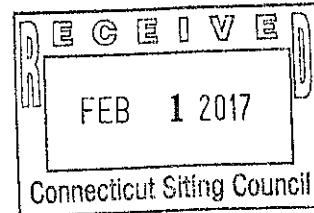


# Holland & Knight

31 West 52nd Street | New York, NY 10019 | T 212.513.3200 | F 212.385.9010  
Holland & Knight LLP | [www.hklaw.com](http://www.hklaw.com)

Stephen J. Humes  
(212) 513-3473  
[steve.humes@hklaw.com](mailto:steve.humes@hklaw.com)

January 31, 2017



## VIA ELECTRONIC MAIL AND OVERNIGHT MAIL

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

Re: **PETITION NO. 1218** - PSEG Power Connecticut LLC petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the construction, maintenance, and operation of a new 485 megawatt (MW) dual fuel combined-cycle electric generating facility at the existing Bridgeport Harbor Station located at 1 Atlantic Street, Bridgeport, Connecticut

### **Connecticut Siting Council Bridgeport Harbor Station Unit 5 - Bridgeport, Connecticut MONTHLY PROGRESS REPORT #1 – JANUARY 31, 2017**

Dear Ms. Bachman:

This is the first monthly progress report submittal to the Connecticut Siting Council (CSC) for the new combined cycle generating facility 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).

The CSC's July 21, 2016 Opinion, Findings of Fact, and Decision and Order, as well as the Development and Management Plans (D&MP) Phases 1 and 2, approved on October 27, 2016 and December 22, 2016, respectively, serve as the basis for the approved project scope. The monthly progress reports will document compliance with all CSC's conditions as set forth in the Decision and Order as well as the two D&MP approvals. PSEG will provide updates to design or construction plans via this monthly progress reporting process.

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

**Connecticut Siting Council  
Bridgeport Harbor Station Unit 5 - Bridgeport, Connecticut  
MONTHLY PROGRESS REPORT #1 – JANUARY 31, 2017**

**General Status Summary:**

The updated Permit Status Summary is included as **Exhibit 2**. Significant regulatory approvals and actions since our previous filings include:

1. The Connecticut Department of Energy and Environmental Protection (CT DEEP) issued the Certificate of Permission for the stormwater outfall on December 16, 2016.
2. CT DEEP issued the Notice of Tentative Determination (NTD) for the New Source Review (NSR) Air Permits on December 28, 2016. Two individuals have requested that a public informational meeting be held; this is scheduled for February 28, 2017. The public comment period closes on March 10, 2017. PSEG proactively provided a Spanish language copy of the notice for publication in LaVoz Hispana (published January 26, 2017). A copy of the NTD, and public information meeting notices are included as **Exhibit 3**.
3. The Federal Aviation Administration (FAA) issued Determinations for most construction cranes on December 28, 2016 (one crane remains to be authorized);
4. The remaining Bridgeport City Engineer's comments on stormwater and the Traffic Impact Study were resolved on December 30, 2016, closing out all open Coastal Site Plan approval conditions.
5. The General Permit for Coastal Maintenance application was withdrawn on January 13, 2017 after CT DEEP determined that the work as shown on the submitted plans could be performed without prior approval, subject to the General Permit conditions.
6. The Industrial Wastewater and Construction Stormwater and Dewatering General Permit applications remain in CT DEEP review.

Site readiness work for construction support facilities and other allowable pre-NSR permit scope is ongoing.

The last No. 6 Fuel Oil Storage Tank ("B") was drained and cleaned. Foundation removal within the tank farm footprint continues. The remediation first Phase (prior to the NSR permit) is in progress and expected to be completed by approximately mid-February 2017. The tank farm berms have been removed. Total quantities of contaminated material to be removed from the site are estimated at approximately 1600 cubic yards, less than originally anticipated. The quantity of material that will be placed on site under the permanent structures (water and fuel oil tanks) is estimated at approximately 5500 cubic yards.

Upon receipt of the NSR Air Permits for the Project, the second phase of remediation will be implemented. The CT DEEP-approved Revised Remedial Action Plan dated August 2004 (and addendum dated August 2016) scope includes consolidating and compacting the above-referenced 5500 cubic yards of material under the permanent foundations. PSEG will also install orange warning geotextile fabric within the footprint of the site sheetpile walls. All newly constructed utilities, foundations, structures, etc. will be above the orange warning geotextile and bedded in clean fill. Based on current site development schedule estimates, the complete remediation is not expected to be completed until the fall of 2017, assuming timely receipt of the NSR Air Permits.

As noted previously, PSEG has completed the construction of a new fuel oil storage tank with an associated fuel unloading facility. This will be documented via a separate letter per the condition of the CSC's acknowledgment of Exempt Modification for that tank. The new fuel oil tank and

**Connecticut Siting Council**

**Bridgeport Harbor Station Unit 5 - Bridgeport, Connecticut**

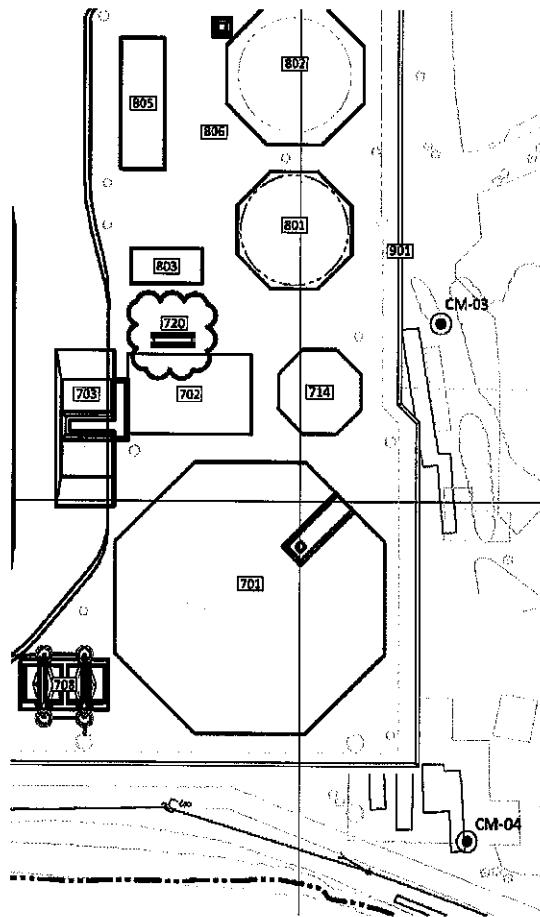
**MONTHLY PROGRESS REPORT #1 – JANUARY 31, 2017**

system were commissioned and tied-in to Unit 3 at the completion of the scheduled maintenance outage in November 2016. The three small existing underground light fuel oil storage tanks (UST) were removed in December and reporting / closeout documentation is in progress. No remediation requirements were identified during the removal of the three USTs.

**Design Summary:**

Detailed design continues for the Project, and major construction and equipment supply contracting has continued on schedule. The following minor change to the design plans was made since the D&MP Phase 2 submittal.

A foundation for a third water storage tank has been added to the south of the existing Service Water / Fire Water Storage Tank (No.801) and the Demineralized Water Storage Tank (No. 802). The new tank foundation (southeastern corner of the site shown below), designated No. 714, is for a future water storage tank (not sized or included in the current scope of the Project), which would be used to provide the ability to drain down the Turbine Secondary Systems, including the Air Cooled Condenser and Heat Recovery Steam Generator (HRSG) during maintenance or off-normal operations. This will provide the operators with the ability to store additional water inventory as needed for reuse and avoid discharges to the City Sewer System. If a new tank is approved for construction, details will be submitted to the CSC via a future monthly report. The only addition to the design plan is the tank foundation.



**Connecticut Siting Council**

**Bridgeport Harbor Station Unit 5 - Bridgeport, Connecticut**

**MONTHLY PROGRESS REPORT #1 – JANUARY 31, 2017**

Connecticut does not require double wall tanks for Oil/Water Separators (OWS). PSEG has determined that double wall OWS units will be used at BHS 5 to provide added assurances against any inadvertent leaks.

PSEG is re-evaluating the use of the existing oil dock (as previously discussed with and submitted to the CSC) for the delivery of fuel oil for BHS 5, and may opt to re-purpose the existing coal unloading dock at the site. A decision has not been made, but as the repair of the oil dock was previously included in the scope of the project approvals, PSEG is providing the CSC with early notice of a potential change. As details become available, PSEG will further update the CSC. This action is tracked under CSC Requirement Number 12/23/16-05 as shown in **Exhibit 1**.

**Construction Planning Summary:**

**Offsite Fabrication**

PSEG has determined that construction efficiencies and traffic reductions (worker vehicles and equipment delivery trucks) may be realized with the offsite fabrication of the HRSG. Pending further design inputs, PSEG anticipates that the HRSG will be barged to the site (delivery in 2018). PSEG will schedule pre-application discussions with the CT DEEP, United States Army Corps of Engineers, United States Coast Guard, and City of Bridgeport as the plans are further refined. Permits that may be required are not currently shown on the Permit Status Summary (**Exhibit 2**), but will be added after pre-application discussions.

**Rigid Inclusions and Piling**

As previously communicated, the bearing capacity of portions of the site will be improved by the installation of grout “columns” (also called Rigid Inclusions) embedded into the sand layer that underlays the site, and the installation of a load transfer “platform” (i.e. the compacted fill). The purpose of this improvement is to distribute the site structural loads (from the fill and other lightly loaded structures) to the lower sand layer through the Rigid Inclusions. The Rigid Inclusions consist of grout elements installed using a displacement auger, and filling the hole with grout as the auger is retrieved from the soil. The design spacing is not complete and will vary across the site, but typical values include an approximately 18-inch diameter auger(s), with center to center spacing of six to ten feet. The displacement-type auger forces soil laterally into the in-situ soil, limiting the amount of spoils observed at the ground surface, and at the same time densifying the soil. Any material displaced during the initial three to five feet of auguring will be locally spread and will be beneath the orange warning geotextile fabric (which will be placed after the Rigid Inclusions are installed). A total of approximately 4,000 Rigid Inclusions, each up to approximately 85 feet in depth, is anticipated.

A Rigid Inclusion test installation is planned for February at the site. The use of the Rigid Inclusions will support the placement of the fill material and lightly loaded structures. Deep foundations (driven steel piles) will be used for critical structures and structures with high bearing loads. A steel pipe pile test installation is also planned for February.

**Connecticut Siting Council  
Bridgeport Harbor Station Unit 5 - Bridgeport, Connecticut  
MONTHLY PROGRESS REPORT #1 – JANUARY 31, 2017**

**Onsite and Offsite Construction Support Facilities**

Onsite and offsite construction support facilities plans continue to be developed, but are essentially the same as provided in prior submittals. PSEG is evaluating the specific uses for the adjacent former Remington Shaver property, immediately west of the Project site, for parking and temporary trailer use. PSEG will provide updates if other properties are identified to support the Project.

**Construction Schedule Update**

The following major schedule activities are anticipated for the construction of BHS 5. Changes in site delivery dates for components that are either assembled or pre-assembled offsite are shown.

1. Forward Capacity Auction No. 10	February 10, 2016(A)
2. Completion of City of Bridgeport Land Use Permitting	November 2016(A)
3. Completion of Non-Air CT DEEP Permitting	March 2017
4. Initial City of Bridgeport Building Permitting	February 2017
5. Receipt of CT DEEP Final Air Permit	March 2017
6. Initiation of Field Construction Activities	March 2017
a. Temporary Construction Facilities	November 2016(A)
b. Site Work and Rigid Inclusions	April 2017
c. Foundations	July 2017
d. Initial Equipment Deliveries	September 2017
e. Major Equipment Delivery (Turbines, etc.)	October 2017
f. GIS and Transformer Foundation Installation	May 2017
g. Gas Turbine Generator (GTG) Installation	December 2017
h. HRSG Delivery	March 2018
i. Start-up Testing and Commissioning	January 2019
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

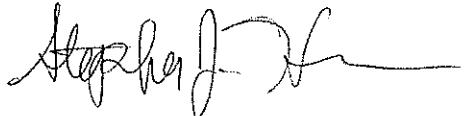
**Note:** "(A)" refers to ACTUAL

**Connecticut Siting Council  
Bridgeport Harbor Station Unit 5 - Bridgeport, Connecticut  
MONTHLY PROGRESS REPORT #1 – JANUARY 31, 2017**

Should you have any questions or require clarification, please don't hesitate to contact me at 212-513-3473 or the Project Regulatory Lead Jeff Pantazes at 856-359-7645.

Sincerely yours,

HOLLAND & KNIGHT LLP



Stephen J. Humes

Enclosures

cc:     Meredith L. Hiller, Esq.  
         Leilani M. Holgado, Esq.  
         Michael Stagliola  
         Karl Wintermeyer  
         David Hinchey  
         James R. Morrissey, Esq.

