



September 29, 2017

VIA ELECTRONIC MAIL AND OVERNIGHT MAIL

Melanie A. Bachman
Executive Director
State of Connecticut
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

**Petition No. 1218 – PSEG Power Connecticut LLC
Bridgeport Harbor Station Unit 5 – Bridgeport, Connecticut
Progress Report No. 9 – September 2017**

Dear Ms. Bachman:

This is the September 2017 progress report submittal to the Connecticut Siting Council (CSC) for the new combined cycle generating station designated by PSEG Power Connecticut LLC (PSEG) as the PSEG Bridgeport Harbor Station Unit 5 Combined Cycle Project (BHS 5, the Project or the Facility). This progress report documents compliance with the CSC's conditions as set forth in the CSC Decision and Order, as well as the Development and Management Plan (D&MP) approvals.

On September 6, 2017, the CSC approved PSEG's request to revise the reporting frequency of construction progress reports from monthly to quarterly, effective with the date of this Progress Report. PSEG's next report will be filed for the period ending December 31, 2017 and continue quarterly thereafter.

The CSC Condition Compliance Matrix is included in this report as **Exhibit 1** and will continue to be included in future progress reports to track the CSC's requirements.

Construction Status Summary

The project continues on schedule. During September, foundation activities and installation of site fill continued. The first large foundation (steam turbine) is scheduled for concrete placement in early October. Approximately 90% of the steel pipe piles have been completed. Underground utility construction, including the electrical ductbanks, oil / water separators, and the stormwater conveyance system, continued. In-ground sump construction is also in process, construction of the stormwater outfall has started and preparation of the piled support foundation for the Heat Recovery Steam Generator (HRSG) offload has commenced.

As previously reported, Soil Erosion and Sediment Control installation is complete and is being maintained.

Finally, **Exhibit 2** provides construction status photographs depicting site developments during the month of September.

**Connecticut Siting Council
Bridgeport Harbor Station Unit 5 – Bridgeport, Connecticut
Progress Report No. 9 – September 2017**

Remediation Status Summary

The second phase of remediation at the site is continuing. As noted in prior progress submittals, the remaining remediation scope includes the placement of an orange geotextile warning fabric over the soils remaining onsite. To date, approximately 95% of the orange warning fabric has been installed. Initial placement of the material that will be under permanent structures (water tanks, fuel oil tanks, and other foundations), in order to remain inaccessible, started in September consistent with the remediation plans.

As noted in prior progress reports, the remediation schedule for the tank farm area has been optimized to reflect actual installation dates for the foundations, which serve to physically make the soil inaccessible. These foundations are currently scheduled for concrete placement in January 2018, weather permitting.

The formal documentation addressing all tank farm remediation is scheduled for submittal to the Connecticut Department of Energy and Environmental Protection (CT DEEP) in the first quarter of 2018, after completion of the tank foundations. This work continues to be tracked in both the prior CSC Exempt Modification (EM-PSEG-015-160205) and in Condition 1(f) of this Petition. At the time of closeout, PSEG will assure both of these CSC actions are appropriately addressed.

Engineering and Regulatory Status Summary

SNC-Lavalin (SNCL) is continuing with the detailed design for the Project, and major construction and equipment supply contracting remains on schedule. Engineering design and City of Bridgeport Building Permitting activities supporting ongoing site field work are continuing on schedule.

As previously reported, permit applications for the southern and eastern roll-off unloading (CT DEEP General Permit for Coastal Maintenance and the related United States Army Corps of Engineers (USACE) General Permit for Maintenance Activities) were filed on July 17. On August 18, approval from the USACE was received for the General Permit for Maintenance Activities and on August 30 approval from the CT DEEP was received for the General Permit for Coastal Maintenance activities.

Two construction support permit submittals are anticipated to be filed with CT DEEP in the near term. These are:

1. An update to the General Permit Registration for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities related to underground utility installation on Henry Street; and
2. The General Permit Registration for the Discharge of Hydrostatic Pressure Testing Wastewater for various underground and embedded utility hydrostatic testing on the site.

