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

PSEG Power Connecticut LLC

April 11, 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 - 485 megawatt (MW) dual fuel combined-cycle electric generating facility at the existing Bridgeport Harbor Station

**Bridgeport Harbor Station Unit 5 – Bridgeport, Connecticut**
**Submittal of Approved Permits and Construction Start Notification**

Dear Ms. Bachman:

PSEG Power Connecticut LLC (PSEG) submits copies of permits and authorizations for the Bridgeport Harbor Station Unit 5 Combined Cycle Project (BHS 5, the Project or the Facility) and notifies the Connecticut Siting Council ("CSC") of PSEG's intent to commence construction of BHS 5).

The table below lists the CSC's approval conditions for the permits and authorizations. These requirements will be labelled as "complete" in the April 2017 Monthly Progress Report No. 4 to the CSC.

| CSC Requirement Number (Decision and Order) | CSC Requirement | Closure Status from March 2017 Monthly Progress Report No. 3 |
|---|---|---|
| 2 | Submit FAA Determinations for temporary structures (cranes) and stack | Open. Information to address CSC Requirement Numbers 2, 3, and 4 will be submitted as a package upon receipt of the NSR Air Permits for the Project. |
| 3 | Submit local permits relative to the discharge of wastewater | Open. Information to address CSC Requirement Numbers 2, 3, and 4 will be submitted as a package upon receipt of the NSR Air Permits for the Project. |
| 4 | Submit final CT DEEP air emissions and water discharge permits | Open. Information to address CSC Requirement Numbers 2, 3, and 4 will be submitted as a package upon receipt of the NSR Air Permits for the Project. |

**Connecticut Siting Council**
**Bridgeport Harbor Station Unit 5 – Bridgeport, Connecticut**
**Submittal of Approved Permits and Construction Start Notification**

Attached to this memorandum are the complete set of: (1) 12 FAA Determinations, including the original and renewal of the stack Determination and 10 Determinations for construction cranes (Exhibit 1), (2) the City of Bridgeport Coastal Site Plan (CSP) approval letter (Exhibit 2), (3) the Connecticut Department of Environmental Protection ("CT DEEP") General Permit for Construction Stormwater (Exhibit 3); (4) the CT DEEP outfall Certificate of Permission (Exhibit 4), and (5) the three approved CT DEEP New Source Review (NSR) air permits for the Project (Exhibit 5).

Note that the City of Bridgeport CSP approval conditions were all completed to the satisfaction of the City Engineer on December 22, 2016

This letter also serves as PSEG's notice to the CSC that construction of BHS 5 is being initiated as all pre-requisite approvals are complete, subject to the local building permitting process requirements.

PSEG will continue to provide updates to design or construction plans via the monthly progress reporting process. If you have any questions or require clarification, please don't hesitate to contact me at 973-856-0066 or the Project Senior Technical Director / Regulatory Lead, Jeff Pantazes at 856-359-7645.

Very truly yours

David Hinchey, Jr.

Manager Environmental - Major Permits & Technical Services
PSEG Power LLC - Fossil Environmental Affairs

**Connecticut Siting Council**
**Bridgeport Harbor Station Unit 5 – Bridgeport, Connecticut**
**Submittal of Approved Permits and Construction Start Notification**

**Enclosures:**

**Exhibit 1 – FAA Determinations**

**Exhibit 2 – City of Bridgeport Coastal Site Plan Approval**

**Exhibit 3 – CT DEEP General Permit for Construction Stormwater Approval**

**Exhibit 4 – CT DEEP Outfall Certificate of Permission**

**Exhibit 5 – CT DEEP New Source Review Permits (3)**

cc: Stephen Humes, Esq.
Franca L. DeRosa, Esq.
Leilani M. Holgado, Esq.
Karl Wintermeyer
Jonathan Howard
Scott Matheson
James R. Morrissey, Esq.
Tiana M. Stephens, Esq.

**Connecticut Siting Council**
**Bridgeport Harbor Station Unit 5 – Bridgeport, Connecticut**
**Submittal of Approved Permits and Construction Start Notification**

**Exhibit 1 – FAA Determinations**

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-ANE-2323-OE

Issued Date: 04/20/2015

Thomas Copus
PSEG Power Connecticut LLC
1 Atlantic Street
Bridgeport, CT 06604

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

| | |
|---|---|
| Structure: | Stack Bridgeport Unit 5 Stack |
| Location: | Bridgeport, CT |
| Latitude: | 41-10-00.16N NAD 83 |
| Longitude: | 73-10-48.42W |
| Heights: | 17 feet site elevation (SE) |
| | 300 feet above ground level (AGL) |
| | 317 feet above mean sea level (AMSL) |

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, a med-dual system - Chapters 4,8(M-Dual),&12.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

Any height exceeding 300 feet above ground level (317 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 10/20/2016 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.

(b) extended, revised, or terminated by the issuing office.

(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before May 20, 2015. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Regulations & ATC Procedures Group, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on May 30, 2015 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Darin Clipper, at (404) 305-6531. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-ANE-2323-OE.

**Signature Control No: 235894583-249506848** ( DNH )
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Case Description
Map(s)

The proposed Bridgeport Unit 5 Exhaust Stack, not exceeding a height of 300 feet (ft.) above ground level (AGL), 317 ft. above means sea level (AMSL), would be located approximately 2.45 nautical miles (NM) west of Igor I Sikorsky Memorial Airport's (BDR) airport reference point (ARP), Bridgeport, CT. The proposed exhaust stack has been identified as an obstruction under the standards of Title 14, Code of Federal Regulations (CFR), Part 77, as applied to BDR as follows:

Section 77.17 (a) (2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposed stack would exceed by up to 100 ft.

Section 77.17 (a) (5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23. However, no part of the takeoff or landing area itself will be considered an obstruction.

Section 77.19 (b): Conical surface. A surface, extending outward and upward, from the periphery of the horizontal surface at a slope of 20 to 1 for a horizontal distance of 4,000 feet. The proposed stack exceeds by up to 47 ft.

The proposal was circularized on March 3, 2015, to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No letters of objection were received as a result of circularization.

Aeronautical study disclosed that the proposed stack would have no effects on any proposed arrival, departure, or en route instrument flight rule (IFR) operations or procedures.

Since the proposed stack lies beyond the lateral limits of the VFR conical surface, and in the Runway 06/24 climb/descent area for Category C and D aircraft (aircraft with approach speeds of 121 knots but less than 166 knots), the maximum allowable height is 350 ft. above airport elevation or the height of 14 CFR Part 77.17(a) (2), whichever is greater not to exceed 499 ft. above the ground. The height that is 350 ft. above airport elevation is 359 ft. AMSL. The height that would not exceed 14 CFR Part 77.17(a) (2) is 217 ft. AMSL.

The proposed stack also lies beyond the lateral limits of the VFR conical surface and not in the climb/descent area for Runway 11/29. The maximum allowable height for this runway is 499 ft. above the airport elevation not to exceed 499 ft. AGL in which this proposed stack does not exceed criteria.

Study for possible visual flight rules (VFR) effect disclosed that the proposed stack would have no effects on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at BDR or any other known public-use or military airports. At 300 ft. AGL, the proposed stack would not have a substantial adverse effect on VFR en route flight operations because it is located within traffic pattern airspace.

Even though the proposed stack exceeds 77.19 (b), the proposed stack does not exceed the height of the VFR transition, approach, horizontal, or conical surfaces as applied to visual approach runways at BDR, the foundation of VFR traffic pattern analysis.

The proposed stack would need appropriate obstruction marking and lighting to make it more conspicuous to airmen should circumnavigation be necessary.

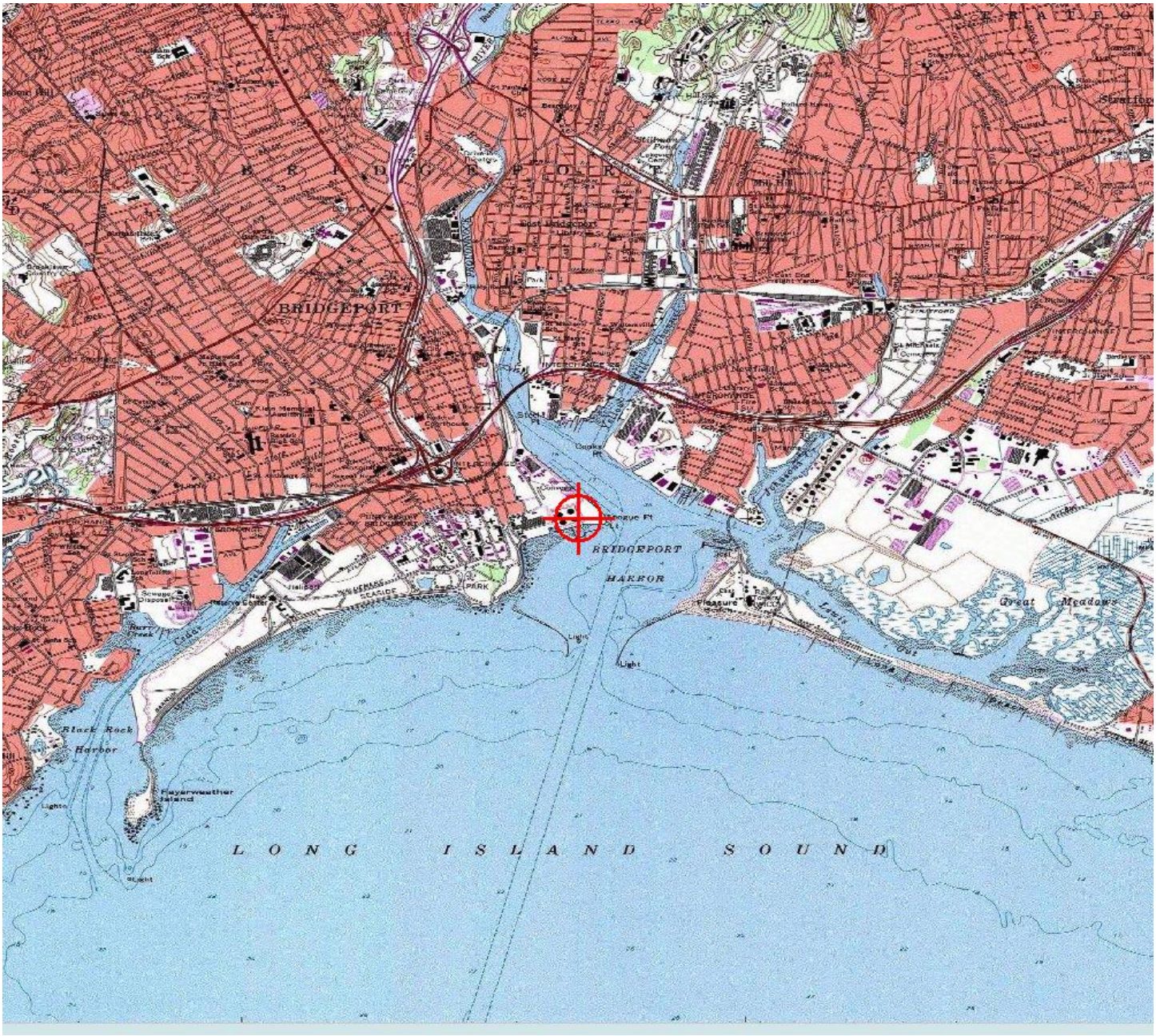
The cumulative impact of the proposed stack, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effects on existing or proposed public-use or military airports or navigational facilities, nor does the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed stack would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation as long as all conditions written within this determination are met.

## Case Description for ASN 2014-ANE-2323-OE

PSEG Power Connecticut LLC is proposing to construct a combined cycle electric generating facility (Bridgeport Unit 5) at the site of its existing Bridgeport Harbor Station. The project?s proposed exhaust stack is proposed at 300 feet above the proposed site design grade of 16 feet AMSL.

# TOPO Map for ASN 2014-ANE-2323-OE



**Sectional Map for ASN 2014-ANE-2323-OE**

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2014-ANE-2323-OE

Issued Date: 10/24/2016

Thomas Copus
PSEG Power Connecticut LLC
1 Atlantic Street
Bridgeport, CT 06604

**** Extension ****

A Determination was issued by the Federal Aviation Administration (FAA) concerning:

| | |
|---|---|
| Structure: | Stack Bridgeport Unit 5 Stack |
| Location: | Bridgeport, CT |
| Latitude: | 41-10-00.16N NAD 83 |
| Longitude: | 73-10-48.42W |
| Heights: | 17 feet site elevation (SE) |
| | 300 feet above ground level (AGL) |
| | 317 feet above mean sea level (AMSL) |

In response to your request for an extension of the effective period of the determination, the FAA has reviewed the aeronautical study in light of current aeronautical operations in the area of the structure and finds that no significant aeronautical changes have occurred which would alter the determination issued for this structure.

Accordingly, pursuant to the authority delegated to me, the effective period of the determination issued under the above cited aeronautical study number is hereby extended and will expire on 04/24/2018 unless otherwise extended, revised, or terminated by this office. You must adhere to all conditions identified in the original determination.

This extension issued in accordance with 49 U.S.C., Section 44718 and, if applicable, Title 14 of the Code of Federal Regulations, part 77, concerns the effect of the structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (404) 305-6531. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-ANE-2323-OE.

**Signature Control No: 235894583-308154422** ( EXT )
Darin Clipper
Specialist

Attachment(s)

**Additional information for ASN 2014-ANE-2323-OE**

Current FAA policy is that only one extension, and for a maximum of 18 months, will be granted. If construction has not begun within the valid period of this extension, it will be necessary to submit a new FAA Form 7460-1, Notice of Construction or Alteration, a minimum of 45 days before construction is expected to begin. If aeronautical study then indicates that further study would be necessary, the process could take an additional 90-120 days to complete.

There is no guarantee that a structure which had a previous favorable determination would continue to receive subsequent favorable determinations. Determinations are made based on current conditions, future conditions (plans on file), as well as cumulative impacts.

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-ANE-4490-OE
Prior Study No.
---OE

Issued Date: 12/28/2016

Mike Stagliola
PSEG Power Connecticut LLC
1 Atlantic Street
Bridgeport, CT 06604

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

| | |
|---|---|
| Structure: | Crane BHS 5 Crane 3 |
| Location: | Bridgeport, CT |
| Latitude: | 41-10-00.38N NAD 83 |
| Longitude: | 73-10-49.43W |
| Heights: | 8 feet site elevation (SE) |
| | 335 feet above ground level (AGL) |
| | 343 feet above mean sea level (AMSL) |

This aeronautical study revealed that the temporary structure does exceed obstruction standards but would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

**SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION**

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. Any changes in coordinates and/or heights will void this determination. Any future construction or alteration, including increase to heights, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6531. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-ANE-4490-OE

**Signature Control No: 309955803-313699946** ( TMP )
Darin Clipper
Specialist

**Proposal:** To construct and/or operate a(n) Crane to a height of 335 feet above ground level, 343 feet above mean sea level.

**Location:** The structure will be located 2.47 nautical miles west of BDR Airport reference point.

**Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:**
Section 77.17 (a) (2) by 135 feet - a height that exceeds 208 feet above mean sea level within 2.47 nautical miles of BDR.

Section 77.17 (a) (5) a height that affects an Airport Surface by penetrating:
Section 77.19 (b) Conical Surface by 69 feet as applied to BDR.

**Preliminary FAA study indicates that the above mentioned structure would:**
have no effect on any existing or proposed arrival, departure, or en route instrument flight rules (IFR) operations or procedures.
have no effect on any existing or proposed arrival, departure, or en route visual flight rules (VFR) operations.
have no effect on any existing or proposed arrival, departure, or en route instrument/visual flight rules (IFR/VFR) minimum flight altitudes.
not exceed traffic pattern airspace
have no physical or electromagnetic effect on the operation of air navigation and communications facilities.
have no effect on any airspace and routes used by the military.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, flags/red lights - Chapters 3(Marked),4,5(Red),&12.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

As a condition to this determination, the temporary structure must be lowered to 200 feet above ground level ( 208 feet above mean sea level) , when not in use and during the hours between sunset and sunrise.

If the crane cannot be lowered to this height, then the following condition must also be met for nighttime conspicuity:

The structure must be lighted in accordance with FAA Advisory Circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, red lights – Chapters 4, 5(Red),&12.

It is required that the manager of IGOR I SIKORSKY MEMORIAL (BDR), (203) 576-8163 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site.