**Exhibits:**

1. CSC Condition Compliance Matrix updated January 31, 2017
2. Permit Status Summary dated January 31, 2017
3. Notice of Tentative Determination and Public Information Meeting Notices

**Exhibit 1 – 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)	<b>Closed</b>
1(b)	Consideration of waste heat as supply for thermal loop or nearby industrial user	N/A	Included (Exhibit 9)	<b>Closed</b> - 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)	<b>Closed</b>
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.	<b>Closed</b> - 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)	<b>Closed</b>
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 CSC with a target of October 31, 2017.
1(g)	Natural gas interconnection plan and gas compressor building design and location	N/A	Included (Exhibit 2)	<b>Closed</b>
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.	<b>Closed</b>
1(i)	Final stormwater design	N/A	Included (Exhibit 2)	<b>Closed</b>

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(j)	Stormwater Pollution Protection Plan	N/A	Included (Exhibit 15)	<b>Closed</b>
1(k)	Flood Mitigation Plan	N/A	Included (Exhibit 3)	<b>Closed</b>
1(l)	Final plans to demonstrate compliance with CT DEEP noise standards	N/A	Final Noise Study Report Included (Exhibit 14)	<b>Closed</b>
1(m)	Fuel storage and handling plan, including containment and spill protection measures	N/A	Spill Prevention Control and Countermeasures Plan included (Exhibit 18)	<b>Closed</b>
1(n)	Containment measures for step-up transformer dielectric fluids and ULSD storage tank	N/A	Included (Exhibit 3)	<b>Closed</b>
1(o)	Containment and/or protective measures for delivery and storage of hydrogen and aqueous ammonia	N/A	Included (Exhibits 3 and 20)	<b>Closed</b>
1(p)	Backup generator design and containment measures for fuel, oil, and coolant	N/A	Included (Exhibit 3)	Open
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)	<b>Closed</b>
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.	<b>Closed</b>
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	Submittal of information known to date is complete; an update is anticipated after final access agreements are completed.
1(t)	Site security measures	Partial: site security for construction discussed in Exhibit 1.	Partial: Site security measures (Exhibit 3)	<b>Closed</b>
1(u)	Final FAA lighting design for the stack and any FAA crane determinations	N/A	Included (Exhibit 3)	<b>Closed</b>

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(v)	Decommissioning Plan as contingency plan, including infrastructure removal and site restoration plans	N/A	Included (Exhibit 19)	Closed
6(i)*	Identification of cleaning media to be used	N/A	Not currently available. An update will be provided by September 30, 2017.	Open
6(ii)*	Identification of any known hazards through use of selected cleaning media	N/A	Not currently available. An update will be provided by September 30, 2017.	Open
6(iii)*	Description of how known hazards will be mitigated, including applicable state or federal regulations	N/A	Not currently available. An update will be provided by September 30, 2017.	Open
6(iv)*	Identification and description of accepted industry practices or relevant regulations concerning proper use of such media	N/A	Not currently available. An update will be provided by September 30, 2017.	Open
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. An update will be provided by September 30, 2017.	Open
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. An update will be provided by September 30, 2017.	Open
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. An update will be provided by September 30, 2017.	Open

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(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. An update will be provided by September 30, 2017 regarding the anticipated schedule.	Open
8(i) <sup>†</sup>	Description of results of simulated emergency response activities	N/A	Not currently available. An update will be provided by September 30, 2017.	Open
8(ii) <sup>†</sup>	Details of any facility site access system that accounts for all personnel entering and leaving the facility	N/A	Not currently available. An update will be provided by September 30, 2017.	Open
8(iii) <sup>†</sup>	Establishment of emergency responder/local community notification system for onsite emergencies and planned construction-related activities	N/A	Not currently available. An update will be provided by September 30, 2017.	Open
	<b>D&amp;MP Phase 1 Conditions</b>			
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.			PSEG is including appropriate language in the applicable construction contracts. An update will be provided in the February 2017 Monthly Report.

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
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.			PSEG is including appropriate language in the applicable construction contracts. An update will be provided in the February 2017 Monthly Report.
10/31/16-03	The petitioner shall submit the specifications of the fill to the Council			<del>Closed - A copy of the specification was filed with the CSC on December 22, 2016 in response to Interrogatory CSC D&amp;M 05.</del>
	<b>D&amp;MP Phase 2 Conditions</b>			
12/23/16-01	Same as 10/31/16-01 above			PSEG is including appropriate language in the applicable construction contracts. An update will be provided in the February 2017 Monthly Report.
12/23/16-02	Same as 10/31/2016-02 above			PSEG is including appropriate language in the applicable construction contracts. An update will be provided in the February 2017 Monthly Report.
12/23/2016	Compliance with the reporting requirements under Section 16-50j-62 of the RCSA			Ongoing via Monthly 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 September 30, 2017.
12/23/16-06	The containment measures for the backup generator engine oil and coolant shall be submitted to the Council.			PSEG will provide this required information by April 30, 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
12/23/16-07	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 September 30, 2017 as noted in CSC Requirement Numbers 6i to 8iii above.
12/23/16-undesignated	The Council recommends that PSEG consult with Council staff regarding dust control measures for materials delivered by barge.			PSEG intends to submit information in the February 2017 monthly report to address this recommendation.
* 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				

**Exhibit 2 – Permit Status Summary**

## Exhibit 2 - BHS Unit 5 Permit Status Summary

Page 1

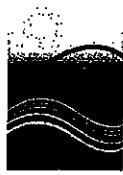
Agency and Permit Type / Name	Comments / Description	Permit Application Submission	Receive Authorization	Notes
<b>Connecticut Department of Energy and Environmental Protection (CTDEEP) / U. S. Environmental Protection Agency (USEPA) - Region 1 (New England)</b>				
1. New Source Review (NSR) (also fulfills Prevention of Significant Deterioration (PSD) requirements)	Application currently under review.	3/2/2016A 05/31/17	03/31/17 10/31/17	NTD issued 12/28/2016. May not require an application; CT DEEP may incorporate NSR inputs directly.
2. Major (i.e. non-minor) modification of the existing Title V Air Permit				
<b>Federal Aviation Administration (FAA)</b>				
1. Notice of Proposed Construction or Alteration - HRSG Stack	Notice of Proposed Construction or Alteration - HRSG Stack received 10/24/2016; application submitted 10/24/2016.	10/24/2016 10/24/2016	10/24/2016 10/24/2016	Renewed FAA Determination for HRSG stack received 10/24/2016; it expires 4/24/2018 if construction has not started.
2. Notice of Proposed Construction or Alteration - Construction Cranes	Cranes as needed in excess of 200 feet in height	11/18/2016A	01/02/17	All approved on 12/28/2016 except one.
<b>U.S. Army Corps of Engineers (USACE), New England District</b>				
1. Wetland Jurisdictional Determination	Submitted	12/29/2016	12/29/2016	
<b>U.S. Coast Guard (USCG)</b>				
1. Facility Response Plan (FRESP). Update to reflect new tanks.	Notification re: spud barges within Bridgeport Harbor during construction	TBD 03/01/17	TBD 04/01/17	Notification and Conditions / Requirements
2. USCG notification for spud barge mooring				
<b>Connecticut Siting Council (CSC)</b>				
1. Decisatory Ruling	Submitted	12/29/2016	12/29/2016	Limited approval for construction support facilities received 9/29/2016.
2. Development and Management Plan Phase 1 for Construction Support Facilities	Submitted	12/29/2016	12/29/2016	
3. Development and Management Plan Phase 2 for New Unit 5 Construction	Submitted	12/29/2016	12/29/2016	Monthly reporting requirement
<b>Connecticut Department of Energy and Environmental Protection (CTDEEP)</b>				
1. Environmental Justice Public Participation Plan	Submitted	12/29/2016	12/29/2016	
2. Final Environmental Justice Report	Submitted	12/29/2016	12/29/2016	

## Exhibit 2 - BHS Unit 5 Permit Status Summary

Page 2

Agency and Permit Type / Name	Comments / Description	Permit Application Submission	Receive Authorization	Notes
<b>CTDDEP, Office of Long Island Sound Programs</b>				
1. Certificate of Permission				
2. General Permit For Coastal Maintenance				
3. Certificate of Permission				
<b>CTDDEP, Bureau of Materials Management and Compliance Assurance</b>				
1. National Pollutant Discharge Elimination System Modification				
2. Individual Permit for Industrial Wastewater	Wastewater to WPCA	10/28/2016A	04/30/17	Review by WPCA completed prior to submittal to CT DEEP. Draft from CT DEEP will precede final permit.
3. General Permit for the Discharge of Stormwater Associated with Industrial Activity	Filed concurrently with SWPPP for information; formal inclusion in site registration to follow.	11/29/17	01/31/18	This will incorporate the new plant into the site stormwater registration. Filing expected in 2017.
4. General Permit for Stormwater and Devolving Wastewater from Construction Activities	Includes SWPPP	11/22/2016A	02/22/17	Filed after City CSP approval per regulation.
<b>City of Bridgeport</b>				
1. Coastal Site Plan Approval	Comments: Coastal Site Plan Comments	2016/09/26	2016/12/20/2016	Final City Engineering comments resolved 12/20/2016
2. Construction Permits (Structural, Mechanical, Electrical, Plumbing, HVAC, Sewer Connection, Road Opening)	As Required	In process	In process	Initial Filings; numerous building permit packages will be issued
<b>City of Bridgeport Water Pollution Control Authority (WPCA)</b>				
1. Industrial Wastewater Sign-off prior to CT DEEP submittal	Comments: Industrial Wastewater Sign-off	2016/09/26	2016/12/20/2016	Informal WPCA review complete
<b>Other</b>				
1. Aquarion Water Supply Will Serve Letter	Comments	2016/09/26	2016/12/20/2016	Will Serve Letter Received
Note: "A" = Actual				

**Exhibit 3 - Notice of Tentative Determination and Public Information Meeting Notices**



DEC 23 2016

Mr. Karl Wintermeyer  
Plant Manager  
PSEG Power Connecticut LLC  
Bridgeport Harbor Station  
1 Atlantic Street  
Bridgeport, CT 06604

Dear Mr. Wintermeyer:

This letter is to inform you that the Department of Energy and Environmental Protection Bureau of Air Management has completed the evaluation of your application and has made a tentative determination to approve the permits to construct and operate the Unit 5 combined cycle project at the above location subject to the following:

(1) Submission of the appropriate permit fee (invoice enclosed) under Section 22a-174-26 of the Regulations of Connecticut State Agencies (RCSA). Remit payment as directed on the enclosed invoice. The following is a description of the permit fee:

Application No. 201411158, 201411160 and 201611860  
Permit Nos. 015-0299, 015-0300 and 015-0301

Permit to Construct & Operate (per RCSA Section 22a-174-3a)  
Premises Size: Major

Total Permit Fee:	\$ 25,000.00
Minus Application Fee Received:	<u>-\$ 2,820.00</u>
<i>Amount Owed:</i>	<b>\$ 22,180.00</b>

(2) Pursuant to RCSA Section 22a-174-2a(b) and Section 22a-6h of the Connecticut General Statutes (CGS), publication of the enclosed notice of tentative determination is required to provide the opportunity for public comment. Within five days of the date of this letter, the notice will be published in the following newspaper:

Connecticut Post  
410 State Street  
Bridgeport, CT 06604

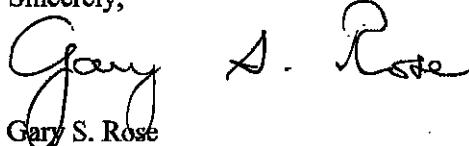
Karl Wintermeyer  
Gary S. Rose  
PSEG Power Connecticut LLC Bridgeport Harbor Station

Under CGS Section 22a-6h the notice is to be published at the applicant's expense. Further processing of the permits is contingent on receipt of the permit fee and reimbursement for the cost of public notice. In order to avoid delays in the processing of your permits, it is in your best interest to submit this payment promptly.

A tentative determination is not a final permit to construct and operate. The tentative determination starts a 30-day public comment period and affords the public an opportunity to request a public hearing. Construction activities allowed prior to permit issuance are specifically addressed in RCSA Section 22a-174-3a(b). You may enter into legally binding contracts and may begin site clearing activities. You are not allowed to begin actual construction specific to your project. This includes excavation, blasting and removal of rock and soil, installing footings, foundations, retaining walls, or permanent storage structures. To do so would be a violation of the Connecticut Air Regulations and the Federal Clean Air Act.

Please read the enclosed tentative determination carefully. If you have any comments or questions, please contact Ms. Lidia Howard by calling (860) 424-3539.

Sincerely,

  
Gary S. Rose  
Director  
Engineering & Enforcement Division  
Bureau of Air Management

GSR:LJH:jad  
Enclosure

Certified Mail



Connecticut Department of

**ENERGY &  
ENVIRONMENTAL  
PROTECTION**

**BUREAU OF AIR MANAGEMENT  
NEW SOURCE REVIEW PERMIT  
TO CONSTRUCT AND OPERATE A STATIONARY SOURCE**

Issued pursuant to Title 22a of the Connecticut General Statutes (CGS) and Section 22a-174-3a of the Regulations of Connecticut State Agencies (RCSA).

