



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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September 4, 2015

Franca L. DeRosa, Esq.

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185 Asylum Street

Hartford, CT 06103

RE: **DOCKET 192B-** CPV Towantic, LLC Certificate of Environmental Compatibility and Public Need 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 Attorneys DeRosa and Small:

At a public meeting of the Connecticut Siting Council (Council) held on September 3, 2015, the Council considered and approved the Development and Management Plan (D&M Plan) submitted for this project on July 17, 2015, except for section (e) which pertains to the Erosion and Sedimentation Control Plan. The partial approval of the D&M Plan includes the conditions noted in the staff report.

This approval applies only to the D&M Plan submitted on July 17, 2015, and other supplemental information dated August 12, 2015, except for section (e) which pertains to the Erosion and Sedimentation Control Plan. Requests for any changes to the approved portion of the D&M Plan shall be approved by Council staff in accordance RCSA §16-50j-62(b). Furthermore, the Certificate Holder is responsible for reporting requirements pursuant to Regulations of Connecticut State Agencies Section 16-50j-62.

Please be advised that changes and deviations from the approved portions of this plan are enforceable under the provisions of the Connecticut General Statutes § 16-50u. Enclosed is a copy of the staff report on this D&M Plan, dated September 3, 2015.

Thank you for your attention and cooperation.

Very truly yours,

Robert Stein
Chairman

RS/MP/cm

Enclosure: Staff Report, dated September 3, 2015

c: Parties and Intervenors





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Docket No. 192B
CPV Towantic, LLC
Development and Management Plan

Staff Report

September 3, 2015

On July 17, 2015, CPV Towantic, LLC (CPV) submitted a Development and Management (D&M) Plan for the construction of a 785 MW (net) natural gas fired combined-cycle electric generating facility located north of the intersection of Prokop Road and Towantic Hill Road in Oxford, Connecticut. CPV submitted additional information on August 12, 2015 in response to Council interrogatories.

The facility would include but not be limited to the stacks; combustion turbines; combustion turbine generators; steam turbine with generator; step-up transformers for all three generators; backup diesel-fueled generator; building for electrical/battery rooms, warehouse/maintenance shop, and office and control rooms; air cooled condenser, auxiliary cooling unit, ultra-low sulfur distillate fuel (ULSD) tank, ULSD unloading area, demineralized water storage tanks, water demineralization trailers, natural gas metering and regulation station, natural gas compressors, and two stormwater detention ponds.

The Council approved the revised facility on May 14, 2015, ordering that a D&M Plan addressing the Council's conditions be submitted to and approved by the Council prior to commencement of construction. Item 2 of the Decision and Order stipulated the D&M plan contain 22 elements, the requirements of which are summarized in bold type below. A description of CPV's compliance with each element is included. Additional project conditions set forth in the Council's Decision & Order (D&O) that are addressed in the D&M Plan are provided where applicable.

- a) **A final site plan showing all roads, structures and other improvements on the site. The final site plan shall, where possible, preserve existing vegetation on the site;**

CPV submitted drawing C305, the Site Plan, as part of the D&M Plan. This drawing depicts all roads (including paved access off of Woodruff Hill Road), structures, and other improvements to the site. In response to the Council interrogatories, CPV submitted a drawing depicting where CPV will preserve existing vegetation on the site. In general, CPV will preserve approximately four acres of existing vegetation in the far northern portion of the site.

- b) **A detailed plan for the gas transmission interconnection showing gas metering and compressor station if applicable;**

CPV filed its natural gas interconnection plan and included the gas metering and compressor station. Natural gas will be supplied from a lateral off of the existing Algonquin Gas Transmission line and connect to a metering and regulation station on the subject property where the gas is first filtered, then metered, heated, and regulated. The natural gas would then be fed to the compression area to three on-site compressors connected in parallel. The compressed gas would then be supplied to the power plant.



