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March 6, 2009

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

PROJECT NAME : Pioneer Valley Energy Center  
PROJECT MUNICIPALITY : Westfield  
PROJECT WATERSHED : Westfield River  
EEA NUMBER : 14151  
PROJECT PROPONENT : Westfield Land Development Company, LLC  
DATE NOTICED IN MONITOR : January 21, 2009

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

According to the FEIR, the project involves the construction of a 400-megawatt (MW) (nominal power output) energy generating facility, consisting of one combined-cycle combustion turbine and associated infrastructure, fueled primarily by natural gas, with Ultra Low Sulfur Distillate (ULSD) fuel as a back-up for limited periods, on a 45-acre industrially zoned site located on Ampad Road in Westfield. The turbine will be equipped with a Selective Catalytic Reduction (SCR) emissions control system to minimize emissions of nitrogen oxides (NO<sub>x</sub>) and an oxidation catalyst to minimize emissions of carbon monoxide (CO) and volatile organic compounds (VOCs). The facility will include: storage tanks for storage of ULSD fuel, water, and aqueous ammonia, a switching yard, various pumps and ancillary structures, and one emissions stack (180 feet in height). The electricity generated by the facility will be distributed to the commercial electricity distribution grid through existing 115 kV transmission lines that

bisect the project site and presently connects Northeast Utilities' (NU) Buck Pond and Pochassic Substations. Natural gas will be provided to the project through a pipeline connection to an existing Westfield Gas and Electric (WG&E) delivery system. The cooling tower makeup water supply for the project will be supplied from the City of Holyoke's Tighe-Carmody Reservoir via a new water supply pipeline connection to existing water supply lines that run between the Tighe-Carmody Reservoir and the Ashley Reservoir to the north of the project site. Project wastewater will be discharged to the City of Westfield Wastewater Treatment Plant.

There will be no restrictions on the daily operation of the combustion turbine. The combustion turbine will be permitted for unrestricted operation on natural gas and for the equivalent usage of up to 1,440 hours per year of operation at its maximum firing rate on ULSD. Combustion turbine ULSD usage will be limited to 21.0 million gallons per 12-month period. The auxiliary boiler will be limited to the equivalent of no more than 1,100 hours of operation per year at maximum heat input. The emergency generator and fire pump will each be limited to no more than 300 hours of operation per year. Other than one hour per week for maintenance and testing, which will only occur between the hours of 8AM and 5PM, the diesel generator and fire pump will not operate concurrently with the turbine. The environmental impact analyses conducted as part of the FEIR were presented with consideration for these limitations and represent worst-case scenarios based upon the operating limits that will be imposed on the project as part of the permitting process.

### Jurisdiction

The project is undergoing review and required the preparation of an EIR pursuant to Section 11.03 (7)(a)(I) of the MEPA regulations, because the project involves the development of a new electric generating facility with a capacity greater than 100 MW. The project also exceeded ENF thresholds due to the construction of a new major stationary source with federal potential emissions, after construction and imposition of required controls, of: 100 TPY or more of CO and 50 TPY or more of NO<sub>x</sub> (301 CMR 11.03(8)(b)(1)) and the new discharge of 100,000 or more gallons per day (gpd) of industrial waste water (301 CMR 11.03(5)(b)(4)(a)). The project will require numerous State, Federal and local permits including, but not limited to: approval of a Bulk Electric Generating Facility and Gas Pipeline from the Energy Facilities Siting Board (EFSB); a Major Comprehensive Plan Air Approval and Sewer Connection Permit from the Massachusetts Department of Environmental Protection (MassDEP); a Storage Tank Permit from the Massachusetts Department of Public Safety; a Conservation and Management Permit from the Massachusetts Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program (NHESP); a Notice of Proposed Construction from the Federal Aviation Administration (FAA); approval under the Prevention of Significant Deterioration (PSD) program and an Acid Rain Permit from the United States Environmental Protection Agency (U.S. EPA); and a National Pollutant Discharge Elimination System (NPDES) Construction General Permit from the U.S. EPA. Local permits include: an Order of Conditions from the Westfield Conservation Commission (and in the case of an appeal, a Superseding Order of Conditions from MassDEP); and Site Plan Approval, Special Permit, Building Permits, and a Sanitary Sewer Permit from the City of Westfield.

