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February 24, 2015

VIA HAND-DELIVERY AND ELECTRONIC MAIL

Mr. Robert Stein, Chairman
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

RE: Docket No. 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—*CPV Towantic, LLC Responses to Borough of Naugatuck and Borough of Naugatuck Water Pollution Control Authority Interrogatories (Set 2)*

Dear Chairman Stein:

Enclosed are an original and fifteen (15) copies of CPV Towantic, LLC's responses to the interrogatories from the Borough of Naugatuck and Borough of Naugatuck Water Pollution Control Authority.

Please contact Franca L. DeRosa, Esq. or me at (860) 509-6500 with any questions.

Very truly yours,

BROWN RUDNICK LLP

Philip M. Small
Counsel for CPV Towantic, LLC

PMS/jmb
Enclosures
cc: Service List

61865604 v1-022345/0005

BR

CERTIFICATE OF SERVICE

This is to certify that on this 24th day of February, 2015, the foregoing document was sent via electronic mail, and/or first class mail, to the persons on the attached service list.

By: _____
Philip M. Small

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SERVICE LIST OF PARTIES AND INTERVENORS

Status Granted	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Applicant	CPV Towantic, L.L.C.	Franca L. DeRosa, Esq. Philip M. Small, Esq. Brown Rudnick LLP 185 Asylum Street Hartford, CT 06103 (860) 509-6500 (860) 509-6501 — fax fderosa@brownrudnick.com psmall@brownrudnick.com
Party	Jay Halpern 58 Jackson Cove Road Oxford, CT 06478 h: (203) 888-4976 zoarmonster@sbcglobal.net Peter Thomas 72 Towantic Hill Road Oxford, CT 06478 (203) 720-1536	
Intervenor	Town of Middlebury	Attorney Dana A. D'Angelo Law Offices of Dana D'Angelo, LLC 20 Woodside Avenue Middlebury, CT 06762 (203) 598-3336 (203) 598-7283 – fax Dangelo.middlebury@snet.net Stephen L. Savarese, Esq. 103 South Main Street Newtown, CT 06470 203-270-0077 attystephensavarese@gmail.com

Intervenor	The Connecticut Light and Power Company (CL&P)	Stephen Gibelli, Esq. Associate General Counsel The Connecticut Light and Power Company P.O. Box 270 Hartford, CT 06141-0270 (860) 665-5513 (860) 665-5504 –fax gibels@nu.com John R. Morissette Manager-Transmission Siting and Permitting The Connecticut Light and Power Company P.O. Box 270 Hartford, CT 06141-0270 (860) 665-2036 morisjr@nu.com Christopher R. Bernard Manager, Regulatory Policy (Transmission) The Connecticut Light and Power Company P.O. Box 270 Hartford, CT 06141-0270 (860) 665-5967 (860) 665-3314 – fax bernacr@nu.com Stella Pace, Senior Engineer The Connecticut Light and Power Company Transmission and Interconnection Dept. P.O. Box 270 Hartford, CT 06141-0270 (860) 665-3569 pacess@nu.com Jeffery D. Cochran Northeast Utilities Service Company 107 Selden Street Berlin, CT 06037 860-665-3548 cochrjd@nu.com
Party	Town of Oxford	Kevin W. Condon, Esq. Condon & Savitt PC P.O. Box 570 Ansonia, CT 06401 203-734-2511 condonsavitt@comcast.net
Party	Naugatuck Valley Chapter Trout Unlimited	Robert M. Perrella, Vice President TU Naugatuck/Pomperaug Valley Chapter 278 W. Purchase Road Southbury, CT 06488-1004 johnnytroutseed@charter.net

