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March 28, 2008

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

PROJECT NAME : Brockton Clean Energy  
PROJECT MUNICIPALITY : Brockton  
PROJECT WATERSHED : Taunton River  
EEA NUMBER : 14017  
PROJECT PROPONENT : Brockton Power Company LLC (an affiliate of Advanced Power Services (NA) LLC  
DATE NOTICED IN MONITOR : February 20, 2008

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 (M.G.L. c. 30, ss. 61-62H) and with its implementing regulations (301 CMR 11.00). The FEIR is generally responsive to the requirements of 301 CMR 11.07 and the Scope, and in accordance with 301 CMR 11.08(8)(c), I have determined that the FEIR is adequate even though certain aspects of the project or issues require additional analysis of technical details. I note that there will be additional opportunities for public review of the proposed project as part of the Massachusetts Department of Environmental Protection (MassDEP) air quality and sewer extension permit processes, and during the Energy Facility Siting Board (EFSB) review.

I acknowledge the many comment letters requesting that I deny the project based on air quality and human health impacts and general principles of environmental justice. Commenters also expressed concern about the number of similar projects that have been proposed in Massachusetts, and questioned the need for so many power plants of this type. As noted in my Certificate on the Draft Environmental Impact Report (DEIR), a number of projects such as this have been submitted for my review and have or are in the process of receiving necessary state permits. It is important to note that only a small percentage of these plants will actually get built, based on the economics and management of the New England energy market. Indeed, I note that two-thirds of the new energy resources that cleared the February 2008 ISO-NE Forward Capacity Market auction will be derived from energy efficiency, load management, and distributed generation. Only one-third of the new resources will be derived from new power generation. This is consistent with the policy of this office to favor energy efficiency, demand resources, and renewable energy sources over fossil fuel energy sources.



However, it is my obligation under the MEPA statute to entertain all projects submitted for MEPA review. MEPA is not a permitting process, and does not allow me to approve or deny a project. Rather, it is a process designed to ensure that state permitting agencies have adequate information on which to base their permit decisions and their Section 61 findings, and to ensure that potential environmental impacts are fully described and avoided, minimized and mitigated to the maximum extent feasible. I have also received several comment letters requesting that I require a supplemental FEIR to provide additional information and analysis of impacts and alternatives. I am satisfied that the FEIR has adequately responded to the Scope and that the analysis provided in the Draft and Final EIR together with additional analysis to be provided during permitting will ensure a thorough evaluation of environmental impacts. In addition, there will be further opportunity for public review and comment through the MassDEP permit process and Energy Facilities Siting Board (EFSB) review.

I note the thoughtful comments from the Mayor of Brockton and I ask the proponent and the permitting agencies to continue to work with the City to identify opportunities to enhance local air quality, including potential mitigation measures at the local level as recommended in the Mayor's comment letter (Exhibit 1, Metcalf and Eddy report). I direct the permitting agencies to also consider including such mitigation in their respective permits.

### Project Description

The proposed project consists of construction and operation of a 300-megawatt (MW) gas turbine combined cycle (GTCC) power plant which will be equipped with duct firing and evaporative cooling of air intake to the turbine to increase capacity to 350 MW. The gas turbine is classified as "Quick Start", capable of achieving 100% load within 30 minutes of start-up. The proposed power plant will use natural gas as the primary fuel and will also be capable of burning Ultra-Low Sulfur Distillate (ULSD) during periods when natural gas is not available (ULSD use will be limited to the equivalent of 60 days per year).

The project will be located on a 13.2-acre parcel in the Oak Hill Industrial Park (located off Route 28 in southern Brockton). The project includes three 2,000-kilowatt (kW) emergency generators, a gas compressor, auxiliary boiler, fire pump, transformers, water and wastewater treatment equipment, fully-diked ULSD and ammonia storage tanks, and a ULSD unloading station. ULSD will be stored on-site in a 750,000 gallon above-ground tank, providing supply for two days of full-load operation. The proposed plant includes a wet mechanical cooling tower, which will use treated wastewater from the adjacent Brockton Advanced Water Reclamation Facility (AWRF). Approximately 1.9 million gallons per day (MGD) of wastewater will be purified and filtered prior to use as cooling tower makeup water. Most of the recycled water used will be evaporated from the cooling towers and approximately 0.3-0.5 MGD of wastewater will be discharged from the plant to the AWRF, resulting in a net use of 1.6 mgd on average. The balance of process and potable water required (0.1-0.25 mgd, depending on which fuel is fired) will be obtained from the City of Brockton system.