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 as defined in the MEPA regulations and that are within the subject matter of required or potentially required state permits or agency actions. However, given the numerous state agency actions required and the broad scope of the EFSB review, MEPA jurisdiction extends to virtually all aspects of the project.

### Project Changes Since the DEIR

The FEIR outlined several changes to the project since the review of the DEIR. The Proponent states that they have refined the project to further reduce impacts to the environment and the community.

Notable project changes include:

- The combustion turbine is now proposed to be permitted for operations 24 hours per day while firing ULSD instead of the 8 hours per day on ULSD as presented in the DEIR. The maximum permitted operating hours on ULSD remains at 1,440 per year.
- The diameter of the combustion turbine/heat recovery steam generator (HRSG) has been increased from 19 feet to 21 feet due to refinements in equipment design.
- The auxiliary boiler's maximum heat input rate has been reduced from 66.2 MMBtu/hr to 21 MMBtu/hr.

### Review of the FEIR

The FEIR provided an updated project summary including a project description, discussion of the anticipated operations and equipment, a list of permits required and their current review status, and a discussion of enhanced public participation efforts in accordance with the Executive Office of Energy and Environmental Affairs (EEA) Environmental Justice (EJ) Policy. The FEIR included a response to comments section.

### *Alternatives Analysis*

The FEIR contained an alternatives analysis comparing the potential environmental impacts associated with a mechanical draft wet cooling tower versus and air cooled condenser to meet the project's cooling demand. This analysis evaluated impacts associated with the project assuming the plant was operated at its maximum permitted levels. The parameters compared between wet cooled and air cooled technologies were presented in tabular format as requested in the Certificate on the DEIR, with a supporting explanatory narrative. The alternatives analysis concluded that the use of a wet cooling tower will result in fewer cumulative environmental impacts and is the Preferred Alternative to an air-cooled condenser.

*Air Quality*

An updated and revised air quality analysis was included in the FEIR to demonstrate compliance with applicable air quality requirements. The project will be subject to the PSD Review (40 CFR Part 52.21), the Federal New Source Performance Standards (NSPS) for newly constructed emission sources (40 CFR 60, Subpart KKKK), and MassDEP Industry Performance Standards (310 CMR 7.26). The project will require Major Comprehensive Plan Air Approval (Air Quality Permit) from MassDEP. The FEIR contained a discussion of potential air quality impacts associated with NO<sub>x</sub>, sulfur dioxide (SO<sub>2</sub>), sulfuric acid (H<sub>2</sub>SO<sub>4</sub>), Particulate Matter (PM<sub>10</sub> and PM<sub>2.5</sub>), CO, VOCs, Ammonia (NH<sub>3</sub>), Carbon Dioxide (CO<sub>2</sub>), and Hazardous Air Pollutants (HAPs) emissions from the combustion turbine, as well as potential air quality impacts from the auxiliary boiler, emergency generator, and emergency fire pump. The dispersion modeling analysis initially utilized the SCREEN3 model, evaluating turbine, boiler, emergency generator, and fire pump emission characteristics at various ambient temperatures and operating loads. Further dispersion model refinements were performed using EPA's AERMOD model to evaluate the pollutants and averaging periods for which SCREEN3 modeling yielded results above EPA's Significant Impact Levels (SILs). These analyses included supporting data and clearly stated assumptions used in the various modeling techniques.

The air quality impact analysis demonstrated that the maximum ambient air impacts resulting from emissions from the facility are below EPA's SILs, and will not cause or contribute to an exceedance of National Ambient Air Quality Standards (NAAQS) or Massachusetts Ambient Air Quality Standards (MAAQS). The project has implemented Best Available Control Technology (BACT) to minimize air emissions. This BACT analysis also included a Lowest Achievable Emission Rate (LAER) determination for NO<sub>x</sub> emissions from the project. The air quality analysis determined that the facility will not be a major source of HAPs.