<b>Owner/Operator</b>	PSEG Power Connecticut LLC – Bridgeport Harbor Station
<b>Address</b>	1 Atlantic Street, Bridgeport, CT 06604
<b>Equipment Location</b>	1 Atlantic Street, Bridgeport, CT 06604
<b>Equipment Description</b>	General Electric 7HA.02 dual fired Combustion Turbine, Duct Burner and Heat Recovery Steam Generator
<b>Town-Permit Numbers</b>	015-0299
<b>Premises Number</b>	045
<b>Stack Number</b>	17
<b>Collateral Conditions</b>	Part III.H: Green House Gases Emission Limitations for the Unit 5 Combined Cycle Project Part VII: Collateral Conditions for the Emergency Fire Pump Engine (EU-53) and Cooling Tower (EU-54) Part VIII: Collateral Conditions for NOx and VOC Offsets
<b>Permit Issue Date</b>	
<b>Expiration Date</b>	None

Michael Sullivan  
Deputy Commissioner

Date

This permit specifies necessary terms and conditions for the operation of this equipment to comply with state and federal air quality standards. The Permittee shall at all times comply with the terms and conditions stated herein.

## **PART I. DESIGN SPECIFICATIONS**

### **A. General Description**

PSEG Power Connecticut, LLC (PSEG) is an exempt wholesale electric generating facility with its principal place of business in Newark, New Jersey. Bridgeport Harbor Station (BHS) has been in operation as an electrical generation station since 1957.

PSEG's Unit 5 combined cycle project includes the following equipment:

1. One dual-fuel-fired General Electric (GE) Model 7HA.02 combustion turbine with duct burner operating under Permit No. 015-0299;
2. One auxiliary boiler operating under Permit No. 015-0300;
3. One emergency generator operating under Permit No. 015-0301;
4. One emergency fire pump operating under collateral conditions in Part VII.A of Permit No. 015-0299;
5. One - three cell auxiliary evaporative cooling tower operating under collateral conditions in Part VII.B in Permit No. 015-0299; and
6. Fuel oil tanks.

The combined cycle unit would be constructed on a 1x1 configuration; that is, a single combustion turbine generator (CTG) exhausting to a single supplementary fired Heat Recovery Steam Generator (HRSG). Steam generated in the HRSG will drive a single steam turbine generator (STG).

### **B. Equipment Design Specifications**

1. **Turbine**
  - a. **Natural Gas:**
    - i. Maximum Natural Gas Firing Rate: 3.227 MMscf/hr
    - ii. Maximum Gross Heat Input: 3,292 MMBtu/hr
  - b. **Ultra Low Sulfur Distillate (ULSD):**
    - i. Maximum ULSD Firing Rate: 24,913 gal/hr
    - ii. Maximum Annual Fuel Usage: 16.7 MMgal
    - iii. Maximum Gross Heat Input: 3,439 MMBtu/hr
2. **Duct Burner (Natural Gas)**
  - a. Maximum Fuel Firing Rate: 0.262 MMscf/hr
  - b. Maximum Gross Heat Input: 267 MMBTU/hr

## **PART I. DESIGN SPECIFICATIONS, continued**

### **C. Control Equipment Design Specifications**

1. Water Injection for the Turbine (ULSD Operation)
2. Dry Low NOx Burners (Natural Gas Operation)
3. Selective Catalytic Reduction (SCR)
  - a. Make and Model: EnviroKinetics or equivalent
  - b. Catalyst Type: Titanium-Vanadium-Tungsten or equivalent
  - c. Collection Efficiency: 100%
  - d. Control Efficiency: 90%
  - e. Overall Control Efficiency: 90%
  - f. Pollutant Controlled: NOx
4. Oxidation Catalyst
  - a. Make and Model: EmeraChem or equivalent
  - b. Catalyst Type: Metal Honeycomb or equivalent
  - c. Collection Efficiency: 100%
  - d. Control Efficiency: 90%
  - e. Overall Control Efficiency: 90%
  - f. Pollutants Controlled: CO, VOC

### **D. Stack Parameters**

1. Minimum Stack Height (above grade): 300 ft
2. Minimum Exhaust Gas Flow Rate at 100% load: 980,000 acfm
3. Minimum Stack Exit Temperature at 100% load: 170 °F
4. Minimum Distance from Stack to Property Line: 199 ft

### **E. Definitions**

1. "Steady-state" operation shall be defined as operation of the turbine during all operating periods other than transient operation.
2. "Transient" operation shall be defined as operation of the combustion turbine during periods of startup, shutdown, fuel switching and equipment cleaning with turbine load less than the manufacturer's specified minimum operating load.
3. "Minimum Operating Load" shall be defined as the lowest value that the combustion turbine can operate while the Steady State emissions limits in Part III.A of this permit are being met at the HRSG stack exit.
4. "Malfunction" shall be defined as any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment or a process to operate in accordance with the allowable limits in Part III.A of this permit. Failures that were caused in part by poor maintenance or careless operation are not malfunctions.

## **PART I. DESIGN SPECIFICATIONS, continued**

5. "Shakedown" shall be defined as turbine operations including, but not limited to, the first firing of the turbine, proof of interlocks, steam blowing, chemical cleaning and initial turbine roll. The shakedown period shall not extend beyond the required date for the initial performance tests.
6. "Commencement of commercial operation" shall mean to have begun to produce steam, gas or other heated medium used to generate electricity for sale or use.

## **PART II. OPERATIONAL CONDITIONS**

### **A. Equipment**

1. **Turbine**
  - a. **Fuel Types:** Natural Gas, ULSD
  - b. **Maximum Heat Input over any Consecutive 12 Month Period:**
    - i. **Natural Gas:** 25,885,944 MMBtu (HHV)
    - ii. **ULSD:** 2,309,684 MMBtu (HHV)
  - c. **Maximum ULSD Sulfur Content:** 0.0015 % by weight
  - d. **Maximum Natural Gas Sulfur Content:** 0.5 grains/100 scf
  - e. **The Permittee shall only burn ULSD in the combined cycle turbine during hours when one or more of the conditions in subparagraphs (i) – (viii) below is true:**
    - i. **Independent System Operator – New England (ISONE) declares an Energy Emergency as defined in ISONE's Operating Procedure No. 21 – Energy Inventory Accounting and Actions during an Energy Emergency and requests the firing of ULSD.**
    - ii. **ISO-NE required audits of capacity.**
    - iii. **The natural gas supply is curtailed by the gas supplier. A curtailment begins when the Permittee receives a communication from the gas supplier stating that natural gas supply will be curtailed, and ends when the Permittee receives a communication from the gas supplier stating that the curtailment has ended.**
    - iv. **There exists a physical blockage or breakage in the natural gas pipeline.**

## **PART II. OPERATIONAL CONDITIONS, continued**

- v. The Permittee is commissioning the combined cycle turbine and, pursuant to the turbine manufacturer's written instructions, the Permittee is required by the manufacturer to fire ULSD during the commissioning process.
- vi. The firing of ULSD is required for emission testing purposes as specified in Part V of this permit.
- vii. Routine maintenance of any equipment that will require the Permittee to fire ULSD.
- viii. In order to maintain an appropriate turnover of the on-site fuel oil inventory, the Permittee may fire ULSD when the last delivery of the oil to the tank was more than six months ago.
- ix. The Permittee will be allowed to operate the duct burner on natural gas during ULSD operation of the turbine for up to 250 hours in a 12 consecutive month period.

### **2. Duct Burner**

- a. Fuel Type: Natural Gas
- b. Maximum Heat Input over any Consecutive 12 Month Period: 849,934 MMBtu (HHV)

- C. The Permittee shall operate and maintain the turbine, duct burner, air pollution control equipment and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including startup and shutdown.
- D. The Permittee shall operate and maintain the turbine, duct burner, air pollution control equipment in accordance with the most recent specific and written recommendations supplied by the equipment manufacturer.
- E. The Permittee shall immediately institute shutdown of the turbine in the event where emissions are in excess of a limit of Part III of this permit that cannot be corrected within three hours of when the emission exceedance was identified.
- F. No period of Transient operation shall exceed 60 consecutive minutes.
- G. The Permittee shall minimize emissions during periods of startup and shutdown by the following work practices and time constraints:
  1. Start the ammonia injection as soon as minimum catalyst temperature is reached;
  2. The oxidation catalyst shall not be bypassed during startup or shutdown; and
  3. Emissions during these periods shall be counted towards the annual emission limits stated herein.
- H. The Permittee shall not exceed 365 startup events per 12 consecutive months for the turbine.
- I. The Permittee shall not exceed a maximum allowable rate of 6,612 Btu/kW-hr (HHV, net plant), corrected to ISO conditions, during the initial performance test while firing natural gas in the combustion turbine without duct firing.

### PART III. ALLOWABLE EMISSION LIMITS

Except during the initial shakedown period, the Permittee shall not cause or allow the turbine and duct burner to exceed the emission limits stated herein at any time during steady state operation.

An exceedance of either (i) the emission limits in the tables below, or (ii) the emissions limits developed for this permit due to an emergency, malfunction, or cleaning shall not be deemed a "Federally Permitted Release," as that term is used in 42 U.S.C. 9601(10).

#### A. Steady State Emission Limits

These short term emission limits do not apply during periods of startup and shutdown, unless otherwise noted.

##### 1. Turbine operating on natural gas without duct firing (Mode 1)

Pollutant	lb/hr	ppmvd @ 15% O <sub>2</sub>	lb/MMBtu <sup>1</sup>
PM/ PM <sub>10</sub> / PM <sub>2.5</sub>	11.9		0.007
SO <sub>2</sub>	5.5		0.002
NOx	25.1	2.0	
CO	6.9	0.9	
VOC	3.1	0.7	
Lead	0.0016		
Sulfuric Acid	3.6		
Ammonia		2.0	

##### 2. Turbine operating on natural gas with duct firing natural gas (Mode 2)

Pollutant	lb/hr	ppmvd @ 15% O <sub>2</sub>	lb/MMBtu <sup>1</sup>
PM/ PM <sub>10</sub> / PM <sub>2.5</sub>	14.6		0.005
SO <sub>2</sub>	5.6		0.002
NOx	25.7	2.0	
CO	13.3	1.7	
VOC	7.2	1.6	
Lead	0.0017		
Sulfuric Acid	3.6		
Ammonia		2.0	

##### 3. Turbine operating on ULSD without duct firing (Mode 3)

Pollutant	lb/hr	ppmvd @ 15% O <sub>2</sub>	lb/MMBtu <sup>1</sup>
PM/PM <sub>10</sub> / PM <sub>2.5</sub>	60.0		0.030
SO <sub>2</sub>	6.6		0.002
NOx	56.1	4.0	
CO	17.1	2.0	
VOC	9.8	2.0	
Lead	0.05		
Sulfuric Acid	4.3		
Ammonia		5.0	

### PART III. ALLOWABLE EMISSION LIMITS, continued

#### 4. Turbine operating on ULSD with duct burner operating on natural gas (Mode 4)

Pollutant	lb/hr	ppmvd @ 15% O <sub>2</sub>	lb/MMBtu <sup>1</sup>
PM/ PM <sub>10</sub> / PM <sub>2.5</sub>	65.0		0.021
SO <sub>2</sub>	7.1		0.002
NOx	60.2	4.0	
CO	55.0	6.0	
VOC	20.9	4.0	
Lead	0.05		
Sulfuric Acid	4.6		
Ammonia		5.0	

<sup>1</sup> lb/MMBtu allowable emission limits shall apply at all times, including periods of startup and shutdown.

#### B. Transient Operation Emissions Rate

Except during the initial shakedown period, the Permittee shall not cause or allow this equipment to exceed these limits during startup and shutdown events.

	Startup		Shutdown	
	Natural Gas	ULSD	Natural Gas	ULSD
NOx (lb/event)	99	108	9.8	16
VOC (lb/event)	10.2	31	26	6.2
CO (lb/event)	129	284	124	42.0
Ammonia (NH <sub>3</sub> ) (ppmvd@15% O <sub>2</sub> )	5.0	5.0	5.0	5.0

#### C. Total Allowable Emission Limits

The Permittee shall not cause or allow this equipment to exceed the emission limits stated herein at any time.

Pollutant	Tons per 12 consecutive months
PM/ PM <sub>10</sub> / PM <sub>2.5</sub>	71.8
SO <sub>2</sub>	22.7
NOx	126.8
VOC	29.5
CO	95.1
Lead	0.02
Sulfuric Acid	14.6
Ammonia	47.6

#### D. This equipment shall not cause an exceedance of the Maximum Allowable Stack Concentration (MASC) for any applicable hazardous air pollutant (HAP) emitted and listed in RCSA §22a-174-29. [STATE ONLY REQUIREMENT]

### **PART III. ALLOWABLE EMISSION LIMITS, continued**

#### **E. Opacity:**

1. This equipment shall not exceed 10% opacity during any six minute block average as measured by 40 CFR Part 60, Appendix A, Reference Method 9.
2. A certified observer shall conduct visual observations once every 100 hours of oil firing operation using Reference Method 9. Monitoring and record keeping may occur at a lesser frequency if circumstances prohibit conducting a visual determination (e.g. night time operation, weather conditions, unplanned dispatching, etc.) within the 100 hour timeframe. However, in no case shall the interval between visual determinations exceed 125 hours of oil firing operation. If the visual observation occurs at a lesser frequency than every 100 hours of oil firing operation, the reason for monitoring at a lesser frequency shall also be recorded. Installation and operation of a Continuous Opacity Monitor (COM) on the turbine will be required in accordance with 40 CFR §72.2 in the event ULSD use causes the turbine to be defined as an "oil-fired unit."