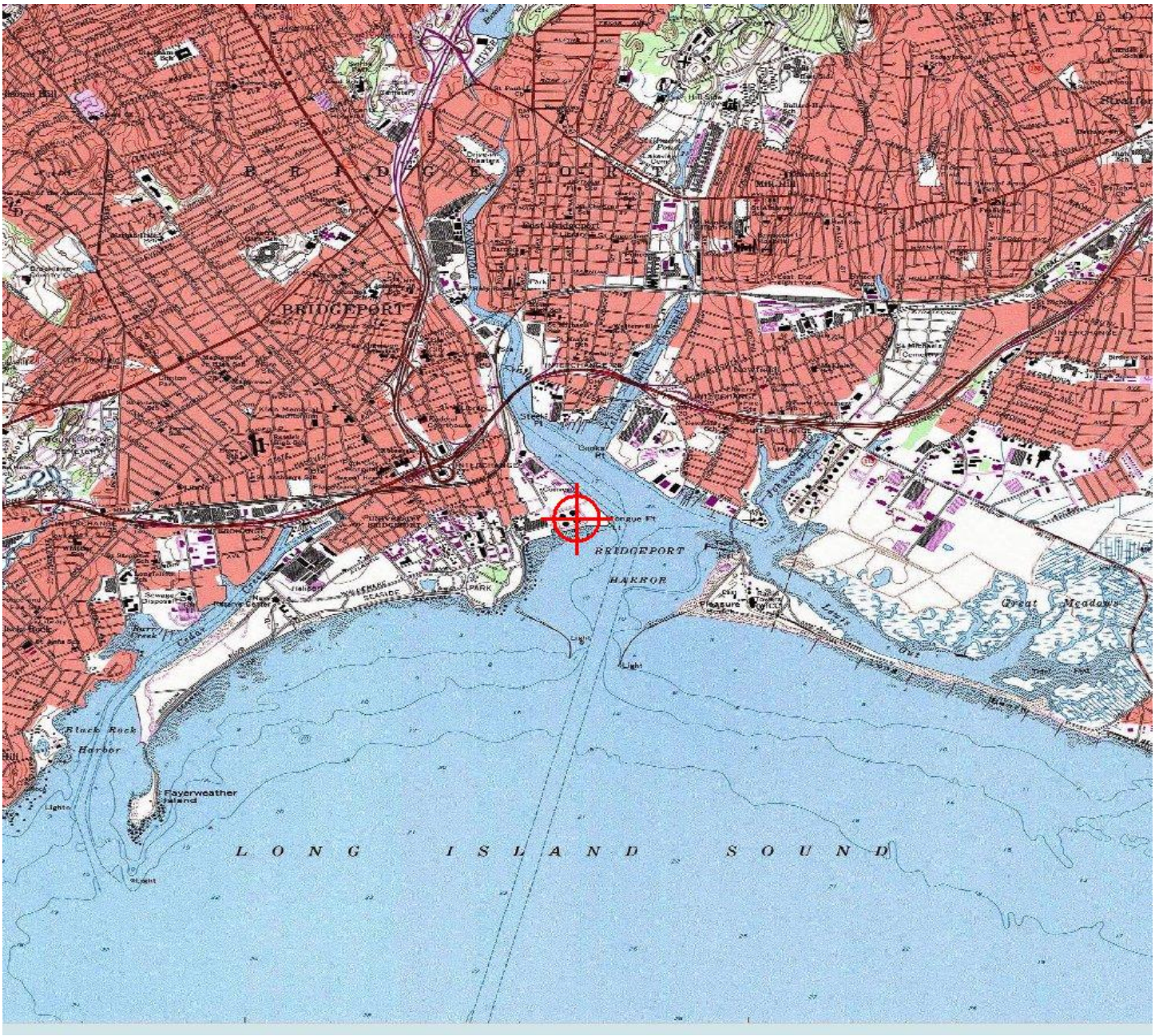
It is required that the manager of BDR air traffic control tower (ATCT) at 203-378-4106 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site. Additionally, please provide contact information for the onsite operator in the event that Air Traffic Control requires the temporary structure to be lowered immediately.

Any height exceeding 335 feet above ground level (343 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 06/28/2018 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

# TOPO Map for ASN 2016-ANE-4490-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-ANE-4491-OE
Prior Study No.
---OE

Issued Date: 02/23/2017

Mike Stagliola
PSEG Power Connecticut LLC
1 Atlantic Street
Bridgeport, CT 06604

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

| | |
|---|---|
| Structure: | Crane BHS 5 Crane 4 |
| Location: | Bridgeport, CT |
| Latitude: | 41-09-59.08N NAD 83 |
| Longitude: | 73-10-52.54W |
| Heights: | 8 feet site elevation (SE) |
| | 350 feet above ground level (AGL) |
| | 358 feet above mean sea level (AMSL) |

This aeronautical study revealed that the temporary structure does exceed obstruction standards but would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

**SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION**

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. Any changes in coordinates and/or heights will void this determination. Any future construction or alteration, including increase to heights, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

**This determination did not include an evaluation of the permanent structure associated with the use of this temporary structure. If the permanent structure will exceed Title 14 of the Code of Federal Regulations, part 77.9, a separate aeronautical study and FAA determination is required.**

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6531. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-ANE-4491-OE

**Signature Control No: 309955804-322999281** ( TMP )
Darin Clipper
Specialist

**Proposal:** To construct and/or operate a(n) Crane to a height of 350 feet above ground level, 358 feet above mean sea level.

**Location:** The structure will be located 2.5 nautical miles west of BDR Airport reference point.

**Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:**
Section 77.17 (a) (2) by 150 feet - a height that exceeds 158 feet above mean sea level within 2.5 nautical miles of BDR.

Section 77.17 (a) (5) a height that affects an Airport Surface by penetrating:
Section 77.19 (b) Conical Surface by 72 feet as applied to BDR.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, flags/red lights - Chapters 3(Marked),4,5(Red),&12.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

As a condition to this determination, the temporary structure must be lowered to 200 feet above ground level ( 208 feet above mean sea level) , when not in use and during the hours between sunset and sunrise.

If the crane cannot be lowered to this height, then the following condition must also be met for nighttime conspicuity:

The structure must be lighted in accordance with FAA Advisory Circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, red lights – Chapters 4, 5(Red),&12.

It is required that the manager of IGOR I SIKORSKY MEMORIAL, (203) 576-8163 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site.

It is required that the manager of Bridgeport FCT at (203) 378-4106 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site. Additionally, please provide contact information for the onsite operator in the event that Air Traffic Control requires the temporary structure to be lowered immediately.

Any height exceeding 350 feet above ground level (358 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 08/23/2018 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Notify doug.ctr.felix@faa.gov when operations are complete and the crane removed from the worksite.

Proponent reduced the height of the crane from 410 ft. AGL to 350 ft. AGL. Appropriate documents have been uploaded to the case file.

**Sectional Map for ASN 2016-ANE-4491-OE**

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-ANE-4496-OE

Issued Date: 12/28/2016

Mike Stagliola
PSEG Power Connecticut LLC
1 Atlantic Street
Bridgeport, CT 06604

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE** (REVISED)**

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

| | |
|---|---|
| Structure: | Crane BHS 5 Crane 7 |
| Location: | Bridgeport, CT |
| Latitude: | 41-10-04.28N NAD 83 |
| Longitude: | 73-10-48.84W |
| Heights: | 9 feet site elevation (SE) |
| | 285 feet above ground level (AGL) |
| | 294 feet above mean sea level (AMSL) |

This aeronautical study revealed that the temporary structure does exceed obstruction standards but would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

**SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION**

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. Any changes in coordinates and/or heights will void this determination. Any future construction or alteration, including increase to heights, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6531. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-ANE-4496-OE

**Signature Control No: 309955811-313700515** ( TMP )
Darin Clipper
Specialist

## Additional Condition(s) or Information for ASN 2016-ANE-4496-OE

**Proposal:** To construct and/or operate a(n) Crane to a height of 285 feet above ground level, 294 feet above mean sea level.

**Location:** The structure will be located 2.46 nautical miles west of BDR Airport reference point.

## Case Description for ASN 2016-ANE-4496-OE

Proposal if for a temporary construction cranes to be working within an existing power plant.

**Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:**
Section 77.17 (a) (2) by 85 feet - a height that exceeds 209 feet above mean sea level within 2.46 nautical miles of BDR.

Section 77.17 (a) (5) a height that affects an Airport Surface by penetrating:
Section 77.19 (b) Conical Surface by 22 feet as applied to BDR.

**Preliminary FAA study indicates that the above mentioned structure would:**
have no effect on any existing or proposed arrival, departure, or en route instrument flight rules (IFR) operations or procedures.
have no effect on any existing or proposed arrival, departure, or en route visual flight rules (VFR) operations.
have no effect on any existing or proposed arrival, departure, or en route instrument/visual flight rules (IFR/VFR) minimum flight altitudes.
not exceed traffic pattern airspace
have no physical or electromagnetic effect on the operation of air navigation and communications facilities.
have no effect on any airspace and routes used by the military.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, flags/red lights - Chapters 3(Marked),4,5(Red),&12.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

As a condition to this determination, the temporary structure must be lowered to 200 feet above ground level ( 209 feet above mean sea level) , when not in use and during the hours between sunset and sunrise.

If the crane cannot be lowered to this height, then the following condition must also be met for nighttime conspicuity:

The structure must be lighted in accordance with FAA Advisory Circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, red lights – Chapters 4, 5(Red),&12.

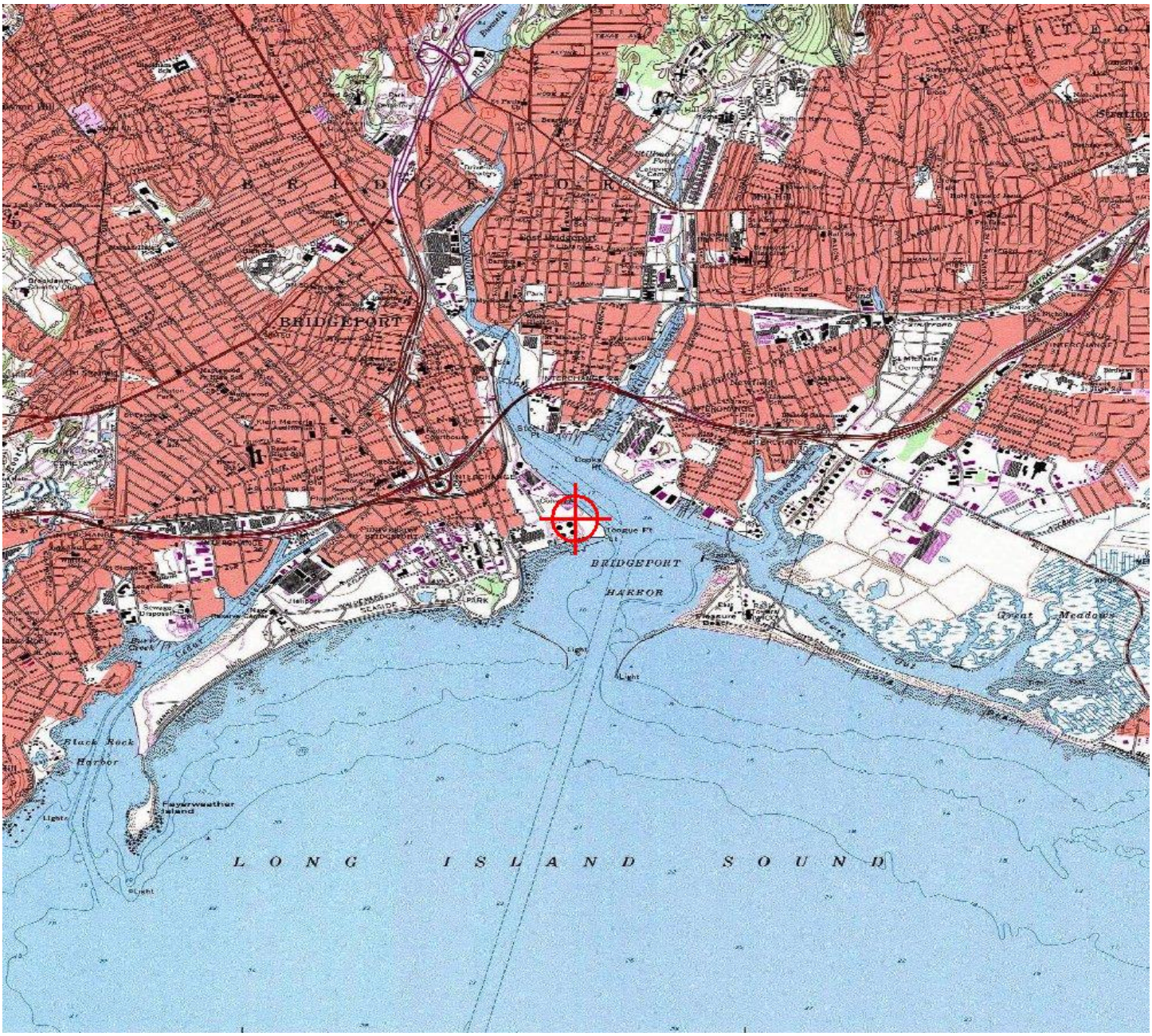
It is required that the manager of SIKORSKY BRIDGEPORT (BDR), 203-386-3873 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site.

It is required that the manager of BDR air traffic control tower (ATCT) at 203-378-4106 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site. Additionally, please provide contact information for the onsite operator in the event that Air Traffic Control requires the temporary structure to be lowered immediately.

This determination expires on 06/28/2018 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

# TOPO Map for ASN 2016-ANE-4496-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-ANE-4497-OE

Issued Date: 12/28/2016

Mike Stagliola
PSEG Power Connecticut LLC
1 Atlantic Street
Bridgeport, CT 06604

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE** (REVISED)**

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

| | |
|---|---|
| Structure: | Crane BHS 5 Crane 7A |
| Location: | Bridgeport, CT |
| Latitude: | 41-10-02.72N NAD 83 |
| Longitude: | 73-10-56.55W |
| Heights: | 8 feet site elevation (SE) |
| | 285 feet above ground level (AGL) |
| | 293 feet above mean sea level (AMSL) |

This aeronautical study revealed that the temporary structure does exceed obstruction standards but would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

**SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION**

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. Any changes in coordinates and/or heights will void this determination. Any future construction or alteration, including increase to heights, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6531. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-ANE-4497-OE

**Signature Control No: 309955812-313700828** ( TMP )
Darin Clipper
Specialist

## Additional Condition(s) or Information for ASN 2016-ANE-4497-OE

**Proposal:** To construct and/or operate a(n) Crane to a height of 285 feet above ground level, 293 feet above mean sea level.

**Location:** The structure will be located 2.56 nautical miles west of BDR Airport reference point.

## Case Description for ASN 2016-ANE-4497-OE

Proposal if for a temporary construction cranes to be working within an existing power plant.

**Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:**
Section 77.17 (a) (2) by 85 feet - a height that exceeds 208 feet above mean sea level within 2.56 nautical miles of BDR.

**Preliminary FAA study indicates that the above mentioned structure would:**
have no effect on any existing or proposed arrival, departure, or en route instrument flight rules (IFR) operations or procedures.
have no effect on any existing or proposed arrival, departure, or en route visual flight rules (VFR) operations.
have no effect on any existing or proposed arrival, departure, or en route instrument/visual flight rules (IFR/VFR) minimum flight altitudes.
not exceed traffic pattern airspace
have no physical or electromagnetic effect on the operation of air navigation and communications facilities.
have no effect on any airspace and routes used by the military.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, flags/red lights - Chapters 3(Marked),4,5(Red),&12.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

As a condition to this determination, the temporary structure must be lowered to 200 feet above ground level ( 208 feet above mean sea level) , when not in use and during the hours between sunset and sunrise.

If the crane cannot be lowered to this height, then the following condition must also be met for nighttime conspicuity:

The structure must be lighted in accordance with FAA Advisory Circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, red lights – Chapters 4, 5(Red),&12.

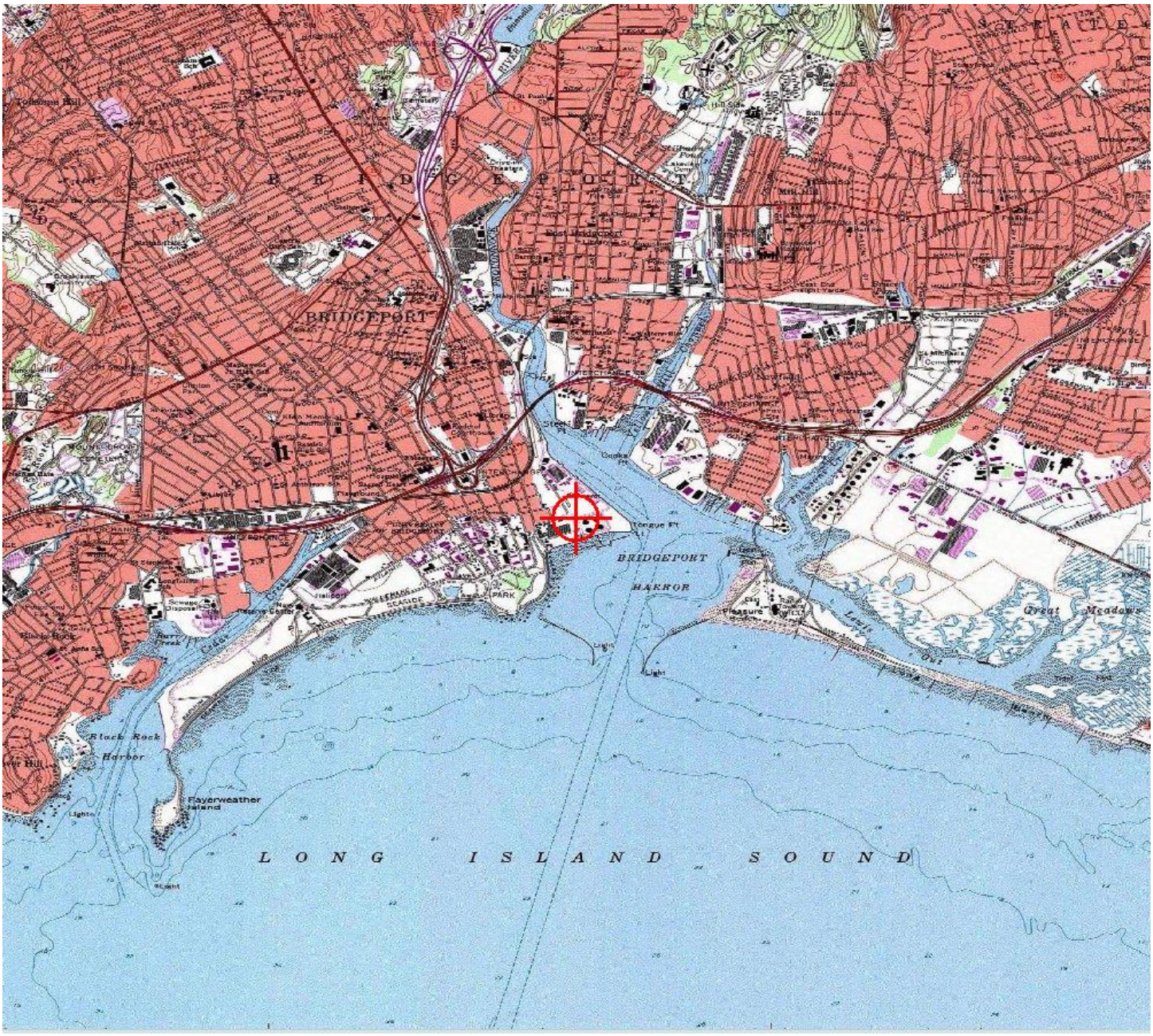
It is required that the manager of IGOR I SIKORSKY MEMORIAL (BDR), (203) 576-8163 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site.