*Greenhouse Gas Analysis*

The FEIR presented a revised greenhouse gas (GHG) analysis based upon the MassDEP comment letter on the DEIR. A baseline assessment of the facility estimated a generation of 1,306,421 tons per year (tpy) of direct and indirect CO<sub>2</sub> emissions. The GHG analysis included a discussion and quantification of GHG reductions to be achieved through building design and operations measures. The FEIR identified potential GHG reductions of approximately 16,400 tpy associated with the implementation of energy efficiency measures within the project's building, the vast majority of which come from the elimination of refrigerants in the HVAC system. While the analysis did not compare these GHG reductions to the building's baseline emissions, MassDEP has found the estimated reductions to be acceptable given the nominal GHG contributions associated with the buildings for a project of this nature.

The FEIR also included an expanded discussion of the role biofuels may play in the project and technical challenges facing implementation of a biofuel-powered facility of this scale. The FEIR estimated a potential net reduction of approximately 128,000 tpy of CO<sub>2</sub> resulting from biofuels substitution, including a 50 percent reduction associated with switching from ULSD as the back-up turbine fuel. However, the FEIR concluded that a lack of sufficient test data on the effects of biofuels on turbine operation, barriers to obtaining manufacturers'

guarantees, market-related supply insufficiencies, and potential increases in certain air pollutants associated with biofuel use prevent the use of biofuels at the facility from being a viable option in the near-term. MassDEP has recommended that these barriers to biofuel usage be explored in further depth during the air permitting process. As such, the Proponent may be required to perform additional analyses as part of the Air Quality Permit application process and MassDEP has noted that permits may be able to be conditioned to permit biofuel use in the future if it becomes more viable. At a minimum, the Air Quality Permit issued by MassDEP would formalize commitments to continue to explore biofuel use and obligate the Proponent, as part of its annual facility reporting requirements, to update MassDEP on biofuel availability and turbine performance results.

The FEIR also included a commitment to implement an innovative, small-scale hydropower generation project as an additional measure to mitigate its GHG generation. The proposed mitigation project would include the installation of a water turbine in the cooling water supply line from the Tighe-Carmody Reservoir. The FEIR estimates the potential energy generation from such an installation at approximately 30kW. MassDEP supports this mitigation project because it is located within the affected region and incorporates an innovative approach to generating renewable energy. MassDEP has noted that this project is not intended to offset the turbine's GHG emissions, as these emissions will be addressed through facility's compliance with the Regional Greenhouse Gas Initiative (RGGI). The Proponent will purchase an estimated \$4 million worth of allowances on an annual basis for its direct CO<sub>2</sub> emissions to satisfy the requirements of the Massachusetts CO<sub>2</sub> Budget Training Program.

### *Noise*

The FEIR contained an updated noise assessment to demonstrate compliance with 310 CMR 7.10, MassDEP Noise Policy 90-001, and the Westfield Noise Ordinance. This updated assessment included a more comprehensive data evaluation by evaluating all ambient noise data and comparing the lowest L<sub>90</sub> levels, irrespective of the time of day, to the modeled plant operating noise levels. Noise impacts were modeled at site property lines and nearest residential receptors. The analysis concluded that future noise levels associated with the operation of the facility will comply with MassDEP noise criteria limits at all residential receptor locations. The MassDEP pure tone criteria will be satisfied at all locations. The facility will also comply with the Westfield Noise Ordinance limits at site property lines. However, the project will exceed MassDEP criteria limits at three of the plant's five property lines. The Proponent intends to seek a waiver from the MassDEP Noise Policy for the property line exceedances given the non-noise-sensitive industrial land uses adjacent to the site.