#### **F. Demonstration of compliance with the above emission limits may be met by calculating the emission rates using the most recent approved stack test results for that pollutant, or if unavailable, emission factors from the following sources:**

1. PM/PM10/PM2.5, VOC, H<sub>2</sub>SO<sub>4</sub>: stack testing data
2. SO<sub>2</sub>: Sulfur content in fuel
3. NOx & CO (steady state): CEM data
4. NOx, VOC, & CO (transient): Manufacturer's recommended uncontrolled emission factors
5. HAP: AP-42, Fifth Edition, Volume I Chapter 3.1, April 2000 except for those HAP with required stack test found in Part V of this permit.

The commissioner may require other means (e.g. stack testing) to demonstrate compliance with the above emission limits, as allowed by state or federal statute, law or regulation.

#### **G. Initial Shakedown Period**

1. The Permittee is not required to demonstrate compliance with the short-term emission limits stated herein during the initial shakedown period.
2. Emissions during the initial shakedown period shall be counted towards the annual emission limits stated herein.
3. The shakedown period shall not extend beyond the required date for the initial performance tests.

#### **H. Greenhouse Gas Emissions for the Unit 5 Combined Cycle Project**

The Permittee shall not cause or allow the equipment associated with the Unit 5 combined cycle project to exceed the emission limits stated herein:

1. The Permittee shall not exceed a maximum allowable CO<sub>2</sub> for the combined cycle unit of 926 lb/MWh (net plant) on a consecutive 12 month operating rolling basis for the turbine and its associated duct burner including MWh from ULSD firing and the steam turbine.
2. CO<sub>2</sub> from the HRSG stack shall be monitored by a CEM system.
3. The following calculation method shall be used:
  - a. Determine total hourly CO<sub>2</sub> mass emission (lbs) for each hour of the operating month using CO<sub>2</sub> CEMs.

**PART III. ALLOWABLE EMISSION LIMITS, continued**

- b. Determine total hourly net electrical output in terms of MWh for each hour of the operating month.
- c. Sum the hourly CO<sub>2</sub> mass emissions calculated for the month.
- d. Sum the total net output calculated for the operating month.
- e. Divide the total CO<sub>2</sub> mass emissions calculated for the month by the total net output calculated for the operating month.
- f. Add the quotient to the sum of the quotient of the previous 11 operating month and divide by 12 to determine the consecutive 12 month total (rolling 1 month basis).

4. The Permittee shall not exceed a combined CO<sub>2</sub>e emission limit of 1,671,463 TPY for the Unit 5 Combined Cycle Project. Compliance with this limitation shall be determined on a 12 month rolling basis and allocated according to the following table:

	Combustion turbine/duct burner	Auxiliary Boiler	Emergency Generator	Emergency Fire Pump Engine	Fugitive Emissions	Unit 5 Combined Cycle Project
	Permit No. 015-0299	Permit No. 015-0300	Permit No. 015-0301	Collateral Conditions in Permit Nos. 015-0299	SF <sub>6</sub> – Circuit breakers CH <sub>4</sub> – natural gas pipeline and associated components	
CO <sub>2</sub>		117 lb/MMBtu	163 lb/MMBtu	163 lb/MMBtu	9.285 TPY	1,671,463 TPY
	1,620,616 TPY	41,031 TPY	468 TPY	63 TPY		

5. Demonstration of compliance with the above emission limits shall be met by calculating the emission rates using emission factors from the following sources:

- a. CO<sub>2</sub> emissions from the combustion turbine shall be determined by CO<sub>2</sub> CEM.
- b. CO<sub>2</sub> emissions from the auxiliary boiler, emergency generator and emergency fire pump engine shall be determined using the default emission factors from 40 CFR Part 98 Subpart C - General Stationary Fuel Combustion Sources, Table C-1: Default CO<sub>2</sub> Emission Factors and High Heat Values for Various Types of Fuel.
- c. Methane (CH<sub>4</sub>) and Nitrous Oxide (N<sub>2</sub>O) for all combustion sources shall be determined using the default emission factors found in 40 CFR Part 98 Subpart C - General Stationary Fuel Combustion Sources; Table C-2: Default CH<sub>4</sub> and N<sub>2</sub>O Emission Factors for Various Types of Fuel.
- d. Emissions of SF<sub>6</sub> from the electrical circuit breakers shall be determined using mass balance found in 40 CFR Part 98 Subpart DD - Electrical Transmission and Distribution Equipment; Equation DD-1.

### **PART III. ALLOWABLE EMISSION LIMITS, continued**

- e. Emissions from CH<sub>4</sub> from the natural gas pipeline and associated components shall be determined using the default emission factors found in 40 CFR Part 98 Subpart W  
Petroleum and Natural Gas System; Table W-7: Default Methane Emission Factors for Natural Gas Distribution.
- f. Global Warming Potential used for all sources shall be those found in 40 CFR Part 98 Subpart A – Global Warming Potentials (100 year Time Horizon).

I. The commissioner may require other means (e.g. stack testing) to demonstrate compliance with the above emission limits, as allowed by state or federal statute, law or regulation.

### **PART IV. MONITORING, RECORD KEEPING AND REPORTING REQUIREMENTS**

#### **A. Monitoring**

1. The Permittee shall comply with the CEM requirements as set forth in RCSA §§22a-174-4 and 22a-174-22, 40 CFR Part 60 Subpart KKKK and 40 CFR Parts 72-78, as applicable. CEM shall be required for the following pollutant/operational parameters and enforced on the following basis:

<b>Pollutant/Operational Parameter</b>	<b>Averaging Times</b>	<b>Emission Limit</b>
CO <sub>2</sub>	1 hour block	See Part III.H Allowable Emissions Limits
NO <sub>x</sub>	1 hour block	See Part III.A Allowable Emissions Limits
CO	1 hour block	See Part III.A Allowable Emissions Limits
NH <sub>3</sub>	1 hour block	See Part III.A Allowable Emissions Limits
O <sub>2</sub>	1 hour block	
Fuel Flow	1 hour block	
Net Electrical Output	Continuous	

2. At least 60 days prior to the initial stack test, the Permittee shall submit a CEM monitoring plan to the commissioner in accordance with RCSA §22a-174-4(c)(3).
3. The Permittee shall use fuel flow meters, certified in accordance with 40 CFR Part 75 Appendix D to measure and record the fuel rate to the turbine and duct burner.
4. The Permittee shall continuously monitor and continuously record the water injection rate (lb/hr). The Permittee shall maintain this parameter within the range recommended by the manufacturer to achieve compliance with the emission limits in this permit.
5. The Permittee shall perform inspections of the SCR and oxidation catalysts as recommended by the manufacturer.

## **PART IV. MONITORING, RECORD KEEPING AND REPORTING REQUIREMENTS, continued**

6. Prior to operation, the Permittee shall develop a written plan for the operation, inspection, maintenance, preventive and corrective measures for minimizing GHG emissions (CH<sub>4</sub> from the natural gas pipeline components and SF<sub>6</sub> emissions from the insulated electrical equipment). At a minimum the plan shall provide for:
  - a. Implementation of daily auditory/visual/olfactory inspections of the natural gas piping components supplying natural gas to the combustion turbine/duct burner;
  - b. An installed leak detection system to include audible alarms to identify SF<sub>6</sub> leakage from the circuit breakers;
  - c. Inspection for SF<sub>6</sub> emissions from the insulated electrical equipment on at least a monthly basis.

### **B. Record Keeping**

1. The Permittee shall keep records of monthly and consecutive 12 month fuel consumption for the turbine. The consecutive 12 month fuel consumption shall be determined by adding (for each fuel) the current month's fuel consumption to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month.
2. The Permittee shall keep records of monthly and consecutive 12 month natural gas consumption for the duct burner. The consecutive 12 month natural gas consumption shall be determined by adding the current month's natural gas consumption to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month.
3. The Permittee shall keep records of the monthly and consecutive 12 month heat input to the turbine for both natural gas and ULSD firing. The records shall include sample calculations.
4. The Permittee shall keep records of the fuel certification for each delivery of fuel oil from a bulk petroleum provider or a copy of the current contract with the fuel supplier supplying the fuel used by the equipment that includes the applicable sulfur content of the fuel as a condition of each shipment. The shipping receipt or contract shall include the date of delivery, the name of the fuel supplier, type of fuel delivered, the percentage of sulfur in such fuel, by weight, dry basis, and the method used to determine the sulfur content of such fuel.
5. The Permittee shall keep records of the monthly and consecutive 12 month heat input to the duct burner. The record shall include sample calculations.
6. The Permittee shall calculate and record the monthly and consecutive 12 month PM, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, VOC, CO, H<sub>2</sub>SO<sub>4</sub>, NH<sub>3</sub> and CO<sub>2e</sub> emissions in units of tons. The consecutive 12 month emissions shall be determined by adding (for each pollutant) the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of the previous month.

Emissions during startup and shutdown shall be counted towards the annual emission limitation in Part III.C of this permit.

## **PART IV. MONITORING, RECORD KEEPING AND REPORTING REQUIREMENTS, continued**

7. The Permittee shall keep records of the number of startup and shutdown events per 12 consecutive months.
8. The Permittee shall keep records of the emissions of the turbine/duct burner during the initial shakedown period. Emissions during shakedown shall be calculated using good engineering judgement and the best data and methodology available for estimating such emissions. Emissions during shakedown shall be counted towards the annual emission limitations in Part III.C of this permit.
9. The Permittee shall keep records of all exceedances of any emissions limitation or operating parameter. Such records shall include:
  - a. the date and time of the exceedance;
  - b. a detailed description of the exceedance; and
  - c. the duration of the exceedance.
10. The Permittee shall keep records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the stationary gas turbine/duct burner; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR §60.7(b)]

Such records shall contain the following information:

  - a. type of event (startup, shutdown, or malfunction);
  - b. equipment affected;
  - c. date of event;
  - d. duration of event (minutes);
  - e. fuel being used during event; and
  - f. total NO<sub>x</sub>, CO and VOC emissions emitted (lb) during the event.
11. The Permittee shall keep records of each delivery of aqueous ammonia. The records shall include:
  - a. the date of delivery;
  - b. the name of the supplier;
  - c. the quantity of aqueous ammonia delivered; and
  - d. the percentage of ammonia in solution, by weight.
12. The Permittee shall keep records of the inspection and maintenance of the SCR and oxidation catalysts. The records shall include:
  - a. the name of the person;
  - b. the date;
  - c. the results or actions; and
  - d. the date the catalyst is replaced.
13. The Permittee shall keep records of all repairs/replacement of parts and other maintenance activities for the equipment.
14. The Permittee shall keep records of the electrical output of the plant (net).

## **PART IV. MONITORING, RECORD KEEPING AND REPORTING REQUIREMENTS, continued**

15. The Permittee shall keep records of the inspections, maintenance, preventive and corrective measures for minimizing GHG emissions from the natural gas pipeline components and the insulated electrical equipment. The records shall include:
  - a. The name of the person conducting the inspection/maintenance;
  - b. The date that the inspection/maintenance was conducted;
  - c. The results and actions taken;
  - d. The leak detection method used; and
  - e. The amount of SF<sub>6</sub> added (if any) to the electrical equipment.
16. The Permittee shall keep monthly records of the audible alarms from the SF<sub>6</sub> leak detection system and inspections for the insulated electrical equipment. The records shall include:
  - a. The name of the person conducting inspection/maintenance;
  - b. The date the inspection/maintenance took place; and
  - c. The results or actions taken.
17. The Permittee shall make and keep records of all occurrences of firing ULSD in the turbine. At a minimum these records shall contain the following information:
  - a. The date the turbine operated on ULSD;
  - b. The duration of ULSD firing;
  - c. The reason for ULSD firing; and
  - d. The heat input to the turbine.
18. The Permittee shall make and keep records of all occurrences of firing ULSD in the turbine and natural gas in the duct burner. At a minimum these records shall contain the following information:
  - a. The date the turbine operated firing ULSD/duct burner operated firing natural gas;
  - b. The duration of the turbine firing ULSD/duct burner firing natural gas occurrence;
  - c. The reason for the turbine firing ULSD/duct burner firing natural gas occurrence; and
  - d. The heat input to the turbine and duct burner.
19. The Permittee shall keep a certified copy of this permit on the premises at all times, and shall make it available upon request of the commissioner for the duration of this permit. This permit shall also be available for public inspection during regular business hours.
20. The Permittee shall keep records of the manufacturer written recommendations for operation and maintenance of the turbine/duct burner and air pollution control equipment.
21. The Permittee shall keep records of stack testing reports.
22. The Permittee shall keep all records required by this permit for a period of no less than five years and shall submit such records to the commissioner upon request.

## **PART IV. MONITORING, RECORD KEEPING AND REPORTING REQUIREMENTS, continued**

### **C. Reporting**

1. The Permittee shall notify the commissioner in writing of any exceedance of an emissions limitation or operating parameter, and shall identify the cause or likely cause of such exceedance, all corrective actions and preventive measures taken with respect thereto, and the dates of such actions and measures as follows:
  - a. For any hazardous air pollutant, no later than 24 hours after such exceedance commenced; and
  - b. For any other regulated air pollutant or operating parameter, no later than ten days after such exceedance commenced.
2. The Permittee shall notify the commissioner in writing of any malfunction of the stationary gas turbine/duct burner, the air pollution control equipment or the continuous monitoring system. The Permittee shall submit such notification within ten days of the malfunction. The notification shall include the following:
  - a. a description of the malfunction and a description of the circumstances surrounding the cause or likely cause of such malfunction; and
  - b. a description of all corrective actions and preventive measures taken and/or planned with respect to such malfunction and the dates of such actions and measures.
3. The Permittee shall notify the commissioner, in writing, of the date of commencement of construction and commencement of commercial operation of this equipment. Such written notifications shall be submitted no later than 30 days after the subject event.
4. The Permittee shall submit the above notifications to the Supervisor of the Compliance Analysis & Coordination Unit, Enforcement Section, Bureau of Air Management; Department of Energy and Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.