It is required that the manager of BDR air traffic control tower (ATCT) at 203-378-4106 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site. Additionally, please provide contact information for the onsite operator in the event that Air Traffic Control requires the temporary structure to be lowered immediately.

This determination expires on 06/28/2018 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

# TOPO Map for ASN 2016-ANE-4497-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-ANE-4499-OE

Issued Date: 12/28/2016

Mike Stagliola
PSEG Power Connecticut LLC
1 Atlantic Street
Bridgeport, CT 06604

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

| | |
|---|---|
| Structure: | Crane BHS 5 Crane 9 |
| Location: | Bridgeport, CT |
| Latitude: | 41-10-06.57N NAD 83 |
| Longitude: | 73-10-46.03W |
| Heights: | 7 feet site elevation (SE) |
| | 160 feet above ground level (AGL) |
| | 167 feet above mean sea level (AMSL) |

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

**SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION**

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. Any changes in coordinates and/or heights will void this determination. Any future construction or alteration, including increase to heights, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6531. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-ANE-4499-OE

**Signature Control No: 309955814-313697491** ( TMP )
Darin Clipper
Specialist

## Additional Condition(s) or Information for ASN 2016-ANE-4499-OE

**Proposal:** To construct and/or operate a(n) Crane to a height of 160 feet above ground level, 167 feet above mean sea level.

**Location:** The structure will be located 2.43 nautical miles west of BDR Airport reference point.

## Case Description for ASN 2016-ANE-4499-OE

Proposal if for a temporary construction cranes to be working within an existing power plant.

**Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:**

**Preliminary FAA study indicates that the above mentioned structure would:**
have no effect on any existing or proposed arrival, departure, or en route instrument flight rules (IFR) operations or procedures.
have no effect on any existing or proposed arrival, departure, or en route visual flight rules (VFR) operations.
have no effect on any existing or proposed arrival, departure, or en route instrument/visual flight rules (IFR/VFR) minimum flight altitudes.
not exceed traffic pattern airspace
have no physical or electromagnetic effect on the operation of air navigation and communications facilities.
have no effect on any airspace and routes used by the military.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

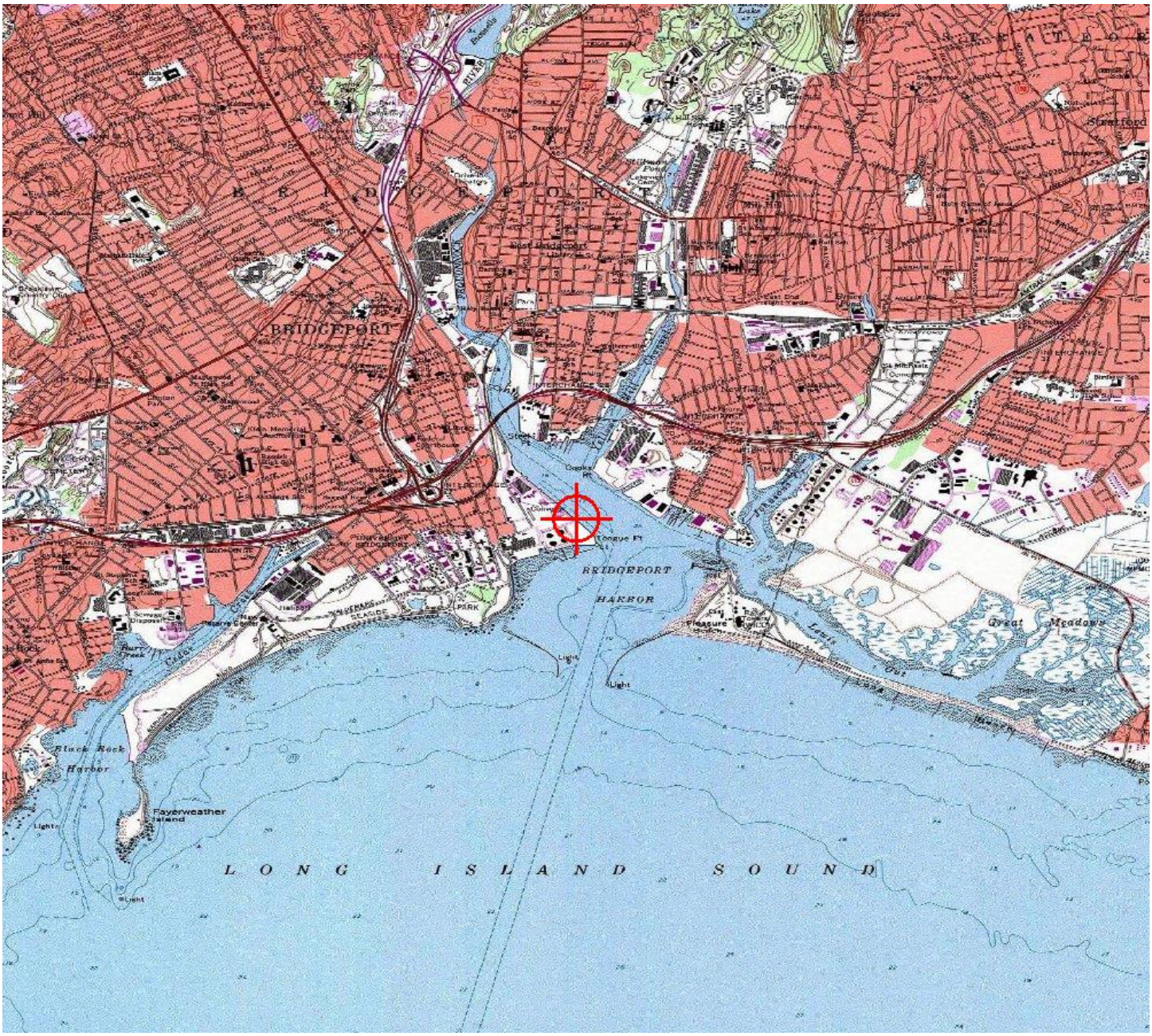
As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, flags/red lights - Chapters 3(Marked),4,5(Red),&12.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This determination expires on 06/28/2018 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

# TOPO Map for ASN 2016-ANE-4499-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-ANE-4500-OE

Issued Date: 12/28/2016

Mike Stagliola
PSEG Power Connecticut LLC
1 Atlantic Street
Bridgeport, CT 06604

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE** (REVISED)**

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

| | |
|---|---|
| Structure: | Crane BHS 5 Crane 10 |
| Location: | Bridgeport, CT |
| Latitude: | 41-09-57.49N NAD 83 |
| Longitude: | 73-10-58.44W |
| Heights: | 7 feet site elevation (SE) |
| | 235 feet above ground level (AGL) |
| | 242 feet above mean sea level (AMSL) |

This aeronautical study revealed that the temporary structure does exceed obstruction standards but would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

**SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION**

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. Any changes in coordinates and/or heights will void this determination. Any future construction or alteration, including increase to heights, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

**This determination did not include an evaluation of the permanent structure associated with the use of this temporary structure. If the permanent structure will exceed Title 14 of the Code of Federal Regulations, part 77.9, a separate aeronautical study and FAA determination is required.**

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6531. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-ANE-4500-OE

**Signature Control No: 309955815-313699014** ( TMP )
Darin Clipper
Specialist

## Additional Condition(s) or Information for ASN 2016-ANE-4500-OE

**Proposal:** To construct and/or operate a(n) Crane to a height of 235 feet above ground level, 242 feet above mean sea level.

**Location:** The structure will be located 2.58 nautical miles west of BDR Airport reference point.

## Case Description for ASN 2016-ANE-4500-OE

Proposal if for a temporary construction cranes to be working within an existing power plant.

**Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:**
Section 77.17 (a) (2) by 34 feet - a height that exceeds 208 feet above mean sea level within 2.58 nautical miles of BDR.

**Preliminary FAA study indicates that the above mentioned structure would:**
have no effect on any existing or proposed arrival, departure, or en route instrument flight rules (IFR) operations or procedures.
have no effect on any existing or proposed arrival, departure, or en route visual flight rules (VFR) operations.
have no effect on any existing or proposed arrival, departure, or en route instrument/visual flight rules (IFR/VFR) minimum flight altitudes.
not exceed traffic pattern airspace
have no physical or electromagnetic effect on the operation of air navigation and communications facilities.
have no effect on any airspace and routes used by the military.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, flags/red lights - Chapters 3(Marked),4,5(Red),&12.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

As a condition to this determination, the temporary structure must be lowered to 200 feet above ground level ( 207 feet above mean sea level) , when not in use and during the hours between sunset and sunrise.

If the crane cannot be lowered to this height, then the following condition must also be met for nighttime conspicuity:

The structure must be lighted in accordance with FAA Advisory Circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, red lights – Chapters 4, 5(Red),&12.

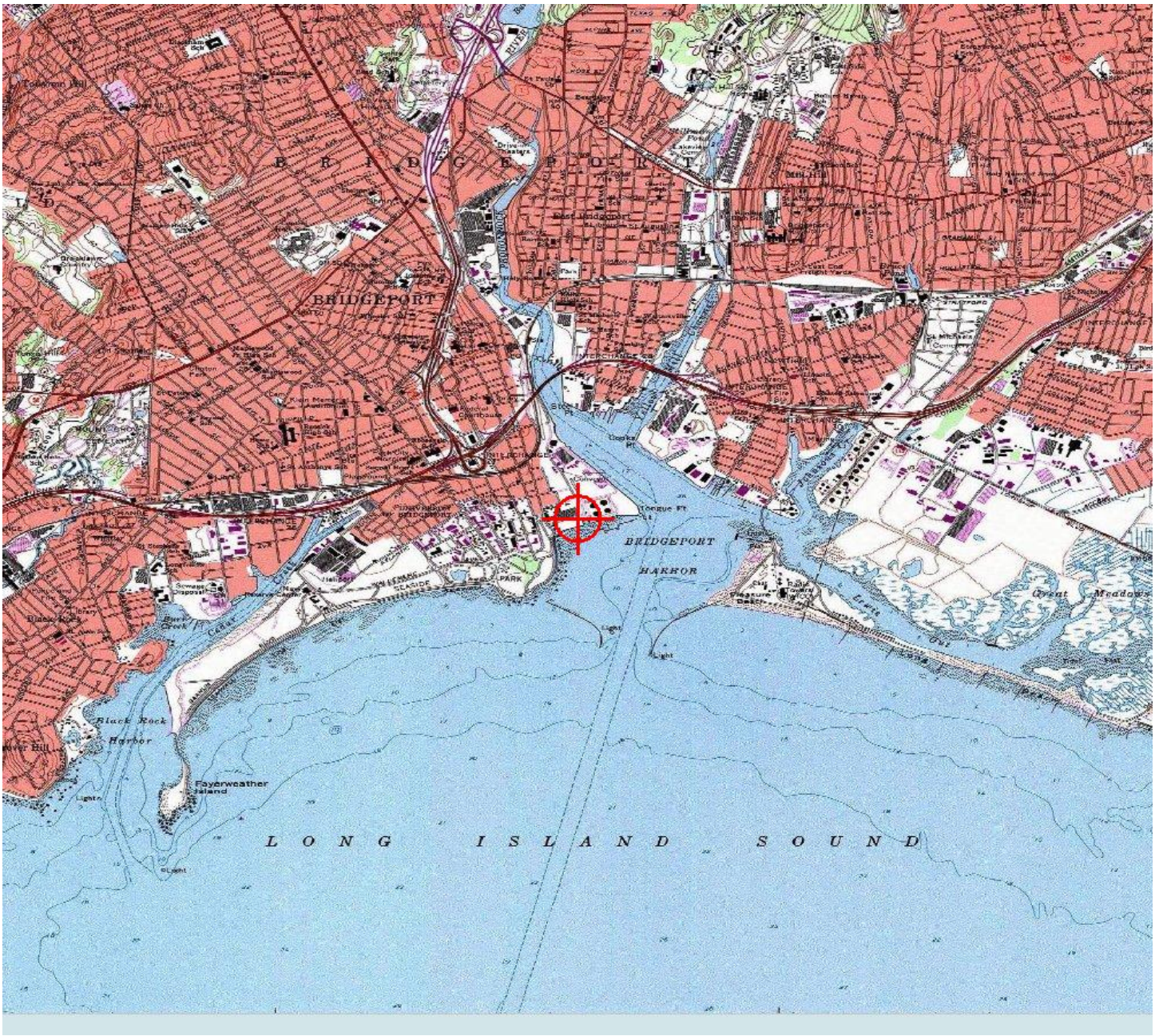
It is required that the manager of IGOR I SIKORSKY MEMORIAL (BDR), (203) 576-8163 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site.

It is required that the manager of BDR air traffic control tower (ATCT)203-378-4106 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site. Additionally, please provide contact information for the onsite operator in the event that Air Traffic Control requires the temporary structure to be lowered immediately.

This determination expires on 06/28/2018 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

# TOPO Map for ASN 2016-ANE-4500-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-ANE-4635-OE

Issued Date: 12/28/2016

Mike Stagliola
PSEG Power Connecticut LLC
1 Atlantic Street
Bridgeport, CT 06604

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE** (REVISED)**

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

| | |
|---|---|
| Structure: | Crane BHS 5 Crane 14 |
| Location: | Bridgeport, CT |
| Latitude: | 41-09-57.90N NAD 83 |
| Longitude: | 73-10-53.60W |
| Heights: | 9 feet site elevation (SE) |
| | 235 feet above ground level (AGL) |
| | 244 feet above mean sea level (AMSL) |

This aeronautical study revealed that the temporary structure does exceed obstruction standards but would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

**SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION**

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. Any changes in coordinates and/or heights will void this determination. Any future construction or alteration, including increase to heights, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

**This determination did not include an evaluation of the permanent structure associated with the use of this temporary structure. If the permanent structure will exceed Title 14 of the Code of Federal Regulations, part 77.9, a separate aeronautical study and FAA determination is required.**

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6531. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-ANE-4635-OE

**Signature Control No: 310650417-313699015** ( TMP )
Darin Clipper
Specialist

## Additional Condition(s) or Information for ASN 2016-ANE-4635-OE

**Proposal:** To construct and/or operate a(n) Crane to a height of 235 feet above ground level, 242 feet above mean sea level.

**Location:** The structure will be located 2.58 nautical miles west of BDR Airport reference point.

## Case Description for ASN 2016-ANE-4635-OE

The proposal is for a temporary roaming crane to be used for the construction of a new generating unit within the existing power plant. The crane will be located at various locations within the listed coordinates. The FAA determination approval for the final plant is ASN# 2014-ANE-2323-OE.

**Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:**
Section 77.17 (a) (2) by 34 feet - a height that exceeds 208 feet above mean sea level within 2.58 nautical miles of BDR.

**Preliminary FAA study indicates that the above mentioned structure would:**
have no effect on any existing or proposed arrival, departure, or en route instrument flight rules (IFR) operations or procedures.
have no effect on any existing or proposed arrival, departure, or en route visual flight rules (VFR) operations.
have no effect on any existing or proposed arrival, departure, or en route instrument/visual flight rules (IFR/VFR) minimum flight altitudes.
not exceed traffic pattern airspace
have no physical or electromagnetic effect on the operation of air navigation and communications facilities.
have no effect on any airspace and routes used by the military.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, flags/red lights - Chapters 3(Marked),4,5(Red),&12.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

As a condition to this determination, the temporary structure must be lowered to 200 feet above ground level ( 207 feet above mean sea level) , when not in use and during the hours between sunset and sunrise.

If the crane cannot be lowered to this height, then the following condition must also be met for nighttime conspicuity:

The structure must be lighted in accordance with FAA Advisory Circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, red lights – Chapters 4, 5(Red),&12.