The project includes construction of approximately 0.1 miles of new water mains for connection with the City of Brockton water supply, a 0.2-mile recycled-water supply line and a 0.2-mile wastewater line with a connection to the AWRF. Natural gas will be supplied to the site

via a new pipeline that will extend approximately 1,500-foot northeast of the project site to an interconnection with an existing Spectra Energy (formerly Algonquin Gas Transmission Company) pipeline within Sargents Way or to the Bay State Gas connection on Oak Hill Way. Electricity from the proposed plant will be fed to the transmission network via a new connection with two existing National Grid 115 kilovolt (kv) transmission lines located approximately 3,000 feet southeast of the site. A new two-acre interconnection substation will be constructed at the interconnection site, and a 3,000-foot 115-kv overhead circuit will connect the power plant with the interconnection site.

The project will result in 1.4 acres of land alteration associated with the transmission line Right-of-Way (ROW). The project will result in 1,800 square feet (sf) of alteration to Bordering Vegetated Wetlands (BVW), a significant reduction from 29,000 sf as proposed in the Draft EIR. Approximately 30 sf of Bordering Land Subject to Flooding (BLSF) and 1,100 sf of Riverfront Area (Edson Brook) will be impacted by placement of transmission poles. The project will impact approximately 9,000 sf of Isolated Vegetated Wetland (IVW) that is not protected under the Massachusetts Wetlands Protection Act. The project will create approximately 3 acres of new impervious area. Total building square footage proposed is 101,200 sf, with proposed heights of 130 feet for the building and 250 feet for the stack. Twenty-four parking spaces are proposed. The project is expected to generate approximately 50 new vehicle trips per day during the operational phase.

The proposed project will result in increased air emissions, which are quantified in the FEIR as: 85 tons per year (tpy) of particulate matter (PM); 109 tpy of Carbon Monoxide (CO); 7 tpy of Sulfur dioxide (SO<sub>2</sub>); 31 tpy Volatile Organic Compounds (VOC); 107 tpy of Oxides of Nitrogen (NO<sub>x</sub>); 1,134,000 tpy of Carbon dioxide (CO<sub>2</sub>); and 7.247 tpy of Hazardous Air Pollutants (HAPs). According to the FEIR, the use of cleaner fuels (natural gas and ULSD) and highly efficient combustion and state of the art control systems will limit emissions to the Lowest Achievable Emission Rate (LAER) or Best Available Control Technology (BACT) levels.

The project is undergoing review and requires the preparation of a mandatory EIR pursuant to Section 11.03(7)(a)(1) of the MEPA regulations because it involves construction of a new electric generating facility with a capacity greater than 100 megawatts. The project is also under review pursuant to Section 11.03(8)(b) of the MEPA regulations because it involves construction of a new stationary source with potential emissions of more than 50 tons per year of NO<sub>x</sub>, Section 11.03 (3)(b)(1)(d) because it may have resulted in alteration of more than 5,000 sf of BVW (as proposed in the DEIR), Section 11.03(5)(b)(4)(a) because it will result in new discharge of more than 100,000 gallons per day (gpd) of industrial waste water, and Section 11.03(7)(b)(4) because it involves construction of an electric transmission line with a capacity greater than 69 kilovolts (kv).