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c) Water and sewer connection routes;

CPV notes that water and sewer connections have already been stubbed into both the 20.3-acre primary parcel and the 6.2-acre secondary parcel known as Lot 9A. CPV expects that the piping for water will run north along the western border of the site and then turn east where it reaches the demineralization and storage area. The sewer piping is expected to follow a similar route, except it will likely turn east at the admin building due north of the water demineralization and storage area.

In addition to those connections, CPV will be providing for the design and construction of a water pump station to be located on Lot 5 of the Woodruff Hill Industrial Park subdivision. The Town of Oxford, as property owner of Lot 5, and CPV are in the process of obtaining appropriate approvals and authorizations for the water pump station.

d) Detailed project schedules for all work activities and proposed construction hours;

CPV provided a project schedule and proposed construction hours. Specifically, upon receipt of all final construction permits and completing financing, CPV expects to begin clearing, grubbing, and grading approximately January 2016. Construction and start-up testing is expected to be completed by June 2018.

Normal work hours will be from 6:30 a.m. to 5:30 p.m. from Monday through Friday. However, there may be times when specific construction activities, including, but not limited to concrete placement, receiving/unloading the major equipment, commissioning and testing, could require a longer working day. Additionally, some weekend work may become necessary at times in order to maintain the critical path schedule. Council staff recommends that changes to the D&M Plan, including but not limited to changes to construction hours be delegated to staff (i.e. Council Executive Director).

e) Erosion and sedimentation control plans that reflect the complexity of developing the site;

CPV has provided its detailed erosion and sedimentation control plans in three phases and detailed such information in drawings C315 through C317 and C330 through C331. These plans include but would not be limited to CPV installing an anti-tracking pad at the construction entrance, as well as water bars and haybale barriers as necessary to control drainage along the entry drive. Hay bales will initially be placed along the southeastern and southwest corners of the site, and silt fence will be placed around the southern portion of the site prior to the start of any construction. Topsoil and seed will be placed on all disturbed areas that are not subject to future construction. Erosion control blankets will be placed on any slopes steeper than 3:1 and all disturbed areas with slopes of 3:1 or less that are not subject to future construction disturbance. All erosion and sedimentation control measures shall remain in place until the construction area is permanently stabilized.

f) Emergency response/safety plan per Condition No. 1(h) of the Decision;

Condition No. 1(h) of the Council's Decision and Order dated May 14, 2015 requires the submission of an Emergency Response/Safety Plan developed in consultation with state and local officials. Accordingly, CPV has included its draft Emergency Response Plan (ERP) with red-line edits that reflect discussions with such officials.

The plan will be updated as necessary and reviewed annually, at a minimum by the facility's Plant Manager and Compliance Coordinator after seeking input from local safety officials, Waterbury-Oxford Airport, and the Connecticut Department of Emergency Services and Public Protection. However, each agency that receives the plan will be requested to provide input on subsequent updates to the plan. The Oxford Fire and Police Departments will have "hands on" input during annual training exercises planned at the facility. A record of all revisions and amendments will be documented in subsequent revisions to this ERP.

Council staff recommends including a condition that a copy of any future updated or revised Emergency Response Plans be submitted to the Council.

g) Final noise mitigation measures and plans to demonstrate compliance with DEEP noise standards;

CPV provided an updated noise analysis to reflect the current site layout. The various mitigation measures in the plant design include but are not limited to combustion turbine air inlet silencing, stack silencing, and low-noise auxiliary fin fan cooler. The gas compressors have been incorporated into the analysis as well. The project is expected to meet the 70 dBA Class C to Class C noise control standard at the nearest industrial location and the 51 dBA (nighttime) Class C to Class A noise control standard at the nearest residential location.

Once construction is completed and prior to the release of the engineering, procurement, and construction contractor from its obligation to conform with noise performance guarantees, a compliance test will be undertaken to verify that the anticipated levels of design have been met and the resulting project meets applicable noise standards. Measurements will be completed at several project property line locations and other locations as deemed necessary to ensure compliance.

An Operational Noise Measurement Protocol plan will be prepared and submitted 120 days prior to the commencement of the field program. A noise monitoring test report will be submitted to the Council and include a comparison of specified and measured sound levels with a statement of compliance.