Offsite Fabrication and Barge Delivery of Equipment / Fill

Delivery of the HRSG and the stack sections to the site remains scheduled for May 2018. The offloading plans have been reviewed with the CT DEEP, USACE, United States Coast Guard,

**Connecticut Siting Council
Bridgeport Harbor Station Unit 5 – Bridgeport, Connecticut
Progress Report No. 9 – September 2017**

and the City of Bridgeport Harbor Commission / Harbormaster. As referenced above, both the USACE CT DEEP General Permits in support of these activities have been issued.

The delivery / off-loading schedule for other large equipment from barges, including the Combustion Turbine, the Steam Turbine, other ancillary power island equipment, and the Air Cooled Condenser components remains on track. The plans call for these deliveries to also use the previously identified eastern locations. Delivery schedules vary by component and are expected to start in late 2017.

Deliveries to the PSEG site through the adjoining Remington property continued. PSEG is finalizing agreements with the City of Bridgeport to lease additional City-owned storage and laydown areas in the vicinity of the plant and Bridgeport Harbor.

Construction Schedule Update

Other than the continuation of equipment deliveries to the site, there have been no significant changes in the schedule for major activities from the prior reporting period.

1.	Forward Capacity Auction No. 10	February 10, 2016 (A)
2.	Completion of City of Bridgeport Land Use Permitting	November 1, 2016 (A)
3.	Completion of Non-Air CT DEEP Permitting	February 2017 (A)
4.	Initial City of Bridgeport Building Permit Submittals	February 2017 (A)
5.	Receipt of CT DEEP Final Air Permit	April 11, 2017 (A)
6.	Initiation of Field Construction Activities	April 12, 2017 (A)
a.	Temporary Construction Facilities	November 2016 (A)
b.	Site Work	April 12, 2017 (A)
c.	Foundations	June 2017 (A)
d.	Initial Equipment Deliveries	August 2017 (A)
e.	Major Equipment Delivery (Turbines, etc.)	November 2017
f.	GIS and Transformer Foundation Installation	June 2017 (A)
g.	Gas Turbine Generator (GTG) Installation	December 2017
h.	HRSG Delivery	May 2018
i.	Start-up Testing and Commissioning	September 2018
7.	Operational Testing (first GTG operations)	November 2018
8.	Balance of Plant Initial Start-up	September 2018
9.	Performance and Reliability Testing	March 2019
10.	Target Completion	April 2019
11.	Commercial Operations	June 2019

Note: "(A)" refers to ACTUAL

Status of CSC Conditions

There are no changes or updates of note to the full listing of CSC conditions (**Exhibit 1**) for this reporting period.

**Connecticut Siting Council
Bridgeport Harbor Station Unit 5 – Bridgeport, Connecticut
Progress Report No. 9 – September 2017**

If you have any questions or require clarification, please contact me at 973-430-6359 or the Project Senior Technical Director / Regulatory Lead, Jeff Pantazes at 856-359-7645.

Very truly yours



Erin Gorman
Manager – Environmental Compliance

PSEG Power LLC
Fossil Environment, Health, and Safety

Enclosures - Exhibits:

- 1. Updated CSC Condition Compliance Matrix**
- 2. Construction Status Photographs**

C Michael Perrone
Harold Blinderman, Esq.
Franca L. DeRosa, Esq.
Leilani M. Holgado, Esq.
Karl Wintermeyer
Scott Matheson
Jeffrey Pantazes
James R. Morrissey, Esq.