The project requires a Major Comprehensive Air Plan Approval and Title V Operating Permit from the Massachusetts Department of Environmental Protection (MassDEP) and an Approval to Construct a Bulk Electric Generating Facility from the Massachusetts Department of Public Utilities (DPU) Energy Facility Siting Board (EFSB). The project requires a DPU Section 72 Approval to Construct a Transmission line and the proponent intends to file a Petition for

Exemption from Zoning Bylaws with the DPU. The project requires a MassDEP Sewer Connection Permit and Treatment Work Plan Approval, and a Massachusetts Department of Public Safety Storage Tank Permit. The project may require a permit from MassDEP under the proposed reclaimed water regulations, 314 CMR 20.00, and may require a 401 Water Quality Certificate from MassDEP. The project requires an Order of Conditions from the Brockton Conservation Commission (and, on appeal only, a Superseding Order from MassDEP). The project requires a National Pollutant Discharge Elimination System (NPDES) Construction General Permit from the U.S. Environmental Protection Agency (EPA) and a New Source Review (NSR)/Prevention of Significant Deterioration (PSD) Approval from EPA. The project also requires other federal and local permits and approvals.

As a natural gas plant with a capacity greater than 25 MW, the project will be subject to the Regional Greenhouse Gas Initiative (RGGI) implementation mechanisms. 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 nameplate capacity of 25 megawatts will be subject to RGGI CO<sub>2</sub> implementation mechanisms.

The project exceeds an Environmental Notification Form (ENF) threshold for air and is located within five miles of an Environmental Justice (EJ) population. Therefore, it is subject to the EEA Environmental Justice Policy requirements for enhanced public participation under MEPA. The project does not exceed a mandatory EIR threshold for air. Therefore, it is not subject to the requirement for enhanced analysis of impacts and mitigation pursuant to the EJ policy.

The project is not seeking financial assistance from the Commonwealth. Therefore, MEPA jurisdiction is limited to the subject matter of state agency Permits required. 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 that have the potential to cause damage to the environment as defined in the MEPA regulations.

## FEIR REVIEW

### General

The FEIR included maps, site plans and other graphics as well as a summary of impacts and mitigation. As required by the Scope, the FEIR also quantified permanent and temporary wetlands impacts. The FEIR included a Response to Comment letters received on the DEIR.

### Environmental Justice - Enhanced Public Participation

The FEIR included an update on the proponent's enhanced public outreach efforts, which indicates that the FEIR was made available for review at the Brockton and West Bridgewater public libraries, at the City of Brockton and Town of West Bridgewater Clerk's offices, and on the City of Brockton website. Additional copies of the FEIR were provided to residents during the FEIR review period. Project information was also made available in Portuguese, Spanish,

French, Haitian Creole and Vietnamese on the proponent's website. The availability of the FEIR was noticed in several publications and with several community organizations, churches and schools. I note that forty-two of the comment letters received were written in Haitian, Portuguese, and Vietnamese, which is an indication of the need for, and benefits of, enhanced outreach and public participation. I encourage the proponent to continue its public outreach efforts and make monitoring information available to the general public as recommended by the Old Colony Planning Council.

### Alternatives

The FEIR included an evaluation of alternatives to avoid and minimize wetland resource area impacts as required by the Scope. The FEIR also includes additional information to clarify resource area impacts. As a result of the alternatives evaluation, the transmission line route has been relocated, resulting in a 94% reduction in BVW alteration associated with tree removal for the Right-of-Way (ROW). The ROW width will be a 60-foot wide corridor, rather than the 100-foot corridor previously proposed. The FEIR proposes self-support single pole structures, located outside of vegetated wetland resource areas, to minimize clearing. The FEIR indicates that upland areas, which are currently cleared or paved, will be used for staging and construction material storage. Additional information on wetlands impacts associated with the preferred alternative are further detailed in the FEIR and in the wetlands section below.

The DEIR proposed the City of Brockton system as an alternative to the Aquaria water supply source. The Scope required that the FEIR include additional analysis that considers the City's future needs to support the proponent's conclusion that sufficient capacity would be available for the project. The FEIR includes an estimate of future water use assuming 12,000 new homes, 24 million sf of biotechnology use and other increases in water demand from retail, office, school, and hospital facilities. The FEIR concludes that the City of Brockton would have sufficient capacity considering its 2005 average withdrawal (8.65 mgd) and maximum permitted withdrawals (16.76 mgd, which includes potential supply from Aquaria).

