PSEG Power Connecticut LLC Bridgeport Harbor Station, 1 Atlantic Street, Bridgeport, CT 06604-5513



April 17, 2020

VIA ELECTRONIC 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. 19 – First Quarter 2020

Dear Ms. Bachman:

This is the First Quarter 2020 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 conditions as set forth in the CSC Decision and Order (D&O), as well as the Development and Management Plan (D&MP) approvals.

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 requirements.

Construction Status Summary

The plant's Commercial Operations Date (COD) was June 10, 2019 as previously reported. The BHS 5 facility has dispatched energy at or near the rated capacity of the unit through the Independent System Operator – New England (ISO-NE) on natural gas, for most of the reporting period.

Physical construction of the electric generating equipment is complete. Miscellaneous construction activities including final non-critical / non-generation features are continuing. PSEG is currently continuing construction to complete the stormwater conveyance and treatment system, including the tie-in to the outfall, which is planned for completion by the end of July 2020.

In addition, electrical installation for plant lighting is being completed, particularly the installation of site perimeter light poles and additional lighting inside of the Turbine Building. This work is planned for completion by the end of June 2020.

As previously reported, remaining site finishes will follow the completion of the remaining construction close-out work, which is expected in the third quarter of 2020. Soil Erosion and Sediment Control (SESC) Best Management Practice (BMP) features will remain in place until site finishes are completed, required stormwater inspections are being conducted, and the

SESC BMPs are being maintained. All testing / commissioning activities for operations on fuel gas have been completed for the facility. The Ultra Low Sulfur Distillate (ULSD) fuel unloading and storage systems have been commissioned, and documentation regarding the testing and commissioning of the ULSD tank was provided to the Connecticut Department of Energy and Environmental Protection (CT DEEP). On January 29, 2020, CT DEEP confirmed that no additional documentation is required to operate this equipment.

Community Activities

PSEG continues to work closely with the City of Bridgeport regarding the ongoing implementation of the Community Environmental Benefit Agreement (CEBA). The project website and Facebook page (https://bridgeportharborstation.com/home/), with photographs and time-lapse video of the construction, provides plant summary information. PSEG continues to solicit CEBA Renewable Energy Investment Program (REIP) opportunities.

Remediation Status Summary

Site remediation status remains unchanged; specifically, all activities are field complete, excepting final site finishes. PSEG plans to document remediation closure with the Connecticut Department of Energy & Environmental Protection (CT DEEP) at the time the final approved site finishes are installed (as noted above, this is currently targeted for 3Q2020). Documentation related to fill depths and the orange warning fabric elevation is being prepared, pending the final site grades, for the closure documentation. In addition, the area with Engineered Controls (EC) in the laydown near the east ramp will be also be included in the final EC documentation. The remediation and EC closure documentation remains targeted for submittal to the CT DEEP in 3Q2020.

Engineering and Regulatory Status Summary

City of Bridgeport building permitting closeouts are in progress, with approximately 75% of the building permits closed as of March 31, 2020. PSEG continues to collate documentation and coordinate final inspections to support building permit close-outs and issuance of Certificates of Occupancy. Building permit applications were submitted to the City of Bridgeport Building Department to support the installation of the perimeter lighting. Although those applications were held up due to temporary shutdowns at City Hall for COVID-19, the Project team has been working with the City reviewers and inspectors to allow installation to continue.

The CSC Decision and Order requires submittal of certain local and state permits. No new permits or permit revisions were filed or received in the first quarter of 2020. There are no outstanding permit applications currently pending before CTDEEP or the City of Bridgeport. Additional permitting update information is provided below.

- 1. The Comprehensive General Permit (GP) Registration for Discharges to Surface Water and Groundwater have been completed for construction scope. The Comprehensive GP will remain open for potential use related to site operations in accordance with the GP terms and conditions as necessary and appropriate.
- 2. The existing CT DEEP GP for the Discharge of Stormwater Associated with Industrial Activities became effective for BHS 5 at COD. The CT DEEP GP for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities remains in effect

concurrently until the site finishes are installed, and all features of the permanent stormwater system are completed and placed in service.

- 3. The ULSD unloading and storage systems have been commissioned the ULSD Forwarding and Combustion Turbine Generator (CTG) Liquid Fuel commissioning is currently scheduled for Fall 2020.
- 4. The remaining permitting activities associated with the construction of BHS5 include:
 - a. Updates of the BHS site Stormwater Pollution Prevention Plan (SWPPP), and Spill Prevention, Control and Countermeasures Plan (SPCC) for incorporation of BHS5 into the existing site response plans have been completed. These documents will be electronically re-submitted to the CSC per Conditions 1(j) and 1(m) through 1(p) under separate cover, after any necessary minor revisions are made due to final site finishes and grading.
 - b. Permit closeouts upon completion of all site construction activities.
 - c. Building permit closeouts upon City of Bridgeport final acceptance of work and issue of the applicable and required Certificates of Occupancy.

