



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

September 4, 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 September 10, 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
Development and Management Plan Interrogatories
Set One

1. Please respond to the following concerns/recommended revisions to Section (e) of the Development and Management Plan – Erosion and Sedimentation Control Plan (ESCP). Would CPV be amenable to incorporating these recommended revisions? If there are areas that CPV disagrees with or believes are not feasible to accommodate, please indicate why.
 - a. Replace DMH G2 and DMH F2 or DMHG1 and DMH F1 with a storm water hydrodynamic separator.
 - b. Replace rip rap pad on eastern side of property discharging into “drainage easement in favor of Lot 9A” with a storm water hydrodynamic separator.
 - c. Replace CB B12, CB A7 and CB A21 with catch basins containing a 4-foot sump with hooded outlet or some form of “trash excluders” to minimize floatables and hydrocarbons from getting into stormwater renovation areas. Would it be easier to clean a manhole than trying to clean up these materials from the forebay or other parts of the stormwater renovation area? Are the proposed catch basin details designed to restrict flow of floatables or hydrocarbons based on the proposed design?
 - d. Were the following soil results, i.e. laboratory testing from Geodesign Inc., considered in CPV’s ESCP design?
 - i. Gradations which indicate a fines content (finer than the #200 sieve) of approximately 31 to 53% are consistent with estimated permeability of the tested soils (Pg.5);
 - ii. Bottom of basins will be below groundwater levels (Pg. 5);
 - iii. Stormwater basins will be below seasonal high groundwater and will intercept water from the excavated geometry and will contribute some flow to the basins (Pg. 5);
 - iv. The North Slope will be cut at 3H:1V slope partially below groundwater levels (Pg. 5);
 - v. An approximated vegetated 3H:1V cut slope is anticipated to be stable, however it must be monitored during construction to allow evaluation of the need for underdrains and/or filter blanket below the vegetated surface (Pg. 6 – disclaimer for company); and
 - vi. The stabilized groundwater levels vary between depths of 2.4 and 14.8 feet below ground surface corresponding to elevations 856 and 818 (Pg. 4).
 - e. Construction General Permit and 2002 Guidelines require reverse slope benches on slopes greater than 15’ high and steeper than 3H:1V. If reverse slope bench is not provided, the General Permit requires engineered slope stabilization structures or a detailed soil mechanics analysis by a soils or geotechnical engineer:
 - i. Slope on northern side of development has top slope elevation of 860’ and toe of slope elevation of 821’ – horizontal distance is 117’ which exceeds 45’ horizontal distance required in 2002 Guidelines.
 - ii. Slope on western side of development has top slope elevation of 830’ and toe of slope elevation of 800’ (around location of cul-de- sac) – horizontal distance of 90’ which exceeds 45’ horizontal distance. Original site boring results for B-101, B-102, B-103 and B-104 show groundwater elevation between 817.5’ and 809.8’ (no water at B-102 witnessed).

- iii. Slope on southwest corner of development has top of slope elevation of 824' at berm and toe of slope elevation of 790' at CB E1 – horizontal distance of 102' which exceeds 45' horizontal distance.
 - iv. Slope on southeast side of proposed road has top of slope elevation at approximately 818' and toe of slope elevation of 778' – horizontal distance of 120' which exceeds 45' horizontal distance.
 - v. None of these slopes have reversed slope benches incorporated into their design.
 - vi. These slopes appear to be in non-compliance with the Preserve and Conserve Soils Land Grading requirements of the Erosion and Sedimentation Control Manual (5-2-5).
- f. Geotechnical report shows high ground water table in the northern portion of the site. References indicate subsurface drainage into the slope above the 821' elevation. No underdrains have been proposed for the northern slope. Could this lead to destabilization of the toe of slope thereby creating potential for slope subsidence?
- i. 2001 report from Burns and Roe Enterprises, Inc. stated “For surficial stability of the detention pond slopes, it is recommended that the face of the slope consist of a layer of riprap, placed over nonwoven geotextile fabric. The section should include crushed stone filter layer, to be placed between riprap and geotextile fabric; No. 357 stone....”
 - ii. Current erosion and control measures based on phasing plans (I, II and III) call for: “Install erosion control blankets on any slopes steeper than 3:1 and hydro-seed all disturbed areas with slopes of 3:1 or less that are not subject to future construction disturbance.
 - iii. This means northern slope towards Stormwater Renovation Area B, as currently designed, will have no reverse slope benches, no underdrainage for addressing a high ground water table, no erosion control blankets anywhere on the slope and no protection of the slope with a layer of riprap and geotextile fabric.
 - iv. Seepage and water are big factors in many slope failures. If seepage or overland flow is causing or worsening the slope condition, use engineered measures whose strategy is to convey runoff, direct runoff and intercept groundwater – E&S Guidelines (4-5)
- g. The plans indicate heavy reliance upon the use of filter fabric fence, including the following:
- i. Geotechnical review of the site indicates between 31% and 53% of soils on site would pass through a #200 sieve.
 - ii. Silt particles between 0.05 and 0.002 mm in size and clay particles being less than 0.002 mm in size may not be effectively removed by the use of filter fabric fence. According to Michael Klein's report to the Council, the erosion and control silt fence specified in the erosion control plan has an apparent size of 0.6 mm, more than 10 times larger than the silt particles and 300 times larger than clay particles.
 - iii. No details are provided on size of fabric opening in “Silt Sack Detail” for insertion into catch basins. If mesh opening is too large, significant portion of solids could pass through material and possibly exit the site.
 - iv. Based on Mr. Klein's calculations, using the proposed silt fence at the perimeter of the site may not be very effective in controlling erosion within the applicant's property boundaries.

2. Confirm that the "Wildlife Mitigation Notes" (WMN) on Sheet C331 are fully consistent with the Wildlife Survey Results report dated July 14, 2015, or update the WMN accordingly.