A number of commenters questioned the FEIR assumptions on population trends in Brockton and future water demand. In addition, the comment letter from the Mayor of Brockton highlights other water resource issues to consider, which include potential constraints on the City's withdrawals due to limitations imposed by a MassDEP Administrative Consent Order (ACO). The Mayor's letter also notes MassDEP's ongoing review of the City's draft Comprehensive Water Resources Management Plan as it relates to overall water supply capacity. The proponent should coordinate with city officials and with MassDEP regarding water supply requirements and to refine the future capacity analysis as needed in consideration of the City's comments.

### Air Quality

#### *Best Available Control Technology (BACT) for Cooling Towers*

The FEIR proposes the cooling tower drift elimination BACT rate of 0.0005%. According to the FEIR, there are no other facilities with demonstrated cooling tower drift

efficiency rates lower than 0.0005%. However, the FEIR identifies two facilities that have lower rates listed (0.0001% and 0.0002%) in the RACT/BACT/LAER Clearinghouse (RBLC) (RACT is defined as Reasonable Available Control Technology and LAER is defined as Lowest Achievable Emission Rate). The Crescent City Power facility in Louisiana (formerly Cecil Power) with a proposed rate of 0.0001% has not yet been constructed and Longview Power in West Virginia with a drift elimination rate of 0.0002% is under construction. The FEIR concludes that since these rates have not been demonstrated, they are not representative of BACT. The FEIR also notes that the premier supplier of cooling towers for power plants does not offer a guaranteed rate lower than 0.0005% due to the absence of equipment to accurately measure drift below that rate.

The proponent will be required to submit a Major Comprehensive Plan Application (MCPA) to MassDEP, which must include a BACT analysis for the cooling towers. As part of that analysis, MassDEP will require further evaluation of measures to reduce cooling tower drift. Specifically, MassDEP will require additional information with respect to the Longview Power cooling tower including but not limited to: anticipated commercial operations; permit conditions including testing provisions; identification of cooling tower supplier, the guaranteed rate and how it would be demonstrated; water quality information and a comparison with water quality for the proposed Brockton project; particulate emission rate information; and design features of the Longview Power cooling tower with comparison to cooling towers for the proposed Brockton project. MassDEP will evaluate the MCPA BACT analysis to determine if the proposed drift limit of 0.0005% could be reduced further taking into consideration all available information and the tenets of BACT.

#### *Particulate Matter (PM) Emissions*

Several commenters have expressed concerns about particulate matter (PM) emissions from the proposed project. The FEIR clarified incremental increases in  $PM_{10}$  and  $PM_{2.5}$  as required by the Scope, and described measures to minimize PM emissions. As further detailed in the FEIR, monitored background levels for  $PM_{2.5}$  constitute 96.3% of the maximum 24-hour impact and 97.6% of the annual impact. The incremental impact associated with the proposed project would increase the 24-hour  $PM_{2.5}$  from  $29.6 \text{ ug/m}^3$  to  $30.75 \text{ ug/m}^3$ , which is below the National Ambient Air Quality Standard (NAAQS) of  $35 \text{ ug/m}^3$ . As noted in the MassDEP comment letter, the U.S. Environmental Protection Agency (EPA) has not yet adopted Significant Impact Levels (SILs) for  $PM_{2.5}$  but is anticipated to do so prior to the issuance of a decision on the MCPA required for the project. MassDEP will require that the MCPA include an analysis of the adopted  $PM_{2.5}$  SILs. I also note that the MassDEP permit process for the proposed project will include a public hearing pursuant to 310 CMR 7.00 Appendix A, Section 9(b)(3).

#### *Stack Height*

The FEIR compared projected emissions from a 325-foot stack, representative of Good Engineering Practice (GEP), with emissions from the proposed 250-foot stack as required by the Scope. The FEIR indicates that there would be no significant improvement in air quality with the taller stack and that impacts associated with the proposed 250-foot stack remain below SILs for all pollutants and averaging periods. In its comment letter, MassDEP agrees with the conclusion

in the FEIR that a stack height of 325 feet would provide a de minimis overall reduction in air quality impacts. MassDEP also agrees that the existing background air quality substantively dominates the combined (background plus the proposed project) air quality impacts and NAAQS demonstration.

