

NEW HAVEN CITY PLAN COMMISSION SITE PLAN REVIEW
NEW HAVEN CITY PLAN COMMISSION COASTAL SITE PLAN REVIEW

RE: 1 (AKA 5) WATERFRONT STREET, Site Plan Review and Coastal Site Plan Review for Installation of 3 new Gas Combustion Turbines, Stack and associated Equipment and Tanks in an IH Zone (Owner/Applicant: PSEG Power Connecticut LLC).

REPORT: 1440-02

FINDING: Approval with Conditions; Minimal impact on Coastal Resources

Submission: Development Permit Application for CSPPR 4/21/10, Project Narrative & attachments: Coastal resources, DEP permit checklist, A-2 survey, General Arrangement Site Plan, Site Location Map, abutting property owners, Site access plan, Grading & drainage plan, Erosion and Sediment Control Plan & Notes, Site Utility Plan, Site Architectural Rendering, Photo Simulation Views, Drainage Calculations, Landscaping Plan. Electronic version of application.

CONDITIONS OF APPROVAL

1. This Site Plan is approved for a period of six years, and the approval will expire if the project is not completed by May 19, 2016.
2. The applicant shall record on the City land records an original copy of this Site Plan Review report (to be provided by the City Plan Department) and shall furnish written evidence to the City Plan Department that the document has been so recorded (showing volume and page number), prior to City Plan signoff on final plans.
3. Comments under **Site Plan Review** on page 4 shall be reviewed with the City Plan Department and resolution reflected on final plans, prior to their circulation for signoff.
4. Signoff on final plans by the City Engineer, Department of Transportation, Traffic and Parking and City Plan Department in that order shall be obtained prior to initiation of site work or issuance of building permit. The Greater New Haven Water Pollution Control Authority and Fire Marshall shall also review the plans.
5. The name of the individual responsible for monitoring the soil erosion and sediment control plan on a daily basis during the construction period shall be provided to the City Plan Department, prior to City Plan signoff on final Plans.
6. Flood elevation certificate [Flood Development Permit certifying finished floor elevation] shall accompany application for building permits.
7. Any proposed work within City right-of-way will require separate permits.
8. As-built site plan in accord with City requirements shall be filed with City Plan Department, prior to issuance of Certificate of Occupancy. Site Plan shall be submitted in both mylar and digital format [TIFF file based on the State Plane Coordinates (NAD1983)]. Provide version of AutoCAD with submission.

PROJECT SUMMARY:

Project: Installation of 3 gas combustion turbines, ancillary equipment, exhaust stack. associated tanks
Address: 1 (AKA 5) Waterfront Street
Site Size: Overall site = 42.86 acres; Limit of disturbance = 5.19 acre
Zone: IH, CAM
Financing: Private
Project Cost: \$135 million
Owner: PSEG Power Connecticut LLC
Applicant: Michael Stagliola, Plant Manager **Phone:** 203-551-6001
Site Engineer: Worley Parsons
City Lead: City Plan Dept. **Phone:** 203-946-6379

Zoning: The Site Plan as submitted meets the requirements of the New Haven Zoning Ordinance for the IH zone.

Project Description: The proposed Project consists of the installation of three (3) General Electric LM-6000 PC Sprint aero-derivative gas combustion turbines and associated auxiliary equipment, a 130-foot exhaust stack, a blackstart emergency generator, a new 277,200-gallon fuel oil tank and a new 5,000-gallon ammonia tank used in the emission control process all of which will be located at PSEG's existing New Haven Harbor Station (NHHS). The turbines will be dual-fuel capable. The facility will have a generating capacity of 129.6 MW (summer) to 145.5 MW (winter).

Proposed activity: Soil erosion measures will be installed, and the site of the new facility will be excavated, including the removal of existing stormwater system and two unused rail lines, and a new foundation supported by piles will be poured at elevation 12.2. The new stormwater system, pre-engineered building, stack and tanks will be installed and final site grading will be done. The site will be planted with additional and relocated trees.

Project access: The site will be accessed from Connecticut Avenue through an easement over City property (former East Shore Parkway). The access road will be gated with security guard house adjacent.

Project Timetable: The project is scheduled for commercial operation in June 2012. Construction is expected to commence in June 2011 with completion of major construction by March 2012.