Intervenor	Town of Southbury	Ed Edelson First Selectman Town of Southbury 501 Main Street Southbury, CT 06488 (203) 262-0647 (203) 264-9762 – fax selectman@southbury-ct.gov
Party	The Pomperaug River Watershed Coalition	Len DeJong, Executive Director Pomperaug River Watershed Coalition 39 Sherman Hill Road, C103 Woodbury, CT 06798 203-263-0076 LDeJong@pomperaug.org
Intervenor (approved 06/07/06)	Raymond Pietrorazio 764 Charcoal Avenue Middlebury, CT 06762-1311 (203) 758-2413 (203) 758-9519 – fax ray@ctcombustion.com	
Intervenor (approved 10/10/06)	GE Energy Financial Services, Inc.	Jay F. Malcynsky The Law Offices of Jay F. Malcynsky, P.C. One Liberty Square New Britain, CT 06051 (860) 229-0301 (860) 225-4627 – fax Jmalcynsky@gaffneybennett.com
Intervenor (Approved 11/13/14)	Borough of Naugatuck and Borough of Naugatuck Water Pollution Control Authority	Edward G. Fitzpatrick, Esq. Alicia K. Perillo, Esq. Fitzpatrick, Mariano, Santos, Sousa, PC 203 Church Street Naugatuck, CT 06770 203-729-4555 Fitz@fmslaw.org Alicia@fmslaw.org Ronald Merancy, Chairman Water Pollution Control Authority 229 Church Street Naugatuck, CT 06770 203-720-7000 Rjm62159@aol.com
Intervenor (Approved 1/8/15)	Wayne McCormack 593 Putting Green Lane Oxford, CT 06478 wayne@waynemccormack.com	

Intervenor (Approved 1/8/15)	Naugatuck River Revival Group, Inc.	Kevin R. Zak, President Naugatuck River Revival Group, Inc. 132 Radnor Avenue Naugatuck, CT 06770 203-530-7850 kznrrg@sbcglobal.net
Intervenor (Approved 1/8/15)	Westover Hills Subdivision Homeowners	Chester Cornacchia Westover Hills Subdivision Homeowners 53 Graham Ridge Road Naugatuck, CT 06770 203-206-9927 cc@necsonline.com
Intervenor (Approved 1/8/15)	Westover School	Kate J. Truini Alice Hallaran Westover School 1237 Whittemore Road Middlebury, CT 06762 203-758-2423 ktruini@westoverschool.org ahallaran@westoverschool.org
Intervenor (Approved 1/8/15)	Greenfields, LLC and Marian Larkin	Edward S. Hill, Esq. Cappalli & Hill, LLC 325 Highland Avenue Cheshire, CT 06410 203-272-2607 ehill@cappallihill.com
Intervenor (Approved 1/8/15)	Lake Quassapaug Association, LLC	Ingrid Manning, Vice President Lake Quassapaug Association, LLC P.O. Box 285 Middlebury, CT 06762 203-758-1692 Ingridmanning2@gmail.com
Intervenor (Approved 1/8/15)	Middlebury Land Trust, Inc.	W. Scott Peterson, M.D., President Middlebury Land Trust, Inc. 317 Tranquility Road Middlebury, CT 06762 203-574-2020 wsp@aya.yale.edu
Intervenor (Approved 1/15/15)	Quassy Amusement Park	George Frantzis Quassy Amusement Park P.O. Box 1107 Middlebury, CT 06762 203-758-2913 x108 George@quassy.com

Intervenor (Approved 1/15/15)	Middlebury Bridle Land Association	Nancy Vaughan Middlebury Bridle Land Association 64 Sandy Hill Road Middlebury, CT 06762 203-598-0697 ndzijavaughan@gmail.com
Intervenor (Approved 1/15/15)	Dennis Kocyla 28 Benz Street Ansonia, CT 06401 203-736-7182 Dennis3141@yahoo.com	
Intervenor (Approved 1/15/15)	Naugatuck Valley Audubon Society	Sophie Zyla Jeff Ruhloff Carl Almonte Naugatuck Valley Audubon Society 17 Stoddard Place Beacon Falls, CT 06403 203-888-7945 NVASeditor@mail.com
Intervenor (Approved 1/15/15)	Oxford Flying Club	Burton L. Stevens Oxford Flying Club P.O. Box 371 Woodbury, CT 06798 203-236-5158 bstevens@snet.net