#### *Air Quality Dispersion Modeling/Monitoring Locations*

The FEIR discusses the selection of monitoring locations as required by the Scope. As noted in the FEIR, PM<sub>2.5</sub> is the only pollutant monitored in Brockton. Monitoring locations in Milton and Boston were selected as the closest and most representative for other pollutants. As further detailed in the MassDEP comment letter, there are no major sources, based on actual emissions, of PM<sub>10</sub>, PM<sub>2.5</sub>, CO, NO<sub>x</sub> or SO<sub>2</sub> within 10km of the proposed project stack. Therefore, an interactive source analysis for the proposed project is not warranted and the use of background ambient air monitoring stations accounting for background sources of PM<sub>10</sub>, PM<sub>2.5</sub>, CO, NO<sub>x</sub>, and SO<sub>2</sub> in the NAAQS demonstration as provided in the FEIR is reasonable and consistent with accepted air quality dispersion modeling practice.

#### *Odor*

The FEIR included additional information on other facilities that use treated effluent for cooling as required by the Scope. The FEIR proposes chemical usage for odor control, which is limited to maintaining a residual level of chlorine within the cooling tower basin. MassDEP has concurred with the proponent's conclusion that the cooling towers will not be a source of off-site odors. MassDEP will require monitoring and record keeping of the cooling tower basin residual chlorine concentration to assure that the proposed facility operates at a minimum concentration of 1.0 mg/L and will set an upper bound to assure no residual chlorine odor off-site.

#### *Noise*

The FEIR included additional evaluation of noise impacts associated with the project, including an evaluation of sound level increases in the Millet Street/Meadow Lane residential area to the north of the project site. The FEIR assumes an ambient level of 36 A-weighted decibels (dBA) and predicts a total sound level of 40 dBA for this area, representing a 4 dBA sound level increase. MassDEP agrees that the background sound level assumption for the Millet Street/Meadow Lane area is conservative and that the sound level in this area, including project-related impacts, will be well below the MassDEP allowable sound level increase of 10dBA. MassDEP will further evaluate sound impacts and additional acoustical controls as part of the MCPA when it is submitted to determine whether sound impacts can be reduced further taking into account the tenets of BACT.

#### *Greenhouse Gas Emissions*

Some of the comment letters received requested additional analysis of the project pursuant to the EAA/MEPA Greenhouse Gas Emissions Policy. I note that the ENF for this project was filed prior to November 1, 2007 when the final policy was issued. Therefore, it is not subject to the specific requirements of the EAA/MEPA Greenhouse Gas Emissions Policy and

Protocol. However, prior to issuance of the final policy, MEPA has been 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 project is also subject to the Regional Greenhouse Gas Initiative (RGGI). I am satisfied that the proponent adequately addressed GHG issues as indicated in my Certificate on the DEIR.

The DEIR discussed compliance with RGGI and the EEA/MEPA GHG Emissions Policy. The DEIR included a GHG emissions analysis and proposed measures to avoid, minimize, or mitigate damage to the environment. Mitigation proposed in the Draft and Final EIR includes obtaining emission allowances as required under RGGI and use of the most efficient fossil fuel combustion technology.

#### Wetlands and Stormwater Management

The FEIR includes additional information on wetlands and buffer zone alteration, including plans showing the 100-year floodplain and an analysis of alternatives to minimize impacts as required by the Scope. The preferred transmission line alternative proposed in the FEIR will result in 1,800 sf of BVW alteration (compared with 29,000 sf in the DEIR). The proponent has also initiated discussions with the adjoining property owners (including UPS) to discuss the possibility of obtaining an easement that would avoid wetland resource areas. If the UPS site is unavailable, the proponent will be required by the Conservation Commission to provide more evidence to demonstrate that the use of this site is not a feasible alternative.