Development and Management Plan (D&MP) and Other CSC Updates

There were no D&MP updates filed in 1Q2020. No additional D&MP construction or operations-related submittals are anticipated excepting the necessary submittals related to the potential refurbishment of the existing oil dock per D&MP Phase 2 Condition 12/23/16-05.

Construction Schedule Update

There have been changes in the schedule for closeout / completion activities from the prior reporting period on lines 12 and 13 below. "(A)" refers to ACTUAL.

1. 2. 3. 4.	Comp Comp Initial	rd Capacity Auction No. 10 letion of City of Bridgeport Land Use Permitting letion of Non-Air CT DEEP Permitting City of Bridgeport Building Permit Submittals	February 10, 2016 (A) November 1, 2016 (A) February 2017 (A) February 2017 (A)
5.		ot of CT DEEP Final Air Permit	April 11, 2017 (A)
6.	Initiation	on of Field Construction and Delivery 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 (Transformers)	November 2017 (A)
	f.	Major Equipment Delivery (Turbines / Generators)	January 2018 (A)
	f.	GIS and Transformer Foundation Installation	June 2017 (A)
	g.	Gas Turbine Generator (GTG) Delivery and Set	January 2018 (A)
	ĥ.	HRSG Delivery	May 2018 (A)
	i.	Start-up Testing and Commissioning	October 2018 (A)
7.	Opera	tional Testing (first GTG operations)	May 6, 2019 (A)
8.	Baland	ce of Plant Initial Start-up Testing	January 2019 (A)
9.	Perfor	mance and Reliability Testing	April - June 2019 (A)
10.		t Completion	June 2019 (A)
11.		nercial Operation Date (COD) on Natural Gas	June 10, 2019 (A)

12. Commissioning of the Combustion Turbine Generator on ULSD December 2020

13. Estimated Completion Date (Post-COD Site Field Construction Related Activities) December 2020

Status of CSC Conditions

The changes and updates to the full listing of CSC conditions (**Exhibit 1**) for this reporting period include the following:

- 1. In consultation with the City of Bridgeport Fire Marshal, PSEG has developed plans for emergency response drills for the City of Bridgeport emergency response organizations. Scheduling is being coordinated with the Fire Marshal and is currently on hold due to the COVID-19 pandemic. Exhibit 1 has been updated accordingly.
- Pursuant to Condition 12/23/16-05 of the D&MP Phase 2, PSEG will provide the CSC with a final determination on plans for the refurbishment of the oil dock to support Bridgeport Unit 5 by December 31, 2020. Based on the plans generated for this activity, the schedule and design plans will follow accordingly. Exhibit 1 has been updated accordingly.
- 3. There are no other minor updates or refinements included in Exhibit 1.

If you have any questions or require clarification, please contact me or the Project Senior Technical Director / Regulatory Lead, Jeff Pantazes at 609-440-0236.

Very truly yours

Electronically approved April 17, 2020 at 0648 by Arthur Mantell, Plant Manager BHS5

Arthur Mantell
Plant Manager
PSEG Power LLC

Enclosures

Exhibit 1 Updated CSC Condition Compliance Matrix

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Exhibit 1 – Updated CSC Condition Compliance Matrix

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 anticipates submittal of final remediation status to the CT DEEP in the third quarter of 2020 and to the CSC shortly thereafter. This condition also addresses remediation reporting related to CSC Exempt Modification EM-PSEG-015-160205 as noted in the 3Q2018 Quarterly Progress Report.
1(g)	Natural gas interconnection plan and gas compressor building design and location	N/A	Included (Exhibit 2)	Completed

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(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	SESC plans included in Exhibit 2; they were previously provided in D&MP Phase 1 as well.	Completed
		as Exhibit 13.		
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 (SWPPP)	N/A	Included (Exhibit 15)	Completed; an update incorporating BHS5 into the existing site SWPPP, is currently targeted for submittal to the CSC in 3Q2020 after site finishes.
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 (SPCC) Plan included (Exhibit 18)	Completed; an update incorporating BHS5 into the existing site SPCC Plan, is currently targeted for submittal to the CSC in 3Q2020 after site finishes.
1(n)	Containment measures for step-up transformer dielectric fluids and ULSD storage tank	N/A	Included (Exhibit 3)	Completed; an update incorporating BHS5 into the existing site SPCC Plan, is currently targeted for submittal to the CSC in 3Q2020 after site finishes.
1(o)	Containment and/or protective measures for delivery and storage of hydrogen and aqueous ammonia	N/A	Included (Exhibits 3 and 20)	Completed; Note that D&MP Update No. 3 was filed with the CSC on February 28, 2019 and approved March 4, 2019.
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

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(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
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. Updated Determinations were included as Exhibit 4 of the 3Q2018 Quarterly Progress Report.
3	Submit local permits relative to the discharge of wastewater	N/A	N/A	Complete - Initially completed April 11, 2017 via memorandum to the CSC. The final CT DEEP Temporary Authorization and individual Pretreatment Permit for discharge of industrial wastewater to WPCA was submitted on June 12, 2019.