Stormwater Management: The majority of the existing drainage system will be removed or modified during construction of the proposed peaking units. The remaining portions of the system will be supplemented with additional catch basins, manholes, and drainage pipes to accommodate the stormwater runoff associated with the new proposed construction. Stormwater management measures have been designed to reduce the post-construction load of total suspended solids (TSS) in runoff generated from the water quality design storm by 80% of the anticipated load from the developed site. Catch basin inserts will be used to collect sediment and floatables. Stormwater runoff from the site that comes into contact with equipment pads, truck unloading areas, transformer containments, and fuel storage containment will be visually assessed for the presence of oil. Stormwater determined by visual assessment to be absent of oil would be discharged to the onsite stormwater system. Stormwater determined by visual assessment to contain oil or oily residues would be directed to an onsite oil/water separator. Here the skimmed oil portion will be collected and trucked offsite by a licensed wastewater hauler. The resulting outflow of water from the oil/water separator will be directed to the existing sanitary sewer system.

With the installation, use, and proper maintenance of construction best management practices for erosion and sedimentation control, the fisheries (i.e., finfish and shellfish) resources of New Haven Harbor in the vicinity of the site would not be impacted by construction activities.

Soil Erosion and Sediment Control Review: The construction manager will be responsible for monitoring the site to assure there is no soil or runoff entering City catch basins or the storm sewer system. The name of such individual shall be supplied at a later date. He is also responsible for assuring there is no dust gravitation off site by controlling dust generated by vehicles and equipment, both during the demolition and construction phases. Soil stockpiles if necessary shall be protected from dust gravitation and soil erosion. All SESC measures are required to be designed and constructed in accordance with the latest Standards and Specifications of the *Connecticut Guidelines for Soil Erosion and Sediment Control*.

The construction manager shall be responsible for determining the appropriate response, should unforeseen erosion or sedimentation problems arise. He is fully responsible for insuring that SESC measures are properly installed, maintained and inspected according to the SESC Plan. Should soil erosion problems develop (either by wind or water) following issuance of permits for site work, the contractor is responsible for notifying the City Engineer within twenty-four hours of any such situation with a plan for immediate corrective action.

COASTAL SITE PLAN REVIEW

The Commission's Coastal Site Plan Review, in accordance with Section 55.C of the New Haven Zoning Ordinance shall consider the characteristics of the site, including location and condition of any coastal resources;

shall consider the potential effects, both beneficial and adverse, of the proposed activity on coastal resources and future water-dependent development opportunities; follow the goals and policies of the Connecticut Coastal Management Act, as amended, and identify conflicts between the proposed use and any goal or policy of the Act.

Applications for development on waterfront parcels shall additionally consider protection of the shoreline where there is erosion or the development is likely to cause erosion; degree of water dependency; preservation of significant natural vistas and points or avenues of views of the waterfront; provision of meaningful public access; and insurance of outstanding quality of design and construction to produce an environment that enhances its waterfront location.

Characteristics and Condition of Coastal Resources at or Adjacent to the site:

Coastal Flood Hazard Area: The site falls within an area of 100-year flood on Flood Insurance Rate Map 090084-0005C, dated 06-16-92. The work area is located at an approximate elevation of 12' above mean sea level.

Developed Shorefront: This is an area which has been highly engineered and developed.

Estuarine Embayment: New Haven Harbor is located approximately 300 feet to the west of the new gas turbines.

Natural resources: There are no inland wetlands within 50 feet of the project area, although there is a stream within a buried pipe along the eastern and southern property lines where it discharges to a reach of tidal creek at the southwest corner of the site. There will be no effect of the project on wetlands.

While the project will result in the net loss of vegetation, primarily common lawn grass, there will be no impact on or loss of bird habitat. There is an active bird life primarily above the site of birds in transit.

The peaking facility has been designed in such a way as to not require harbor water intake and discharge for cooling purposes. Water to be used for fire protection, evaporative cooling, air pollution control, and other plant service waters will be supplied via the city potable water supply. Water consumed at the plant will be lost via evaporation (e.g., waters used in evaporative coolers), trucked off-Site by a licensed waste hauler (e.g., various wash water portions), and/or discharged to the sanitary sewer. As a result, entrainment and impingement of aquatic life associated with water intake, and thermal impacts to surface waters associated with cooling water discharge, is not an issue associated with the operation of the proposed peaking facility on site.

Endangered species: The Great Egret, a state threatened bird, has been noted feeding along the shoreline at the southwestern corner of the larger site. The site does not offer suitable nesting habitat to the Great Egret, which prefers off shore islands for breeding. Construction of the proposed peaking facility on the site would not impact breeding, roosting or feeding habitat of the Great Egret.

Potential Adverse Impacts on Coastal Resources and Mitigation of Such Impacts: Runoff of material from the site during the excavation process is a potential adverse impact. The construction project will be conducted using good engineering practices to insure siltation runoff is controlled. With the installation, use, and proper maintenance of construction best management practices for erosion and sedimentation control, the fisheries (i.e., finfish and shellfish) resources of New Haven Harbor in the vicinity of the site would not be impacted by construction activities. No adverse impacts are anticipated.