The preferred alignment for the transmission line right-of-way is located within 100,000 sf of buffer zone and will involve tree-cutting in approximately 11,700 sf of buffer zone. The proposed alignment will result in 1,100 sf of Riverfront area impact, which has increased from 712 sf in the DEIR due to the relocation of transmission lines to reduce BVW impact. The preferred alternative involves alteration of approximately 9,000 sf of Isolated Vegetated wetland (IVW) that is not subject to jurisdiction under the Massachusetts Wetlands Protection Act. The FEIR notes that IVW was miscalculated in the DEIR (at 4,835 sf) and that the project does not propose any further impacts to the southern half of the IVW that was previously altered and is being restored by others.

According to the FEIR, the project will result in alteration of 30 sf (4 cubic feet) of Bordering Land Subject to Flooding (BLSF), a reduction from the 60 sf impact proposed in DEIR. The FEIR indicates that the inconsistency in elevations noted in comment letters on the DEIR was due to an inaccuracy in elevations in the 1998 site plan. The FEIR confirms that an area of the project site appears to have been filled previously and the FEIR includes a proposal to restore prior BLSF elevations during project construction. The FEIR includes restoration plans for BVW and Riverfront Area, IVW, and BLSF. The proponent should address proposed restoration work for prior BLSF filling in the Notice of Intent (NOI) filing. As noted in the MassDEP comment letter, the proponent will also be required to address the alternative analysis requirements for Riverfront Area pursuant to 310 CMR 10.58.

Portions of the project site are within the jurisdiction of the Wetlands Protection Act and will require a Notice of Intent filing with the Brockton Conservation Commission. The FEIR



does not propose compensatory storage for BLSF impacts. As further detailed in the MassDEP comment letter, the Conservation Commission should evaluate this issue under 310 CMR 10.57(4)(a). As further detailed in the comment letter from the Brockton Conservation Commission, the Commission will require additional detailed plans of a sufficient scale for its review before the Commission will deem the Notice of Intent (NOI) submittal complete. These plans include but are not limited to wetlands replication and restoration plans, a comprehensive Erosion and Sediment Control Plan, and a Construction Sequencing Plan. The Commission expressed concerns regarding potential construction vehicle access as well as parking in unpaved areas on the project site. The proponent should consult with the Commission and provide additional information on proposed vehicle access and parking and measures to avoid, minimize or mitigate adverse impacts in the Wellhead Protection District.

The proponent should consult with the Commission regarding the timing of the Notice of Intent (NOI) as it relates to the pending enforcement action against the owner of Bake LLC property. According to its comment letter, it is not the Commission's policy to act on a NOI on a property with ongoing enforcement actions. In a response to comments (dated March 28, 2008) the proponent notes that it intends to meet all applicable performance standards for work near wetlands and buffer zones, include those on that property.

The proponent indicates that a Section 404 permit from the Army Corps of Engineers (ACOE) may not be required. The proponent should consult with ACOE to clarify permit requirements, and follow up with MassDEP to determine if a 401 Water Quality Certificate will be required. The proponent should provide an update on MassDEP and ACOE consultations to the Brockton Conservation Commission.

The FEIR includes additional information on the proposed stormwater management system and discusses how the project will comply with the Stormwater Management Policy and Standards, including Standard 5 for Land Subject to Uses with Higher Pollutant Loads and Standard 6 for Critical Areas. The project site is located in a critical area (the Hubbard Avenue Well Interim Wellhead Protection Area). As noted in the MassDEP comment letter, the MassDEP Stormwater Management Policy Standard 6 is applicable to the project and has been properly addressed in the FEIR. According to the FEIR, structural stormwater Best Management Practices (BMPs) were specifically selected for the project because they have been determined by the MassDEP to be suitable for discharge in critical areas.