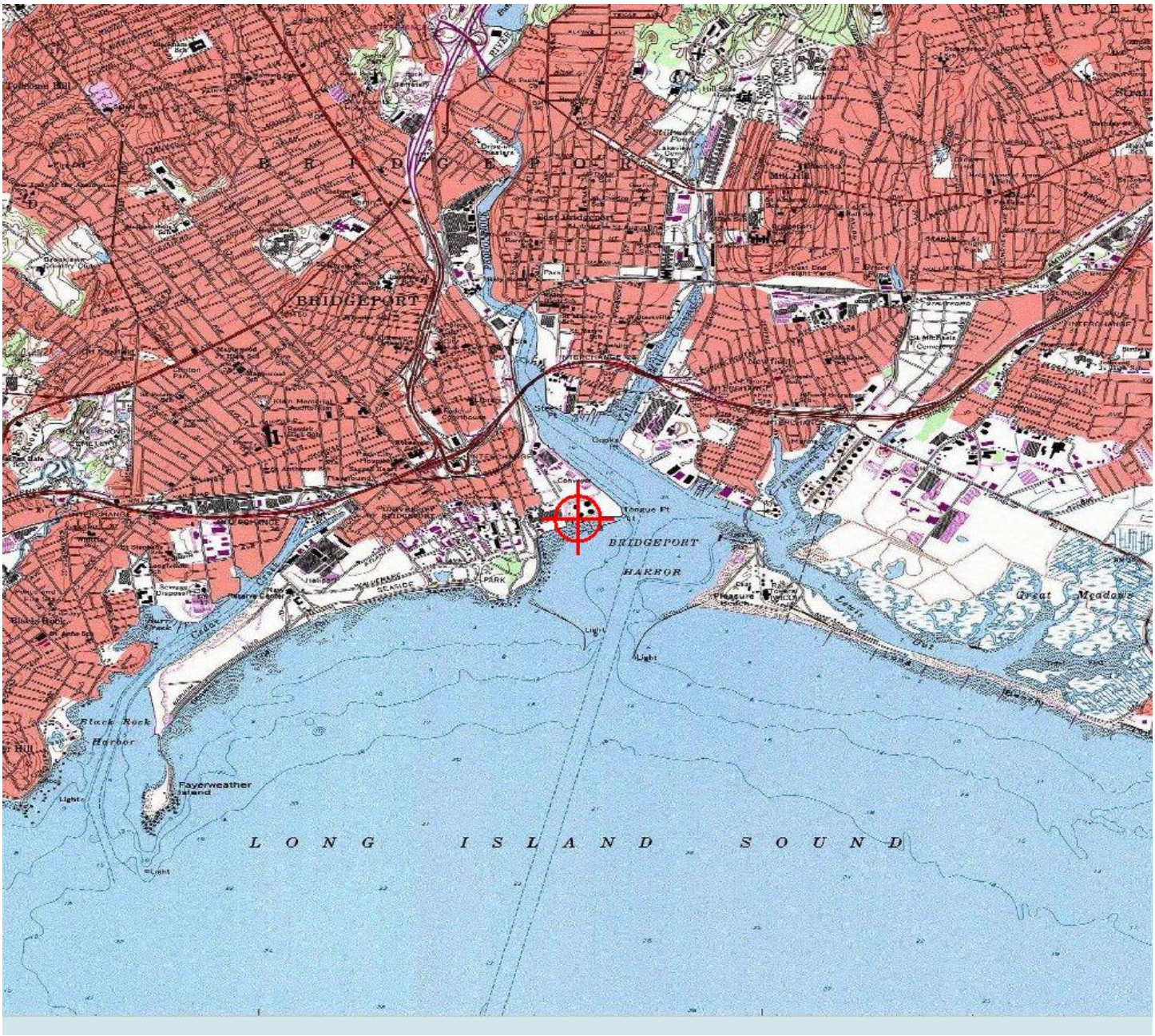
It is required that the manager of IGOR I SIKORSKY MEMORIAL (BDR), (203) 576-8163 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site.

It is required that the manager of BDR air traffic control tower (ATCT)203-378-4106 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site. Additionally, please provide contact information for the onsite operator in the event that Air Traffic Control requires the temporary structure to be lowered immediately.

This determination expires on 06/28/2018 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

# TOPO Map for ASN 2016-ANE-4635-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-ANE-4638-OE

Issued Date: 12/28/2016

Mike Stagliola
PSEG Power Connecticut LLC
1 Atlantic Street
Bridgeport, CT 06604

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE** (REVISED)**

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

| | |
|---|---|
| Structure: | Crane BHS 5 Crane 14 |
| Location: | Bridgeport, CT |
| Latitude: | 41-10-03.53N NAD 83 |
| Longitude: | 73-10-57.70W |
| Heights: | 9 feet site elevation (SE) |
| | 235 feet above ground level (AGL) |
| | 244 feet above mean sea level (AMSL) |

This aeronautical study revealed that the temporary structure does exceed obstruction standards but would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

**SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION**

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. Any changes in coordinates and/or heights will void this determination. Any future construction or alteration, including increase to heights, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

**This determination did not include an evaluation of the permanent structure associated with the use of this temporary structure. If the permanent structure will exceed Title 14 of the Code of Federal Regulations, part 77.9, a separate aeronautical study and FAA determination is required.**

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6531. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-ANE-4638-OE

**Signature Control No: 310650420-313699013** ( TMP )
Darin Clipper
Specialist

## Additional Condition(s) or Information for ASN 2016-ANE-4638-OE

**Proposal:** To construct and/or operate a(n) Crane to a height of 235 feet above ground level, 242 feet above mean sea level.

**Location:** The structure will be located 2.58 nautical miles west of BDR Airport reference point.

## Case Description for ASN 2016-ANE-4638-OE

The proposal is for a temporary roaming crane to be used for the construction of a new generating unit within the existing power plant. The crane will be located at various locations within the listed coordinates. The FAA determination approval for the final plant is ASN# 2014-ANE-2323-OE.

**Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:**
Section 77.17 (a) (2) by 34 feet - a height that exceeds 208 feet above mean sea level within 2.58 nautical miles of BDR.

**Preliminary FAA study indicates that the above mentioned structure would:**
have no effect on any existing or proposed arrival, departure, or en route instrument flight rules (IFR) operations or procedures.
have no effect on any existing or proposed arrival, departure, or en route visual flight rules (VFR) operations.
have no effect on any existing or proposed arrival, departure, or en route instrument/visual flight rules (IFR/VFR) minimum flight altitudes.
not exceed traffic pattern airspace
have no physical or electromagnetic effect on the operation of air navigation and communications facilities.
have no effect on any airspace and routes used by the military.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, flags/red lights - Chapters 3(Marked),4,5(Red),&12.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

As a condition to this determination, the temporary structure must be lowered to 200 feet above ground level ( 207 feet above mean sea level) , when not in use and during the hours between sunset and sunrise.

If the crane cannot be lowered to this height, then the following condition must also be met for nighttime conspicuity:

The structure must be lighted in accordance with FAA Advisory Circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, red lights – Chapters 4, 5(Red),&12.

It is required that the manager of IGOR I SIKORSKY MEMORIAL (BDR), (203) 576-8163 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site.

It is required that the manager of BDR air traffic control tower (ATCT)203-378-4106 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site. Additionally, please provide contact information for the onsite operator in the event that Air Traffic Control requires the temporary structure to be lowered immediately.

This determination expires on 06/28/2018 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

# TOPO Map for ASN 2016-ANE-4638-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-ANE-4639-OE

Issued Date: 12/28/2016

Mike Stagliola
PSEG Power Connecticut LLC
1 Atlantic Street
Bridgeport, CT 06604

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE** (REVISED)**

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

| | |
|---|---|
| Structure: | Crane BHS 5 Crane 14 |
| Location: | Bridgeport, CT |
| Latitude: | 41-10-06.20N NAD 83 |
| Longitude: | 73-10-47.74W |
| Heights: | 9 feet site elevation (SE) |
| | 235 feet above ground level (AGL) |
| | 244 feet above mean sea level (AMSL) |

This aeronautical study revealed that the temporary structure does exceed obstruction standards but would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

**SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION**

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. Any changes in coordinates and/or heights will void this determination. Any future construction or alteration, including increase to heights, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

**This determination did not include an evaluation of the permanent structure associated with the use of this temporary structure. If the permanent structure will exceed Title 14 of the Code of Federal Regulations, part 77.9, a separate aeronautical study and FAA determination is required.**

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6531. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-ANE-4639-OE

**Signature Control No: 310650421-313699017** ( TMP )
Darin Clipper
Specialist

## Additional Condition(s) or Information for ASN 2016-ANE-4639-OE

**Proposal:** To construct and/or operate a(n) Crane to a height of 235 feet above ground level, 242 feet above mean sea level.

**Location:** The structure will be located 2.58 nautical miles west of BDR Airport reference point.

## Case Description for ASN 2016-ANE-4639-OE

The proposal is for a temporary roaming crane to be used for the construction of a new generating unit within the existing power plant. The crane will be located at various locations within the listed coordinates. The FAA determination approval for the final plant is ASN# 2014-ANE-2323-OE.

**Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:**
Section 77.17 (a) (2) by 34 feet - a height that exceeds 208 feet above mean sea level within 2.58 nautical miles of BDR.

**Preliminary FAA study indicates that the above mentioned structure would:**
have no effect on any existing or proposed arrival, departure, or en route instrument flight rules (IFR) operations or procedures.
have no effect on any existing or proposed arrival, departure, or en route visual flight rules (VFR) operations.
have no effect on any existing or proposed arrival, departure, or en route instrument/visual flight rules (IFR/VFR) minimum flight altitudes.
not exceed traffic pattern airspace
have no physical or electromagnetic effect on the operation of air navigation and communications facilities.
have no effect on any airspace and routes used by the military.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, flags/red lights - Chapters 3(Marked),4,5(Red),&12.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

As a condition to this determination, the temporary structure must be lowered to 200 feet above ground level ( 207 feet above mean sea level) , when not in use and during the hours between sunset and sunrise.

If the crane cannot be lowered to this height, then the following condition must also be met for nighttime conspicuity:

The structure must be lighted in accordance with FAA Advisory Circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, red lights – Chapters 4, 5(Red),&12.

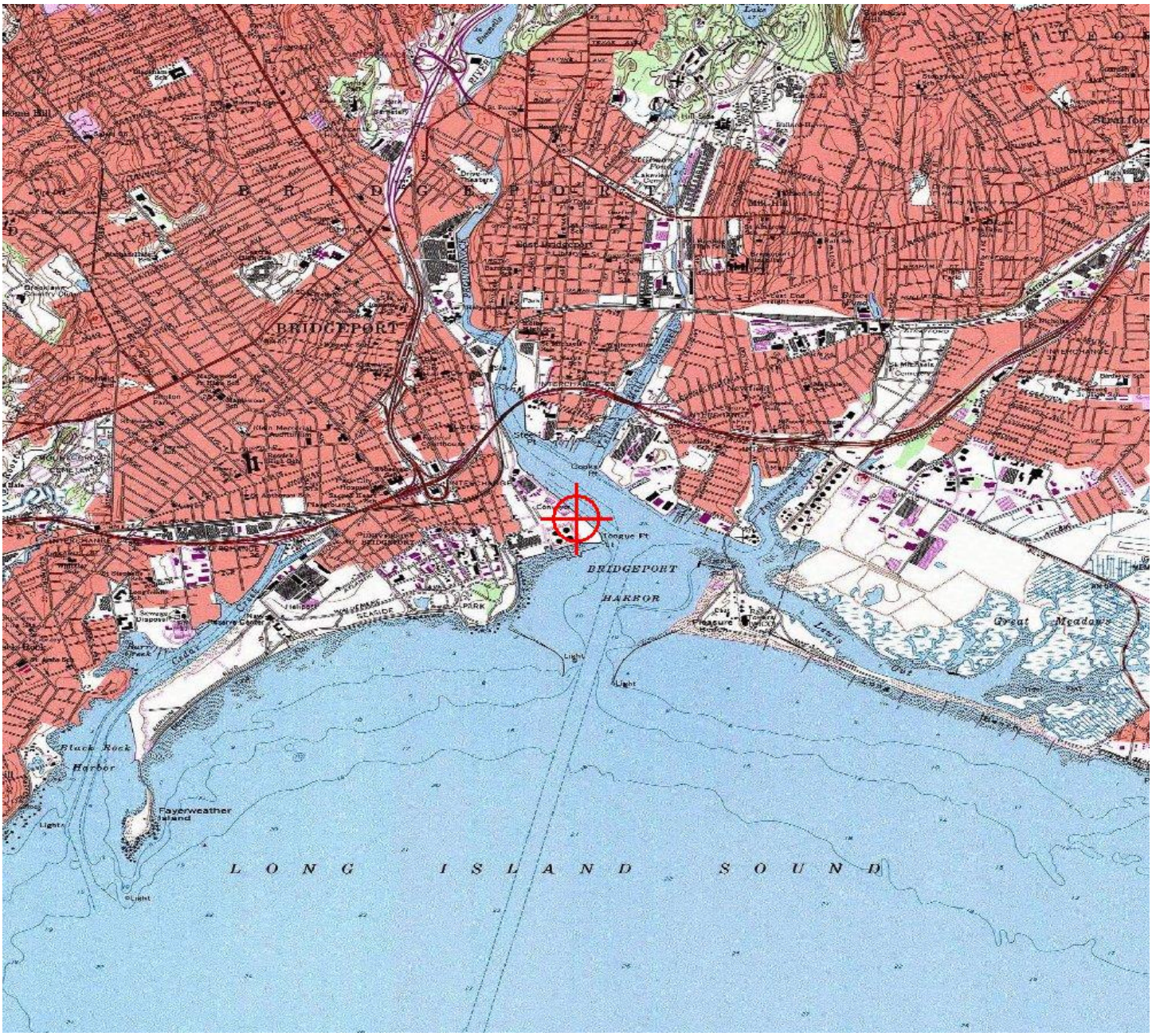
It is required that the manager of IGOR I SIKORSKY MEMORIAL (BDR), (203) 576-8163 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site.

It is required that the manager of BDR air traffic control tower (ATCT)203-378-4106 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site. Additionally, please provide contact information for the onsite operator in the event that Air Traffic Control requires the temporary structure to be lowered immediately.

This determination expires on 06/28/2018 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

# TOPO Map for ASN 2016-ANE-4639-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-ANE-4640-OE

Issued Date: 12/28/2016

Mike Stagliola
PSEG Power Connecticut LLC
1 Atlantic Street
Bridgeport, CT 06604

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE** (REVISED)**

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

| | |
|---|---|
| Structure: | Crane BHS 5 Crane 14 |
| Location: | Bridgeport, CT |
| Latitude: | 41-10-00.39N NAD 83 |
| Longitude: | 73-10-44.91W |
| Heights: | 9 feet site elevation (SE) |
| | 235 feet above ground level (AGL) |
| | 244 feet above mean sea level (AMSL) |

This aeronautical study revealed that the temporary structure does exceed obstruction standards but would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

**SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION**

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. Any changes in coordinates and/or heights will void this determination. Any future construction or alteration, including increase to heights, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

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This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6531. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-ANE-4640-OE

**Signature Control No: 310650422-313699016** ( TMP )
Darin Clipper
Specialist

## Additional Condition(s) or Information for ASN 2016-ANE-4640-OE

**Proposal:** To construct and/or operate a(n) Crane to a height of 235 feet above ground level, 242 feet above mean sea level.

**Location:** The structure will be located 2.58 nautical miles west of BDR Airport reference point.

## Case Description for ASN 2016-ANE-4640-OE

The proposal is for a temporary roaming crane to be used for the construction of a new generating unit within the existing power plant. The crane will be located at various locations within the listed coordinates. The FAA determination approval for the final plant is ASN# 2014-ANE-2323-OE.

**Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:**
Section 77.17 (a) (2) by 34 feet - a height that exceeds 208 feet above mean sea level within 2.58 nautical miles of BDR.

**Preliminary FAA study indicates that the above mentioned structure would:**
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have no effect on any existing or proposed arrival, departure, or en route instrument/visual flight rules (IFR/VFR) minimum flight altitudes.
not exceed traffic pattern airspace
have no physical or electromagnetic effect on the operation of air navigation and communications facilities.
have no effect on any airspace and routes used by the military.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, flags/red lights - Chapters 3(Marked),4,5(Red),&12.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

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If the crane cannot be lowered to this height, then the following condition must also be met for nighttime conspicuity:

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It is required that the manager of BDR air traffic control tower (ATCT)203-378-4106 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site. Additionally, please provide contact information for the onsite operator in the event that Air Traffic Control requires the temporary structure to be lowered immediately.

This determination expires on 06/28/2018 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

# TOPO Map for ASN 2016-ANE-4640-OE

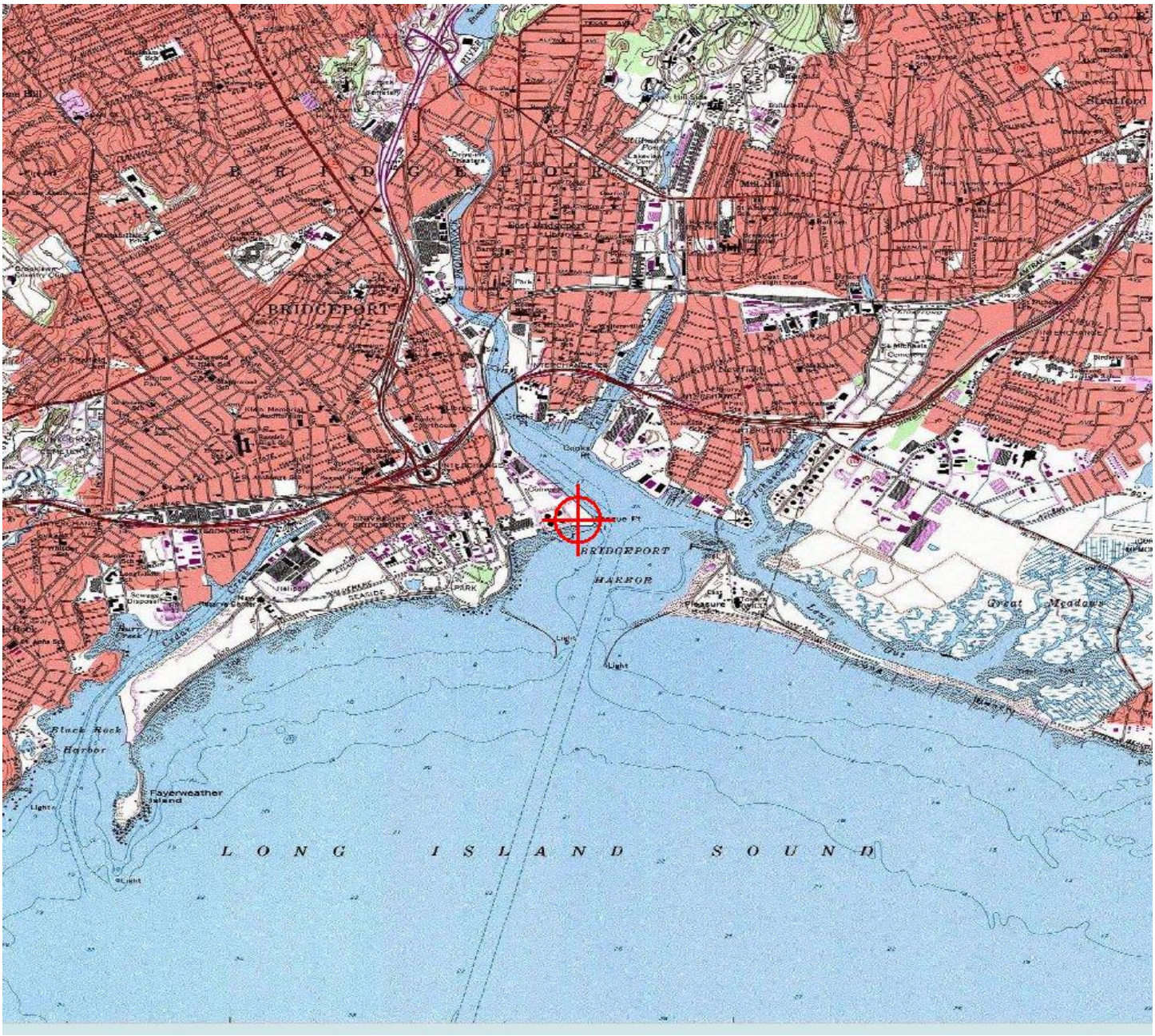


**Exhibit 2 – City of Bridgeport Coastal Site Plan Approval**

*City of Bridgeport*
**Zoning Department**
**PLANNING & ECONOMIC DEVELOPMENT**
45 Lyon Terrace • Bridgeport, Connecticut 06604
Telephone (203) 576-7217
Fax (203) 576-7213

November 2, 2016

**PSEG POWER CONNECTICUT, LLC**
C/O THOMAS J. REGAN
CITYPLACE 1, 38TH FLOOR
185 ASYLUM STREET
HARTFORD, CT 06103
OUR FILE (16-51)

**RE: 1 ATLANTIC STREET** – Seeking a site plan review and a coastal site plan review to permit the construction of a combined cycle electric generating unit in I-H and I-L zones and coastal area.