## **PART V. STACK EMISSION TEST REQUIREMENTS**

- A. Stack emission testing shall be performed in accordance with the Emission Test Guidelines available on the DEEP website.
- B. Initial stack testing shall be required for the following pollutant(s):

PM/PM<sub>10</sub>/PM<sub>2.5</sub>       SO<sub>2</sub>       NOx       CO       VOC  
 Opacity       CO<sub>2</sub>       Other (HAPs): Sulfuric Acid, Formaldehyde, Arsenic

1. Stack emissions testing firing natural gas, without duct firing, for CO<sub>2</sub> shall only be required during the initial performance test to show compliance with an emissions limit of 773 lbs/MW-hr (net plant), corrected to ISO conditions, as defined in the approved stack test protocol.

## PART V. STACK EMISSION TEST REQUIREMENTS, continued

2. For the purpose of determining maximum heat input of the turbine and including the duct burner as applicable during performance testing, the following equation may be used when the actual ambient temperature is not specified in Table 1:

$$MHI_T: Q_1 - [(T_{Act} - T_1)/(T_2 - T_1)] \times (Q_1 - Q_2)$$

Where:

$MHI_T$ : Turbine or duct burner maximum heat input at ambient temperature (°F)

$T_{Act}$ : Actual ambient temperature

$T_1$ : Temperature value from Table 1 that is below  $T_{Act}$

$T_2$ : Temperature value from Table 1 that is above  $T_{Act}$

$Q_1$ : Maximum Heat Input value from Table 1 at corresponding  $T_1$

$Q_2$ : Maximum Heat Input value from Table 1 at corresponding  $T_2$

Table 1: Maximum Heat Input Capacities at Given Ambient Temperatures for Natural Gas and ULSD

Actual Ambient Temperature (T <sub>Act</sub> )	Natural Gas		ULSD	
	Heat Input (Q) For Combustion Turbine without Duct Burner	Heat Input (Q) for Duct Burner	Heat Input (Q) For Combustion Turbine without Duct Burner	Heat Input (Q) for Duct Burner
0	3,292	73*	3,439	267
20	3,281	84*	3,422	267
35	3,245	120*	3,396	267
50	3,138	227*	3,348	267
59	3,128	237*	3,321	267
80	3,096	267	3,281	267
90	3,043	267	3,199	267
100	2,967	267	3,079	267

Note:

\* For natural gas firing, turbine/duct burner reaches a maximum total fuel consumption at 59 °F and is based on a maximum gas availability for the combustion turbine + the duct burner of 3,365 MMBtu/hr HHV. As the ambient temperature decreases below 59 °F, the total maximum heat input remains constant by burning less fuel in the duct burner while the combustion turbine burns more fuel. This is done so that the maximum amount of natural gas available to the site is utilized to produce electricity in the most efficient manner.

Units of measure are MMBtu/hr (HHV) for Heat Input and °F for temperature.

3. The Permittee shall perform one set of tests on this turbine for the following scenarios:

- Mode 1: turbine on natural gas; no duct firing
- Mode 2: turbine and duct burner on natural gas
- Mode 3: turbine on ULSD; no duct firing
- Mode 4: turbine on ULSD; duct firing on natural gas

## **PART V. STACK EMISSION TEST REQUIREMENTS, continued**

4. The Permittee shall conduct initial stack emissions testing within 60 days of achieving the maximum production rate, but not later than 180 days after initial startup. The Permittee shall submit test results within 60 days after completion of testing.

**C.** Recurrent stack testing of all pollutants listed in Part V.B of this permit shall be performed within five years from the date of the previous stack test. Testing shall be as described in Part V.B of this permit with the following exceptions:

1. After the initial performance test, stack testing may not be required for pollutants requiring CEM.
2. The commissioner retains the right to require stack testing of any pollutant at any time to demonstrate compliance.

**D.** Fuel oil analysis of the arsenic in the distillate oil may be substituted for stack testing while firing distillate oil. Arsenic testing is not required for natural gas firing.

**E.** Stack emissions test results shall be reported as follows: all pollutants in units of lb/hr, NO<sub>x</sub>, CO, VOC, formaldehyde and ammonia in units of ppmvd at 15% O<sub>2</sub>.

## **PART VI. SPECIAL REQUIREMENTS**

**A.** The Permittee shall comply with all applicable sections of the following New Source Performance Standard at all times.

Title 40 CFR Part 60 Subpart A – General provisions

Title 40 CFR Part 60 Subparts KKKK – Standards of Performance for Stationary Combustion Turbines

Copies of the Code of Federal Regulations (CFR) are available online at the U.S. Government Printing Office website.

**B.** The Permittee shall comply with all applicable requirements of the Federal Acid Rain Program codified in Title 40 CFR Parts 72-78, inclusive, by the deadlines set forth with the aforementioned regulation.

**C.** The Permittee shall operate this facility at all times in a manner so as not to violate or contribute significantly to the violation of any applicable state noise control regulations, as set forth in RCSA §§22a-69-1 through 22a-69-7.4. [STATE ONLY REQUIREMENT]

**D.** The Permittee shall resubmit for review and approval a Best Available Control Technology (BACT) analysis if such construction or phased construction has not commenced within the 18 months following the commissioner's approval of the current BACT determination (i.e., the date of this permit) for such construction or phase of construction. [RCSA §22a-174-3a(j)(4)]

## PART VII. COLLATERAL CONDITIONS FOR EU-53 AND EU-54

### A. EU-53: 2.6 MMBtu/hr Cummins CFP9E-F50 or equivalent emergency fire pump engine

#### 1. Operational Conditions

- a. Fuel Type: ULSD
- b. Maximum Fuel Sulfur Content: 0.0015% by weight
  - a. Maximum Hours of Operation over any Consecutive 12 Month Period: 300 hours

#### 2. Criteria and Non-Criteria Pollutants

Pollutant	lb/hr	Other Units	TPY
PM/PM <sub>10</sub> / PM <sub>2.5</sub>	0.1	0.15 g/hp-hr	0.014
NOx	1.7		0.3
VOC	0.1		0.01
(NOx+NMHC)		3.0 g/hp-hr	
CO	1.1	2.6 g/hp-hr	0.17
Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )	0.0006		0.0001
CO <sub>2e</sub>	420	163 lb/MMBtu	63

Demonstration of compliance with the above emission limits may be met by calculating the emission rates using emission factors from the following sources:

- SO<sub>2</sub>, H<sub>2</sub>SO<sub>4</sub>: Calculated from fuel sulfur content
- NOx, PM<sub>10/2.5</sub>, VOC, CO: EPA Certified Vendor Emissions Factor
- Pb: AP-42 Sec. 3.1 (April 2000)
- CO<sub>2</sub>: 40 CFR Part 98 Subpart C, Table C-1
- CO<sub>2e</sub>: 40 CFR Part 98, Subpart C, Table C-2

The commissioner may require other means (e.g. stack testing) to demonstrate compliance with the above emission limits, as allowed by state or federal statute, law or regulation.

#### 3. Monitoring and Record Keeping

##### a. Monitoring

- i. The Permittee shall continuously monitor fuel consumption by this unit using a non-resettable totalizing fuel meter.
- ii. The Permittee shall monitor the number of hours that this unit is in operation.

##### b. Record Keeping

- i. The Permittee shall calculate and record the monthly and consecutive 12 month PM<sub>10</sub>, PM<sub>2.5</sub>, NOx, VOC, H<sub>2</sub>SO<sub>4</sub>, CO<sub>2e</sub> and CO emissions in units of tons. The consecutive 12 month emissions shall be determined by adding (for each pollutant) the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of the previous month.

## **PART VII. COLLATERAL CONDITIONS FOR EU053 AND EU054, continued**

- ii. The Permittee shall monitor and keep records of monthly and 12 consecutive months operating hours of the emergency fire pump. The 12 consecutive month time period shall be determined by adding the current month's operating hours to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month.
- iii. The Permittee shall keep any of the records listed below to demonstrate the sulfur content of the fuel used.
  - (A) A sales receipt for the sale of motor vehicle diesel fuel from a retail location; or
  - (B) A copy of the current contract with the fuel supplier supplying the fuel used by the unit that includes the applicable sulfur content of nongaseous fuel as a condition of each shipment.
- iv. The Permittee shall comply with all applicable sections of the following National Emission Standards for Hazardous Air Pollutants at all times.

Title 40 CFR Part 60 Subpart IIII – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

**Note:** The emergency fire pump engine is subject to 40 CFR Part 63 Subpart ZZZZ and complies with the requirements by operating under 40 CFR Part 60 Subpart IIII.

- v. The Permittee shall keep records of the manufacturer's specifications and written recommendations.
- vi. The Permittee shall keep records on the premises indicating continual compliance with the above condition at all times and shall make them available upon request by the commissioner for the duration of this permit, or for the previous five years, whichever is less.

### **c. Reporting**

- i. The Permittee shall notify the commissioner, in writing, of the date of commencement of construction and commencement of operation of this equipment. Such written notifications shall be submitted no later than 30 days after the subject event.
- ii. The Permittee shall submit the above notifications to the Supervisor of the Compliance Analysis & Coordination Unit, Enforcement Section, Bureau of Air Management; Department of Energy and Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.

## PART VII. COLLATERAL CONDITIONS FOR EU-53 AND EU-54, continued

### B. EU-54: Auxiliary Cooling Tower

#### 1. Criteria and Non-Criteria Pollutants

Pollutant	lb/hr	TPY
PM/PM <sub>10</sub> / PM <sub>2.5</sub>	0.16	0.71

Demonstration of compliance with the above emission limits may be met by calculating the emission rates using the cooling tower flow rate (gallons/min), TDS content of the cooling water and drift rate from the manufacturer.

The commissioner may require other means (e.g. stack testing) to demonstrate compliance with the above emission limits, as allowed by state or federal statute, law or regulation.

#### 2. Record Keeping

- a. The Permittee shall calculate and record the monthly and consecutive 12 month PM/PM<sub>10</sub>/PM<sub>2.5</sub> in units of tons. The consecutive 12 month emissions shall be determined by adding the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of the previous month.
- b. The Permittee shall keep records of the manufacturer's specifications and written recommendations.
- c. The Permittee shall keep records on the premises indicating continual compliance with the above condition at all times and shall make them available upon request by the commissioner for the duration of this permit, or for the previous five years, whichever is less.

#### 3. Reporting

- i. The Permittee shall notify the commissioner, in writing, of the date of commencement of construction and commencement of operation of this equipment. Such written notifications shall be submitted no later than 30 days after the subject event.
- ii. The Permittee shall submit the above notifications to the Supervisor of the Compliance Analysis & Coordination Unit, Enforcement Section, Bureau of Air Management; Department of Energy and Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.

## PART VIII. COLLATERAL CONDITIONS FOR NOX AND VOC OFFSETS

The Unit 5 combined cycle project includes the following equipment:

- Dual fuel fired General Electric (GE) Model 7HA.02 combustion turbine with duct burner operating under Permit No. 015-0299
- One auxiliary boiler operating under Permit No. 015-0300
- One emergency generator operating under Permit No. 015-0301
- One emergency fire pump operating under collateral conditions in Part VIII.A of Permit No. 015-0299
- One Cooling Tower operating under collateral conditions in Part VII.B of Permit No. 015-0299

Total allowable emissions for the Unit 5 combined cycle project are 136.6 TPY for NOx and 31.3 TPY for VOC.

Pursuant to RCRA §22a-174-3a(l)(4)(x), the Permittee must offset at a ratio of 1.3 to 1 because the project will be located in a severe non-attainment area for ozone.

<b>Pollutant</b>	<b>Emissions Increase From Unit 5 Combined Cycle Project (tons)</b>	<b>Offset Ratio</b>	<b>Offsets Required (tons)</b>	<b>CERCs</b>	
				<b>Obtained (tons)</b>	<b>Required (tons)</b>
NOx	136.6	1.3 to 1	$136.6 \times 1.3 = 178$	115	63
VOC	31.3	1.3 to 1	$31.3 \times 1.3 = 41$	0	41

### NOx offsets:

The Permittee currently has 115 tons of Continuous Emission Reduction Credits (CERCs). The CERCs have Serial Numbers: CT4NOx00-015-0045-7668-115.

To complete the offset requirements, the Permittee will have to acquire 63 tons of external offsets before the final issuance of Permit Nos. 015-0299, 015-0300 and 015-0301. Pursuant to RCRA §§22a-174-3a(l)(5)(A) thru (F), the NOx offset transaction will be memorialized in Permit No. 015-0299.