### Visual Impacts

As required by the Scope, the FEIR includes additional assessment of stack lighting and visual impacts during times when there is little or no leaf cover. The FEIR notes that the project must submit a Notice to Construct the proposed stack to the Federal Aviation Administration (FAA), and it is anticipated that the stack would have a steady red light rather than a strobe light on top. The FEIR includes photo-simulation graphics during leaf-off conditions and a summary of visual impacts by viewshed. The FEIR concludes that the visual impact from most viewsheds does not change substantially between foliated and defoliated conditions. The FEIR identifies four locations from which the stack and Heat Recovery Steam Generator (HRSG) building would become more visible under defoliated conditions. These locations are Samuel Avenue,

Appleby Street, Davis School parking lot, and the Crown Plaza Condos. Several commenters noted that the visual simulations did not include an emission plume. I encourage the proponent to consult with the City of Brockton on this issue and provide additional photosimulations as requested by the Mayor of Brockton in his comment letter.

### Water Reuse

I acknowledge the comment letters received that express concern regarding the proposed use of wastewater for cooling towers and potential impacts on water resources in the project area. As noted in my November 1, 2007 Certificate on the DEIR, the DEIR responded adequately to the Scope and MassDEP indicated that the water re-use proposal is acceptable. I expect that stream flow and other water resource issues will be further evaluated during the MassDEP permit process. I also refer the proponent to Mayor's comment letter (Exhibit 1, Metcalf and Eddy report) and its recommendations cooling tower disinfection and other design issues.

### Mitigation and Section 61 Findings

The FEIR included a summary of proposed mitigation measures and proposed Section 61 Findings. The proponent has committed in the DEIR to a range of measures to avoid, minimize and mitigate impacts including:

*Air Quality:* Project emissions will be controlled to BACT and LAER levels using selective catalytic reduction (SCR), water injection, combustion controls, and an oxidation catalyst. Natural gas and Ultra-Low Sulfur Diesel (ULSD) are proposed as the cleanest fossil fuels available. The proponent will obtain 135 tons of Emission Reduction Credits (ERC) at a rate of 1.26:1 as well as the required RGGI CO<sub>2</sub> offsets. The FEIR estimates that air quality mitigation will cost \$5 million (including water injection, SCR and oxidation catalyst). The cost of Emission Reduction Credits (ERC) for NO<sub>x</sub> is estimated in the FEIR at \$350,000 to \$540,000.

*Noise:* Equipment, including generators, pumps and compressors, will be housed within weatherproof, acoustical enclosures. The ventilation system will include intake and exhaust silencing. The gas turbine will be equipped with an exhaust silencer. Site layout is oriented to direct primary noise sources away from the nearest residential receptors. The cost of acoustical treatments, including enclosures, is estimated in the FEIR at \$8 million. The mitigation plan includes an additional allowance of \$2.7 million for other acoustical treatment around the plant.

*Wetlands:* The proposed project will comply with the performance standards of the Wetland Protection Act. Wetlands resource areas will be restored with native shrubs and seed mixes and monitored for at least two growing seasons. A Stormwater Pollution Prevention Plan (SWPPP) and Erosion Control and Sedimentation Plan will be implemented. The cost of the proposed stormwater management system and wetlands mitigation is estimated in the FEIR at \$250,000-\$325,000.

*Water Supply:* The project will include an on-site cooling water storage tank (1 million gallon capacity) in case of a problem with the AWRF supply, and a demineralized water tank (275,000-

gallon) so that water withdrawal from the City system can be limited during high demand periods. The cost of these tanks is estimated in the FEIR at \$875,000.

*Wastewater:* Wastewater from the AWRF will be filtered and purified before use. The project will include an on-site wastewater holding tank that will discharge to the AWRF during low flow conditions. The cost of the tank is estimated at \$600,000. Portable demineralizers will be sent off-site for regeneration and reuse of resins at a cost of approximately \$300,000.

*Stormwater:* The stormwater management system, which will be in place during construction and operation, will be designed to meet MassDEP Stormwater Management Policy standards and maximize on-site recharge to groundwater to the extent practical.

*Construction and Traffic:* the project will include mitigation measures for traffic management, dust and noise control, and erosion and sedimentation control, and will comply with the MassDEP Clean Air Construction Initiative. Erosion control and dust management during construction is estimated at \$50,000.