Dear Thomas J. Regan:

At a public hearing held on Tuesday, November 1, 2016 the Planning and Zoning Commission decided the following regarding the above referenced matter:

**DECISION:** Approved with Conditions

**CONDITIONS:**
1. Petitioner must incorporate all of the City Engineer's recommendations as stated in his letter dated October 27, 2016.
2. Percolation test must be performed to ensure proper infiltration to meet the criteria for drain times as recommended by the Environmental Analyst from the Office of Long Island Sound Programs in his correspondence dated November 1, 2016.
3. Applicant shall file plans and application for the issuance of a Certificate of Zoning Compliance and a Building Permit.
4. All construction shall comply with the Basic Building Code of the State of CT.

**REASONS:**
1. The project as approved complies with the site plan review standards of Sec. 14-2-5.
2. The redevelopment of the subject site will have no unacceptable impact on the coastal area
3. Changing to natural gas will ensure the carbon footprint results in healthier air quality for Bridgeport residents.

**The expiration date of the Coastal Site Plan Review, as required under Sec. 14-3-4 of the Zoning Regulations of the City of Bridgeport, CT has been established as November 7, 2017.**

If you have any questions regarding the above matter, please call the Zoning Office at 203-576-7217.

Cordially,

Dennis Buckley, Clerk
Planning & Zoning Commission

DB/gb

**Exhibit 3 – CT DEEP General Permit for Construction Stormwater Approval**

Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

79 Elm Street • Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer

**Bureau of Materials Management and Compliance Assurance**

**Notice of Permit Authorization**

February, 14 2017

DAVID B. HINCHEY, JR.
PSEG POWER CONNECTICUT LLC
1 ATLANTIC ST
BRIDGEPORT, CT 06604-5513

Subject: General Permit Registration for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities
Application NO.: 201614764

DAVID B. HINCHEY, JR.:

The Department of Energy and Environmental Protection, Water Permitting and Enforcement Division of the Bureau of Materials Management and Compliance Assurance, has completed the review of the BRIDGEPORT HARBOR STATION (located at 1 ATLANTIC ST, BRIDGEPORT) registration for the **General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, effective 10/1/13 (general permit)** . The project is compliant with the requirements of the general permit and the discharge(s) associated with this project is (are) authorized to commence as of the date of this letter. Permit No. GSN003109 has been assigned to authorize the stormwater discharge(s) from this project.

Questions can be emailed to deep.stormwater@ct.gov.

**Exhibit 4 – CT DEEP Outfall Certificate of Permission**

Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

79 Elm Street • Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer

December 16, 2016

PSEG Power Connecticut, LLC
David Hinchey
80 Park Plaza T18H
Bridgeport, CT 06604

Subject: Certificate of Permission #201611636-SJ
1 Atlantic Street, Bridgeport

Dear Mr. Hinchey:

Enclosed please find a copy of the certificate of permission ("certificate") which is being issued pursuant to your application of September 20, 2016. Your attention is directed to the conditions of the enclosed certificate. All work must conform to that which is specifically authorized by this certificate. Any work in tidal wetlands or waterward of the coastal jurisdiction line in tidal, navigable and coastal waters of the State which has not been authorized by a valid permit or certificate is a violation of state law and subject to enforcement action by the Department of Energy and Environmental Protection and the Office of the Attorney General.

Your initiation of authorized activities will be relied upon as your agreement to comply with the terms and conditions of the certificate. Please note that Appendix B of the certificate has been enclosed for your convenience to comply with Connecticut General Statutes Section 22a-363g. Also, the Permit Notice, found at the back of your authorization, must be posted at the work area while the work is being undertaken. Please refer to the SPECIAL TERMS AND CONDITIONS of your certificate for further details.

If you have not already done so, you should contact your local Planning and Zoning Office to determine local permit requirements for your project. Also, your activity may be eligible for General Permit authorization from the U.S. Army Corps of Engineers ("Corps"). Most maintenance and reconstruction activities require no further authorization from the Corps. Other activities, generally involving work in tidal wetlands or other special aquatic sites, and in or near a federal Navigation Project or involving filling, must receive written authorization from the Corps prior to beginning work. The State of Connecticut will automatically forward this certificate to the Corps for its determination of General Permit eligibility. You do not need to apply directly to the Corps unless they notify you. For more information regarding this federal process, you may write to the Corps New England Division, Regulatory Branch, 696 Virginia Road,

Concord, Massachusetts, 02254 or call 978-318-8335 or 800-343-4789.

Sincerely,

Susan Jacobson, Environmental Analyst
Land & Water Resources Division
Bureau of Water Protection and Land Reuse

Enclosure – COP #201611636-SJ

cc: File #201611636-SJ
via e-mail: Jeffrey Pantazes, AKRF, Inc.
Municipal CEO
Corps
Harbor Master

Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

79 Elm Street • Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer

# CERTIFICATE OF PERMISSION

**Certificate No:** COP-201611636

**Municipality:** Bridgeport

**Site of Activity:** Bridgeport Harbor off property located at 1 Atlantic Street

**Certificate Holder:** PSEG Power Connecticut, LLC
80 Park Plaza T18H
Bridgeport, CT 06604

Pursuant to section 22a-363b of the Connecticut General Statutes ("CGS") and in accordance with section 401 of the Federal Clean Water Act, as amended, CGS sections 22a-359 to 22a-363g, 22a-98, and the Regulations of Connecticut State Agencies sections 22a-426-1 to 22a-426-9 (the Water Quality Standards) effective September 10, 2013, a certificate of permission ("certificate") is hereby granted to relocate and modify a stormwater discharge outlet for flood and erosion control as is more specifically described below in the SCOPE OF AUTHORIZATION. The work performed shall conform to the terms and conditions of this certificate.

## *****NOTICE TO CERTIFICATE HOLDERS AND CONTRACTORS*****

**UPON INITIATION OF ANY WORK AUTHORIZED HEREIN, THE CERTIFICATE HOLDER ACCEPTS AND AGREES TO COMPLY WITH ALL TERMS AND CONDITIONS OF THIS CERTIFICATE. FAILURE TO CONFORM TO THE TERMS AND CONDITIONS OF THIS CERTIFICATE MAY SUBJECT THE CERTIFICATE HOLDER AND ANY CONTRACTOR TO ENFORCEMENT ACTIONS, INCLUDING INJUNCTIONS AS PROVIDED BY LAW AND PENALTIES UP TO $1,000.00 PER DAY PURSUANT TO THE ADMINISTRATIVE CIVIL PENALTY POLICY DESCRIBED IN SECTIONS 22a-6b-1 THROUGH 22a-6b-15 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES.**

## SCOPE OF AUTHORIZATION

The Certificate Holder is hereby authorized to conduct the following work as described in application number 201611636-SJ, including seven sheets of plans with the location map undated, sheets 1201 to 1204 signed November 15, 2016 and two product manufacturer sheets issued January 2003, submitted by the Certificate Holder to the Commissioner of Energy and Environmental Protection ("Commissioner") and attached hereto:

1. relocate, approximately 400' to the east, an existing outfall pipe;
2. modify the outfall by:

a. removing an approximately 11' x 100' band of existing riprap from along the shore for temporary upland storage;
b. excavating to install geotextile and approximately 70 c.y. of bedding stone;
c. installing seven pre-cast, 11'-4" stormwater outfall structures; and,
d. replacing riprap stone using original stone and no more than approximately 40 cubic yards of new stone; and,

3. remove the original outlet identified as Stormwater Outfall S-15 in accordance with SPECIAL TERMS AND CONDITIONS, paragraph 5., below.

## SPECIAL TERMS AND CONDITIONS

1. Not later than two (2) weeks prior to the commencement of any work authorized herein, the Certificate Holder shall submit to the Commissioner, on the form attached hereto as Appendix A, the name(s) and address(es) of all contractor(s) employed to conduct such work and the expected date for commencement and completion of such work, if any.

2. The Certificate Holder shall file Appendix B on the land records of the municipality in which the subject property is located not later than thirty (30) days after certificate issuance pursuant to CGS Section 22a-363g. A copy of Appendix B with a stamp or other such proof of filing with the municipality shall be submitted to the Commissioner no later than sixty (60) days after certificate issuance.

3. Excavation authorized in SCOPE OF AUTHORIZATION, paragraph 2.b., above shall be conducted during periods of lower water only.

4. Prior to the commencement of work authorized herein, the Certificate Holder shall install turbidity curtains extending from the water surface to the substrate around the work area. Such erosion and sediment control structures shall be maintained in optimal operating condition until project completion at which time the erosion and sediment controls shall be removed to an upland location.

5. Prior to certificate expiration, the Certificate Holder shall remove any section of Stormwater Outfall S-15 that is located at, or below, the coastal jurisdiction line, as authorized in SCOPE OF AUTHORIZATION, paragraph 3., above.

6. The Certificate Holder shall give a copy of this certificate to the contractor(s) who will be carrying out the activities authorized herein prior to the start of construction and shall receive a written receipt for such copy, signed and dated by such contractor(s). The Certificate Holder's contractor(s) shall conduct all operations at the site in full compliance with this certificate and, to the extent provided by law, may be held liable for any violation of the terms and conditions of this certificate. At the work area the contractor(s) shall, whenever work is being performed, make available for inspection a copy of this certificate and the final plans for the work authorized herein.

7. The Certificate Holder shall post the attached Permit Notice in a conspicuous place at the work

area while the work authorized herein is undertaken.

8. Except as specifically authorized by this certificate, no equipment or material including, but not limited to, fill, construction materials, excavated material or debris, shall be deposited, placed or stored in any wetland or watercourse on or off-site, nor shall any wetland or watercourse be used as a staging area or accessway other than as provided herein.

9. On or before ninety (90) days after completion of the work authorized herein, the Certificate Holder shall submit to the Commissioner "as-built" plans of the work area showing all tidal datums and structures, including any proposed elevation views and cross sections included in the certificate. Such plans shall be the original ones and be signed and sealed by an engineer, surveyor or architect, as applicable, who is licensed in the State of Connecticut.

## GENERAL TERMS AND CONDITIONS

1. All work authorized by this certificate shall be completed within three (3) years from date of issuance of this certificate ("work completion date") in accordance with all conditions of this permit and any other applicable law.
   a. The Certificate Holder may request a one-year extension of the work completion date. Such request shall be in writing and shall be submitted to the Commissioner at least thirty (30) days prior to said work completion date. Such request shall describe the work done to date, what work still needs to be completed, and the reason for such extension. It shall be the Commissioner's sole discretion to grant or deny such request.
   b. Any work authorized herein conducted after said work completion date or any authorized one- year extension thereof is a violation of this certificate and may subject the Certificate Holder to enforcement action, including penalties, as provided by law.

2. In conducting the work authorized herein, the Certificate Holder shall not deviate from the attached plans, as may be modified by this certificate. The Certificate Holder shall not make de minimis changes from said plans without prior written approval of the Commissioner.

3. The Certificate Holder may not conduct work waterward of the coastal jurisdiction line or in tidal wetlands at this certificate site other than the work authorized herein, unless otherwise authorized by the Commissioner pursuant to CGS section 22a-359 et. seq. and/or CGS section 22a-28 et. seq.

4. The Certificate Holder shall maintain all structures or other work authorized herein in good condition. Any such maintenance shall be conducted in accordance with applicable law including, but not limited to, CGS sections 22a-28 through 22a-35 and CGS sections 22a-359 through 22a-363g.

5. In undertaking the work authorized hereunder, the Certificate Holder shall not cause or allow pollution of wetlands or watercourses, including pollution resulting from sedimentation and erosion. For purposes of this certificate, "pollution" means "pollution" as that term is defined by CGS section 22a-423.

6. Upon completion of any work authorized herein, the Certificate Holder shall restore all areas impacted by construction, or used as a staging area or accessway in connection with such work, to their condition prior to the commencement of such work.

7. The work specified in the SCOPE OF AUTHORIZATION is authorized solely for the purpose set forth in this certificate. No change in purpose or use of the authorized work or facilities as set forth in this certificate may occur without the prior written authorization of the Commissioner. The Certificate Holder shall, prior to undertaking or allowing any change in use or purpose from that which is authorized by this certificate, request authorization from the Commissioner for such change. Said request shall be in writing and shall describe the proposed change and the reason for the change.

8. The Certificate Holder shall allow any representative of the Commissioner to inspect the work authorized hereunder at reasonable times to ensure that it is being or has been accomplished in accordance with the terms and conditions of this certificate.

9. This certificate is not transferable without prior written authorization of the Commissioner. A request to transfer a certificate shall be submitted in writing and shall describe the proposed transfer and the reason for such transfer. The Certificate Holder's obligations under this certificate shall not be affected by the passage of title to the certificate site to any other person or municipality until such time as a transfer is authorized by the Commissioner.

10. Any document required to be submitted to the Commissioner under this certificate or any contact required to be made with the Commissioner shall, unless otherwise specified in writing by the Commissioner, be directed to:

    Regulatory Section
    Land & Water Resources Division
    Department of Energy and Environmental Protection
    79 Elm Street
    Hartford, Connecticut 06106-5127
    (860) 424-3019
    Fax # (860) 424-4054

11. The date of submission to the Commissioner of any document required by this certificate shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this certificate, 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 (3) days after it is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in this certificate, the word "day" as used in this certificate means calendar day. Any document or action which is required by this certificate to be submitted or performed by a date which falls on a Saturday, Sunday or a Connecticut or federal holiday shall be submitted or performed on or before the next day which is not a Saturday, Sunday, or a Connecticut or federal holiday.

12. Any document, including but not limited to any notice, which is required to be submitted to the Commissioner under this certificate shall be signed by Certificate Holder and by the individual or individuals 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 and 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, and I understand that any false statement made in this document or its attachments may be punishable as a criminal offense."

13. In evaluating the application for this certificate the Commissioner has relied on information and data provided by the Certificate Holder and on the Certificate Holder's representations concerning site conditions, design specifications and the proposed work authorized herein, including but not limited to representations concerning the commercial, public or private nature of the work or structures authorized herein, the water-dependency of said work or structures, its availability for access by the general public, and the ownership of regulated structures or filled areas. If such information proves to be false, deceptive, incomplete or inaccurate, this certificate may be modified, suspended or revoked, and any unauthorized activities may be subject to enforcement action.

14. In granting this certificate, the Commissioner has relied on all representations of the Certificate Holder, including information and data provided in support of the Certificate Holder's application. Neither the Certificate Holder's representations nor the issuance of this certificate shall constitute an assurance by the Commissioner as to the structural integrity, the engineering feasibility or the efficacy of such design.

15. In the event that the Certificate Holder becomes aware that he did not or may not comply, or did not or may not comply on time, with any provision of this certificate or of any document required hereunder, the Certificate Holder shall immediately notify the Commissioner and shall take all reasonable steps to ensure that any noncompliance or delay is avoided or, if unavoidable, is minimized to the greatest extent possible. In so notifying the Commissioner, the Certificate Holder shall state in writing the reasons for the noncompliance or delay and propose, for the review and written approval of the Commissioner, dates by which compliance will be achieved, and the Certificate Holder shall comply with any dates which may be approved in writing by the Commissioner. Notification by the Certificate Holder shall not excuse noncompliance or delay and the Commissioner's approval of any compliance dates proposed shall not excuse noncompliance or delay unless specifically stated by the Commissioner in writing.

16. This certificate may be revoked, suspended, or modified in accordance with applicable law.

17. The issuance of this certificate does not relieve the Certificate Holder of his obligations to obtain any other approvals required by applicable federal, state and local law.