**Connecticut Siting Council
Bridgeport Harbor Station Unit 5 – Bridgeport, Connecticut
Progress Report No. 9 – September 2017**

Exhibit 1 – Updated CSC Condition Compliance Matrix (no change this period)

Connecticut Siting Council
Bridgeport Harbor Station Unit 5 – Bridgeport, Connecticut
Progress Report No. 9 – September 2017

CSC Requirement Number	CSC Requirement	D&M Plan Phase 1 Construction Support Facilities	D&M Plan Phase 2 BHS 5 Design	Subsequent Filing Report and Date Closure Status
1(a)	Final site plan showing roads, structures, and other improvements on the site	Partial: construction execution planning process summary included as Exhibit 1. A general update on Project Scope and Design is included as Exhibit 15.	Final structures and other improvements, including buildings, stack, power block, and balance of plant (Exhibits 1 and 2)	Completed; D&MP Update No. 1 was filed in June 2017 and approved in July 2017.
1(b)	Consideration of waste heat as supply for thermal loop or nearby industrial user	N/A	Included (Exhibit 9)	Completed; see CSC Requirement Number 12/23/16-04 below for follow-up requirements.
1(c)	Lighting plan and details to minimize impact on off-site properties	Partial: construction lighting only – Exhibit 9	Final lighting plans (Exhibits 1 and 2)	Completed
1(d)	Final fuel dock rehabilitation plan	Update on status included as Exhibit 7	Status unchanged since D&MP Phase 1 – PSEG will provide an update of this portion of the project by September 30, 2017 after design is completed. See Exhibit 10.	Completed; see CSC Requirement Number 12/23/16-05 below for follow-up actions.
1(e)	Water and sewer connection routes	Partial: temporary construction sewer line connection and other utilities included in Exhibit 9. Note that the status of the UI Exempt Modification request is included as Exhibit 11.	Permanent utility routing included (Exhibits 1 and 2)	Completed
1(f)	Status of site remediation in existing fuel tank area and remaining remediation work - Which areas of contamination will be inaccessible? - Layer showing contaminated soil locations	Remedial Action Plan Addendum included as Exhibit 6. Status of remediation implementation included as Exhibit 5. Unit 3 tank and unloader status included as Exhibit 4.	Status for remaining work will be included to document final soil placement locations. (Exhibits 7 and 8)	Open – PSEG will submit final remediation status to the CT DEEP and CSC with a target of March 31, 2018.
1(g)	Natural gas interconnection plan and gas compressor building design and location	N/A	Included (Exhibit 2)	Completed
1(h)	Final Erosion and Sediment Control Plans	Soil Erosion and Sediment Control Plans included in Exhibit 9 as noted in Exhibit 14. The USACE Jurisdictional Determination is included as Exhibit 13.	SESC plans included in Exhibit 2; they were previously provided in D&MP Phase 1 as well.	Completed

Connecticut Siting Council
Bridgeport Harbor Station Unit 5 – Bridgeport, Connecticut
Progress Report No. 9 – September 2017

CSC Requirement Number	CSC Requirement	D&M Plan Phase 1 Construction Support Facilities	D&M Plan Phase 2 BHS 5 Design	Subsequent Filing Report and Date Closure Status
1(i)	Final stormwater design	N/A	Included (Exhibit 2)	Completed. D&MP Update No. 1 was filed in June 2017 and approved in July 2017 that included stormwater design revisions.
1(j)	Stormwater Pollution Protection Plan	N/A	Included (Exhibit 15)	Completed
1(k)	Flood Mitigation Plan	N/A	Included (Exhibit 3)	Completed
1(l)	Final plans to demonstrate compliance with CT DEEP noise standards	N/A	Final Noise Study Report Included (Exhibit 14)	Completed
1(m)	Fuel storage and handling plan, including containment and spill protection measures	N/A	Spill Prevention Control and Countermeasures Plan included (Exhibit 18)	Completed
1(n)	Containment measures for step-up transformer dielectric fluids and ULSD storage tank	N/A	Included (Exhibit 3)	Completed
1(o)	Containment and/or protective measures for delivery and storage of hydrogen and aqueous ammonia	N/A	Included (Exhibits 3 and 20)	Completed
1(p)	Backup generator design and containment measures for fuel, oil, and coolant	N/A	Included (Exhibit 3)	Completed: Vendor data included in Exhibit 4 of the May 2017 Monthly Progress Report No. 5
1(q)	Dewatering plan to address groundwater issues during construction	N/A	Stormwater Pollution Control Plan for construction stormwater and dewatering included. (Exhibits 15 and 16)	Completed
1(r)	Detailed project schedules for all work activities and proposed typical construction days and hours	Partial: Schedule update Included as Exhibit 2 and permitting status included as Exhibit 3.	Work hours and schedule update included in Exhibits 3 and 6 respectively.	Completed
1(s)	Construction laydown area locations	Included in Exhibits 8 and 10 including access routings for high trucks. In addition, the plans for barge delivery of equipment and unloading are included as Exhibit 12.	See Exhibit 3 for an update regarding a lease agreement for an adjoining property	Complete: Submitted information in D&MP Phases 1 and 2 was updated in May 2017 Monthly Progress Report No. 5.
1(t)	Site security measures	Partial: site security for construction discussed in Exhibit 1.	Partial: Site security measures (Exhibit 3)	Completed