### VOC Offset:

To complete the offset transaction, the Permittee will have to acquire 41 tons of external offsets before the final issuance of Permit Nos. 015-0299, 015-0300 and 015-0301. Pursuant to RCRA §§22a-174-3a(l)(5)(A) thru (F), the VOC offset transaction will be memorialized in Permit No. 015-0299.

The Permittee shall maintain sole ownership and possession of these emissions reductions for the duration of the permits and any subsequent changes to the permits.

The Permittee may be required to obtain additional NOx and VOC offsets and complete additional ambient air quality analysis to show that the National Air Ambient Quality Standards (NAAQS) and Prevention of Significant Deterioration (PSD) increments have not been violated, if observed steady state or transient emissions exceed a limit specified in Parts III of this permit.

## **PART IX. ADDITIONAL TERMS AND CONDITIONS**

- A.** This permit does not relieve the Permittee of the responsibility to conduct, maintain and operate the regulated activity in compliance with all applicable requirements of any federal, municipal or other state agency. Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state and local law.
- B.** Any representative of the DEEP may enter the Permittee's site in accordance with constitutional limitations at all reasonable times without prior notice, for the purposes of inspecting, monitoring and enforcing the terms and conditions of this permit and applicable state law.
- C.** This permit may be revoked, suspended, modified or transferred in accordance with applicable law.
- D.** This permit is subject to and in no way derogates from any present or future property rights or other rights or powers of the State of Connecticut and conveys no property rights in real estate or material, nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the facility or regulated activity affected thereby. This permit shall neither create nor affect any rights of persons or municipalities who are not parties to this permit.
- E.** Any document, including any notice, which is required to be submitted to the commissioner under this permit shall be signed by a duly authorized representative of the Permittee and by the person who is responsible for actually preparing such document, each of whom shall certify in writing as follows: "I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense under section 22a-175 of the Connecticut General Statutes, under section 53a-157b of the Connecticut General Statutes, and in accordance with any applicable statute."
- F.** Nothing in this permit shall affect the commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, recover costs and natural resource damages, and to impose penalties for violations of law, including but not limited to violations of this or any other permit issued to the Permittee by the commissioner.
- G.** Within 15 days of the date the Permittee becomes aware of a change in any information submitted to the commissioner under this permit, or that any such information was inaccurate or misleading or that any relevant information was omitted, the Permittee shall submit the correct or omitted information to the commissioner.
- H.** The date of submission to the commissioner of any document required by this permit shall be the date such document is received by the commissioner. The date of any notice by the commissioner under this permit, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three days after it is mailed by the commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" means calendar day. Any document or action which is required by this permit to be submitted or performed by a date which falls on a Saturday, Sunday or legal holiday shall be submitted or performed by the next business day thereafter.

## **PART IX. ADDITIONAL TERMS AND CONDITIONS**

- I. Any document required to be submitted to the commissioner under this permit shall, unless otherwise specified in writing by the commissioner, be directed to: Office of Director; Engineering & Enforcement Division; Bureau of Air Management; Department of Energy and Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.**



Connecticut Department of

**ENERGY &  
ENVIRONMENTAL  
PROTECTION**

**BUREAU OF AIR MANAGEMENT  
NEW SOURCE REVIEW PERMIT  
TO CONSTRUCT AND OPERATE A STATIONARY SOURCE**

Issued pursuant to Title 22a of the Connecticut General Statutes (CGS) and Section 22a-174-3a of the Regulations of Connecticut State Agencies (RCSA).

<b>Owner/Operator</b>	PSEG Power Connecticut LLC – Bridgeport Harbor Station
<b>Address</b>	1 Atlantic Street, Bridgeport, CT 06604
<b>Equipment Location</b>	1 Atlantic Street, Bridgeport, CT 06604
<b>Equipment Description</b>	80 MMBtu/hr Natural Gas Fired Boiler with Ultra Low NOx Burners and Flue Gas Recirculation
<b>Town-Permit Numbers</b>	015-0300
<b>Premises Number</b>	045
<b>Street Number</b>	18
<b>Permit Issue Date</b>	
<b>Expiration Date</b>	None

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Michael Sullivan  
Deputy Commissioner

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Date

This permit specifies necessary terms and conditions for the operation of this equipment to comply with state and federal air quality standards. The Permittee shall at all times comply with the terms and conditions stated herein.

## **PART I. DESIGN SPECIFICATIONS**

### **A. General Description**

The main purpose of the 80 MMBtu/hr (HHV) natural gas fired boiler is to produce auxiliary steam to provide certain heating functions prior to and during startups in order to allow shorter startup time durations.

### **B. Equipment Design Specifications**

1. Fuel Type: Natural gas
2. Maximum Fuel Firing Rate: 78,000 scf/hr
3. Maximum Gross Heat Input: 80 MMBtu/hr (HHV)
4. Maximum Steam Flow @ 406 °F and 250 psig: 66,000 lb/hr (at 80% efficiency)

### **C. Control Equipment Design Specifications**

1. Ultra Low NOx Burner/Flue Gas Recirculation
  - a. Make and Model: John Zink Hamworthy Combustion/Coen Rapid Mix Burner or equivalent

### **D. Stack Parameters**

1. Minimum Stack Height: 160 ft
2. Minimum Exhaust Gas Flow Rate: 23,000 acfm
3. Minimum Stack Exit Temperature: 300 °F
4. Minimum Distance from Stack to Property Line: 400 ft

## **PART II. OPERATIONAL CONDITIONS**

### **A. Equipment**

1. Maximum Fuel Consumption over any Consecutive 12 Month Period: 687 MMscf
2. Maximum Fuel Sulfur Content: 0.5 grains/100 scf
3. The Permittee shall operate and maintain the boiler/control equipment in accordance with manufacturer's specifications and written recommendations.

## PART II. OPERATIONAL CONDITIONS, continued

4. The Permittee shall properly operate the flue gas recirculation (FGR) system at all times that this equipment is in operation and emitting air pollutants.

## PART III. ALLOWABLE EMISSION LIMITS

The Permittee shall not cause or allow this equipment to exceed the emission limits stated herein at any time.

### A. Criteria and Non-Criteria Pollutants

Pollutant	Ib/hr	Other Units	TPY
PM/ PM <sub>10</sub> / PM <sub>2.5</sub>	0.48		2.1
SO <sub>2</sub>	0.12		0.5
NOx	0.72	7.0 ppmvd@3% O <sub>2</sub>	3.2
VOC	0.32	0.004 lb/MMBtu	1.4
CO	2.88	50 ppmvd@3% O <sub>2</sub>	12.6
Pb	3.9 E-05		1.7E-4
H <sub>2</sub> SO <sub>4</sub>	0.02		0.08
CO <sub>2e</sub>	9,368	117 lb/MMBtu	41,031

### B. Hazardous Air Pollutants

This equipment shall not cause an exceedance of the Maximum Allowable Stack Concentration (MASC) for any hazardous air pollutant (HAP) emitted and listed in RCSA §22a-174-29. [STATE ONLY REQUIREMENT]

### C. Opacity

This equipment shall not exceed 10% opacity during any six minute block average as measured by 40 CFR Part 60, Appendix A, Reference Method 9.

### D. Demonstration of compliance with the above emission limits may be met by calculating the emission rates using the most recent approved stack test results for that pollutant, or if unavailable, emission factors from the following sources:

- NOx, CO, VOC: stack testing data
- PM<sub>10</sub>: Guaranteed Vendor Emissions Factor
- Opacity: Stack Test Data
- SO<sub>2</sub>, H<sub>2</sub>SO<sub>4</sub>: Calculated from fuel sulfur content
- Pb: AP-42, Table 1.4-2, July 1998
- CO<sub>2e</sub>: 40 CFR Part 98, Tables A-1 (Dec 2014), C-1 and C-2 (Nov 2013)

The commissioner may require other means (e.g. stack testing) to demonstrate compliance with the above emission limits, as allowed by state or federal statute, law or regulation.

## **PART IV. MONITORING, RECORD KEEPING AND REPORTING REQUIREMENTS**

### **A. Monitoring**

1. The Permittee shall continuously monitor fuel consumption to the boiler using a non-resettable totalizing fuel meter.
2. The Permittee shall perform inspections of the low NOx burners and flue gas recirculation system as recommended by the manufacturer.

### **B. Record Keeping**

1. The Permittee shall keep records of monthly and consecutive 12 month fuel consumption. The consecutive 12 month fuel consumption shall be determined by adding the current month's fuel consumption to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month.
2. The Permittee shall calculate and record the monthly and consecutive 12 month PM, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NOx, VOC, CO, Pb, H<sub>2</sub>SO<sub>4</sub> and CO<sub>2e</sub> emissions in units of tons. The consecutive 12 month emissions shall be determined by adding (for each pollutant) the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of the previous month.
3. The Permittee shall keep records of a current valid purchase contract, tariff sheet, or transportation contract which demonstrates the maximum total sulfur content of the natural gas burned in the auxiliary boiler.
4. The Permittee shall make and keep records of all maintenance and tune-up activities for the boiler.
5. The Permittee shall make and keep records of all inspections of the low NOx burners and flue gas recirculation system.
6. The Permittee shall make and keep records of manufacturer written specifications and recommendations for operation and maintenance.
7. The Permittee shall keep records of stack testing reports.
8. The Permittee shall keep all records required by this permit for a period of no less than five years and shall submit such records to the commissioner upon request.

### **C. Reporting**

The Permittee shall notify the commissioner, in writing, of the date of commencement of construction and the date of initial startup of the boiler. Such written notification shall be submitted no later than 30 days after the subject event. The Permittee shall submit the above notifications to the Supervisor of the Compliance Analysis & Coordination Unit, Enforcement Section, Bureau of Air Management; Department of Energy and Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.

## PART V. STACK EMISSION TEST REQUIREMENTS

Stack emission testing shall be performed in accordance with the Emission Test Guidelines available on the DEEP website.

Initial stack testing shall be required for the following pollutant(s):

PM     PM<sub>10</sub>     PM<sub>2.5</sub>     SO<sub>2</sub>     NOx     CO  
 VOC     Opacity     Other (HAPs):

- A. The Permittee shall conduct initial stack testing within 60 days of achieving the maximum production rate, but not later than 180 days after initial startup. The Permittee shall submit test results within 30 days after completion of testing.
- B. Recurrent stack testing for the above pollutants shall be conducted within five years from the date of the previous stack test or when it was due.
- C. Stack test results shall be reported as follows:
  1. All pollutants in units of lb/hr.
  2. NOx and CO in ppmvd at 3% O<sub>2</sub>.
  3. Opacity: %.
  4. VOC: lb/MMBtu.

## PART VI. SPECIAL REQUIREMENTS

- A. The Permittee shall comply with all applicable sections of the following New Source Performance Standard(s) at all times.

Title 40 CFR Part 60 Subpart A – General Provisions

Title 40 CFR Part 60 Subpart Dc – Standards of Performance for Small Industrial Commercial-Institutional Steam Generating Units

Copies of the Code of Federal Regulations (CFR) are available online at the U.S. Government Printing Office website.

- B. The Permittee shall not cause or permit the emission of any substance or combination of substances which creates or contributes to an odor beyond the property boundary of the premises that constitutes a nuisance as set forth in RCSA §22a-174-23. [STATE ONLY REQUIREMENT]
- C. The Permittee shall operate this facility at all times in a manner so as not to violate or contribute significantly to the violation of any applicable state noise control regulations, as set forth in RCSA §§22a-69-1 through 22a-69-7.4. [STATE ONLY REQUIREMENT]
- D. The Permittee shall resubmit for review and approval a Best Available Control Technology (BACT) analysis if such construction or phased construction has not commenced within the 18 months following the commissioner's approval of the current BACT determination (i.e., the date of this permit) for such construction or phase of construction. [RCSA §22a-174-3a(j)(4)]

## **PART VII. ADDITIONAL TERMS AND CONDITIONS**

- A.** This permit does not relieve the Permittee of the responsibility to conduct, maintain and operate the regulated activity in compliance with all applicable requirements of any federal, municipal or other state agency. Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state and local law.
- B.** Any representative of DEEP may enter the Permittee's site in accordance with constitutional limitations at all reasonable times without prior notice, for the purposes of inspecting, monitoring and enforcing the terms and conditions of this permit and applicable state law.
- C.** This permit may be revoked, suspended, modified or transferred in accordance with applicable law.
- D.** This permit is subject to and in no way derogates from any present or future property rights or other rights or powers of the State of Connecticut and conveys no property rights in real estate or material, nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the facility or regulated activity affected thereby. This permit shall neither create nor affect any rights of persons or municipalities who are not parties to this permit.
- E.** Any document, including any notice, which is required to be submitted to the commissioner under this permit shall be signed by a duly authorized representative of the Permittee and by the person who is responsible for actually preparing such document, each of whom shall certify in writing as follows: "I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense under section 22a-175 of the Connecticut General Statutes, under section 53a-157b of the Connecticut General Statutes, and in accordance with any applicable statute."
- F.** Nothing in this permit shall affect the commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, recover costs and natural resource damages, and to impose penalties for violations of law, including but not limited to violations of this or any other permit issued to the Permittee by the commissioner.
- G.** Within 15 days of the date the Permittee becomes aware of a change in any information submitted to the commissioner under this permit, or that any such information was inaccurate or misleading or that any relevant information was omitted, the Permittee shall submit the correct or omitted information to the commissioner.
- H.** The date of submission to the commissioner of any document required by this permit shall be the date such document is received by the commissioner. The date of any notice by the commissioner under this permit, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three days after it is mailed by the commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" means calendar day. Any document or action which is required by this permit to be submitted or performed by a date which falls on a Saturday, Sunday or legal holiday shall be submitted or performed by the next business day thereafter.

