



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

www.ct.gov/csc

VIA ELECTRONIC MAIL

February 22, 2019

Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597

RE: **DOCKET NO. 470B** – NTE Connecticut, LLC application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a 550-megawatt dual-fuel combined cycle electric generating facility and associated electrical interconnection switchyard located at 180 and 189 Lake Road, Killingly, Connecticut. Reopening of this application based on changed conditions pursuant to Connecticut General Statutes §4-181a(b)

Dear Attorney Baldwin:

The Connecticut Siting Council (Council) requests your responses to the enclosed questions no later than March 15, 2019. 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 website under the "Pending Matters" link.

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.

Sincerely,

Melanie Bachman
Executive Director

MB/MP

c: Parties and Intervenors



CONNECTICUT SITING COUNCIL
Affirmative Action / Equal Opportunity Employer

Docket No. 470B
Pre-Hearing Questions for NTE
February 22, 2019
Set One

Municipal/Public Outreach Question

1. Provide the 2018 list of Distressed Municipalities referenced on page 8 of NTE Connecticut, LLC's (NTE) Motion to Reopen and Modify the Decision in Docket No. 470 Due to Changed Conditions (NTE Motion to Reopen).

Site Question

2. Referencing Docket No. 470 Finding of Fact (FOF) #147, have there been any material changes to the redacted Option Agreement? If yes, provide an updated copy of the redacted Option Agreement.
3. Referencing FOF #159 and #160, are the data related to the closest residences still accurate? If no, please update accordingly.

Alternatives Question

4. Was a fuel cell facility considered as an alternative to a combined cycle natural gas facility? If yes, explain why such alternative was rejected.

Project Design/Construction Questions

5. Would there be any gas-insulated equipment containing sulfur hexafluoride (SF₆) at either the proposed power block or utility switchyard? If yes, estimate the quantity of SF₆ that would be used at either location.
6. Referencing page 12 of the January 2019 Environmental Overview in Support of Petition for Changed Conditions (EOSPCC), the heat recovery steam generator (HRSG) stack was shifted about 35 feet. In which direction was it shifted? Per FOF #18, the originally proposed HRSG stack was to be located on a final grade of 315 feet above mean sea level (amsl). What is the final grade of the updated HRSG stack location amsl?
7. Referencing FOF #165, would there still be insufficient space for an additional generating unit at the proposed site?
8. Referencing FOF #166, please provide a similar updated power plant MW table taking into account the updated Mitsubishi combustion turbine generator configuration. Also, provide the most up to date information in that table relative to steam turbine generator MW, parasitic loads, etc.
9. Referencing FOF #167, would the administrative/warehouse/water treatment building (now known as the "facilities building") still have dimensions of about 175-feet by 65-feet? If no, please revise accordingly.
10. Referencing FOF #178, would the raw water tank and demineralized water tank still have diameters of approximately 45 feet each and capacities of 500,000 gallons each? If no, please revise accordingly.

11. Referencing FOF #179, would NTE still utilize four demineralization trailers? If no, please revise accordingly.
12. Referencing FOF #180, would the proposed ultra-low sulfur distillate (ULSD) tank still be approximately 1,000,000 gallons in capacity and approximately 75 feet in diameter?
13. Referencing FOF #182, would the proposed asphalt driveway still total roughly 2,500 linear feet? If no, please revise accordingly.
14. Referencing FOF #184, would there be any changes to the proposed fence design? If yes, please revise accordingly.
15. Referencing FOF #187, please update the cost data based on the proposed 650 MW configuration.
16. Referencing FOF #320, would the acreage numbers remain the same? If no, please update accordingly.
17. Referencing FOF #321, would the amount of material to be relocated at the site remain at roughly 220,000 cubic yards? If no, please update accordingly.

Power Plant Operations Questions

18. Referencing FOF #324 through #332, as an update, please respond to the following:
 - a) Would the proposed service life of the plant still be approximately 30 years?
 - b) Would the load factor (or capacity factor) of Killingly Energy Center (KEC), as a baseload facility, still be in the range of 65 to 80 percent?
 - c) Would the power production (under normal operation) roughly vary from 40 percent load (i.e. 260 MW) to 100 percent load (i.e. 650 MW) depending on ISO-NE electric system dispatch and ambient conditions?
 - d) Estimate the full load heat rate of KEC. Indicate if this includes or excludes the effects of duct firing.
 - e) Estimate the proposed combined cycle efficiency of the plant during annual average ambient conditions and without duct firing.
 - f) Would the “hot” start-up time remain at about 30 minutes for both natural gas and ULSD operation?
 - g) Would the “cold” start-up time remain at about 35 minutes or less for natural gas and ULSD operation?
 - h) Would the ramp rate remain about 29 MW/minute with the proposed configuration?

Electric Energy and Markets, and Public Benefit Questions

19. Referencing the February 7, 2019 Affidavit from Timothy Eves, NTE secured a seven-year capacity supply obligation (CSO) for 2022 through 2029. However, the attached ISO-NE Press Release is titled, “New England’s Forward Capacity Auction Closes with Adequate Power System Resources for 2022-2023,” which implies that the auction was for a one-year capacity commitment period. Explain how and why NTE’s CSO is for seven years, rather than one year.