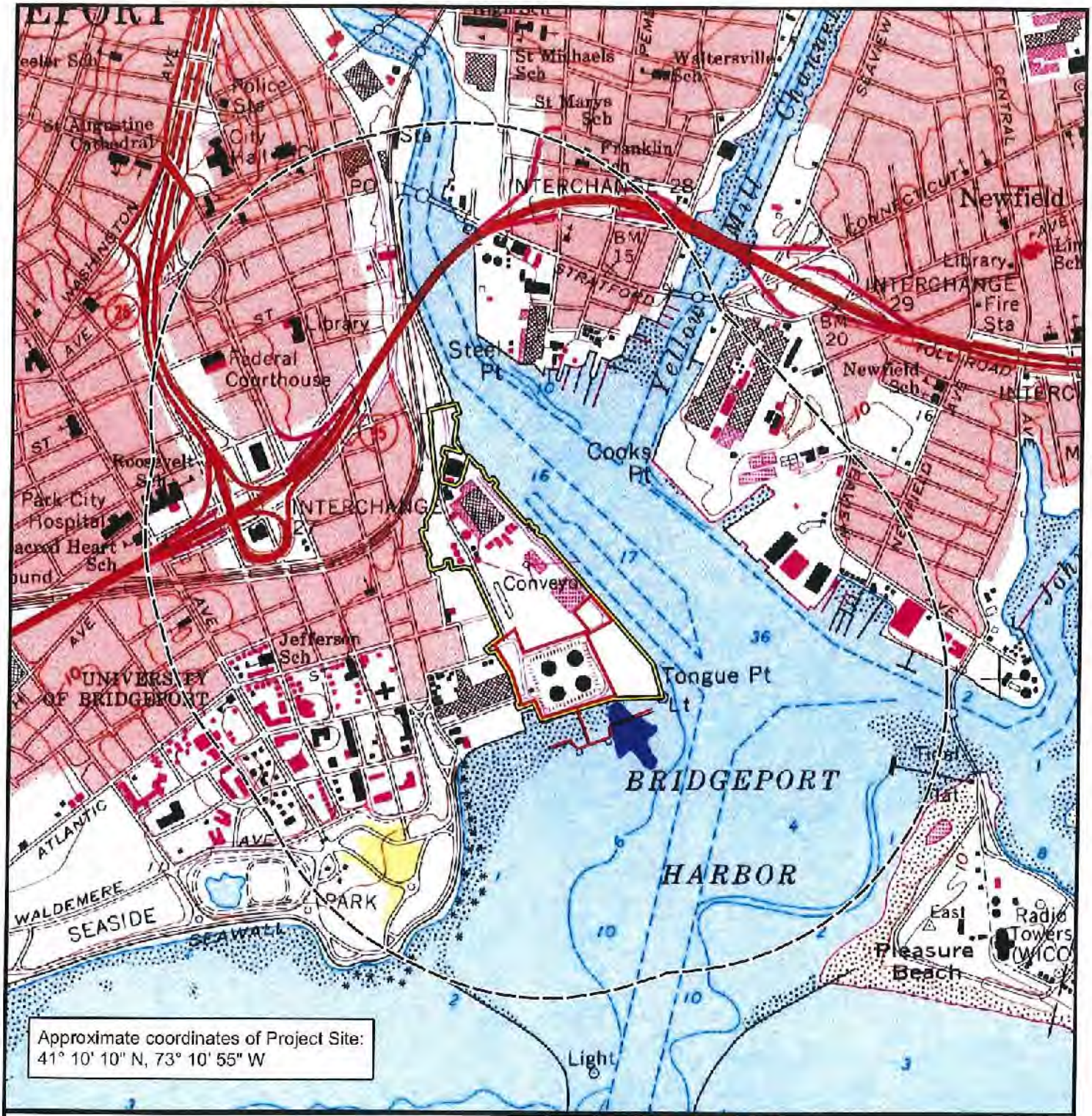
18. This certificate is subject to and does not derogate any present or future property rights or powers of the State of Connecticut, and conveys no property rights in real estate or material nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the property or activity affected hereby.

Issued on December 14, 2016.

STATE OF CONNECTICUT
DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION

**Brian P. Thompson, Director**
**Land & Water Resources Division**
**Bureau of Water Protection and Land Reuse**

**Certificate of Permission No.** 201611636
PSEG Power Connecticut, LLC




1/2-Mile Study Area
Approximate Area of Development
Project Site Property Boundary

References:
Basemap obtained from USGS.

0 1,250 2,500 Feet

1 inch = 1,250 feet

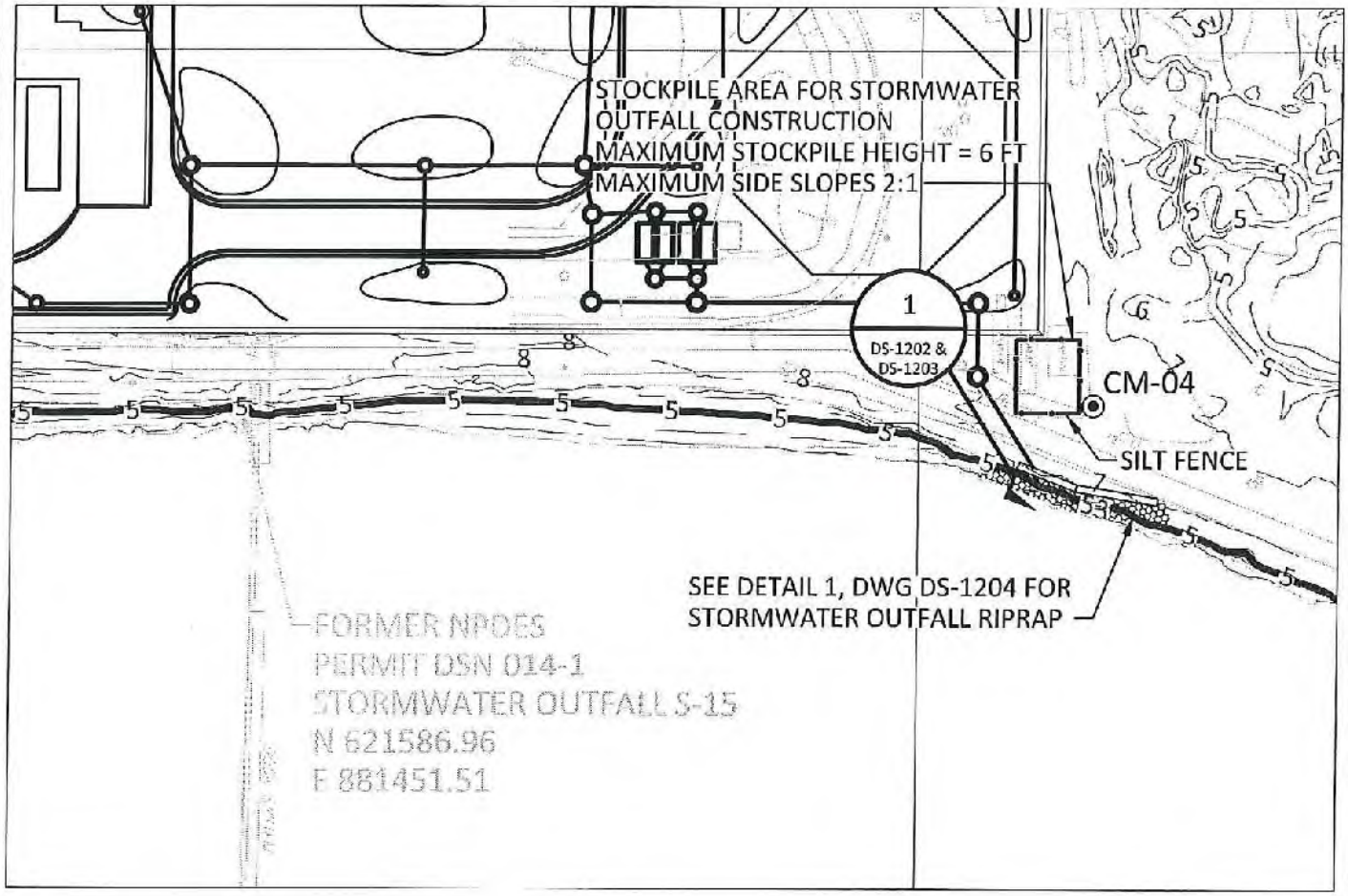
N

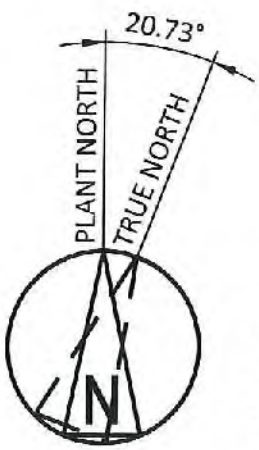
AKRF
307 Fellowship Rd., Suite 214
Mt Laurel, NJ 08054
856-797-9930

**USGS 7.5 MINUTE TOPOGRAPHIC MAP**
**BRIDGEPORT QUAD**

**PSEG POWER CONNECTICUT LLC**
**BRIDGEPORT HARBOR STATION**
**COMBINED CYCLE FACILITY**
**BRIDGEPORT, FAIRFIELD COUNTY, CT**

| FIGURE 1 | AUGUST 2016 |
|---|---|




100' 50' 0 100' 200'

1"=100'

# ISSUED FOR PERMITTING

THE DISTRIBUTION AND USE OF THE NATIVE FORMAT CAD FILE OF THIS DRAWING IS UNCONTROLLED. THE USER SHALL VERIFY TRACEABILITY OF THIS DRAWING TO THE LATEST CONTROLLED VERSION.

| NO | DATE | ACCT | DESCRIPTION | DWN | CKD | EXD | RCV | REV | APD |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 11/15/16 | C.01950 | PERMIT ISSUE | RRH | BMH | CAF | X | GLG | MED |

REVISION

BRIDGEPORT 05
YARD
GRADING & DRAINAGE
EXISTING & PROPOSED OUTFALL STRUCTURES
PARTIAL SITE PLAN DESIGN-CIVIL GENERAL

PROJECT ENGINEERING DIVISION

PSEG
Power Connecticut LLC

Project Location:
Fairfield County, CT

BLACK & VEATCH
Building a world of difference®
Corporate Headquarters:
11401 Lamar Ave., Overland Park, KS 66211

STATE OF CONNECTICUT
GRAYLYN L. GARR
No. 31903
LICENSED PROFESSIONAL ENGINEER
16 Nov, 16

| DRAWN (B&V) | CHECKED (B&V) | EXAMINED (B&V) |
|---|---|---|
| JACLYN LOPEZ | BLIA HER | CHRIS FINN |
| REVIEWED (B&V) | REVIEWED (B&V) | APPROVED (B&V) |
| | GRAYLYN GARR | MICHAEL DRAKE |

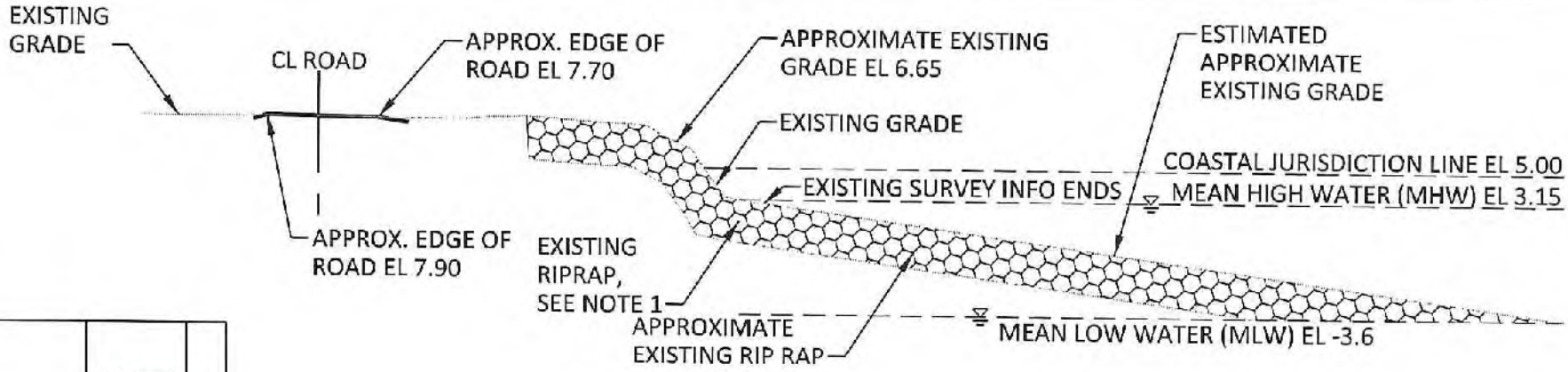
VENDOR NO.
191547-DS-1201

ANSI A SIZE

CONT. _____ MECH. _____ SPON. _____
ELEC. _____ CIVIL _____ OTHER _____

SPONSOR:

VERSION: 0




# SECTION 1
# STORMWATER OUTFALL - EXISTING CONDITION

NO SCALE
SEE DWG DS-1201

## NOTES:

1. EXISTING RIPRAP:
   APPROXIMATE SIZE VARIES 8" TO 36" DIAMETER.
   APPROXIMATE THICKNESS VARIES 12" TO 36".
   SIZE AND THICKNESS TO BE FIELD VERIFIED DURING INSTALLATION.

STATE OF CONNECTICUT
GRAYLYN L. GARR
No. 31903
LICENSED PROFESSIONAL ENGINEER

16 DEC 16

ANSI A SIZE

CONT: ELEC. MECH. CIVIL SPON. OTHER

Project Location: Fairfield County, CT

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PROJECT ENGINEERING DIVISION

PSEG Power Connecticut LLC

SECTIONS

DESIGN-CIVIL GENERAL

BRIDGEPORT 05
YARD
GRADING & DRAINAGE
STORMWATER OUTFALL DETAILS

| NO | DATE | ACCT | DESCRIPTION | DWN | CKD | EXD | REV | REV | APD |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 11/15/16 | C.01958 | PERMIT ISSUE | HHH | BMH | CAF | | GLG | MED |

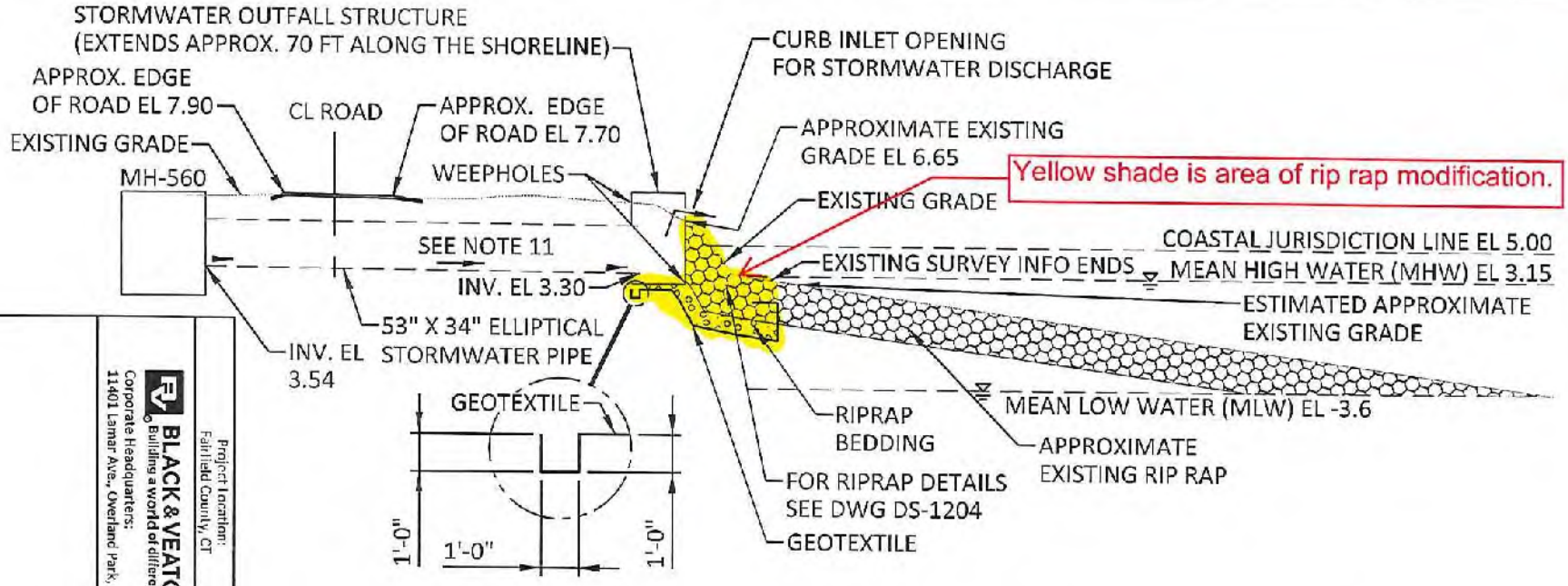
REVISION

DRAWN (B&V) JACLYN LOPEZ
CHECKED (B&V) BLIA HER
EXAMINED (B&V) CHRIS FINN
REVIEWED (B&V)
REVIEWED (B&V) GRAYLYN GARR
APPROVED (B&V) MICHAEL DRAKE

VENDOR NO.
191547-DS-1202

SPONSOR:

VERSION: 0




## SECTION 1
## STORMWATER OUTFALL - PROPOSED CONDITION

NO SCALE
SEE DWG DS-1201

ANSI A SIZE

CONT. _____ MECH. _____ SPON. _____
ELEC. _____ CIVIL _____ OTHER _____

SPONSOR:

VERSION: 0

VENDOR NO.
191547-DS-1203

DRAWN (B&V)
JACLYN LOPEZ

CHECKED (B&V)
RIA HER

EXAMINED (B&V)
CHRIS FINN

RELIEVED (B&V)

REVIEWED (B&V)
BRAYLYN GARR

APPROVED (B&V)
MICHAEL DRAKE

PROJECT ENGINEERING DIVISION

PSEG
Power Connecticut LLC

SECTIONS
STORMWATER OUTFALL DETAILS
DESIGN-CIVIL GENERAL

BRIDGEPORT 05
YARD
GRADING & DRAINAGE

| NO | DATE | ACCT | DESCRIPTION | DWN | CKD | EXD | REV | REV | APD |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 11/15/16 | C.01950 | PERMIT ISSUE | RMH | DMH | CAF | X | GLG | MED |