Council staff recommends that the final noise monitoring test report be submitted to the Council no later than 30 days after commercial operation. This timeframe may be extended by written request to the Council.

h) Final determination on black start capability and such design if applicable;

CPV issued its final determination on black start capability. Specifically, CPV notes that 16 MW of diesel generators would be required for black start capability. Such a configuration would require four 4 MW units or two 8 MW units. However, the current site plan cannot accommodate the footprint of these generators. In addition, a new air permit application would have to be filed and would result in a six-month delay, thus reducing the probability of reaching ISO-NE's commercial operation deadline of June 1, 2018. Therefore, CPV has no plans to install black start capability at the plant at this time.

i) Stormwater pollution protection plan outlining best management practices;

CPV submitted its detailed Stormwater Pollution Protection Plan (SPPP) prepared by Civil 1. The SPPP includes best management practices, and the SPPP drawings are stamped by a Professional Engineer duly licensed in the State of Connecticut.

j) Final stormwater design including evaluating the feasibility of not introducing stormwater into the wastewater;

CPV incorporated the feedback from the Naugatuck Water Pollution Control Authority into the stormwater design. Accordingly, the stormwater design does not call for any disposal of stormwater via the sanitary sewer. Any water collected in the transformer pit and/or oil tank containment area will pass through an oil/water separator prior to discharge into the project's normal stormwater management system.

k) Updated Water Supply/Management Plan;

CPV provided its updated Water Supply/Management Plan (WSMP). The plant has been designed to minimize water use by utilizing a dry, fin fan design for the air cooled condenser and auxiliary cooling unit; eliminating blowdown waste streams; and installing low flow toilets and domestic fixtures. In aggregate, there would be a 90 percent reduction in average water usage. CPV will periodically review its water usage profile in an effort to capture the benefit of any advances in water saving technology and best practices. CPV also commits to proactively engage with key water-related stakeholders.

CPV's proposed water consumption is consistent with its committed amounts detailed in the record of the proceeding. Specifically, CPV's peak daily water demand between mid-April through mid-October would be 150,000 gallons per day (gpd). During the colder months from mid-October through mid-April, CPV's peak daily water demand would be 218,000 gpd to reflect the possibility of operation on ULSD in the event of natural gas unavailability. These peak water consumption amounts are also consistent with the Heritage Village Water Company's (HVWC) committed amounts. There would be two demineralization trailers on site, each individually capable of supporting more than the peak water draw of 218,000 gpd. The on-site water storage of 1.75M gallons plus the peak water draw from HVWC of 218,000 gpd would provide approximately 52 consecutive hours of operation at ULSD. In the event that a ULSD operation event exceeds 52 hours, CPV would seek additional uncommitted water from HVWC if possible. If HVWC is unable to supply additional water (beyond its original commitment), CPV would be forced to shut down its plant after 52 hours of ULSD operation.

On July 29, 2015, Pomperaug River Watershed Coalition (PRWC) submitted comments on the D&M Plan. These comments focus on the WSMP. Although the PRWC letter was discussed at the Town of Southbury's August 6, 2015, Board of Selectman meeting, on August 11, 2015, the Town of Southbury requested the Council postpone its review and decision on the WSMP until the PRWC Executive Director returns from vacation and is able to attend the August 20, 2015 Board of Selectman meeting. Specifically, PRWC requests that the Council not approve the D&M Plan until such time as water/supply resource matters are fully resolved. PRWC is concerned about the future

of a water supply interconnection between HVWC and CWC, which has permits that will expire in 2017 and 2020. However, Council staff notes that page 5 of the Council's May 14, 2015 Opinion document states that, "While the Council is concerned about the future sale of water from CWC to HVWC, the Council believes that this is an issue to be resolved between the two water companies."