Visual impacts: The proposed exhaust stack height of the project facility is 130'. A visual impact study (photosimulation) was conducted from four locations in the areas surrounding the project site. A proposed stack height of 213' was used in this study to provide a conservative estimate of potential visual impacts. Based on this study, it appears potential visual impacts resulting from the Project will be minimal. It should be noted that the existing stack on the site is at 389' in height is lit per FAA regulations.

The lighting system for the proposed peaking facility will meet requirements recommended for this type of facility and will comply with City zoning regulations regarding illumination requirements onto residential areas.

Public access: As this is a public utility use, where public safety and security are issues, public access is not provided in this project area. There are adjacent grassy fields used for recreational purposes, and East Shore Park is immediately to the south.

Consistency with Connecticut coastal policies: Consistent with the general development policies of CGS 22a-92(a)(1), the proposed project will not significantly disrupt the natural environment or economic growth in the project area. The project will not involve intake of water from or discharges of water to New Haven Harbor, with the exception of discharges of stormwater runoff that have been observed to be absent of petroleum products. In addition, best management practices for erosion and sedimentation control will be used during project construction and operation.

Consistent with CGS 22a-92(b)(1)(C), the project has been designed to minimize the risk of oil and chemical spills. Fuel oil will be delivered to the project by tanker truck. The fuel oil unloading pad will drain to an underground sump, capable of containing the contents of a full tanker truck. In addition, a concrete dike, capable of containing 110% of the tank capacity plus an allowance for a 10-year, 24-hour rainstorm, will be present around the tank.

The project is not expected to have adverse environmental impacts to onsite or adjacent natural resources. A Shellfish Concentration area is located approximately 7,000' south of the project site. Best management practices for erosion and sedimentation control will be implemented to minimize impact to the fisheries (i.e., finfish and shellfish) resources of New Haven Harbor.

Construction is proposed on a portion of the site that is currently lawn and gravel drive. Tidal flats and shoreline at the New Haven Harbor Station are located away from the construction area. The project will be constructed using methods and practices that minimize flood damage. The main components of the facility will be located on top of a concrete slab foundation that will be 0.2 feet above the base flood elevation (12.2). Equipment will be anchored as will storage containers for fuel oil and ammonia. Stormwater features, as necessary, would be below the base flood elevation, to allow for proper stormwater runoff from the site.

SITE PLAN REVIEW

Plans have been reviewed by the Site Plan Review team with representatives from the Departments of City Plan, City Engineer, Building, Disabilities Services, and Transportation, Traffic and Parking and have been found to meet the requirements of City ordinances, Regulations and standard details with the following comments:

Engineering:

- *Drainage connection in Waterfront Street is under review*

Transportation:

- *Add signage at entry on Connecticut Avenue.*

City Plan:

- *Revise Landscape Plan to show additional trees in accord with the City's Complete Streets Design Manual and Mayor's 10,000 tree initiative.*

Building Official:

- *The 130' stack will require threshold review by an independent engineer prior to building permit.*
- *The facility will require a Flood Elevation Certificate prior to building permit.*

Other permits required: DPUC and CT Siting Council's approvals in hand; DEP permits pending.


COASTAL FINDING:

Taking into consideration all of the above information, the City Plan Commission finds the proposed activity consistent with all applicable goals and policies in Section 22a-92 of the Connecticut Coastal Management Act and incorporates as conditions or modifications all reasonable measures which would mitigate the adverse effects on coastal resources. The Commission therefore makes a finding of no impact on coastal resources and approval for a coastal permit to be issued.

ACTION

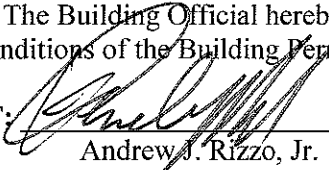
The City Plan Commission approves the submitted Site Plans subject to the standard conditions on Page 1.

ADOPTED: May 19, 2010
Edward Mattison
Chair

ATTEST: 
Karyn M. Gilvarg, AIA
Executive Director

Coastal Site Plan Review, based upon the application and materials submitted by the applicant, was conducted administratively without hearing by the City Plan Commission of the City of New Haven in accordance with the Connecticut Coastal Management Act (CGS, Sections 22a-90 to 22a-112). The Building Official hereby receives the above written findings and any conditions thereof are made conditions of the Building Permit.

DATE ADOPTED: 5/21/10

ATTEST: 
Andrew J. Rizzo, Jr.
Building Official