**PART VII. ADDITIONAL TERMS AND CONDITIONS, continued**

- I. Any document required to be submitted to the commissioner under this permit shall, unless otherwise specified in writing by the commissioner, be directed to: Office of Director; Engineering & Enforcement Division; Bureau of Air Management; Department of Energy and Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.**



Connecticut Department of

**ENERGY &  
ENVIRONMENTAL  
PROTECTION**

**BUREAU OF AIR MANAGEMENT  
NEW SOURCE REVIEW PERMIT  
TO CONSTRUCT AND OPERATE A STATIONARY SOURCE**

Issued pursuant to Title 22a of the Connecticut General Statutes (CGS) and Section 22a-174-3a of the Regulations of Connecticut State Agencies (RCSA).

<b>Owner/Operator</b>	PSEG Power Connecticut LLC – Bridgeport Harbor Station
<b>Address</b>	1 Atlantic Street, Bridgeport, CT 06604
<b>Equipment Location</b>	1 Atlantic Street, Bridgeport, CT 06604
<b>Equipment Description</b>	2,000 kW Diesel Fired Emergency Generator
<b>Town/Permit Numbers</b>	015-0301
<b>Premises Number</b>	045
<b>Stack Number</b>	19
<b>Permit Issue Date</b>	
<b>Expiration Date</b>	None

---

Michael Sullivan  
Deputy Commissioner

---

Date

This permit specifies necessary terms and conditions for the operation of this equipment to comply with state and federal air quality standards. The Permittee shall at all times comply with the terms and conditions stated herein.

## **PART I. DESIGN SPECIFICATIONS**

### **A. General Description**

The main purpose of the 2,000 kW Diesel fired emergency generator is to provide emergency back-up power to the Bridgeport Harbor Station Unit 5 Project. The emergency generator is not connected to the electrical grid.

### **B. Equipment Design Specifications**

1. **Fuel Type:** Ultra Low Sulfur Diesel (ULSD)
2. **Maximum Fuel Firing Rate:** 138 gal/hr
3. **Maximum Gross Heat Input:** 19.1 MMBTU/hr (HHV)

### **C. Stack Parameters**

1. **Minimum Stack Height:** 35 ft
2. **Minimum Exhaust Gas Flow Rate:** 15,293 acfm
3. **Minimum Stack Exit Temperature:** 752 °F
4. **Minimum Distance from Stack to Property Line:** 294 ft

## **PART II. OPERATIONAL CONDITIONS**

### **A. Equipment**

1. **Maximum Fuel Consumption over any Consecutive 12 Month Period:** 41,400 gallons
2. **Maximum Hours of Operation over any Consecutive 12 Month Period:** 300 hours
3. **Maximum Fuel Sulfur Content:** 0.0015% by weight
4. **The Permittee shall operate and maintain this equipment in accordance with the manufacturer's specifications and written recommendations.**
5. **The Permittee shall operate and maintain this equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown and malfunction.**

## PART II. OPERATIONAL CONDITIONS, continued

### B. For Emergency Use

1. The Permittee shall only operate this equipment in accordance with the definition of emergency engine as defined in RCSA §22a-174-1, et seq.
2. The Permittee shall not operate the subject engine for routine scheduled testing or maintenance during days when ambient ozone is forecasted by the commissioner to be "moderate unhealthy for sensitive groups" to "very unhealthy" anywhere in Connecticut.
  - a. Forecast Information

Official ambient ozone information can be obtained by calling:

- i. (860) 424-4167 Department's Bureau of Air Management Monitoring Section (Recorded Message Updated daily at 3:00 p.m.)
- ii. (860) 424-3027 Department's Bureau of Air Management Monitoring Section (For additional air quality information)

## PART III. ALLOWABLE EMISSION LIMITS

The Permittee shall not cause or allow this equipment to exceed the emission limits stated herein at any time.

### A. Criteria and Non-Criteria Pollutants

Pollutant	lb/hr	Other Units	TPY
PM/ PM <sub>10</sub> / PM <sub>2.5</sub>	0.3	0.15 g/hp-hr	0.04
SO <sub>2</sub>	0.2		0.03
NOx	42.3		6.4
VOC	1.0		0.15
(NOx+NMHC)		4.8 g/hp-hr	
CO	3.5	2.6 g/hp-hr	0.52
Lead (Pb)	0.0003		0.00004
Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )	0.03		0.0043
CO <sub>2e</sub>	3,117	163 lb/MMBtu	468

### B. Hazardous Air Pollutants

This equipment shall not cause an exceedance of the Maximum Allowable Stack Concentration (MASC) for any hazardous air pollutant (HAP) emitted and listed in RCSA §22a-174-29. [STATE ONLY REQUIREMENT]

### C. Opacity

Opacity resulting from operation of this engine shall not exceed 10% during any six-minute block average or 40% reduced to a one-minute block average; as measured by 40 CFR Part 60, Appendix A, Reference Method 9.

### **PART III. ALLOWABLE EMISSION LIMITS, continued**

**D. Demonstration of compliance with the above emission limits may be met by calculating the emission rates using emission factors from the following sources:**

- SO<sub>2</sub>, H<sub>2</sub>SO<sub>4</sub>: Calculated from fuel sulfur content
- NOx, PM<sub>10/2.5</sub>, VOC, CO: EPA Certified Vendor Emissions Factor
- Pb: AP-42 Sec. 3.1(April 2000)
- CO<sub>2e</sub>: 40 CFR Part 98 Subpart C, Table C-1 and Table C-2 (Nov 2013)

The Permittee is not required to demonstrate compliance with the short-term emission limits stated herein during the initial shakedown period. Emissions during the initial shakedown period shall be counted towards the annual emission limits stated herein.

The commissioner may require other means (e.g. stack testing) to demonstrate compliance with the above emission limits, as allowed by state or federal statute, law or regulation.

### **PART IV. MONITORING, RECORD KEEPING AND REPORTING REQUIREMENTS**

#### **A. Monitoring**

1. The Permittee shall continuously monitor fuel consumption by this equipment using a non-resettable totalizing fuel meter.
2. The Permittee shall monitor the number of hours that this equipment is in operation.

#### **B. Record Keeping**

1. The Permittee shall keep records of monthly and consecutive 12 month fuel consumption. The consecutive 12 month fuel consumption shall be determined by adding the current month's fuel consumption to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month.
2. The Permittee shall keep records of monthly and consecutive 12 month hours of operation. The consecutive 12 month hours of operation shall be determined by adding the current month's hours of operation to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month.
3. The Permittee shall calculate and record the monthly and consecutive 12 month PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NOx, VOC, Pb, H<sub>2</sub>SO<sub>4</sub>, CO<sub>2e</sub> and CO emissions in units of tons. The consecutive 12 month emissions shall be determined by adding (for each pollutant) the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of the previous month.
4. The Permittee shall keep records of the fuel certification for each delivery of fuel oil from a bulk petroleum provider or a copy of the current contract with the fuel supplier supplying the fuel used by the equipment that includes the applicable sulfur content of the fuel as a condition of each shipment. The shipping receipt or contract shall include the date of delivery, the name of the fuel supplier, type of fuel delivered, the percentage of sulfur in such fuel, by weight, dry basis, and the method used to determine the sulfur content of such fuel.

## **PART IV. MONITORING, RECORD KEEPING AND REPORTING REQUIREMENTS, continued**

5. The Permittee shall keep records of the inspection and maintenance for this equipment. The records shall include:
  - a. the name of the person conducting the inspection or maintenance;
  - b. the date of the inspection or maintenance; and
  - c. the results or actions taken.
6. The Permittee shall comply with the applicable record keeping requirements of RCSA §22a-174-22(l).
7. The Permittee shall keep records of the manufacturer's specifications and written recommendations.
8. The Permittee shall keep all records required by this permit for a period of no less than five years and shall submit such records to the commissioner upon request.

### **C. Reporting**

1. The Permittee shall comply with the applicable reporting requirements of RCSA §22a-174-22(l).
2. The Permittee shall comply with the reporting requirements in 40 CFR §60.4214.
3. The Permittee shall notify the commissioner, in writing, of the date of commencement of construction and the date of initial startup of the equipment. Such written notification shall be submitted no later than 30 days after the subject event. The Permittee shall submit the above notifications to the Supervisor of the Compliance Analysis & Coordination Unit, Enforcement Section, Bureau of Air Management; Department of Energy and Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.

## **PART V. SPECIAL REQUIREMENTS**

- A. The Permittee shall comply with all applicable sections of the following New Source Performance Standard(s) at all times.

Title 40 CFR Part 60, Subparts: A and III – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

**Note:** the emergency generator is subject to 40 CFR Part 63 Subpart ZZZZ and complies with the requirements by operating under 40 CFR Part 60 Subpart IIII.

Copies of the Code of Federal Regulations (CFR) are available online at the U.S. Government Printing Office website.

- B. The Permittee shall not cause or permit the emission of any substance or combination of substances which creates or contributes to an odor beyond the property boundary of the premises that constitutes a nuisance as set forth in RCSA §22a-174-23. [STATE ONLY REQUIREMENT]
- C. The Permittee shall operate this facility at all times in a manner so as not to violate or contribute significantly to the violation of any applicable state noise control regulations, as set forth in RCSA §§22a-69-1 through 22a-69-7.4. [STATE ONLY REQUIREMENT]

## **PART V. SPECIAL REQUIREMENTS, continued**

**D. The Permittee shall resubmit for review and approval a Best Available Control Technology (BACT) analysis if such construction or phased construction has not commenced within the 18 months following the commissioner's approval of the current BACT determination (i.e., the date of this permit) for such construction or phase of construction. [RCSA §22a-174-3a(i)(4)]**

## **PART VI. ADDITIONAL TERMS AND CONDITIONS**

**A. This permit does not relieve the Permittee of the responsibility to conduct, maintain and operate the regulated activity in compliance with all applicable requirements of any federal, municipal or other state agency. Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state and local law.**

**B. Any representative of the DEEP may enter the Permittee's site in accordance with constitutional limitations at all reasonable times without prior notice, for the purposes of inspecting, monitoring and enforcing the terms and conditions of this permit and applicable state law.**

**C. This permit may be revoked, suspended, modified or transferred in accordance with applicable law.**

**D. This permit is subject to and in no way derogates from any present or future property rights or other rights or powers of the State of Connecticut and conveys no property rights in real estate or material, nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the facility or regulated activity affected thereby. This permit shall neither create nor affect any rights of persons or municipalities who are not parties to this permit.**

**E. Any document, including any notice, which is required to be submitted to the commissioner under this permit shall be signed by a duly authorized representative of the Permittee and by the person who is responsible for actually preparing such document, each of whom shall certify in writing as follows: "I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense under section 22a-175 of the Connecticut General Statutes, under section 53a-157b of the Connecticut General Statutes, and in accordance with any applicable statute."**

**F. Nothing in this permit shall affect the commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, recover costs and natural resource damages, and to impose penalties for violations of law, including but not limited to violations of this or any other permit issued to the Permittee by the commissioner.**

**G. Within 15 days of the date the Permittee becomes aware of a change in any information submitted to the commissioner under this permit, or that any such information was inaccurate or misleading or that any relevant information was omitted, the Permittee shall submit the correct or omitted information to the commissioner.**

## **PART VI. ADDITIONAL TERMS AND CONDITIONS, continued**

- H.** The date of submission to the commissioner of any document required by this permit shall be the date such document is received by the commissioner. The date of any notice by the commissioner under this permit, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three days after it is mailed by the commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" means calendar day. Any document or action which is required by this permit to be submitted or performed by a date which falls on a Saturday, Sunday or legal holiday shall be submitted or performed by the next business day thereafter.
- I.** Any document required to be submitted to the commissioner under this permit shall, unless otherwise specified in writing by the commissioner, be directed to: Office of Director; Engineering & Enforcement Division; Bureau of Air Management; Department of Energy and Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.

## Notice of Public Hearing

**Applicant: PSEG Power Connecticut LLC - Bridgeport Harbor Station**

**Application Nos. 201411158, 201411160 and 201611860**

**City/Town: Bridgeport**

The Commissioner of the Department of Energy and Environmental Protection (“DEEP”) hereby gives notice of a public hearing to address issues concerning the applications by PSEG Power Connecticut LLC - Bridgeport Harbor Station for permits to construct and operate the Unit 5 Combined Cycle Project. The hearing, to be held on February 28, 2017 is more thoroughly described herein.

Application Nos.: 201411158, 201411160 and 201611860

Applicant’s Name and Address: PSEG Power Connecticut LLC - Bridgeport Harbor Station

Contact Name/Phone/Email: Douglas Gordon, (973) 430-6092, [douglas.gordon@pseg.com](mailto:douglas.gordon@pseg.com)

Type of Permits: Three New Source Review permits for an approximately 485 MW Combined Cycle Power Plant consisting of one dual fired GE turbine/duct burner, one auxiliary boiler and one emergency generator.

