirements and obtain all other necessary permits such as a town storm water permit.

The FEIR states that natural gas will be the primary fuel of use for up to six (6) months per year and that ultra low sulfur distillate fuel/biofuel will be the fuels of use for the balance of the year. During the plan application review, I remind the proponent that MassDEP will require a Best Available Control Technology analysis to determine the allowable amounts for each fuel of use.

The FEIR also included the projected annual emissions for the project. The emergency generator has been included in the project emissions and the air quality analysis. The updated air quality modeling analysis also contains startup/shutdown conditions. In addition, an air quality impact analysis for fine particulates has been completed.

### 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:

#### *Air Quality*

- Use of clean-burning natural gas as primary fuel.
- Use of ultra low sulfur distillate (ULSD) oil as a secondary fuel.

- Use of advanced combustion and pollution control technologies including dry low-NOx combustor for gas firing, and SCR and oxidation catalysts that represent LAER and BACT.
- Acquisition of offsets at 1.26:1 for potential NOx and VOC emissions
- Acquisition of ozone season NOx allowances in compliance with Federal CAIR Program.
- Acquisition of SO2 allowances in compliance with Federal Acid Rain program.
- Acquisition of CO2 allowances in compliance with the RGGI program.
- Construction contractors will be required to: (1) wet or otherwise control dust resulting from demolition activities; (2) wet and/or cover open soil areas as necessary to prevent generation of dust; (3) implement final grading, seeding and/or paving of exposed areas as quickly as practical; (4) cover all transported material with a potential to generate dust; and (5) in the event of spills, to remove any spilled material as quickly as possible.
- Construction contractors will be prohibited from using construction vehicles and other powered equipment that do not meet applicable regulatory emissions requirements, and from unnecessary idling of vehicles or other powered equipment. Contractors will be required to remove from service any malfunctioning vehicles or equipment and to implement a program to minimize the use and evaporation of volatile chemicals.

#### *Aviation*

- Construction cranes will be lighted and marked per FAA requirements, and lowered to a height of 150 feet or less when not in use. The proponent will inform the Westover Metropolitan Airport of all relevant construction activities on a regular basis.
- The new stack will be the same height as 3 existing stacks. The proponent proposes to light and mark the new stack in the same manner as the existing stacks. Spacing from the Westover Metropolitan Airport runways complies with all statutory requirements.

#### *Rare Species*

- During construction, impenetrable erosion control barriers will be installed and maintained around the perimeter of the construction site to insure that migrating salamanders do not cross onto the construction site.
- Approximately 2.5 acres of open land on the Stony Brook site will be converted to mixed deciduous forest. MMWEC will avoid impacts to wetlands habitat by construction of a large retention basin designed for the 100-year storm event (see also wetlands mitigation).

#### *Wetland*

- The limits of construction work do need to extend into buffer zones in some areas, but will not encroach on any actual wetland boundaries. Comprehensive erosion and sediment controls will be used and maintained along all boundaries of work.
- Drainage and storm water runoff from the northern portion of the site will be managed on-site by construction of a "wet" storm water retention basin designed to detain the runoff generated by a 24-hour, 100-year storm. Post-construction runoff will be limited to no more than the pre-construction rate. An oil-water separator will be provided at the outlets of the retention basin to control water quality. The retention basin outlet will be located to retain the "first flush" of sediment that may accumulate within the basin and this sediment will be removed periodically to maintain basin design depth. The existing

Site Storm Water Pollution Prevention Plans will be updated for the Project to ensure adequate control and containment of operational activities with potential for causing stormwater impacts.

#### *Water Supply*

- Significant water conservation measures are incorporated in the Project design. Such measures include the use of an air-cooled steam condenser, dry low-NOx combustion as opposed to steam or water injection for the control of NOx emissions during gas-fired operation, implementation of increased cooling cycles, and the recycling of storm water from the oil storage tank containment dike and unloading areas.

#### *Wastewater*

Process wastewater will be pretreated as necessary prior to discharge to the Ludlow sewers/SWSC Bondi's Island Treatment plant. Demineralization wastewater, boiler blowdown, and wastewater passing through floor drains in chemical storage and treatment areas will be treated in a wastewater neutralization system. Wastewater passing through floor drains in other than chemical storage and treatment areas will pass through oil/water separators.

#### *Hazardous Waste*

- The excavation contractor will be required to approximately monitor and respond to the unexpected discovery of any evidence of subsurface contamination. All waste material generated will be appropriately contained by the construction contractors and disposed off-site in accordance with all applicable regulations.
- All hazardous wastes generated will be stored and disposed of in accordance with applicable federal and state regulations. The proponent will recycle waste oil for heat recovery in two on-site waste oil furnaces under a DEP Class A recycling permit currently held. The proponent will recycle other wastes such as paper and cardboard to the maximum extent practicable.

#### *Noise*

- A low noise air-cooled condenser and a low-noise inlet air chiller cooling tower will be specified. The combustion turbine air intake will be equipped with duct silencers. Reduced noise transformers will be specified. The combustion turbines, steam turbines, and generators will be enclosed with vendor supplied equipment to reduce equipment noise within the power generation building. Duct silencers will be required to mitigate sound produced by compartment and enclosure ventilation fans. The combustion turbine, HRSG, steam turbine, generators, boiler feed pumps, cooling water pumps, and other auxiliary equipment will be housed within the power generation building. Building interior surfaces will be sound absorptive, and the average sound level in the building will be controlled to 85 dBA or less. In addition, all building ventilation equipment (louvers, and exhaust fans), and entryways will be carefully oriented, and/or acoustically treated to meet project acoustic design goals.
- Construction contractors will be required to comply with all regulatory requirements limiting noise from trucks and powered equipment. In addition, contractors will be required to maintain sound muffling devices in good repair through the construction

period.

*Traffic*

- Construction shift schedules do not significantly overlap with peak traffic hours on local streets. MMWEC will monitor the construction traffic and potential impacts at Moody Street/Holyoke Street intersection and arrange for traffic control officers in coordination with the Ludlow Police Department if determined necessary.

*Visual*

- The facility stack will be the same height as 3 of the existing stacks (150'). The appearance of the Project structures will be consistent with structures in the surrounding area. Project structures will be painted a neutral color similar to the existing structures to minimize the visibility of the Project.

Conclusion

I am satisfied that the proponent, through its various submissions under MEPA, has adequately assessed the potential impacts of the project and committed to measures that will avoid, minimize and mitigate adverse impacts. I am also satisfied that any remaining issues can be addressed through the state and local permitting processes. The proposed project requires no further review under MEPA and may proceed to permitting. The permitting agencies should forward a copy of their final Section 61 Findings to the MEPA Office for completion of the project file. The Proponent should contact the MEPA office if a Conservation & Management Permit is required for the project to determine if a Notice of Project Change (NPC) is required. Lastly, I note that the MEPA Office recently released a Greenhouse Gas (GHG) Emissions' policy. I encourage the project proponent to consider and implement measures to avoid, minimize, and mitigate the GHG Emissions from this project.

December 3, 2007

Date



Ian A. Bowles

Comments received:

- 11/06/07 Division of Fisheries & Wildlife, Natural Heritage & Endangered Species Program
- 11/26/07 Massachusetts Department of Environmental Protection, Western Regional Office

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