CSC Requirement Number	CSC Requirement	D&M Plan Phase 1 Construction Support	D&M Plan Phase 2 BHS 5 Design	Subsequent Filing Report and Date
4	Submit final CT DEEP air emissions and water discharge permits	N/A	N/A	Closure Status ** Complete - Initially completed April 11, 2017 via memorandum to the CSC. Updated NSR permits were provided in Exhibit 3 of the 2Q2018 Progress Report No. 12. The Title V Air Permit was included as Exhibit 3 of the 3Q2018 Quarterly Progress Report. The final CT DEEP Temporary Authorization and individual Pretreatment Permit for discharge of industrial wastewater to WPCA was submitted on June 12, 2019.
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	Complete - PSEG notes this condition and will comply for any future facility modifications. 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	Closed – information submitted to the CSC via memos on November 13, November 15, and November 21, 2018. CSC provided acknowledgment on November 28, 2018.
6(i)	Identification of cleaning media to be used	N/A	Not currently available.	Closed – see Condition 6.
6(ii)	Identification of any known hazards through use of selected cleaning media	N/A	Not currently available.	Closed – see Condition 6.
6(iii)	Description of how known hazards will be mitigated, including applicable state or federal regulations	N/A	Not currently available.	Closed – see Condition 6.
6(iv)	Identification and description of accepted industry practices or relevant regulations concerning proper use of such media	N/A	Not currently available.	Closed – see Condition 6.

csc	CSC Requirement	D&M Plan Phase 1	D&M Plan Phase 2	Subsequent Filing Report
Requirement Number		Construction Support Facilities	BHS 5 Design	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.	Closed – see Condition 6.
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.	Closed – see Condition 6.
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.	Closed – see Condition 6.
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.	Closed – see Condition 6.
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	Closed – see Condition 6.
8(i) [†]	Description of results of simulated emergency response activities	N/A	Not currently available.	Open – response targeted for submittal after the onsite drill, via the Quarterly Progress Report. Schedule pending COVID-19 pandemic.

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 – response targeted for submittal after the onsite drill, via the Quarterly Progress Report. Schedule pending COVID-19 pandemic.
8(iii) [†]	Establishment of emergency responder/local community notification system for onsite emergencies and planned construction-related activities	N/A	Not currently available.	Open – response targeted for submittal after the onsite drill, via the Quarterly Progress Report. Schedule pending COVID-19 pandemic.
9	Unless otherwise approved by the Council, the facility must be constructed within five years of July 22, 2016 (by July 21, 2021) or reapproval by the Council is required.	N/A	N/A	Open: PSEG completed commissioning on natural gas and the COD was June 10, 2019. This item will remain open until ULSD COD and site field construction completion in 4Q2020.
10	Notify the Council within 45 days of the completion of construction.	N/A	N/A	Open – PSEG also will provide the required Final Report within 180 days of construction completion.
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

CSC	CSC Requirement	D&M Plan Phase 1	D&M Plan Phase 2	Subsequent Filing Report
Requirement Number		Construction Support Facilities	BHS 5 Design	and Date Closure Status **
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
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	Closed – see Condition 6.
18	Deposit a fee into the Code Training Fund in accordance with CGS § 29-251c.	N/A	N/A	Closed – PSEG submitted documentation to the CSC on October 11, 2018.
	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			

CSC Requirement Number	CSC Requirement	D&M Plan Phase 1 Construction Support	D&M Plan Phase 2 BHS 5 Design	Subsequent Filing Report and Date
	Same as 10/31/16-01	Facilities		Closure Status ** Completed: February 2017
12/23/16-01	above			Monthly Progress Report.
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 on a quarterly basis (approved by the CSC on September 6, 2017).
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.			Closed; see Exhibit 3 of 4Q2018 Quarterly Progress Report.
12/23/16-05	The final fuel dock rehabilitation plan shall be submitted to the Council for review and approval.			PSEG will submit a final determination regarding the rehabilitation of the oil dock by December 31, 2020. The schedule for D&MP Phase 2 Condition 12/23/16-05 (Oil Dock Refurbishment Plans) will follow accordingly.
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 or 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.			Closed – information submitted to the CSC via memos on November 13, November 15, and November 21, 2018. CSC provided acknowledgment on November 28, 2018.
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.
safety officials	Emergency Response/Safe, DESPP, and other emerge submitted to and from the C	ncy response officials.	•	
	o://www.ct.gov/csc/cwp/view			

NOTE: Additional information related to submittal plans to address CSC condition 8 (emergency response) is provided below:

Emergency response procedures (CSC Condition 8) are in place for both BHS 5 and the existing station. PSEG is updating these processes with the ongoing transition from BHS 5 construction to operations. Coordination with City of Bridgeport Fire Marshal and emergency services is ongoing, and contact and response information has been updated. A description of the revised procedures will be submitted to the CSC, to address CSC Condition 8 requirements, after final alignment and drills, which will be scheduled after the COVID-19 pandemic restrictions are lifted.