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Witness: Andrew J. Bazinet

Question Naugatuck-1:

In your response to Borough of Naugatuck (hereinafter referred to as "BON") interrogatory question #1, you provide a chart that compares the water discharge profile of the old 512 MW facility and the proposed 785 MW facility. There is a huge disparity between the water discharge under the 512 MW facility versus the 785 MW facility. What specific processes, in layman's terms, have been modified and how do they account for this change?

a. Are the numbers contained in this chart "daily averages" or "maximums?"

b. What modeling studies have been done to determine what the water discharge profile will be under the 785 MW facility?

c. If the answer to (b) is in the affirmative, is this data contained in the exhibits to CPV's Petition to Reopen and Modify dated November 3, 2014?

Response:

The Project has committed to other means of disposing of discharge sources, eliminated discharge sources all together, and is now recycling water which would have otherwise been discharged. These measures are described in the Response to Q-Naugatuck-2, dated February 9, 2015.

a. The numbers in the chart are "daily maximums."

b. CPV has created a water balance, which details the source of all water supply, use and discharge streams. Given that all process water stream discharges have been eliminated, the remaining discharge streams are limited to 6,480 gallons per day associated with floor drains, service uses such as fire water systems and domestic uses such as sinks and toilets. The profile of these streams is substantially similar to those currently processed by the Naugatuck WPCA for other commercial users.

c. The updated data was included in Late-Filed Exhibit 2a, dated January 16, 2015 (Set 1) as Item 4 under the heading "Exhibit 1 to the Petition-Environmental Overview in Support of Petition for Changed Conditions."

Witness: Andrew J. Bazinet

Question Naugatuck-2:

In response BON interrogatory questions #1 and #2, you state that the maximum amount of wastewater discharged by CPV will be 4.5 gallons per minute, the rough equivalent of a garden hose, and 6,480 gallons per day. This volume is based on the facility being fueled by either natural gas (NG) or ultra-low sulfur distillate (ULSD), at full plant load and across all ambient temperatures. So, there will be no difference in the wastewater discharge when the facility is operating on NG v. ULSD?

a. Under the 512 MW facility, why was there a difference in the wastewater discharge profile when it was operating on NG and ULSD? i.e., 84,672 gpd when operating on NG and 77,616 gpd when operating on oil, and under the 785 MW facility, the gpd is the same for either NG or ULSD?

Response:

Correct, there will be no difference in the wastewater discharge for the Facility between gas or ULSD operation.

a. The Project has incorporated several innovative improvements to minimize the water consumption and discharge from the plant. These include:

- Boiler blowdown, which in the previous design was a constant waste stream, is now recycled, purified and re-introduced into the cycle;
- A fin-fan cooler (like a radiator) replaces the previous wet surface air cooler for cooling the plant auxiliary equipment; and
- The evaporative cooler at the gas turbine inlet now uses high purity demineralized water for makeup which eliminates a blowdown stream.

These system improvements, along with the air cooled condenser, eliminate the process waste flow from the plant minimizing water supply and discharge for the Project and result in the discharge flow of 4.5 gpm for both natural gas and ULSD fuel firing. The remaining flow is attributable to non-process related streams, such as service water and drains.

Witness: **Andrew J. Bazinet**

Question Naugatuck-3:

Is it possible that the discharge from the Facility will **ever** exceed 1 million gallons/day?

Response:

No.

Witness: Andrew J. Bazinet

Question Naugatuck-4:

Has a characterization study of the wastewater been completed?

Response:

No. See Response to Q-Naugatuck-1.b, dated February 9, 2015.

