STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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VIA ELECTRONIC MAIL

February 11, 2015

Philip M. Small, Esq.
Brown Rudnick LLP
185 Asylum Street
Hartford, CT 06103

RE: **DOCKET 192B**- Towantic Energy, LLC Motion to Reopen and Modify the June 23, 1999 Certificate of Environmental Compatibility and Public Need based on changed conditions pursuant to Connecticut General Statutes §4-181a(b) for the construction, maintenance and operation of a 785 MW dual-fuel combined cycle electric generating facility located north of the Prokop Road and Towantic Hill Road intersection in the Town of Oxford, Connecticut.

Dear Attorney Small:

The Connecticut Siting Council (Council) requests your responses to the enclosed questions no later than February 19, 2015. 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 send a copy via electronic mail. In accordance with the State Solid Waste Management Plan and in accordance with Section 16-50j-12 of the Regulations of Connecticut State Agencies 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.

Yours very truly,

Melanie Bachman
Acting Executive Director

MB/MP

c: Parties and Intervenors
Council Members

Docket No. 192B
CPV
Pre-hearing Interrogatories
Set Three

1. The comments from the Department of Energy and Environmental Protection (DEEP) dated January 28, 2015 contained several questions. Please address these questions from DEEP.
    a. Given that CPV Towantic, Inc. (CPV Towantic) has qualified for the ISO New England (ISO-NE) Forward Capacity Auction (FCA) in February, how does Towantic expect to perform to meet its obligations under its Forward Capacity Market contract with its penalties and incentives? Has Towantic modeled when it expects to meet performance obligations? Overperform? Underperform? Does Towantic expect, in the absence of gas infrastructure expansion, to not operate or significantly reduce output during certain winter periods? If so, under what conditions?

    b. Has CPV Towantic explored establishing the conditions under which Heritage Village Water Company (HVWC) will sell additional water to Towantic during periods of available supply such that Towantic can operate 52 continuous hours using ultra-low sulfur distillate fuel (ULSD)? If not, why not?

    c. What is Towantic's plan for resupplying its ULSD tanks?

    d. What plans does Towantic have for extending the 68 hours of operation using ULSD during extended cold periods, i.e. can the tanks be continuously refilled (assuming available water supply)? How long would it take for Towantic to refill its ULSD tank?

    e. What is the feasibility of increasing on-site water supply to extend the continuous oil-fired operation beyond the 52 hours of operation? What are the site limitations? What are the economic limitations? What are the permitting limitations?

    f. What is the feasibility of increasing on-site ULSD supply to extend the ability to extend the continuous operation beyond the 68 hours of operation? What are the site limitations? What are the economic limitations? What are the permitting limitations?

    g. What are the economic limitations of securing firm natural gas contracts?

    h. What is the economic comparison of securing firm natural gas contracts to the cost of maintaining dual-fuel capability? Please describe capital, operational, and running costs.

2. At what rate (in gallons per minute) can each demineralization trailer treat the incoming water? Does the demineralization process become a "bottleneck" in terms of the rate of water delivery to the plant? If yes, has CPV Towantic considered expanding its demineralization treatment capacity to increase the rate of supply of usable water? How often would the trailers require recharging and how long would it usually take? Would the recharging cycles be staggered so that one demineralization trailer would be used while one is recharging? Explain.

3. Why are demineralization trailers used rather than a demineralization building? Or is the demineralization process one that can only be (economically or practically) performed off site?

4. Referencing the First Set of Late Filed Exhibits 2h regarding berms, could you consider a more modest berm say 20 feet high with vegetation to reduce visual impacts? Could you also lower the air cooled condenser via excavation to say 65 feet high instead of approximately 85 feet? Would this help reduce visibility and/or noise? Provide the pros and cons of this suggestion.

5. Has CPV Towantic considered making a larger footprint for the plant in order to spread out the facility and possibly have lower heights for fuel and water storage, air cooled condensers, etc.?

6. Has CPV Towantic considered the possibility of underground electrical transmission connections from the switchyard to the existing transmission lines? Explain.

7. Provide a high-level breakdown of the $1B project cost.

8. Regarding the University of Connecticut *Economic Impact Analysis of CPV Towantic LLC's Construction and Operation of an 805 MW Electricity Generating Facility in Oxford, CT* report (UCONN Report) dated January 2, 2015, how does the $1B estimated project cost fit in with the construction expenditures in Table 1 of the UCONN Report?

9. Estimate the number of trucks per day visiting the site for construction and summarize the their route to the site from Interstate 84. Also, indicate how many vehicles would visit the plant under normal operations; include the number of oil trucks, water demineralization trailer trucks, maintenance vehicles, etc.

10. Regarding the Second Set of Late Filed Exhibits, 2b, what is the ambient air temperature assumed for the temperature and velocity profile of the stack exhaust? Please provide a temperature and velocity profile for the stack exhaust assuming the combustion of USLD (with the same still air and ambient temperature assumptions that were used for natural gas).

11. What does the exhaust plume look like in terms of its color and being transparent versus opaque under worst-case conditions?

12. What is the status of CPV Towantic's participation in the latest ISO-NE FCA? Was CPV Towantic selected in the auction, and if so, for how many megawatts of capacity?