Type of Facility: Power Generation

Facility/Site Location: 1 Atlantic Street, Bridgeport, CT 06604

### NOTICE OF HEARING

DEEP will hold a public hearing on these applications on February 28, 2017 at 6:30 PM at the Common Council Chambers, Bridgeport City Hall, 45 Lyon Terrace, Bridgeport, CT. The public hearing will consist of informational presentations by the parties and the collection of public comment on the record.

The informational hearing will be moderated and recorded by a DEEP hearing officer and will proceed in the following order: presentations from the panel, including the applicant, DEEP, and petitioners; a 15-minute break for informal questions and answers between members of the public and the panel which will not be recorded nor be part of the hearing record; and then the continuation of the informational hearing to receive oral and written comments from members of the public. Comments will be heard in the order in which members of the public sign up at the informational hearing.

Written comments will be accepted at the public hearing and until the close of business on March 10, 2017. All written comments submitted after February 28, 2017 shall be submitted to Ms. Lidia J. Howard, Engineering & Enforcement Division of the Department of Energy and Environmental Protection, 5<sup>th</sup> Floor, 79 Elm Street, Hartford, Connecticut 06106.

Members of the public should refer to the DEEP Calendar of Events at [www.ct.gov/deep/calendar](http://www.ct.gov/deep/calendar) for the official schedule in this matter, including cancellations, or other schedule alterations. In the event of inclement weather, the hearing will be rescheduled to March 7, 2017 at 6:30 PM in

the same location. A decision on whether to postpone the hearing will be made by 3:00 PM on February 28, 2017 and posted to the DEEP calendar of events.

Interested persons who wish to obtain more information regarding the applications and draft permits may do so by contacting Ms. Lidia J. Howard of the Engineering and Enforcement Division by mail at the address above, by electronic mail to [lidia.howard@ct.gov](mailto:lidia.howard@ct.gov), or by calling (860) 424-4152.

The Connecticut Department of Energy and Environmental Protection is an Affirmative Action and Equal Opportunity Employer that is committed to complying with the Americans with Disabilities Act. To request an accommodation or interpreter contact us at (860) 418-5910 or [deep.accommodations@ct.gov](mailto:deep.accommodations@ct.gov).

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**Tuesday, January 24, 2017**

## **NOTICE OF PUBLIC HEARING APPLICANT: PSEG POWER CONNECTICUT**

Notice of Public Hearing Applicant: PSEG Power Connecticut LLC - Bridgeport Harbor Station Application Nos. 201411158, 201411160 and 201611860 City/Town: Bridgeport The Commissioner of the Department of Energy and Environmental Protection ("DEEP") hereby gives notice of a public hearing to address issues concerning the applications by PSEG Power Connecticut LLC -Bridgeport Harbor Station for permits to construct and operate the Unit 5 Combined Cycle Project. The hearing, to be held on February 28, 2017 is more thoroughly described herein. Application Nos.: 201411158, 201411160 and 201611860 Applicant's Name and Address: PSEG Power Connecticut LLC -Bridgeport Harbor Station Contact Name/Phone/Email: Douglas Gordon, (973) 430-6092, douglas.gordon@pseg.com Type of Permits: Three New Source Review permits for an approximately 485 MW Combined Cycle Power Plant consisting of one dual fired GE turbine/duct burner, one auxiliary boiler and one emergency generator. Type of Facility: Power Generation Facility/Site Location: 1 Atlantic Street, Bridgeport, CT 06604 NOTICE OF HEARING DEEP will hold a public hearing on these applications on February 28, 2017 at 6:30 PM at the Common Council Chambers, Bridgeport City Hall, 45 Lyon Terrace, Bridgeport, CT. The public hearing will consist of informational presentations by the parties and the collection of public comment on the record. The informational hearing will be moderated and recorded by a DEEP hearing officer and will proceed in the following order: presentations from the panel, including the applicant, DEEP, and petitioners; a 15-minute break for informal questions and answers between members of the public and the panel which will not be recorded nor be part of the hearing record; and then the continuation of the informational hearing to receive oral and written comments from members of the public. Comments will be heard in the order in which members of the public sign up at the informational hearing. Written comments will be accepted at the public hearing and until the close of business on March 10, 2017. All written comments submitted after February 28, 2017 shall be submitted to Ms. Lidia J. Howard, Engineering & Enforcement Division of the Department of Energy and Environmental Protection, 5th Floor, 79 Elm Street, Hartford, Connecticut 06106. Members of the public should refer to the DEEP Calendar of Events at [www.ct.gov/deep/calendar](http://www.ct.gov/deep/calendar) for the official schedule in this matter, including cancellations, or other schedule alterations. In the event of inclement weather, the hearing will be rescheduled to March 7, 2017 at 6:30 PM in the same location. A decision on whether to postpone the hearing will be made by 3:00 PM on February 28, 2017 and posted to the DEEP calendar of events. Interested persons who wish to obtain more information regarding the applications and draft permits may do so by contacting Ms. Lidia J. Howard of the Engineering and Enforcement Division by mail at the address above, by electronic mail to lidia.howard@ct.gov, or by calling (860) 424-4152. The Connecticut Department of Energy and Environmental Protection is an Affirmative Action and Equal Opportunity Employer that is committed to complying with the Americans with Disabilities Act. To request an accommodation or interpreter contact us at (860) 418-5910 or [deep.accommodations@ct.gov](mailto:deep.accommodations@ct.gov).

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llicitation you must send your request to bids@parkci.org, please reference solicitation number and title on e. A pre-bid conference will be held at 150 Highland ort, CT 06604 on February 14, 2017 @ 2:00 p.m. Al- alance is not mandatory, submitting a bid for the pro- tending conference is not in the best interest of the tional questions should be emailed only to bids@park- es.org no later than February 17, 2017 @ 3:00 p.m. the questions will be posted on PCC's Website: www. unities.org. Proposals shall be mailed or hand deliv- jury 24, 2017 @ 3:00 PM, to Ms. Caroline Sanchez, cialist, 150 Highland Ave, Bridgeport, CT 06604. s will not be accepted.

email: nrjsi@jsiane.com E.O.E. IV

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aeczecena@gmail.com

REMOVEMOS LA NIEVE DE LOS TEC

## SO DE AUDIENCIA PÚBLICA

SEG Power Connecticut LLC - Bridgeport Harbor Station  
dades números: 201411158, 201411160 y 201611860  
Ciudad: Bridgeport

Departamento de Energía y Protección ("DEEP"), por este medio informa que a pública para abordar cuestiones relacionadas con las solicitudes de PSEG LLC - Bridgeport Harbor Station, para recibir los permisos para construir y mbinada Unit 5 Combined Cycle Project. La audiencia, que tendrá lugar el 28 se describe con más detalles más abajo.

os:  
1 del solicitante: 01411158, 201411160 y 201611860  
PSEG Power Connecticut LLC -  
Bridgeport Harbor Station

a  
io/email:  
Douglas Gordon, 973-430-6092,  
douglas.gordon@pseg.com

Tres permisos de revisión de nuevas fuentes para una planta de ciclo combinado de aproximadamente 485 MW, consistente de una turbina GE de combustible dual/con- ducto quemador, una caldera y un generador de emer- gencia.

Generación de electricidad  
1 Atlantic Street, Bridgeport, CT 06604

## AVISO DE AUDIENCIA

udiencia pública sobre estas solicitudes, el 28 de febrero de 2017, a las 6:30 en Council Chambers, Bridgeport City Hall, 45 Lyon Terrace, Bridgeport, CT. a consistirá de una presentación informativa de las partes involucradas y la comentarlos hechos.

rá ser dirigida por un funcionario de DEEP, quien recogerá los comentarios y en que sigue: presentación los participantes del panel, incluido el solicitante, os; un receso de 15 minutos para preguntas y respuestas informales entre el que no serán grabadas, ni formaran parte del registro de la audiencia; luego, presentación informativa, para recibir comentarios orales y escritos de parte nentarios serán escuchados en el orden de inscripción de los participantes en rmativa.

scritos serán aceptados en la audiencia pública y hasta el 10 de marzo de cierre. Todos los comentarios escritos sometidos después del 28 de febrero r enviados a: Ms. Lidia J. Howard, Engineering & Enforcement Division of Energy and Environmental Protection, 5th Floor, 79 Elm Street, Hartford,

El público deben remitirse al Calendario de eventos del DEEP:

## EAST HADDAM, CT / LEGAL N

PHASE 1 NATHAN HALE-RAY MIDDLE SCHOOL  
CONVERSION TO MUNICIPAL OFFICES  
TOWN OF EAST HADDAM  
1 PLAINS ROAD, MOODUS, CT 06469  
REQUEST FOR BIDS

1. The Construction Manager (Downes Construction Company, LLC) will receive sealed bid p behalf of The Town of East Haddam for the bid packages identified below for the Town Munic received at the Downes Construction Company, LLC Main Office, 200 Stanley Street, New B no later than 2:00 P.M. on Thursday February 9, 2017. Bids will be publicly opened for the foll

Bid Package Name and Number	DAS Prequalification
Bid Package #1.1.1 – Temporary Fencing (SBE)	
Bid Package #1.1.2 – Temporary Power & Lighting (M/WBE)	
Bid Package #1.2.1 – Demolition and Abatement	Demolition and Abate
Bid Package #1.8.1 – Glass & Glazing	
Bid Package #1.23.1 – HVAC Units (Furnish Only)	

NOTE: ANY SUBCONTRACTORS BID THAT EXCEEDS \$500,000 MUST BE PRE-QUALIFI-  
NECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES (DAS) FOR THE CLASSIFI-  
CATED.

2. The contractor shall hold a current DAS Contractor Prequalification Certificate (not a prede-  
Department of Administrative Services of the State of Connecticut according to Connecticut  
4a-100, 4b-101 and 4b-91. Bidders shall submit with their bids a current Update (bid) Statement.  
**FAILURE TO SUBMIT THIS ITEM WITH THE BID SUBJECTS YOUR BID TO DISQUALIFI-  
CATION.** If you have any questions regarding these requirements contact the State of CT.DAS, at tele-  
5280 or visit their web site at [www.das.state.ct.us](http://www.das.state.ct.us).
3. This contract may be subject to state set-aside and contract compliance requirements, per-  
If required, the Subcontractor who is selected to perform this State project must comply with  
4a-60, 4a-60a, 4a-60g, and 46a-68b through 46a-68f, inclusive, as amended by June 2015 Si-  
15-5. An Affirmative Action Plan must be filed with and approved by the Commission on Human  
prior to the commencement of construction. State law requires a minimum of twenty-five (25)  
funded portion of the contract for award to subcontractors holding current certification from the  
of Administrative Services ("DAS") under the provisions of CONN. GEN. STAT. § 4a-60, a  
work with DAS certified Small and Minority owned businesses and 25% of that work with DAS  
and/or Disabled owned businesses.) The contractor must demonstrate good faith effort to  
goals. For municipal public works contracts and quasi-public agency projects, the contractor n  
tronic non-discrimination certification with the Commission on Human Rights and Opportunitie  
[http://www.ct.gov/opm/cwp/view.asp?a=2982&q=390928&opmNav\\_GID=1806](http://www.ct.gov/opm/cwp/view.asp?a=2982&q=390928&opmNav_GID=1806).
4. As security, each bid must be accompanied by a Certified Check or Cashiers Check drawn  
a Trust Company or a National Banking Association, or the Bid must be accompanied by a E  
thereto, such Surety Company or Companies as are authorized to do business in the State of C  
not less than 5% of the Bid. Obligee is Downes Construction Company, LLC.
5. The successful bidder shall furnish Performance, Labor and Material Payment Bonds, each  
Sum.
6. Questions regarding the work or bid shall be made in writing and directed via fax or e-mail to:  
Assistant Director of Operations [romagnoli@downesco.com](mailto:romagnoli@downesco.com) or Mr. Scott Scholl [sscholl@downesco.com](mailto:sscholl@downesco.com)  
Construction Manager (Downes Construction Company, LLC) at (860) 225-3617 fax the last date f  
calendar days prior to bid due date.
7. Said bids will be received at the office of the Construction Manager until 2:00 PM as noted abo  
the Construction Manager's office @ 200 Stanley Street, New Britain, CT.
8. Plans, Specifications and Instructions to Bidders may be obtained on or after **Monday Janu**  
vanced Reprographics, LLC 50 Corporate Avenue, Plainville, CT 06062. (860) 410-1020. On  
and specifications are available at the cost of reproduction. Plans will also be available for view  
tion's Main Office, 200 Stanley St., New Britain, at the Town of East Haddam Selectman's O  
Haddam, CT and also through Share File web access by contacting Thomas Romagnoli at  
information to a Share File link.
9. A Pre-Bid Conference will be held at Nathan Hale-Ray Middle School located at 1 Plains Road,  
**January 30, 2017 at 10:00 AM.** Prospective Bidders are to meet in the Main Lobby Entr  
STRONGLY encouraged but not mandatory.
10. The successful bidder shall comply with applicable state and local laws and The Town of East
11. The State of Connecticut Department of Labor and all associated statutes and regulations sha  
this project. The successful bidder shall comply with applicable state and local laws and the Sta  
ments.
12. The requirements for prevailing wage rates as outlined in the Connecticut General Statutes c  
resultant contract award.