20. Referencing FOF #129, the original 550 MW KEC project was anticipated to reduce wholesale electric costs to Connecticut ratepayers by approximately an average of \$215M per year. Estimate such annual reduction in wholesale electric costs to Connecticut ratepayers (or provide an approximate range of cost reduction) based on the proposed 650 MW KEC project.
21. Referencing FOF #323 and page 14 of the EOSPCC, while the proposed commercial operation date is March 2022, is it correct to say that the CSO requires commercial operation no later than June 1, 2022?
22. Reference FOF#193. What is the status of the ISO-NE System Impact Study (ISO-NE SIS)? Was the ISO-NE SIS revised to accommodate the change from 550 MW to 650 MW?
23. Referencing Exhibit 2 (New England Coal and Oil Units) of the NTE Motion to Reopen, the New Haven Harbor power plant is listed as having a nameplate capacity of 182 MW. Is NTE referring to the original New Haven Harbor unit (which doesn't have a unit number)? If yes, would the MW of this unit at risk of retiring be on the order of 347 MW, per Appendix A of the November 8, 2018 Connecticut Siting Council Review of the Ten-Year Forecast of Electric Loads and Resources?

Fuel Questions

24. Referencing FOF #197, would the new natural gas pipeline still be approximately 14 inches in diameter with a pressure of about 700 pounds per square inch gauge (psig)? If no, please update accordingly.
25. Referencing FOF #199, would the new natural gas pipeline remain within the existing right-of-way?
26. Referencing FOF #301, NTE's firm natural gas contract (Gas Contract) was previously from 2020 through 2027. Given NTE's CSO for the capacity commitment periods of 2022 through 2029, have the start and end dates of the Gas Contract changed? Explain.
27. Referencing FOF #302, would the Gas Contract still be for up to 95,000 million British Thermal Units (BTUs) of natural gas per day? If no, please update this number accordingly and indicate if it would be sufficient to supply the larger 650 MW plant.

Traffic Questions

28. Referencing FOF #391, is the DOT traffic data still accurate/current? If no, please revise those numbers.
29. Referencing FOF #392, would the proposed project still have up to 30 employees present during plant operations, resulting in less than 25 peak hour trips under normal operations? If no, please revise these numbers.
30. Referencing FOF #394 and page 14 of the EOSPCC, would peak construction traffic volume occur over a three-month period during an approximately 31-month (August 2019 through March 2022) construction period?
31. Reference FOF #400, would the volume of truck traffic associated with replenishing the ULSD supply during a ULSD operation event have a significant impact on traffic operations in the local roadway network?

Water Resources Questions

32. Provide an updated KEC Water Balance, similar to Figure 2-11a through 2-11b of the original Application. If this document is not materially changed due to the proposed 650 MW configuration, please indicate as such.

Air Emissions Questions

33. Referencing Figure 7 of the FOFs, would the PM_{2.5} dispersion map still be approximately accurate (or conservative) given the proposed Mitsubishi combustion turbine design? If no, please revise accordingly.
34. Would the proposed HRSG stack height of 150 feet be the minimum required to meet air pollutant emissions standards? Explain.
35. Referencing FOF #480, NTE was considering offset mechanisms to allow KEC to operate more frequently and achieve an 80 percent reduction in greenhouse gas emissions from approximately 2020 through 2050. Please provide an update on these plans.

Wildlife/Wildlife Habitat Questions

36. Please provide an update on the status of any Connecticut Department of Energy and Environmental Protection (DEEP) Natural Diversity Database (NDDB) review and any consultations NTE had with DEEP regarding the NDDB. Provide a copy of any additional correspondence received from DEEP relative to the NDDB, if applicable.
37. Referencing FOF #453 through #458, would development of the proposed project not occur closer than 430 feet from the edge of the vernal pool habitat in Wetland B? If no, please revise that number accordingly. Also, please update the numbers from FOF #458 relative to the Critical Terrestrial Habitat, as necessary/applicable.

Cultural Resource Question

38. Referencing FOF #405, has NTE received any additional feedback on the proposed project from the Mohegan Tribal Historic Preservation Office?

Electric and Magnetic Field Questions

39. Referencing FOF #346, would the maximum magnetic field level (under average annual load conditions) of 322 milligauss (mG) directly under the center of the 345-kV overhead transmission line connection as it crosses Lake Road be materially affected by the change from 550 MW to 650 MW? If yes, estimate the updated maximum mG.
40. Referencing FOF #347, would the maximum magnetic field level (under average annual load conditions) of 213 mG in the center of the electric transmission right-of-way adjacent to the proposed Utility Switchyard be materially affected by the change from 550 MW to 650 MW? If yes, estimate the updated maximum mG.

Aviation Safety Questions

41. Referencing page 12 of the EOSPCC and FOF #295 through #299, would NTE need to apply for an updated review by the Federal Aviation Administration for a Determination of No Hazard to Air Navigation (No Hazard Determinations) either because of the shift in HRSG stack location (or other plant layout changes) or because the existing No Hazard Determinations have expired? Provide such updated No Hazard Determinations if necessary/applicable.
42. Referencing FOF #363 through #375 and Figure 16 from the FOFs, would the proposed power up-rate from 550 MW to 650 MW materially affect the exhaust plume and related plume analyses? Explain.