Witness: **Andrew J. Bazinet**

Question Naugatuck-5:

On page 26 of the Tetra Tech Report, it says that under ULSD operation, the quantity of water required to be drawn from Heritage Village Water Company will be between 954,720 and 1,025,280 gpd. In response to BON's interrogatory question #1, the chart indicates that the water discharge profile when operating under either NG or ULSD is 6,480 gpd. How does the 954,720 – 1,025,280 gallons of water per day from Heritage get reduced to a nominal 6,480 gpd of effluent?

Response:

All process water will be recycled and reused internally until it is entirely evaporated for operation fueled by either natural gas or ULSD. The additional water required for operation on ULSD is injected along with the ULSD for emissions control in the combustor and is evaporated in the combustion process, thereby resulting in no wastewater discharges that could add to the 6,480 gallons per day resulting from domestic and service water uses.

Please note that the water quantities described in the question relate to daily water usage, not to the quantity of water to be drawn daily from HVWC.

Witness: **Andrew J. Bazinet**

Question Naugatuck-6:

In response to BON interrogatory #3, you describe the discharge, characterized as "wastewater," and how it will be associated with three distinct sources. What processes/ treatments will sources "b" and "c" go through prior to being discharged from the facility?

Response:

The water captured in plant and equipment enclosure floor drains will be treated in an oil/water separator prior to discharge to the Oxford sanitary sewer system.

Witness: Andrew J. Bazinet

Question Naugatuck-7:

What will be the chemical makeup of the effluent?

Response:

The chemical makeup of the effluent will be consistent with domestic sources. Discharges stemming from "b"("Domestic Uses") and "c" ("Services Uses"), as referenced in the Response to Q-Naugatuck-3, dated January 8, 2015, will be treated and consistent with all limits in the Project's DEEP Pre-treatment Discharge Permit. The Project will maintain a detailed monitoring and sampling plan in accordance with DEEP regulations to ensure compliance with all such limits.

Witness: Andrew J. Bazinet

Question Naugatuck-8:

What is going to be found in the water from equipment drains and turbine building floor drains?

Response:

Water from equipment floor drains and building floor drains will contain three (3) types of constituents:

- Minerals present in the potable water supplied by Heritage Village Water to the power plant;
- Suspended solids that may be washed off equipment or floors in the turbine building; and
- Trace amounts of oils that are not removed by the oil/water separator

Witness: **Andrew J. Bazinet**

Question Naugatuck-9:

In response to BON interrogatory #3, you indicate that there will be an addition of oil and suspended solids resulting from floor and equipment wash down. How can the BON be sure that nothing harmful will be contained in this?

Response:

Oil and suspended solids are removed mechanically in the oil/water separator. This equipment is specifically designed to ensure the elements are removed consistently and reliably. Furthermore, CPV will maintain a sampling/monitoring compliance program in accordance with DEEP regulations. Also, Please see the Response to Q-Naugatuck-7, dated February 9, 2015.

Witness: Andrew J. Bazinet

Question Naugatuck-10:

Are there any other dual-fuel facilities like this in the United States? Elsewhere?

a. If yes, have any modeling studies been done to measure the volume, quality and content of the effluent from those facilities?

Response:

Yes. Dual fuel facilities like the Project are very common particularly in the Northeastern United States. The Kleen Energy facility in Middletown is a recent example of a dual-fueled combined cycle unit. GenConn Facilities in Middletown and Milford, and the PSEG facility in New Haven are recent examples of dual-fueled peaking units.

a. Virtually all electric generating facilities that consume water and discharge wastewater produce facility water balance diagrams, like the one presented to the Naugatuck WPCA on August 21, 2014, and updated in Late-Filed Exhibit 2a, dated January 16, 2015. Depending on the incoming source quality and quantity and proposed discharge, these studies can vary in complexity. In the case of the CPV Towantic Facility, this analysis have been performed and the quantity and quality of proposed potable supply and proposed discharge being all but eliminated has been captured in the aforementioned updated water balance diagram.