Connecticut Siting Council
Bridgeport Harbor Station Unit 5 – Bridgeport, Connecticut
Progress Report No. 9 – September 2017

CSC Requirement Number	CSC Requirement	D&M Plan Phase 1 Construction Support Facilities	D&M Plan Phase 2 BHS 5 Design	Subsequent Filing Report and Date Closure Status
1(u)	Final FAA lighting design for the stack and any FAA crane determinations	N/A	Included (Exhibit 3)	Completed
1(v)	Decommissioning Plan as contingency plan, including infrastructure removal and site restoration plans	N/A	Included (Exhibit 19)	Completed
2	Submit FAA Determinations for temporary structures (cranes) and stack	N/A	N/A	Completed April 11, 2017 via memorandum to the CSC.
3	Submit local permits relative to the discharge of wastewater	N/A	N/A	Completed April 11, 2017 via memorandum to the CSC.
4	Submit final CT DEEP air emissions and water discharge permits	N/A	N/A	Completed April 11, 2017 via memorandum to the CSC.
5	The use of natural gas as a fuel pipeline / system cleaning medium for construction or any future facility modification shall be prohibited.	N/A	N/A	PSEG notes this condition and will retain it as "Open". The provisions of CSC Requirement Number 6 (below) address the specifics of compliance.
6	Submit the information included below in CSC requirement Numbers 6(i) to 6(viii) at least 15 days prior to fuel pipeline / system cleaning medium for construction or any future facility modification.*	N/A	N/A	Open – an update response to all of the Condition 6 (i) to (viii) through 8(iii) will be provided by December 31, 2017
6(i)*	Identification of cleaning media to be used	N/A	Not currently available.	Open - An update will be provided by December 31, 2017.
6(ii)*	Identification of any known hazards through use of selected cleaning media	N/A	Not currently available.	Open - An update will be provided by December 31, 2017.
6(iii)*	Description of how known hazards will be mitigated, including applicable state or federal regulations	N/A	Not currently available.	Open - An update will be provided by December 31, 2017.
6(iv)*	Identification and description of accepted industry practices or relevant regulations concerning proper use of such media	N/A	Not currently available.	Open - An update will be provided by December 31, 2017.

Connecticut Siting Council
Bridgeport Harbor Station Unit 5 – Bridgeport, Connecticut
Progress Report No. 9 – September 2017