PRWC is also concerned that the water supply plan lacks accountability relative to actual water usage. Council staff notes that CPV's water consumption, in general, is limited to a peak of 218,000 gpd per the commitment from HVWC. However, Council staff shares PRWC concerns relative to the possibility of exceeding 218,000 gpd during an extended ULSD operation event. Accordingly, Council staff suggests including a condition that the Council be notified in writing when CPV's daily water usage exceeds 218,000 gpd. The water usage and length of such ULSD operation event should be included to keep the Council apprised of any patterns of excessive water consumption.

PRWC is also requesting a drought management plan (DMP). However, Council staff notes that a DMP is not a specific D&M Plan requirement listed on the Council's May 14, 2015 Decision and Order nor was a DMP a subject of discussion during the proceedings.

PRWC is also concerned that the WSMP does not provide any indication that CPV is collaborating with stakeholders such as Department of Energy and Environmental Protection (DEEP), Department of Public Health, HVWC, PRWC and others regarding studies of water flow of the Pomperaug River. Council staff notes that, while these consultations are highly encouraged, details of such consultations are not a D&M Plan requirement per the Decision and Order. However, CPV states that it is committed to engaging key water-related stakeholders.

PRWC also is concerned that the WSMP lacks any commitment to the funding of the two stream flow gauges. While the details are not strictly a D&M Plan requirement, Condition 1(d) of the Council's Decision and Order states that, "The Certificate Holder shall continue to fund and maintain two stream gauge stations on the Pomperaug River." Accordingly, Council staff recommends that CPV provide the most current status of CPV's funding and maintenance of the two stream gauge stations.

1) Decommissioning Plan;

CPV provided a decommissioning plan. Assuming a roughly 35-year operational life of the plant and expected technological advances will drive the replacement of existing equipment, CPV has assembled a plan for permanent closure of the combined cycle facility.

CPV has entered into a development agreement with the Town of Oxford that generally requires CPV to decommission, dismantle and dispose of the facility in good workmanlike fashion by the end of the facility's useful life as determined by CPV. The Development Agreement also calls for CPV to maintain financial assurance in the amount of \$6M to ensure that adequate funds are available to allow for the proper restoration of the site.

The decommissioning process would include removal and proper disposal or recycling of all project components. Access roads, fencing, and electrical power would remain for use until no longer needed by the decommissioning and site restoration workers. Underground conduits and cables would

be cut to an appropriate depth below ground surface, unless required for future development. Access roads that would not be used will be restored to pre-construction conditions by removal of the aggregate base material, fill of the compacted base section with locally imported soil to match existing on-site soils, and hydroseeded with a seed mix to match existing onsite ground cover. The chain link fence would remain if beneficial for a future use. Otherwise, it would be removed and holes left behind will be backfilled. The natural gas interconnection line and metering station would remain in place if beneficial for a future use. If it will not be used, it would be removed in accordance with Spectra Energy's guidelines.

m) Updated fuel storage and handling plan including containment and other measures to protect against spillage when the ULSD tank is being refilled;

CPV provided an updated fuel storage and handling plan relative to ultra-low sulfur distillate fuel (ULSD). Specifically, CPV would store ULSD in a 1.5M-gallon 48-foot tall double-walled storage tank. Such storage tank would have secondary containment designed to hold 110 percent of the tank's capacity. The adjacent ULSD unloading station will have a curbed unloading area for trucks to contain any spills. Spills or leaks will be immediately contained and reported in accordance with DEEP regulations and CPV's Spill Prevention/Containment/Control Plan (SPCC).

n) Containment and/or protective measures for the safe delivery and storage of hydrogen and aqueous ammonia;

Aqueous ammonia (19 percent by weight as opposed to household ammonia, which is on the order of 5 to 10 percent) will be stored in an aboveground storage tank. The ammonia truck unloading area will be paved with concrete, sloped and curbed with a sump to contain a potential spill. The on-site ammonia storage tank consists of a 20,000-gallon tank located above a secondary containment area capable of holding 110 percent of the tank's volume. Tank alarms will immediately notify facility personnel in the event of an accidental release. Proper training in emergency procedures and emergency respirators will be available for use by trained personnel. The curbing and containment are expected to prevent accidental release of ammonia during ammonia deliveries. In addition, by keeping the concentration under 20 percent, the aqueous ammonia solution is not subject to the Accidental Release requirements contained in Section 112r of the Federal Clean Air Act.