REVISION

Project Location:
Fairfield County, CT

BLACK & VEATCH
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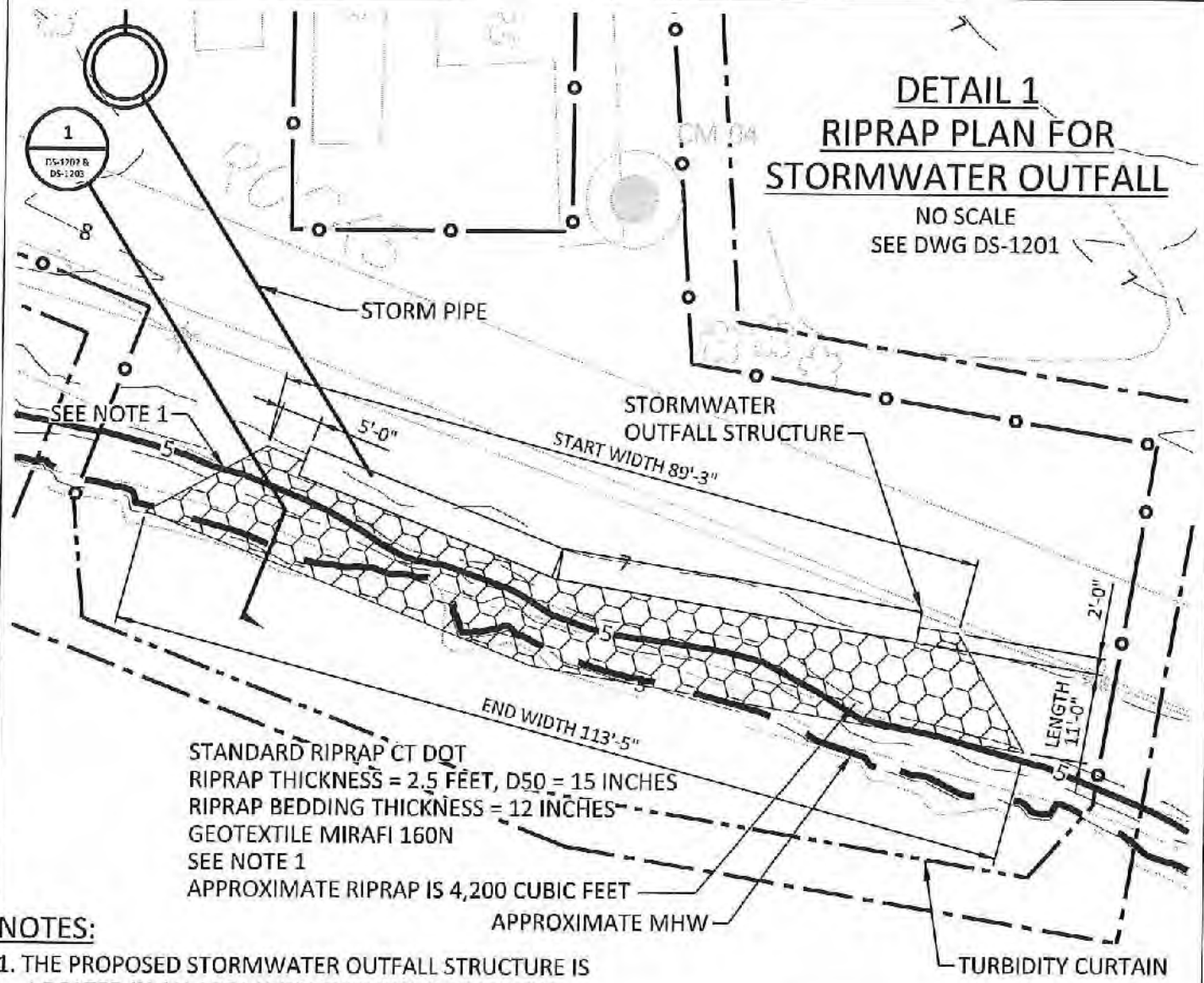
Corporate Headquarters:
11401 Lamar Ave., Overland Park, KS 66211

# DETAIL 1
# RIPRAP PLAN FOR STORMWATER OUTFALL

NO SCALE
SEE DWG DS-1201




## NOTES:

1. THE PROPOSED STORMWATER OUTFALL STRUCTURE IS LOCATED IN AN AREA WITH EXISTING RIP RAP. THE EXISTING RIP RAP DOWN GRADIENT OF THE OUTFALL STRUCTURE WILL BE IMPROVED WITH GEOTEXTILE AND BEDDING; WITH RE-USE OF EXISTING RIP RAP, AS REQUIRED. THE EXISTING SLOPE AND EXISTING RIP RAP D50 SIZE WILL BE MAINTAINED. THE RIP RAP APRON DOWN GRADIENT OF OUTFALL STRUCTURE IS SIZED TO DISSIPATE ENERGY FROM THE 25YR STORM FLOWRATE FROM OUTFALL STRUCTURE. FROM THE AERIAL SURVEY AND PHOTOGRAPHY, THE PROPOSED RIP RAP APRON WIDTH AND LENGTH IS WITHIN THE EXISTING RIP RAP LIMITS, AND WILL BE FIELD VALIDATED DURING INSTALLATION.

| NO | DATE | ACCT | DESCRIPTION | DWN | CKD | EXD | REV | REV | APD |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 11/15/16 | C.01950 | PERMIT ISSUE | RRH | BMH | CAF | X | GLG | MED |

REVISION

BRIDGEPORT 05
YARD
GRADING & DRAINAGE
RIP RAP DETAILS

STANDARDS DESIGN-CIVIL GENERAL

PROJECT ENGINEERING DIVISION

PSEG
Power Connecticut LLC

Project Location:
Fairfield County, CT

BLACK & VEATCH
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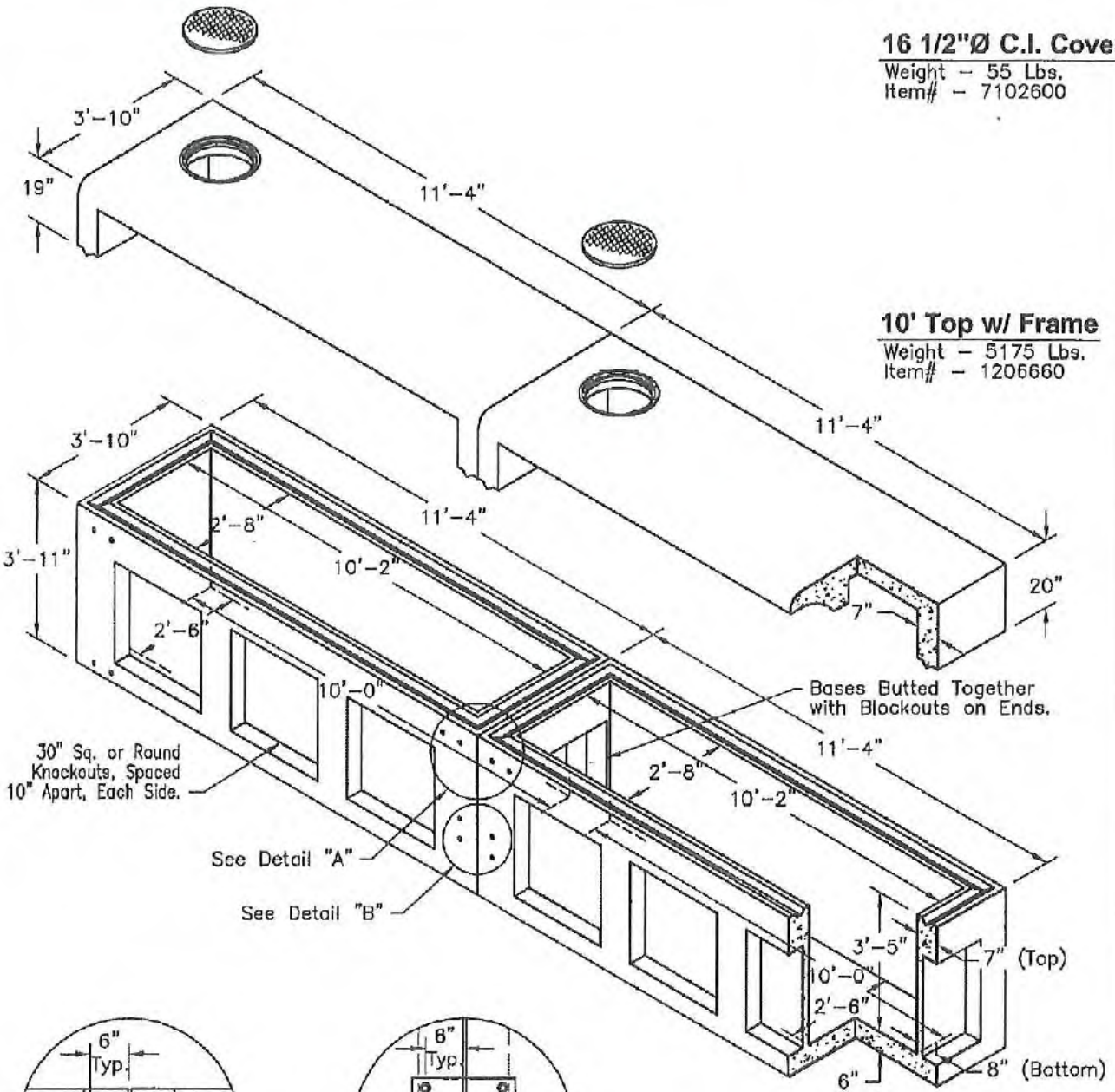
Corporate Headquarters:
11401 Lamar Ave., Overland Park, KS 66211

STATE OF CONNECTICUT
GRAYLYN L. GARR
No. 31903
LICENSED PROFESSIONAL ENGINEER

| DRAWN (B&V) | CHECKED (B&V) | EXAMINED (B&V) |
|---|---|---|
| JACLYN LOPEZ | BLIA HER | CHRIS FINN |
| REVIEWED (B&V) | REVIEWED (B&V) | APPROVED (B&V) |
| | GRAYLYN GARR | MICHAEL DRAKE |

VENDOR NO.
191547-DS-1204

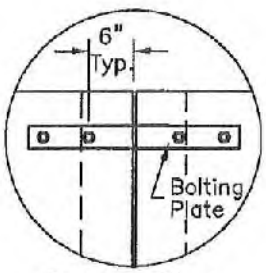
ANSI A SIZE | CONT. ____ MECH. ____ SPON. ____ | ELEC. ____ CIVIL ____ OTHER ____ | SPONSOR: | VERSION: 0



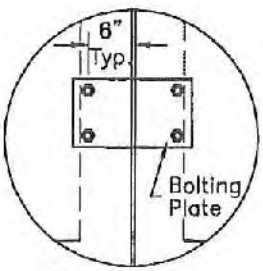

**16 1/2"Ø C.I. Cover**
Weight – 55 Lbs.
Item# – 7102600

**10' Top w/ Frame**
Weight – 5175 Lbs.
Item# – 1206660

**(2) 10' Bottom**
Weight – 10,500 Lbs.
Item# – 1206800




**Connection Detail "A"**
Item# – 8508000




**Connection Detail "B"**
Item# – 8508050

SCALE: NONE

Oldcastle Precast
1100 Heritage Parkway, Mansfield, Texas 76063
Phone: 817.453.1054 Fax: 817.453.4007

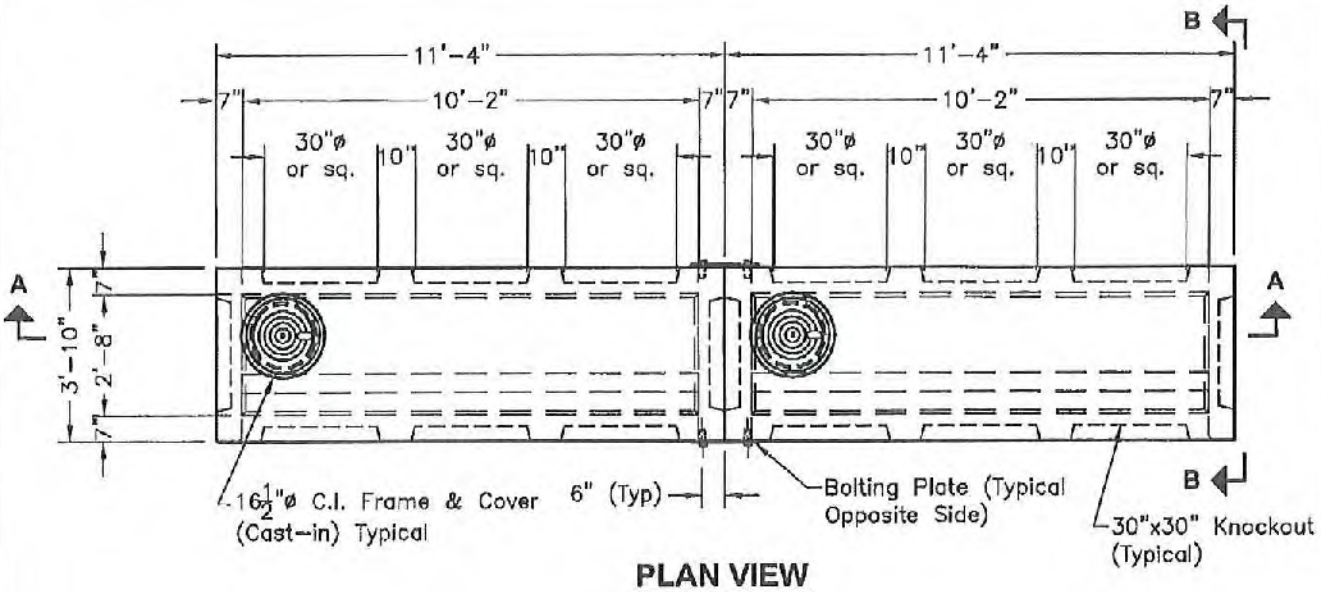
## 20' CURB INLET

FILE NAME: 260DI120'-CURB INLET_F.dwg
ISSUE DATE: January, 2003
www.oldcastleprecast.com

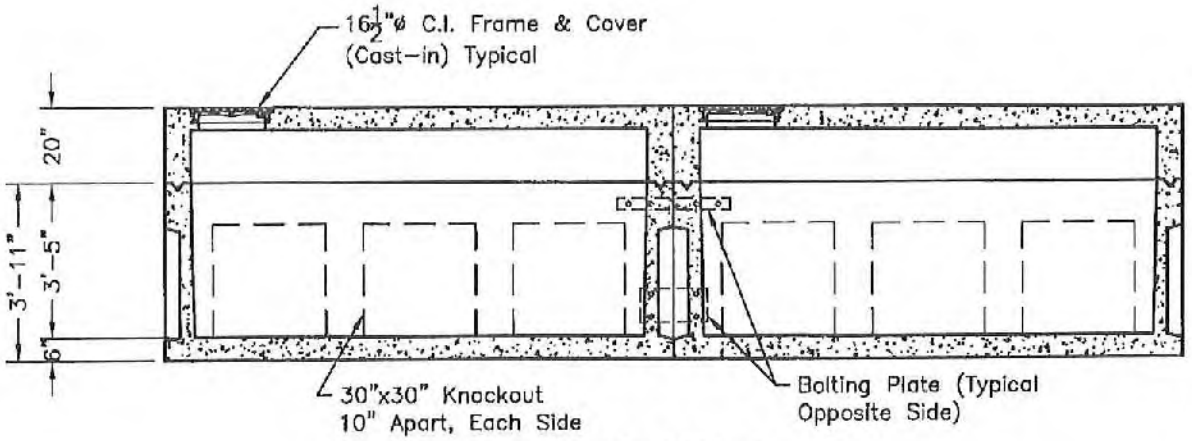
## 20' Curb Inlet

RECEIVED
OCT 31 2016
Copyright © 2002 Oldcastle Precast

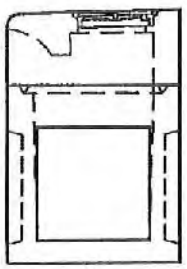
Office of Long Island Sound Programs




## PLAN VIEW




## SECTION A-A



## ELEVATION B-B

**GENERAL NOTES:**

1. Different Height of Extensions are Available by Request.

**SPECIFICATIONS:**

1. Concrete: Has a Design Strength of 5,000 psi at 28 Days.
2. Steel Reinforcement: ASTM A-615, Grade 60.
3. Loading: Designed for H20 Loading.
4. C.I. Castings: ASTMA-48, Class 30/35.

SCALE: 1/4"=1'-0"

Oldcastle Precast®

1100 Heritage Parkway, Mansfield, Texas 76063
Phone: 817.453.1054 Fax: 817.453.4007

**20' CURB INLET**

FILE NAME: 260DII20'-CURB INLET_B.dwg

ISSUE DATE: January, 2003

www.oldcastleprecast.com

**20' Curb Inlet**

RECEIVED

Copyright © 2002 Oldcastle Precast, Inc.

OCT 31 2016

Office of Long Island Sound Programs

**LAND & WATER RESOURCES DIVISION**

**APPENDIX A**

**TO: Regulatory Section**
**Department of Energy and Environmental Protection**
**Land & Water Resources Division**
**79 Elm Street**
**Hartford, CT 06106-5127**

**Certificate Holder:** PSEG Power Connecticut, LLC
80 Park Plaza T18H
Bridgeport, CT 06604

**Certificate No:** COP-201611636, Bridgeport

**CONTRACTOR 1:** _____

Address: _____

_____

Telephone #: _____

**CONTRACTOR 2:** _____

Address: _____

_____

Telephone #: _____

**CONTRACTOR 3:** _____

Address: _____

_____

Telephone #: _____

**EXPECTED DATE OF COMMENCEMENT OF WORK:** _____

**EXPECTED DATE OF COMPLETION OF WORK:** _____

**PERMITTEE:** _____
(signature) (date)

Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

79 Elm Street • Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer

## LAND & WATER RESOURCES DIVISION

## APPENDIX B

### NOTICE OF CERTIFICATE ISSUANCE
### DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION

**To:** Bridgeport City Clerk

**Signature and Date:** 12/16/2016

**Subject:** 1 Atlantic Street
Certificate of Permission #201611636

Pursuant to Section 22a-363g and Section 22a-363b of the Connecticut General Statutes, the Commissioner of Energy and Environmental Protection gives notice that a certificate has been issued to **PSEG Power Connecticut, LLC**, 80 Park Plaza T18H, Bridgeport, CT, 06604 to:

1. relocate, approximately 400' to the east, an existing outfall pipe;
2. modify the outfall by:
   a. removing an approximately 11' x 100' band of existing riprap from along the shore for temporary upland storage;
   b. excavating to install geotextile and approximately 70 c.y. of bedding stone;
   c. installing seven pre-cast, 11'-4" stormwater outfall structures; and,
   d. replacing riprap stone using original stone and no more than approximately 40 cubic yards of new stone; and,
3. remove the original outlet identified as Stormwater Outfall S-15.