CSC Requirement Number	CSC Requirement	D&M Plan Phase 1 Construction Support Facilities	D&M Plan Phase 2 BHS 5 Design	Subsequent Filing Report and Date Closure Status
6(v)*	Detailed narratives/drawings showing location and procedures to be used during pipe cleaning process, including worker safety exclusion zones	N/A	Not currently available.	Open - An update will be provided by December 31, 2017.
6(vi)*	Identification of contractor or personnel performing work, including description of past project experience and level of training/qualifications necessary for work	N/A	Not currently available.	Open - An update will be provided by December 31, 2017.
6(vii)*	Contact information for special inspector (CT registered engineer with knowledge or experience with electric generating facilities) with written approval by local fire marshal and building inspector	N/A	Not currently available.	Open - An update will be provided by December 31, 2017.
6(viii)*	Certification of notice regarding pipe cleaning operations (Submitted to all state agencies listed in CGS §16-50j(g), Dept of Consumer Protection, Dept of Labor, Dept of Emergency Services and Public Protection, Dept of Construction Services, Dept of Emergency Management and Homeland Security, and local fire marshal)	N/A	Not currently available. An update will be provided one month prior to the start date for pipe cleaning.	Open - An update will be provided by December 31, 2017 regarding the anticipated schedule.
7	Compliance with specific codes and standards for any fuel pipeline / system cleaning operations related to construction or any future facility modification, as applicable. (Note: the Codes and Standards are listed in the Decision and Order)	N/A	N/A	PSEG notes this condition and will retain it as "Open". The provisions of CSC Requirement Number 6 (above) address the specifics of compliance.
8(i) [†]	Description of results of simulated emergency response activities	N/A	Not currently available.	Open - a status to all of the Condition 6 (i) through 8(iii) will be provided by December 31, 2017

Connecticut Siting Council
Bridgeport Harbor Station Unit 5 – Bridgeport, Connecticut
Progress Report No. 9 – September 2017

CSC Requirement Number	CSC Requirement	D&M Plan Phase 1 Construction Support Facilities	D&M Plan Phase 2 BHS 5 Design	Subsequent Filing Report and Date Closure Status
8(ii) [†]	Details of any facility site access system that accounts for all personnel entering and leaving the facility	N/A	Not currently available.	Open - An update will be provided by December 31, 2017.
8(iii) [†]	Establishment of emergency responder/local community notification system for onsite emergencies and planned construction-related activities	N/A	Not currently available.	Open - An update will be provided by December 31, 2017.
9	Unless otherwise approved by the Council, the facility must be constructed within five years of July 22, 2016 (by July 21, 2021) or re-approval by the Council is required.	N/A	N/A	Open: PSEG anticipates completion of BHS 5 by June 1, 2019.
10	Notify the Council within 45 days of the completion of construction.	N/A	N/A	Open
11	Maintain the facility in a reasonable physical and operational condition consistent with the Decision and Order and the approved D&MPs.	N/A	N/A	Noted
12	Provide the Council with a minimum of 30 days written notice when the facility will cease operations.	N/A	N/A	Noted
13	Remit timely payments associated with annual assessments and invoices submitted by the Council.	N/A	N/A	Noted
14	Notify the Council of any change in ownership or contact information within 30 days of the sale and / or transfer.	N/A	N/A	Noted
15	Submit any request for extension as noted in CSC Requirement Number 9 (above) not later than 60 days prior to the expiration, including notice to specific parties and the service list.	N/A	N/A	Noted

Connecticut Siting Council
Bridgeport Harbor Station Unit 5 – Bridgeport, Connecticut
Progress Report No. 9 – September 2017