The FEIR also included a construction period noise assessment. Construction activities at the facility site will comply with the applicable portions of the Westfield Noise Ordinance. The FEIR contained an assessment of potential noise impacts associated with the horizontal directional drilling (HDD) activities proposed for the installation of the natural gas pipeline beneath the Westfield River. This analysis discussed the applicability of the Westfield Noise Ordinance, potential noise impacts to the nearest residences during the HDD operations, and a conceptual noise mitigation plan for HDD operations. The Proponent should work with the City

of Westfield to finalize this construction period noise mitigation plan prior to the commencement of construction.

### *Stormwater*

The FEIR included a description of the stormwater management plan proposed for the project site. The FEIR evaluated the proposed stormwater runoff flow patterns, the use of direct infiltration of stormwater, and the use of impervious containment areas and pervious equipment areas. As directed in the Certificate on the DEIR, the FEIR included a discussion of the types of Low Impact Development (LID) techniques that were considered for use on-site. Finally, the FEIR contained a description of how the project complies with the MassDEP Stormwater Management Regulations, including total suspended solids (TSS) removal, as well as the non-applicability of the MassDEP Underground Injection Control (UIC) Program. As part of the Notice of Intent submission for this project, the Proponent should address the outstanding stormwater concerns raised in the comment letter issued by the Connecticut River Watershed Council (CRWC).

### *Wetlands*

The FEIR included a summary of potential project impacts to wetland resource areas. There are no proposed direct wetland resource area impacts at the energy facility site. State, federal, and locally regulated wetlands and streams are found along the proposed gas pipeline and water connection routes. The FEIR has noted that any impacts to wetland resource areas associated with the gas pipeline and water supply installation will be temporary in nature, with in-situ soils or stream beds being replaced after pipeline installation and grades being returned to their prior condition. Wetland and stream crossings will implement standard crossing technologies and Best Management Practices (BMPs) that minimize impacts. The project will require the filing of a Notice of Intent in accordance with the Massachusetts Wetlands Protection Act.

The majority of wetland resource areas along the gas pipeline route were field delineated in October 2008. Wetland resource areas along the remaining portions of the gas pipeline and water supply connection routes are proposed for delineation in the spring of 2009. The FEIR included a discussion of potential Limited Project provisions associated with the project in accordance with the Massachusetts Wetlands Protection Act. The FEIR described potential cumulative impacts to Waters of the United States within the Commonwealth and mitigation measures that will be implemented to avoid, minimize or mitigate impact to these jurisdictional areas. The HDD associated with the crossing of the Westfield River does not trigger the threshold for a Chapter 91 License or Permit from MassDEP. Upon completion of the additional wetland delineation, the Proponent should determine the cumulative amount of wetland resource area impact and file a Notice of Intent in accordance with the Massachusetts Wetlands Protection Act and/or a Section 401 Water Quality Certificate application.

### *Rare Species*

The FEIR summarized the ongoing collaborative efforts between the Proponent and NHESP related to the anticipated endangered species permitting for the project. Since the filing of the DEIR, a full season of Eastern Box Turtle (*Terrapene carolina*) field studies were completed on the site and submitted to NHESP. The Proponent has reviewed the work areas (staging and pulling pits) along the existing water supply line to assess potential habitat for both Eastern Box Turtle and Wood Turtle (*Glyptemys insculpta*) and visited the habitat areas associated with the Westfield River. The Westfield River has been identified as habitat for two freshwater mussels, Triangle Floater (*Alasmidonta undulate*) and Creeper (*Strophitus undulates*). The FEIR demonstrated how the project intends to comply with the Conservation Management Permit performance standards of 321 CMR 10.23. Strategies to mitigate rare species impact include habitat protection and enhancement, installation of isolating structures, turtle clearing surveys, additional land acquisition or mitigation, construction practices, and contractor education.