13. If the stacks do no exceed 200 feet in height, why is lighting required?

14. Have the economics of an on-site well supply versus the HVWC water supply been evalulated? Or has a hybrid system with on-site wells and outside HVWC water been considered?" Isn't a 2 gallon per minute well yield considered low? What would be the depth of such a well? Has CPV Towantic any knowledge of flows for deep wells in the area. Have any permits for such been issued? Has CPV Towantic looked at that?

15. Has CPV considered partially buried water and fuel tanks in contrast to a fully buried water and fuel tanks to reduce its visibility via a lower height above grade?

16. Does HVWC have adequate facilities (main and pumping stations) to meet CPV Towantic's demands for water supply? If no, generally, what kind of facility upgrades would be required? What kind of on-site water facilities would be required to secure supply from HVWC? If extensive water distribution facilities must be installed to supply water to the plant, have the alternatives of on-site water supplies been evaluated? If not, why shouldn't that be considered?

17. Oxford has grown in both population, vehicle registrations, and commercial/industries development over the past 15 years. How has this growth compared with the proposed CPV Towantic plant in terms of water consumption, as well as pollution emissions from new buildings and vehicles? How would the predicated growth for the next ten years in Oxford conform with the impact of the CPV Towantic plant?

18. Are "offsets" available due to the conversion of about 2000 residential and commercial oil-burning heating customers to utilize natural gas?

19. Regarding the Test Pit Data from the Burns and Roe Enterprises, Inc. report dated January 2001, have any new test pits been excavated in the area of the relocated detention basins (north and south of the proposed facility)? If yes, where is the data? If no, deep test pits need to be excavated in the area of the proposed detention basins and the information provided should include at a minimum: surface elevation, depth to water, checked for modeling to determine high water levels.

20. As the soils on the site indicate very slow drainage characteristics and the original test pit date was observed in October and November, should new tests be performed and observed during the spring to better reflect high groundwater characteristics of the site?

21. Deep test pit #106, which appears to be the only deep test pit located on or near Lot 9A, was described as elevation 839.0, depth to groundwater 6.0', and groundwater elevation 833.0. The proposed southern detention basin is designed for a base elevation of 821' with the top of berm at an elevation of 824'. Where is the data that will support the construction of this detention basin and associated drainage features will not be under water and will function properly?

22. Three piezometers were installed in the detention pod area, since this area would be most influenced by the groundwater. The location of the three piezometers do not reflect current conditions as to the location of the two proposed detention basins. Will piezometers be installed at the newly proposed detention basins to obtain a better understanding of the on-site groundwater behavior?

23. There is no documentation of deep test pits being dug in the northern portion of the site (where Stormwater Renovation Area B is situated), nor any data associated with the

installation of piezometers. Is CPV Towantic planning on providing this type of groundwater information to the Council? If yes, when?

24. Page 17 of the Burns and Roe report states, "Due to the high content of fines in the on-site soils, precaution should be taken in order to assure that the material does not become excessively wet." Although this information is associated with fill, backfill and compaction requirements, very fine soils can lead to severe erosion problems. What special precautions will be undertaken at the site to control both on-site and off-site sedimentation problems?

25. A review of the application indicates two "stormwater renovation areas" and the incorporation of Low Impact Development (LID) principles. Please provide construction design details for the LID.

26. Grass lined water quality swales have been proposed for the site. The swales are to provide for filtration and infiltration of stormwater coming off of the proposed access drive (E1, E2, D1, and C on Civil Map page C 310). Does this grass lined swale design take into consideration water entering the swale from the modified riprap emergency overflow component of the stormwater plan? Why would the design show an emergency spillway from a detention basin being discharged into a grass lined swale?

27. Water Quality Swale D2 appears to collect stormwater from the southern side of the access drive and some water from the drainage swales situated on the northern side of the access road. This stormwater appears to be discharged at the junction of Woodruff Hill Road and the driveway associated with the Spectra Energy Compressor Station. How do you propose to control such stormwater that the plans show draining onto an abutting property without any control structures? Do you have the right to drain the stormwater onto your neighbor's property?

28. Regarding Tab C, page 22 of the *Environmental Overview in Support of Petition for Changed Conditions*, respond to the following:

    a) CPV Towantic will monitor stormwater management facilities during construction to assess the presence of invasive species. Why is the monitoring only proposed for the stormwater management facilities and not the whole site? Why no long term monitoring and corrective action plan to address invasive species issues after completion of proposed facility?

    b) Bullet #6 states stockpiling of excavated soils will be separately stockpiled. What is the plan for these soils during and after construction? Don't want to transport invasive species on non-impacted areas.

29. What is being proposed to stabilize the inlet side of the storm drainage pipe for Stormwater Renovation Area B?

30. It appears that the drainage system over the northern portion of the original 20 acre (+/-) parcel enters stormwater renovation area B and flows in a southerly direction to discharge at a point just west of "Drainage Easement in favor of lot 9A." Much of the stormwater generated on Lot 9A appears to be re-directed towards the stormwater system installed along Woodruff Hill Road. Does the drainage easement in favor of Lot 9A allow the property owner to discharge stormwater not associated with Lot 9A into the drainage easement area? Can you provide proof of such drainage rights?

31. Please provide details as to the design criteria and proposed location of any/all oil/water separator(s) on site.

32. Is CPV Towantic planning to install hoods on the inside of all/any catch basins and deep manholes proposed on site?