Hydrogen gas will be used as a generator coolant and will be stored in trailers near the generators, but away from potential ignition sources as required by applicable building and fire codes. The hydrogen trailers will be protected from vehicular impact by installation of crash posts or other protective measures.

o) Maintenance of detention basins;

All-Points Technology Corporation, P.C. (APT) will serve as the project wetland monitor (PWM) to ensure that placement of topsoil and planting of the extended detention shallow wetland basins (EDSWB) are implemented properly. The PWM will be notified a minimum of seven business days prior to any phase of the EDSWB project including excavation and grading, soil transfer, and planting. The EDSWB will only be constructed after the contributing drainage areas have been completely stabilized since these areas will be used as temporary sediment basins during the

construction phase of the project. The basins shall be de-watered, dredged and re-graded as necessary to design dimensions after the contributing drainage areas have been completely stabilized.

Topsoil will be placed within the EDSWB and stabilized with an erosion control blanket. The PWM will inspect planting stock specimens for health, pests, and suitability for use within the EDSWB. Only plant materials native and indigenous to Connecticut shall be used. Erosion and sedimentation controls will remain until the site is stable.

Protection of the newly planted wetland vegetation from predation by waterfowl (e.g. Canada Geese) is critical. Waterfowl protection such as netting, webbing, or string installed in a crisscross pattern over the surface area of the EDSWB will be utilized, above the level of the emergent plants.

The EDSWB will be monitored by the PWM during construction and for a period of five growing seasons following construction.

p) Backup generator design and containment measures for fuel, oil, and coolant;

CPV provided the backup generator design and fluid containment measures. Specifically, CPV will install a 1,500-kilowatt (or 1.5 MW) diesel backup generator to provide emergency backup power to the facility. The generator will not connect to the electric grid and would only be for internal use.

The generator unit will be located inside an outside enclosure with dimensions of approximately 11.25 feet tall, 11.25 inches wide, and 34.25 inches long. The enclosure will minimize the risk of oil or coolant leakage from the engine. Underneath the engine, is a 2,630-gallon belly fuel tank. The fuel tank will be double-walled to contain all of the diesel fuel and prevent leakage.

q) Final report on wildlife surveys performed in 2015 and any recommended measures to mitigate wildlife impacts due to construction and/or habitat loss;

CPV submitted its Wildlife Survey Results Report (WSRR) dated July 14, 2015 and prepared by Eric Davison of Davison Environmental. The WSRR discusses the wildlife field surveys that were conducted in the spring of 2015. Survey methods for amphibians and reptiles included cover searching (e.g. turning of rocks, logs and other surface debris), visually searching for egg masses, dip-netting for larvae and audial surveys for calling frogs and toads. Survey methods for birds included audial and visual surveys during late May and early June when the migratory birds have returned to Connecticut for the breeding season. Eastern box turtle surveys were conducted in May and June and included visual surveys concentrated in low density vegetation where box turtles bask on sunny days during the spring. Basking surveys were performed with multiple observers in May before groundcover vegetation becomes dense and obstructs visual surveys.

A total of 51 birds, 5 reptiles, and 12 amphibians were found within or adjacent to the study area. Of the wildlife observed, the two state listed species observed were the American kestrel and the eastern box turtle. The kestrel was present only temporarily during migration and did not breed in the study area. A single eastern box turtle was observed within the Algonquin natural gas right-of-way. (This is not inconsistent with Finding of Fact #257 that notes that the likelihood of finding an eastern box turtle at the power plant site are low because they are not typically found at such elevations.) No

vernal pools were located within the study area. However, the study area lies within a known Critical Terrestrial Habitat zone (Calhoun and Klemens, 2002).

To protect against the direct loss of wildlife during construction, the WSRR has several recommendations listed below.