The NHESP comment letter on the FEIR states that the project will result in approximately 21.3-acres of impact to the Eastern Box Turtle and 0.75-acres of impact to the Wood Turtle. It is estimated that 30 percent of these impacts are in areas that will revert back to their previous vegetative condition within one to two years of the project. NHESP anticipates that the project will not result in a “take” of the Creeper or Triangle Floater, as defined in the MESA regulations (321 CMR 10.00). The Proponent should submit materials for formal MESA review pursuant to 321 CMR 10.18 and Permit pursuant to 321 CMR 10.23 as directed in the NHESP comment letter on the FEIR.

### *Water Resources*

The FEIR states that the project will average approximately 120,000 gpd of potable water from the City of Westfield’s water supply system, with a peak demand of up to 500,000 gpd during periods of ULSD firing. The cooling tower makeup water demand from the City of Holyoke’s Tighe-Carmody Reservoir will typically be less than 1.8 million gpd, with a peak demand of up to 2.0 million gpd during periods with high ambient temperatures. I note the thorough comments submitted on behalf of the CRWC with regard to the potential impact of this project on water resources. I have consulted with MassDEP and the project Proponent during the FEIR review period to clarify several of the issues raised by the CRWC. While due to the nature of the withdrawals no MassDEP permits are required for either the use of water from the City of Westfield water supply system or the withdrawals from the Tighe-Carmody Reservoir, I have outlined later in this certificate additional mitigation measures that could potentially be undertaken to further mitigate any impacts to water resources and I am requesting that the EFSB include consideration of these additional measures in its review process.

The FEIR provided updated information on potable and cooling water demand, adequacy of capacity and infrastructure, and potential water withdrawal impacts on the Tighe-Carmody Reservoir and Manhan River. The FEIR included a general discussion of characteristics of the Tighe-Carmody Reservoir, existing permitted water withdrawal levels, Holyoke Water Works

(HWW) operations, and data supporting the trend of overall decline in HWW water consumption. Some of these data were anecdotal or based on observations by HWW staff. The FEIR evaluated the potential project impact on flows to the Manhan River through the use of Streamstats software, as limited data from USGS records are available. The FEIR noted the limited applicability of the Streamstats software for a river that does not maintain a normal flow regime (i.e. is altered by dam regulation or water withdrawals). Both the CWRC and Water Resources Commission (WRC) acknowledged the potential shortcomings of these analyses due to a lack of substantial concrete data to model within their respective comment letters on the FEIR. The FEIR stated that additional long-term data gathering for input into a more sophisticated modeling program would not be undertaken as the proposed water withdrawal for the facility is within the existing permitted withdrawal levels. The FEIR concluded that further downstream effects of the reservoir and dam are minimized in the river system, as the Manhan River receives flows from a larger watershed area. Furthermore, the FEIR states that immediately below the Tighe-Carmody Reservoir the Manhan River is fed by groundwater and seepage from the dam, as it has been observed to flow even when reservoir water is not flowing over the spillway or out the low level outlet.

The FEIR discussed the feasibility of several potential water resource impact mitigation measures including: cooling water recharge to groundwater, alternatives to reduce cooling tower water use, the establishment of water releases from the Tighe-Carmody Reservoir to the Manhan River, and contribution to Holyoke combined sewer overflow (CSO) separation projects. The WRC noted that there could be additional opportunities to explore the possibility of releases from the reservoir which may result in additional ecological benefit. Subsequent to the feasibility analysis, the Proponent has committed to assist the City of Holyoke in reducing overall unaccounted for water (UAW) within its water supply system. The HWW's UAW has consistently been greater than 20 percent, and greater than 25 percent since 2003, well in excess of the Massachusetts Water Conservation Standards of 15 percent for a lowstressed or unassessed basins, such as HWW. This water conservation standard will be reduced to 10 percent by 2017. To date, HWW has conducted a system-wide water audit and leak detection survey on approximately 68 out of 212 miles of water lines in the system. This audit and detection program was conducted using an existing grant award of \$40,000 (\$32,000 of grant funding and \$8,000 of an in-kind match). As a condition of project construction, the Proponent has committed to providing HWW with \$40,000 to perform additional leak detection activities on the remainder of the HWW system and/or conduct repairs of leaks found, at the discretion of the HWW.