*Visual:* Tree and shrub plantings will be used to create a visual buffer. Buildings colors and materials will be selected to minimize visual impact. High efficiency drift eliminators will be used on cooling towers to minimize visual plume impacts.

*Hazardous Materials and Waste Management:* Containment will be provided for ULSD and ammonia storage tanks. A Spill Prevention Control and Countermeasure Plan (SPCCC) and an Emergency Response Plan will be in place. Storage areas will be properly designated for maintenance chemicals. The cost of secondary containment and spill controls is estimated in the FEIR at \$200,000

Based on review of the FEIR, comments received, and consultations with relevant state agencies, I am satisfied that the FEIR adequately complies with MEPA and the project may proceed to the state permitting process. MEPA review of the project is complete. I note that there will be additional opportunities for public input on the project through the MassDEP permitting and EFSB review processes. State agencies should forward copies of final Section 61 Findings to the MEPA Office.

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March 28, 2008



Ian A. Bowles, Secretary

IAB/AE/ae

## Comments received:

1/28/08 – Sheila Stewart  
2/08/08 – Lola DeLeo and Mack Stewart  
2/25/08 – Ida Laurema  
3/04/08 – Daniel W. Miles, P.E.  
3/12/08 – Burton L. Tibbetts  
3/14/08 – Councillor Linda M. Balzotti  
3/14/08 – Thomas and Ruth Rokus  
3/17/08 – Judith M. Dolan (e-mail)  
3/18/08 – Darlene Albanys  
3/18/08 – Albert Murray and Loretta Murray  
3/19/08 – Marijo P. Martin  
3/19/08 – Stephen and Laurene Frederick  
3/20/08 – Virginia A. Jeppson  
3/20/08 - Frank Gurley  
3/20/08 – Brockton Conservation Commission  
3/20/08 – Honorable James E. Harrington  
3/20/08 - Senator Robert S. Creedon, Jr. and Representative Geraldine Creedon  
3/20/08 – Councillor Thomas G. Brophy  
3/20/08 – Mary Anne McGonagle  
3/20/08 – Lisa M. O’Keefe  
3/20/08 – Gertrude McCarthy and James J. McCarthy  
3/21/08 – Representative Christine E. Canavan  
3/21/08 – Mass Audubon  
3/21/08 – MassDEP, Southeast Regional Office  
3/21/08 – Taunton River Watershed Alliance, Inc.  
3/21/08 – ACE  
3/21/08 – Agatha LePointe  
3/21/08 – Robert Branconnier  
3/21/08 – Margaret Lang  
3/21/08 – Jeanette Logan  
3/21/08 – Blake Gulbrand  
3/21/08 - Mary Litton and James Litton  
3/21/08 – Florence McNamara and John J. McNamara, M.D.  
3/21/08 – Susan M. Wood and Joshua J. Wood  
3/21/08 – Suzanne Brown and Steven Brown  
3/21/08 – Tara Wegener and Robert Wegener  
3/21/08 – Carolyn Anderson and Thomas Anderson  
3/21/08 – Christine Almquist  
3/21/08 – David Almquist  
3/21/08 – Mona McNamara Burns  
3/21/08 – Joseph Caniglia and Moira Cavanagh  
3/21/08 – Susan J. Nicastro  
3/21/08 – Jim Bosco  
3/21/08 – Arnold and Stephanie Danielson

3/21/08 – Suzanne O'Donnell  
3/21/08 – Eleanor Nutter  
3/21/08 – Merryle Anderson and Ernie Anderson, Jr.  
3/21/08 – James W. Long (2 letters)  
3/21/08 – Theresa A. Long (2 letters)  
3/26/08 - Representative Thomas P. Kennedy

Form Letters

Haitian - 25 form letters  
Portuguese -16 form letters  
Vietnamese - 1 letter

English - eight different form letters were received (referenced A-H below)

A - 162 form letters  
B - 142 form letters  
C - 91 form letters  
D - 59 form letters  
E - 38 form letters  
F - 80 form letters  
G - 31 form letters  
H - 5 form letters