- a) All tree clearing shall take place from August 16th through April 30th to protect the vast majority of nesting birds and summer roosting bats from direct impact during the breeding season.
- b) Targeted turtle sweeps shall be performed prior to construction to search for and remove any eastern box turtles (and other low motility reptiles and amphibians) from the construction area per the DEEP 401 Water Quality Certification Programmatic General Permit (PGP) approval conditions. These sweeps should be conducted according to the protocol outlined in the Eastern Box Turtle Protection Plan (EBTPP) included in the WSRR.
- c) The WSRR also recommends that an initial eastern box turtle survey be conducted one day prior to barrier installation, followed by one week of sweeps after installation and prior to construction, and periodic sweeps during construction as detailed in the implementation schedule of the EBTPP.
- d) It is recommended that the perimeter security fence be buried to a depth of 12 inches and have a maximum mesh size of two inches to prevent turtles and other wildlife from entering the site post-construction.
- e) Installation of erosion and sedimentation controls, if installed during amphibians' inactive period (November to March), should be constructed in a synchopated manner to allow for amphibian passage to the vernal pool during the spring.
- f) Post-construction, restoration of forest cover within the laydown areas should be considered to restore habitat for off-site vernal pool indicator species and of the forest dwelling wildlife.

According to the WSRR, the primary impacts associated with a project of this scale are permanent habitat loss and temporary disturbance associated with noise from construction activities. While no mitigation measures are available for habitat loss, the WSRR notes that, "[B]ased on the results of this study, no critical habitats (i.e. rare or unique) or significant populations of rare or notable species will be directly impacted."

Relative to the issue of construction noise impacts on wildlife, such temporal impacts are greatest during the active wildlife season from March through November. Therefore, the WSRR notes that any activities conducted outside of this season would minimize disturbance to wildlife adjacent to the construction area. Post-construction, the species diversity within the habitats adjacent to the site

would be expected to recover to near pre-construction levels, as has already been demonstrated and observed within habitats surround the adjacent Spectra Energy site.

Council staff notes that, per the project schedule, the project site will be "cleared and grubbed" between December 16, 2015 and March 7, 2016, which is consistent with the seasonal restriction on tree clearing. Council staff further notes that the fence mesh size is proposed at two inches; however, the fence design plans do not appear to include burying the lower portion of the chain link fence as suggested in the above recommendation (d). The bottom of the chain link sections are approximately at grade. Council staff also notes that it may not be feasible to prevent all significant construction noise during the March to November season given CPV's time schedule to complete the project and meet its ISO-NE Forward Capacity Auction commitment.

Council staff recommends that CPV implement the recommendations of the WSRR to the extent reasonably feasible except for burying the bottom section of the chain link fence and imposing seasonal restrictions on construction noise. Staff suggests that CPV minimize the gap between the fence and grade to reduce the risk of turtle entry into the fenced area.

r) Dewatering plan to address groundwater issues during construction;

CPV filed a dewatering plan on sheet C318. The largest area anticipated to require dewatering is the power block excavation area. Sump pits will be placed in the southeast and southwest corners of the excavation. The water will be transported via discharge hoses to the temporary sediment traps 2A and 2B on the southern portion of the site. Should additional dewatering of the construction site be required, then additional dewatering basins will be located on the site by the design engineer.

s) Final construction traffic route plans;

CPV provided its final construction route plans. Specifically, on behalf of the Town of Oxford, CPV seeks to construct a new Town-owned road, to be known as E-Commerce Drive, which will connect the eastern end of Juliano Drive directly to Woodruff Hill Road. The detailed construction plans for E-Commerce Drive are complete, and the permit application is almost complete. It is anticipated that this new road will be completed by the middle of 2016, before the labor force and heavy haul material deliveries reach their peak. The use of this new section of road will minimize the need for traffic to travel the Christian Street, Jacks Hill Road, and Riggs Street route.

However, during initial phases of construction, relatively few workforce cars and trucks will be traveling to and from the site. The traffic is expected to use Christian Street, Jacks Hill Road, Riggs Street, and Prokop Street to gain access to Woodruff Hill Road until construction of E-Commerce Drive is completed.