CSC Requirement Number	CSC Requirement	D&M Plan Phase 1 Construction Support Facilities	D&M Plan Phase 2 BHS 5 Design	Subsequent Filing Report and Date Closure Status
16	The Declaratory Ruling may be transferred subject to being current with payments and an agreement to continue payments as required.	N/A	N/A	Noted
17	Retain a Special Inspector to assist the Fire Marshall to assure compliance with CGS §16-50ii	N/A	N/A	Noted. This will be addressed in the response to CSC Requirement Number 6(vii). An update will be provided by December 31, 2017.
18	Deposit a fee into the Code Training Fund in accordance with CGS § 29-251c.	N/A	N/A	Open. PSEG will work with the City of Bridgeport to establish the timing and amount of the subject fee. This will be addressed in a future Progress Report prior to the completion of the project.
	D&MP Phase 1 Conditions			
10/31/16-01	Use of off-road construction equipment that meet the latest EPA or California Air Resources Board standards, or in the alternative, equipment with the best available controls on diesel emissions, including but not limited to retrofitting with diesel oxidation catalysts, particulate filters and use of ultra-low sulfur fuel.			Completed: February 2017 Monthly Progress Report.
10/31/16-02	Compliance with the provisions of Section 22a-174-18(b)(3)(C) of the RCSA that limit the idling of mobile sources to 3 minutes.			Completed: February 2017 Monthly Progress Report.
10/31/16-03	The petitioner shall submit the specifications of the fill to the Council			Completed; December 2, 2016 response to Interrogatory CSC D&M-05.
	D&MP Phase 2 Conditions			
12/23/16-01	Same as 10/31/16-01 above			Completed: February 2017 Monthly Progress Report.

Connecticut Siting Council
Bridgeport Harbor Station Unit 5 – Bridgeport, Connecticut
Progress Report No. 9 – September 2017

CSC Requirement Number	CSC Requirement	D&M Plan Phase 1 Construction Support Facilities	D&M Plan Phase 2 BHS 5 Design	Subsequent Filing Report and Date Closure Status
12/23/16-02	Same as 10/31/2016-02 above			Completed: February 2017 Monthly Progress Report.
12/23/16-03	Compliance with the reporting requirements under Section 16-50j-62 of the RCSA			Ongoing Reporting to continue
12/23/16-04	The final modifications of the plant to accommodate the use of waste heat, if applicable, shall be submitted to the Council for review and approval.			PSEG will provide an update by January 31, 2018.
12/23/16-05	The final fuel dock rehabilitation plan shall be submitted to the Council for review and approval.			PSEG will provide an update by June 30, 2018.
12/23/16-06	The containment measures for the backup generator engine oil and coolant shall be submitted to the Council.			Completed: Vendor data included in Exhibit 4 of the May 2017 Monthly Progress Report No. 5
12/23/16-07	Prior to testing of start-up of the plant, the Certificate Holder shall submit to the council its final plans to comply with the recommendation and conditions relative to Council Docket No. NT-2010 and conditions (6i through 8iii) Council's Decision and Order for Petition No. 1218 relative to plant safety.			PSEG will provide an update by December 31, 2017 as noted in CSC Requirement Numbers 6(i) to 8(iii) above.
12/23/16-undesignated	The Council recommends that PSEG consult with Council staff regarding dust control measures for materials delivered by barge.			Completed: June 2017 Monthly Progress Report.
* 15 days prior to fuel pipeline/system cleaning operations related to construction or any future facility modifications † Submittal of Emergency Response/Safety Plan developed in cooperation with all local public safety officials, DESPP, and other emergency response officials				

**Connecticut Siting Council
Bridgeport Harbor Station Unit 5 – Bridgeport, Connecticut
Progress Report No. 9 – September 2017**

Exhibit 2 – Construction Status Photographs



Bridgeport Harbor Station Unit 5
Combined Cycle Project

Progress Photos
Site Progress Photo 9-14-17



Site Progress Photo 9-20-17





Bridgeport Harbor Station Unit 5
Combined Cycle Project



GIS Building Sweeps



Admin Building Ductbank Conduits Being Installed



Installed Conduits in the CTG Foundation



Grading Service Water Tank Area



Preparing the HRSG Unload Area



Pouring Walls at Spent Slurry Sump



Installing Oily Water Separator



Finishing Aux transformer Ductbanks



**Bridgeport Harbor Station Unit 5
Combined Cycle Project**



GIS Building Sweeps



Service Water & Demineralizer Tank Area



Top Mat on the STG Foundation



Admin Building Ductbank Conduits Being Installed



Morning Safety Meeting



General Services Sump Foundation



Oily Water Separator Installed



Rip Rap Stockpiled for New Outfall Installation