While the project will not require a water-related permit, I respectfully request that the EFSB consider an enhancement or expansion of the water use mitigation measures presented in the FEIR as part of their review process. I ask that the EFSB consider whether a contribution of greater than \$40,000 to the HWW would be warranted. Furthermore, I request that the EFSB consider the placement of a stream gauging station within the Manhan River, preferably downstream of the Tighe-Carmody Reservoir, to assist in future data gathering for the watershed. Such a gauge would be useful for monitoring overall impacts to the watershed from a variety of competing water users.



*Wastewater*

The FEIR states that the typical wastewater discharge rate from the facility is expected to be less than 230,000 gpd, with a peak wastewater discharge rate of up to approximately 340,000 gpd during periods of ULSD firing. The FEIR included a discussion outlining how the project intends to comply with the Westfield Wastewater Treatment Facility (WWTF) NPDES Permit and will not result in a violation of the current or proposed WWTF NPDES permitted discharge volumes and pollutant threshold limits. The FEIR described potential wastewater discharge thermal impacts, noting that sanitary sewer permits typically include temperature limits and the discharge will be treated by the Westfield WWTF prior to discharge to the Westfield River.

*Hazardous Materials*

The FEIR included an updated draft Pollution Prevention and Emergency Plan, which also included a Spills Contingency Plan. The FEIR described the relationship of stormwater infrastructure and infiltration areas to potential pollution sources. Roof runoff and runoff generated on the southern part of the site collected by the closed drainage system will be directed to an infiltration basin designed in accordance with the MassDEP Stormwater Management Handbook. The FEIR described those portions of the facility that will utilize impervious areas and the closed drainage system to manage stormwater flows, including equipment, parking, storage and fueling areas. The FEIR included an analysis of tertiary storage tank containment options, comparing the use of a single or double-walled aqueous ammonia storage tank. The FEIR has proposed the use of a single-walled stainless steel storage tank with a secondary 110 percent containment berm. The FEIR also included a discussion of fuel oil storage tank release prevention and mitigation measures to be implemented by the Proponent.

*Construction*

The FEIR included a Construction Management Plan that described project activities and their schedule and sequencing, site access and truck routing, and BMPs to minimize short-term impacts resulting from construction activities. The FEIR contained a commitment to implement measures consistent with the MassDEP Diesel Retrofit Program during the construction period. Vehicle idling will be limited, ULSD fuel will be used for all off-road construction equipment, and diesel equipment used during construction will be equipped with either a diesel oxidation catalyst (DOC) or diesel particulate filter (DPF) to reduce PM, VOC, and CO emissions.

Mitigation / Section 61 Findings

The FEIR included a separate chapter summarizing proposed mitigation commitments for the project. These measures have been proposed to mitigate potential impacts to rare species, air quality, greenhouse gas emissions, noise, wetlands, water resources, wastewater, hazardous materials and construction activities. I anticipate that these mitigation commitments will be further refined during the individual permitting processes with each State agency. The final Section 61 findings will be included with all state permits issued for this project, and will be considered binding upon the proponent as mitigation commitments. In accordance with Section

11.12(5)(e) of the MEPA regulations, final Section 61 findings must be forwarded by each permitting agency to the MEPA Office, which will publish a Notice of Availability in the Environmental Monitor. Mitigation commitments outlined in the FEIR include:

#### *Air Quality*

- The facility will implement Best Available Control Technology (BACT) for all regulated air pollutant emissions.
- The facility will implement the Lowest Achievable Emission Rate (LAER) for its NO<sub>x</sub> emissions.
- The facility will obtain federally enforceable NO<sub>x</sub> emission offsets at a ratio of total actual emission reductions to the increase in actual emissions of at least 1.26:1 prior to receiving Plan approval from MassDEP.
- The facility will comply with the applicable emissions limitations contained in the federal NSPS.
- The facility will utilize SCR to control NO<sub>x</sub> emissions and an oxidation catalyst to control the emissions of CO, VOC and HAP from the combustion turbine. Emissions of SO<sub>2</sub>, H<sub>2</sub>SO<sub>4</sub>, and PM (both PM<sub>10</sub> and PM<sub>2.5</sub>) from the combustion turbine will be minimized through the use of natural gas and ULSD fuels.
- Additional air quality mitigation measures include the use of high efficiency mist eliminations, state-of-the-art combustion controls, and limitations on annual operation.
- The Proponent will implement measures consistent with the MassDEP Diesel Retrofit Program during the construction period. Vehicle idling will be limited, ULSD fuel will be used for all off-road construction equipment, and diesel equipment used during construction will be equipped with either a diesel oxidation catalyst (DOC) or diesel particulate filter (DPF) to reduce PM, VOC, and CO emissions.

#### *Greenhouse Gas Emissions*

- The Proponent will purchase an estimated \$4 million worth of allowances on an annual basis for its direct CO<sub>2</sub> emissions to satisfy its RGGI requirements.
- The project buildings will include high-efficiency HVAC systems, eliminate or reduce the use of refrigerant in HVAC systems, incorporate window glazing, super insulation, and motion sensors to achieve a reduction in GHG of approximately 16,300 tpy. The installation of a water turbine in the cooling water supply line will achieve an additional GHG reduction of approximately 107 tpy.
- Prior to the issuance of the project MassDEP Air Quality Permit, the Proponent will submit to MassDEP a feasibility analysis describing the design, equipment, installation, and operation and maintenance tasks associated with implementing the hydropower project. This analysis should include a discussion of costs as well as any engineering and permitting barriers that would make the project infeasible to implement. MassDEP will review the feasibility analysis and work with the Proponent to implement the project as proposed, or if found to be infeasible, consult on whether it is feasible to proceed with the hydropower project in a modified form or select an alternative, comparable mitigation project, and report back to MEPA on the substitute project.

- The Proponent will continue to explore biofuel use and update MassDEP on biofuel availability and turbine performance results as conditioned by the MassDEP Air Quality Permit.
- Upon completion of construction, the Proponent will provide a certification to the MEPA Office signed by an appropriate professional (e.g., engineer, architect, general contractor) indicating that the all of the GHG emissions mitigation measures, or equivalent measures that collectively will achieve the GHG emissions represented in the FEIR, have been incorporated into the project. The certification will be supported by as-built plans. For those measures that are operational in nature the Proponent should provide an updated plan identifying the measures, the schedule for implementation and how progress towards achieving the measures will be obtained. MassDEP will incorporate this self-certification requirement into its Section 61 Finding for the Major Air Quality Permit.

### *Noise*

- The facility will implement comprehensive noise minimization measures including high performance silencers, acoustic shrouds and enclosures, noise barrier walls, and a building to enclose major components.
- The facility will comply with MassDEP noise criteria limits at all residential receptors. MassDEP pure tone criteria will be satisfied at both residential receptors and property lines. The project will seek a waiver from MassDEP, as future noise levels are predicted to exceed MassDEP criteria at three of the five property lines.
- Should HDD result in an unacceptable generation of noise levels, the conceptual mitigation plan shall include:
  - Construction of temporary noise barrier walls along the western and eastern edges of the construction site in the vicinity of the equipment;
  - Installation of partial enclosures around the pump, the drilling rig, the mud tank trailer, and the hydraulic power set; and
  - Noise measurements to verify functionality of mitigation.

### *Rare Species*

- The Proponent will submit materials for formal MESA review pursuant to 321 CMR 10.18 and Permit pursuant to 321 CMR 10.23.
- Short-term mitigation measures include:
  - Continuation of Eastern Box Turtle surveys and telemetry efforts through the facility construction phase; and
  - Installation of temporary turtle barriers and final turtle-clearing surveys prior to construction.
- Long-term mitigation measures include:
  - Installation of a permanent wildlife exclusion barrier around the facility;
  - Restoration/Enhancement of temporary work areas on the site to provide suitable box turtle habitat;
  - Maintenance and monitoring of habitat restoration/enhancement areas; and
  - Permanent protection of approximately 32 acres of habitat placed under a Conservation Restriction.

