STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL
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VIA ELECTRONIC MAIL

April 8, 2016

Stephen J. Humes, Esq.
Holland & Knight LLP
31 West 52nd Street
New York, NY 10019

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

Dear Attorney Humes:

The Connecticut Siting Council (Council) requests your responses to the enclosed questions no later than April 28, 2016. To help expedite the Council's review, please file individual responses as soon as they are available.

Please forward an original and 15 copies to this office, as well as a copy via electronic mail. In accordance with the State Solid Waste Management Plan, the Council is requesting that all filings be submitted on recyclable paper, primarily regular weight white office paper. Please avoid using heavy stock paper, colored paper, and metal or plastic binders and separators. Fewer copies of bulk material may be provided as appropriate.

Copies of your responses shall be provided to all parties and intervenors listed on the service list, which can be found on the Council's pending proceedings website.

Any request for an extension of time to submit responses to interrogatories shall be submitted to the Council in writing pursuant to §16-50j-22a of the Regulations of Connecticut State Agencies.

Yours very truly,

Melanie A. Bachman
Acting Executive Director

MB/MP/lm

c: Council Members
Parties and Intervenors

CSC
CONNECTICUT SITING COUNCIL

Petition No. 1218
PSEG
Bridgeport
Set One

1. PSEG Power Connecticut LLC (PSEG or Petitioner) included Abutters Map L-1 under Tab L of the Petition (Petition) dated March 9, 2016. Please submit a properly labeled Abutters Map identifying each parcel owner, including but not limited to, the abutters listed under L-2 of Tab L of the Petition.

2. Approximately how many residences are located within 1,000 feet of the center of the proposed power plant (Facility)? Provide the address and direction from the Facility to the nearest property boundary of the nearest residence (approximately 900 feet away) as indicated in the Petition on page 8.

3. Would the proposed combined-cycle Facility have black start capability?

4. Would the Facility be baseload, intermediate, or peaking?

5. On page 3 of the Petition, the Petitioner notes that the proposed Facility would provide energy and capacity in ISO New England Inc. (ISO-NE) markets. Would the proposed Facility also provide ancillary services in ISO-NE's markets? If so, which ones?

6. Could the plant operate as simple cycle (i.e. without the steam turbine) under certain conditions? If the combined cycle efficiency is 59 percent as noted on page 5 of the Petition, what would be the approximate simple cycle thermal efficiency of the gas turbine itself?

7. Provide a summer and winter megawatt (MW) breakdown table in a similar format to the sample table below.

Proposed GE Frame 7HA.01	**Winter**	**Summer**
Natural Gas		
Gas Turbines (2 units)	556.00 MW	487.63 MW
Steam Turbine (with duct firing)	280.46 MW	271.48 MW
Facility Load	(20.91 MW)	(18.98 MW)
Total Plant Net Output	815.55 MW	740.13 MW
ULSD		
Gas Turbines (2 units)	531.12 MW	453.75 MW
Steam Turbine (with duct firing)	200.54 MW	193.09 MW
Facility Load	(18.29 MW)	(16.17 MW)
Total Plant Net Output	713.37 MW	630.67 MW

8. What are the approximate cold and hot start-up times for the plant if dispatched?

9. Could the plant provide spinning reserves? What is the approximate ramp rate of the plant in MW/minute if the plant had to ramp up or ramp down in response to ISO-NE dispatch?

10. On page 5 of the Petition, the PSEG notes that the Facility has provisions for use of ULSD for up to 30 days per year as a backup fuel. Is this based on 30 days of actual on-site ULSD storage or does it include fuel deliveries during that time period? What is the approximate ULSD consumption rate in gallons per day (gpd) for full load conditions operating on ULSD? Was the approximate full load natural gas consumption rate when operating on natural gas?

11. Is it correct to say that the air cooled condenser would be a closed system that would not rely on evaporative cooling in order to save water?

12. Would the air cooled condenser fans be staged so that only the minimum required number of fans run at a given time in order to reduce noise and save energy?

13. Would the plant utilize evaporative coolers or chillers to cool the incoming air to the turbine during the summer months?

14. What is the water consumption rate of the plant in gallons per day (gpd) under natural gas-fueled conditions? What is the water consumption rate of the plant in gpd under ULSD-fueled conditions? Average or worst-case or a range of values of gpd are acceptable. In general, is water consumption greater under ULSD operation due to emissions controls? Has the Petitioner consulted with Aquarion Water Company to confirm availability of sufficient water to supply the plant?

15. Would the water have to be demineralized for use at the plant? If yes, would that process be performed on-site via demineralization trailers?

16. Would PSEG need on-site compression for its natural gas supply, or does it expect that sufficient line pressure is available from the existing Southern Connecticut Gas Company lateral pipeline connection?

17. If the proposed project is approved, would PSEG (and/or The United Illuminating Company) file a separate petition for the 345-kV underground electrical transmission cable and interconnection portion of the project or is this part of the instant Petition?

18. Is the approximately 300-foot stack the minimum height to meet air emission requirements? What is the approximate diameter of the stack? If the stack is tapered, include the approximate top and bottom diameters.

19. Provide a viewshed map depicting the year-round visibility area of the proposed approximately 300-foot stack. As a comparison, provide a viewshed map depicting the year-round visibility of the existing 498-foot stack that would eventually be removed. Include the areas of visibility for both in acres choosing a suitable radius (e.g. 2 miles) for the study areas.

20. Would exhaust plumes be visible under certain circumstances such as cold weather below 40 degrees F or very humid conditions? Roughly how tall could a visible plume rise on a calm day (i.e. negligible wind)?

21. Is the proposed project located outside of the shaded area of the Department of Energy and Environmental Protection (DEEP) Natural Diversity Database (NDDB)? If no, has PSEG consulted with DEEP regarding the NDDB? If yes, provide a copy of any reply correspondence from DEEP.

22. Where is the nearest Important Bird Area (relative to the center of the Facility) as indicated by the National Audubon Society?

23. Where is the nearest bat hibernaculum located? Provide the distance and direction from the center of the proposed Facility?

24. What is status of the Federal Aviation Administration review of the stack regarding marking and lighting? If the stack is to be lit, would it be a two-color scheme such as white light during day and red at night? If permissible by FAA, has PSEG considered utilizing lighting without the orange and white painting scheme currently utilized on the 498 foot stack in order to minimize the visual impact?

25. Would the ULSD storage have secondary containment? If yes, what percentage of the full amount of ULSD could it contain (e.g. 110 percent)?

26. Would both 345-kV step-up transformers have containment in case of any leaks of dielectric fluid? Would the dielectric fluid contain PCBs? If the secondary voltage of the transformers is 345-kV, approximately what is the primary voltage (or generator output voltage) to be stepped up?

27. Is the proposed project located within an acquifer protection area?

28. How many trees six inches diameter of greater would be removed to construct the project? Alternatively an acreage (or area) of clearing is acceptable.

29. Provide the closest distance from the limits of construction of the Facility to the nearest wetland.

30. Would the proposed Facility impact a coastal resource or coastal boundary?

31. What is the status of the cumulative impact study for NO_2 (and particulate matter if applicable) to be submitted to DEEP?

32. Would hydrogen be used on site for cooling the generator? If yes, what safety measures would be employed relative to the use and storage of hydrogen?

33. Would the proposed Facility have a backup generator on site? If yes, provide the fuel source (e.g. diesel) and the size in kilowatts or MW.

34. If the proposed Facility is approved and Unit 3 is later decommissioned, would the entire Unit 3 facility be removed or would portions of the Unit 3 facility remain? Explain.