As noted in Section (d), the workday begins at 6:30 a.m. to avoid the morning peak rush hour traffic that occurs between 7:00 a.m. and 8:00 p.m. The workday would end by 5:30 p.m. to allow construction traffic to leave the site after 5:00 p.m. and avoid the 4:00 p.m. to 5:00 p.m. rush hour.

t) Fence design and other site security measures;

CPV would install a seven-foot chain link fence with three strands of barbed wire on top (for a total height of eight feet). Such fence would surround the facility. The proposed chain link size is 2 inches. A smaller chain link size is a special order fence that would result in additional cost. CPV respectfully requests Council approval of the 2-inch chain link design. CPV would also install a 24-foot wide security gate at the entrance of the facility.

u) Federal Aviation Administration lighting design for the stacks;

The Federal Aviation Administration (FAA) has completed its review of the two 150-foot exhaust stacks and issued a Determination of No Hazard to Air Navigation to each. Accordingly, CPV has included the lighting design in accordance with FAA Advisory Circular 70/7460-1K, Change 2, dated February 2, 2015. Such lighting design has red lights for nighttime operation and medium intensity flashing white lights for daytime and twilight operation.

v) Full geotechnical study performed on Lot 9A prior to finalizing construction plans.

CPV had a full geotechnical study (Geotech Report) of Lot 9A performed and included such plans in the D&M Plan. Specifically, the Geotech Report notes that four borings were performed in late April/early May 2015. Two of the borings were performed in the northern drainage basin location. Two were performed in the southern drainage basin.

Groundwater was initially measured at depth of 12.8 to 26.1 feet below grade. However, in deep glacial till, water levels may take some time to stabilize in a boring hole, and thus, the actual depth of the water may be more shallow or deeper. Accordingly, stabilized groundwater levels were taken during June 2015. Such stabilized groundwater levels vary between 2.4 and 14.8 feet below ground surface.

Ultimately, the following conclusions were reached in the Geotech Report:

- a) Site soils consist of a thick layer of glacial till as demonstrated by testing in the basins and review of prior borings.
- b) Site soils have low permeability.
- c) Bottom of basins will be below groundwater levels.
- d) Stormwater basins will be below seasonal high groundwater and will intercept water from the excavated geometry and will contribute some flow to the basins.
- e) Due to the low permeability of the site soils, it is anticipated that the rate of groundwater flow into the basins will be relatively low; thus, the loss of stormwater due to infiltration will be minimized.
- f) The North Slope will be cut at a 3H to 1V slope partially below the groundwater levels.
- g) 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 a filter blanket below the vegetated surface.

Staff Recommendations

Staff recommends approval of the D&M Plan as submitted with the following conditions:

Changes to the D&M Plan shall be delegated to staff per Section 16-50j-62(b) of the Regulations of Connecticut State Agencies.

Eric Davison shall serve as the Environmental Monitor as noted in the Wildlife Survey Report.

All-Points Technology Corporation, P.C. shall act as the Project Wetland Monitor as noted in Sheet C331 of the D&M Plan.

A copy of any future updated or revised Emergency Response Plans be submitted to the Council no later than 30 days after such update or revision.

No later than 30 days after commercial operation of the plant, the final noise monitoring test report shall be submitted to the Council. This timeframe may be extended by written request to the Council.

The Council shall be notified in writing of each extended ULSD operation event when CPV's daily water usage exceeds the normal worst-case peak of 218,000 gpd. The daily water usages and the length of such ULSD operation event shall be included as well as the reason for the event, e.g. natural gas unavailability for greater than 52 hours.

CPV shall provide the most current status of the funding and maintenance of the two stream gauge stations on the Pomperaug River.

CPV shall implement the recommendations of the Wildlife Survey Results report dated July 14, 2015 to the extent reasonably feasible except for burying the bottom section of the chain link fence and imposing seasonal restrictions on construction noise.

CPV shall minimize the gap between the bottom of the chain-link security fence and grade to reduce the risk of turtle entry into the fenced area.