*Wetlands*

- The facility will comply with the MassDEP Stormwater Management Regulations.
- Construction impacts to the Westfield River will be limited through the use of HDD pipeline installation techniques.
- Construction BMPs will be utilized to limit impacts to wetland resource areas.
- Wetland resource area impacts will be temporary in nature and fully restored in compliance with the Massachusetts Wetlands Protection Act. Success of wetland re-vegetation and bank stabilization will be monitored annually for the first three years following construction or until wetland re-vegetation and stabilization is successful. A monitoring report will be filed with appropriate federal, State and local authorities.

*Wastewater*

- The facility will not result in a direct discharge of wastewater to the Westfield River, or to any wetland resource areas or rare habitat areas.
- The project will obtain a Sanitary Sewer Permit from the City of Westfield which will include pollutant threshold limits and effluent sampling requirements for the facility to ensure that the Westfield WWTF will continue to comply with its NPDES permitting requirements.
- The facility will use continuous temperature monitoring of the discharge and a blowdown cooling system to remove excess heat from the warmer parts of the discharge system prior to combining flows with the balance of the plant discharge.

*Water*

- The Proponent will provide \$40,000 in funds to the Holyoke Water Works (HWW) to perform leak detection activities and/or conduct repairs of leaks found in the Holyoke water supply system, at the discretion of the HWW.

*Oil and Hazardous Materials Management*

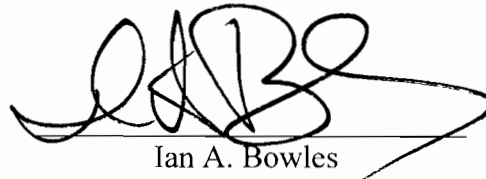
- The facility will maintain a Pollution Prevention and Emergency Response Plan that includes a Spill Contingency Plan.
- Ammonia will be stored in a single-walled stainless steel storage tank with a secondary 110% containment berm.
- The ULSD tank will have a 110% containment system, daily inspections, and will be equipped with continuous level monitoring systems. Integrity testing of the bulk oil storage tank will be performed at least once every five years.

Conclusion

I find the FEIR to be adequate and am allowing the project to proceed to the State agencies for permitting. The FEIR contained adequate information on project impacts and mitigation, and provided the state permitting agencies with sufficient information to understand the environmental consequences of their permit decisions. No further MEPA review is required.

March 6, 2009

Date



Ian A. Bowles

## Comments received:

02/10/2009	Mayor Michael R. Boulanger – City of Westfield
02/10/2009	Greater Westfield Chamber of Commerce
02/10/2009	Christopher Keefe – Westfield City Council – Ward One
02/10/2009	Barnes Aquifer Protection Advisory Committee (BAPAC)
02/17/2009	Kelly Jurczyk
02/17/2009	Pavel Brouer
02/17/2009	Robert Bachmann
02/17/2009	Heather Roncalli
02/17/2009	Marcus Kane
02/17/2009	Thomas Smith
02/17/2009	Susan Hitchcock
02/17/2009	Daniel Hitchcock
02/17/2009	John Funaro
02/17/2009	Ryan Boman
02/17/2009	Anatolie Balaur
02/18/2009	Jean Carpenter
02/18/2009	Division of Fisheries and Wildlife – Natural Heritage and Endangered Species Program
02/19/2009	Pioneer Valley Planning Commission
02/25/2009	Jean Carpenter (2 <sup>nd</sup> letter)
02/27/2009	Massachusetts Department of Environmental Protection – WERO
02/27/2009	Connecticut River Watershed Council
03/04/2009	Water Resources Commission

IAB/HSJ/hsj