If you have any questions pertaining to this matter, please contact the Land & Water Resources Division at 860-424-3019.

Return to:
Land & Water Resources Division
State of Connecticut
Department of Energy & Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

# PERMIT NOTICE

This Certifies that Authorization to perform work below the Coastal Jurisdiction Line and/or within Tidal Wetlands of coastal, tidal, or navigable waters of Connecticut

Has been issued to: PSEG Power Connecticut, LLC

At this location: 1 Atlantic Street, Bridgeport

To conduct the following:

1. relocate, approximately 400' to the east, an existing outfall pipe;
2. modify the outfall; and
3. remove the original outlet identified as Stormwater Outfall S-15.

Permit #: COP-201611636
Issued on: 12/14/2016

This Authorization expires on: 12/14/2019

This Notice must be posted in a conspicuous place on the job during the entire project.

Department of Energy and Environmental Protection
Land & Water Resources Division
79 Elm Street • Hartford, CT 06106-5127
Phone: (860) 424-3019 Fax: (860) 424-4054
www.ct.gov/deep

**Exhibit 5 – CT DEEP New Source Review Permits (3)**

Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

79 Elm Street • Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer

APR 11 2017

Mr. Karl Wintermeyer
Plant Manager
PSEG Power Connecticut LLC
Bridgeport Harbor Station
1 Atlantic Street
Bridgeport, CT 0664

Dear Mr. Wintermeyer:

Enclosed are copies of your new permits to construct and operate the Unit 5 combined cycle project at the above location.

This letter does not relieve you of the responsibility to comply with the requirements of other appropriate Federal, State, and municipal agencies. These permits are not transferable from one permittee to another without prior written approval, from one location to another, or from one piece of equipment to another. The permits must be made available at the site of operation throughout the period that such permit is in effect.

Permit renewal applications must be filed at least one hundred twenty (120) days prior to the permit expiration date, if applicable. Pursuant to Section 22a-174-3a of the Regulations of Connecticut State Agencies (RCSA), PSEG Power Connecticut LLC Bridgeport Harbor Station must apply for a permit modification/revision in writing if it plans any physical change, change in method of operation, or addition to this source which constitutes a modification or revision pursuant to RCSA sections 22a-174-1 and 22a-174-2a, respectively. Any such changes should first be discussed with Ms. Lidia J. Howard of the Bureau of Air Management, by calling (860) 424-3539. Such changes shall not commence prior to the issuance of a permit modification.

Sincerely,

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

GSR:LJH:jad
cc (via electronic mail):
Enclosure

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).

| | |
|---|---|
| **Owner/Operator** | PSEG Power Connecticut LLC – Bridgeport Harbor Station |
| **Address** | 1 Atlantic Street, Bridgeport, CT 06604 |
| **Equipment Location** | 1 Atlantic Street, Bridgeport, CT 06604 |
| **Equipment Description** | 80 MMBtu/hr Natural Gas Fired Boiler with Ultra Low NOx Burners and Flue Gas Recirculation |
| **Town-Permit Numbers** | 015-0300 |
| **Premises Number** | 045 |
| **Stack Number** | 18 |
| **Permit Issue Date** | APR 1 1 2017 |
| **Expiration Date** | None |

/s/ Robert E. Kaliszewski
Robert E. Kaliszewski
Deputy Commissioner

4/11/17
Date

ORIGINAL

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.



ORIGINAL

## 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 | lb/hr | Other Units | TPY |
|---|---|---|---|
| PM/ $PM_{10}$/ $PM_{2.5}$ | 0.48 | | 2.1 |
| $SO_2$ | 0.12 | | 0.5 |
| NOx | 0.72 | 7.0 ppmvd@3% $O_2$ | 3.2 |
| VOC | 0.32 | 0.004 lb/MMBtu | 1.4 |
| CO | 2.88 | 50 ppmvd@3% $O_2$ | 12.6 |
| Pb | 3.9 E-05 | | 1.7E-4 |
| $H_2SO_4$ | 0.02 | | 0.08 |
| $CO_{2e}$ | 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
- $PM_{10}$: Guaranteed Vendor Emissions Factor
- Opacity: Stack Test Data
- $SO_2$, $H_2SO_4$: Calculated from fuel sulfur content
- Pb: AP-42, Table 1.4-2, July 1998
- $CO_{2e}$: 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.



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## 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, $PM_{10}$, $PM_{2.5}$, $SO_2$, NOx, VOC, CO, Pb, $H_2SO_4$ and $CO_{2e}$ 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.



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## 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 ☐ $PM_{10}$ ☐ $PM_{2.5}$ ☐ $SO_2$ ☒ 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% $O_2$.
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)]



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## 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.



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**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.



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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).

| | |
|---|---|
| **Owner/Operator** | PSEG Power Connecticut LLC – Bridgeport Harbor Station |
| **Address** | 1 Atlantic Street, Bridgeport, CT 06604 |
| **Equipment Location** | 1 Atlantic Street, Bridgeport, CT 06604 |
| **Equipment Description** | General Electric 7HA.02 dual fired Combustion Turbine, Duct Burner and Heat Recovery Steam Generator |
| **Town-Permit Numbers** | 015-0299 |
| **Premises Number** | 045 |
| **Stack Number** | 17 |
| **Collateral Conditions** | Part III.H: Green House Gases Emission Limitations for the Unit 5 Combined Cycle Project<br>Part VII: Collateral Conditions for the Emergency Fire Pump Engine (EU-53) and Cooling Tower (EU-54)<br>Part VIII: Collateral Conditions for NOx and VOC Offsets |
| **Permit Issue Date** | APR 11 2017 |
| **Expiration Date** | None |

Robert E. Kaliszewski
Deputy Commissioner

4/11/17
Date

79 Elm Street, Hartford, CT 06106-5127
www.ct.gov/deep
*Affirmative Action/Equal Opportunity Employer*

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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



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## 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.



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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.

7. "Oil-fired unit" shall mean the combustion of fuel oil for more than 10.0 percent of the average annual heat input during the previous three calendar years or for more than 15.0 percent of the annual heat input during any one of those calendar years. [40 CFR §72.2]

8. "Hot startup" shall be defined as startup when the turbine has been down for less than 8 hours.

9. "Warm startup" shall be defined as startup when the turbine has been down for more than 8 hours.

10. "Cold startup" shall be defined as startup when the turbine has been down for more than 24 hours.

## 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.



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iv. There exists a physical blockage or breakage in the natural gas pipeline.

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 a total of 500 hours of cold startups, warm startups, and shutdown per calendar year.



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## PART II. OPERATIONAL CONDITIONS, continued

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.

Compliance with VOC emission limits in the tables below shall be determined by correlating the VOC emissions to the CO emissions using the results of the stack test required in Part V of this permit along with manufacturer's data and tracked using the CO CEMS.

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

| Pollutant | lb/hr | ppmvd @ 15% $O_2$ | lb/MMBtu[1] |
|---|---|---|---|
| PM/ $PM_{10}$/ $PM_{2.5}$ | 11.9 | | 0.007 |
| $SO_2$ | 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% $O_2$ | lb/MMBtu[1] |
|---|---|---|---|
| PM/ $PM_{10}$/ $PM_{2.5}$ | 14.6 | | 0.005 |
| $SO_2$ | 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 | |



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

| Pollutant | lb/hr | ppmvd @ 15% $O_2$ | lb/MMBtu[1] |
|---|---|---|---|
| $PM/PM_{10}/ PM_{2.5}$ | 60.0 | | 0.030 |
| $SO_2$ | 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 | |

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

| Pollutant | lb/hr | ppmvd @ 15% $O_2$ | lb/MMBtu[1] |
|---|---|---|---|
| $PM/ PM_{10}/ PM_{2.5}$ | 65.0 | | 0.021 |
| $SO_2$ | 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 | |

[1] 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.

1. Cold Startup/Shutdown

| | 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 ($NH_3$) (ppmvd@15% $O_2$) | 5.0 | 5.0 | 5.0 | 5.0 |

2. Warm Startup/Shutdown

| | Startup | | Shutdown | |
|---|---|---|---|---|
| | Natural Gas | ULSD | Natural Gas | ULSD |
| NOx (lb/event) | 99 | 108 | 9.8 | 16 |
| VOC (lb/event) | 9.6 | 31 | 26 | 6.2 |
| CO (lb/event) | 126 | 279 | 124 | 42.0 |
| Ammonia ($NH_3$) (ppmvd@15% $O_2$) | 5.0 | 5.0 | 5.0 | 5.0 |



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3. Hot Startup/Shutdown

| | Startup | | Shutdown | |
|---|---|---|---|---|
| | Natural Gas | ULSD | Natural Gas | ULSD |
| NOx (lb/event) | 67 | 63 | 9.8 | 16 |
| VOC (lb/event) | 8.4 | 28 | 26 | 6.2 |
| CO (lb/event) | 120 | 261 | 124 | 42.0 |
| Ammonia ($NH_3$) (ppmvd@15% $O_2$) | 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/ $PM_{10}$/ $PM_{2.5}$ | 71.8 |
| $SO_2$ | 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]

**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 §75.10(a)(4) 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, $H_2SO_4$: stack testing data
2. $SO_2$: Sulfur content in fuel
3. NOx & CO (steady state): CEM data
4. NOx, VOC, & CO (transient): Manufacturer's recommended uncontrolled emission factors



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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 $CO_2$ 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. $CO_2$ from the HRSG stack shall be monitored by a CEM system.
3. The following calculation method shall be used:

    a. Determine total hourly $CO_2$ mass emission (lbs) for each hour of the operating month using $CO_2$ CEMs.
    b. Determine total hourly net electrical output in terms of MWh for each hour of the operating month.
    c. Sum the hourly $CO_2$ mass emissions calculated for the month.
    d. Sum the total net output calculated for the operating month.
    e. Divide the total $CO_2$ 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).



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

4. The Permittee shall not exceed a combined $CO_{2e}$ 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 | $SF_6$ – Circuit breakers<br>$CH_4$ – natural gas pipeline and associated components | |
| $CO_{2e}$ | -------- | 117 lb/MMBtu | 163 lb/MMBtu | 163 lb/MMBtu | ---------- | ---------- |
| | 1,620,616 TPY | 41,031 TPY | 468 TPY | 63 TPY | 9,285TPY | 1,671,463 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. $CO_2$ emissions from the combustion turbine shall be determined by $CO_2$ CEM.

   b. $CO_2$ 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 $CO_2$ Emission Factors and High Heat Values for Various Types of Fuel.

   c. Methane ($CH_4$) and Nitrous Oxide ($N_2O$) 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 $CH_4$ and $N_2O$ Emission Factors for Various Types of Fuel.

   d. Emissions of $SF_6$ 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.

   e. Emissions from $CH_4$ 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).



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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:

| Pollutant/Operational Parameter | Averaging Times | Emission Limit |
|---|---|---|
| $CO_2$ | 1 hour block | See Part III.H Allowable Emissions Limits |
| NOx | 1 hour block | See Part III.A Allowable Emissions Limits |
| CO | 1 hour block | See Part III.A Allowable Emissions Limits |
| $NH_3$ | 1 hour block | See Part III.A Allowable Emissions Limits |
| $O_2$ | 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.

6. Prior to operation, the Permittee shall develop a written plan for the operation, inspection, maintenance, preventive and corrective measures for minimizing GHG emissions ($CH_4$ from the natural gas pipeline components and $SF_6$ 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 $SF_6$ leakage from the circuit breakers;
   c. Inspection for $SF_6$ emissions from the insulated electrical equipment on at least a monthly basis.



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## 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, $PM_{10}$, $PM_{2.5}$, $SO_2$, NOx, VOC, CO, $H_2SO_4$, $NH_3$ and $CO_{2e}$ 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.

7. 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.



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8. 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.

9. 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. if a startup, then what kind (hot, warm, cold);
   b. equipment affected;
   c. date of event, start time and end time;
   d. duration of event (minutes);
   e. fuel being used during event; and
   f. total $NO_x$, CO and VOC emissions emitted (lb) during the event.

10. 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).

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 $SF_6$ added (if any) to the electrical equipment.



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16. The Permittee shall keep monthly records of the audible alarms from the $SF_6$ 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.

**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.



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

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):

☒ $PM/PM_{10}/PM_{2.5}$ ☒ $SO_2$ ☒ NOx ☒ CO ☒ VOC
☒ Opacity ☒ $CO_2$ ☒ Other (HAPs): Sulfuric Acid, Formaldehyde, Arsenic

1. Stack emissions testing firing natural gas, without duct firing, for $CO_2$ 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.

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 $T_2$



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

| Actual Ambient Temperature ($T_{Act}$) | 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:
   a. Mode 1: turbine on natural gas; no duct firing
   b. Mode 2: turbine and duct burner on natural gas
   c. Mode 3: turbine on ULSD; no duct firing
   d. Mode 4: turbine on ULSD; duct firing on natural gas

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.



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## PART V. STACK EMISSION TEST REQUIREMENTS, continued

**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, NOx, CO, VOC, formaldehyde and ammonia in units of ppmvd at 15% $O_2$.

## 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



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2. Criteria and Non-Criteria Pollutants

| Pollutant | lb/hr | Other Units | TPY |
|---|---|---|---|
| $PM/PM_{10}/ PM_{2.5}$ | 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 ($H_2SO_4$) | 0.0006 | | 0.0001 |
| $CO_{2e}$ | 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:

- $SO_2$, $H_2SO_4$: Calculated from fuel sulfur content
- NOx, $PM_{10/2.5}$, VOC, CO: EPA Certified Vendor Emissions Factor
- Pb: AP-42 Sec. 3.1 (April 2000)
- $CO_2$: 40 CFR Part 98 Subpart C, Table C-1
- $CO_2e$: 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 $PM_{10}$, $PM_{2.5}$, NOx, VOC, $H_2SO_4$, $CO_{2e}$ 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.

ii. The Permittee shall monitor and keep records of monthly and 12 consecutive months operating hours of the emergency fire pump. The12 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.



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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.

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

1. **Criteria and Non-Criteria Pollutants**

| Pollutant | lb/hr | TPY |
|---|---|---|
| $PM/PM_{10}/ PM_{2.5}$ | 0.16 | 0.71 |



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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 $PM/PM_{10}/PM_{2.5}$ 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

To comply with RCSA §22a-174-3a(l), the Permittee shall possess, at least 178 tons of external emission reduction (ERC) to offset the quantity of NOx and 41 tons of ERCs to offset the quantity of VOC emitted from the following sources:

- 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



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

Such a quantity is sufficient to offset the emissions at a ratio of 1.3 to 1 ton of reduction for every ton of NOx and VOC emissions allowed under the permits listed above. Specifically, the reductions are real, quantifiable, surplus, permanent and enforceable as defined in RCSA 22a-174-3a(l)(5). The Permittee shall maintain sole ownership and possession of these emissions reductions for the duration of this permit and any subsequent changes to the permit.

Such offsets have been obtained from the following sources:

*NOx offsets:*

- The Permittee used 115 tons of Emission Reduction Credits (ERCs) from PSEG – Bridgeport Harbor Station. The ERCs have Serial Numbers: CT4NOx00-015-0045-7668-115.

- The Permittee acquired 63 tons of ERCs from the New York Power Authority: NY-DEC-2-6301-00084-63

*VOC Offset:*

- The Permittee acquired 41 tons of ERCs from Element Markets, LLC: NY-DEC-2-6401-00042-41

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.



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## PART IX. ADDITIONAL TERMS AND CONDITIONS, continued

**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.

**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.



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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).

| | |
|---|---|
| **Owner/Operator** | PSEG Power Connecticut LLC – Bridgeport Harbor Station |
| **Address** | 1 Atlantic Street, Bridgeport, CT 06604 |
| **Equipment Location** | 1 Atlantic Street, Bridgeport, CT 06604 |
| **Equipment Description** | 2,000 kW Diesel Fired Emergency Generator |
| **Town-Permit Numbers** | 015-0301 |
| **Premises Number** | 045 |
| **Stack Number** | 19 |
| **Permit Issue Date** | APR 1 1 2017 |
| **Expiration Date** | None |

Robert E. Kaliszewski
Deputy Commissioner

4/11/17
Date

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79 Elm Street, Hartford, CT 06106-5127
www.ct.gov/deep
*Affirmative Action/Equal Opportunity Employer*

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.



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## 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/ $PM_{10}$/ $PM_{2.5}$ | 0.3 | 0.15 g/hp-hr | 0.04 |
| $SO_2$ | 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 ($H_2SO_4$) | 0.03 | | 0.0043 |
| $CO_{2e}$ | 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.



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**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:

- $SO_2$, $H_2SO_4$: Calculated from fuel sulfur content
- NOx, $PM_{10/2.5}$, VOC, CO: EPA Certified Vendor Emissions Factor
- Pb: AP-42 Sec. 3.1(April 2000)
- $CO_2e$: 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 $PM_{10}$, $PM_{2.5}$, $SO_2$, NOx, VOC, Pb, $H_2SO_4$, $CO_{2e}$ 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.



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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 IIII – 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]



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**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(j)(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.



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**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.



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