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February 16, 2015

VIA ELECTRONIC MAIL AND HAND-DELIVERY

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 Late-Filed Exhibits 2c and 2i (Set 2)*

Dear Chairman Stein:

Pursuant to Section 2 of the Connecticut Siting Council's ("Council") January 30, 2015 Memorandum to Parties and Intervenors, enclosed are an original and fifteen (15) copies of CPV Towantic, LLC's ("CPV") Late-Filed Exhibits 2c and 2i.

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

61860902 v1-022345/0005

CERTIFICATE OF SERVICE

This is to certify that on this 16th 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

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

Witness: Dean Gustafson
Curt Jones

2c –Connecticut Siting Council Second Late-Filed Exhibit:

Indicate how many acres of glacial till would be penetrated and displaced by foundation excavations for the power plant project. How would the foundation emplacements and excavations alter the subterranean water flows? How would downstream wetlands and watercourses (Jack's Brook) be affected by these changes? In testimony at the January 29, 2015 hearing, it was indicated that the till is quite impermeable, and that the water moves in distinct pathways through the till. These pathways are akin to subterranean streams. Have these been identified and mapped? Address thermal changes to water exiting the site resulting from holding water in open detention basins as opposed to underground movement through the till. Which is the current situation? Address whether the stormwater management plan on C-310 alters the current discharges east and west on the site. Does water leaving the site still reflect the sub watershed contributions in the pre-construction condition? Address the potential for the dewatering of Wetlands 2 and 3, and or alterations in hydroperiod of Wetlands 2 and 3, by the filling of Wetland 1 and/or the current stormwater management plan shown on C-310.

Response:

Indicate how many acres of glacial till would be penetrated and displaced by foundation excavations for the power plant project.

The Geotechnical Report prepared in 2001 indicates that glacial till generally exists at depths of greater than two feet on the site. There are approximately 12.3 acres of area where the cut would exceed a depth of two feet.

How would the foundation emplacements and excavations alter the subterranean water flows?

The effect of the foundations and excavation on the site will be to lower the groundwater table on the site in the immediate vicinity of the excavation. We would expect that the seasonal high groundwater table be two to five feet below the finished grade of the site depending upon the placement and elevations of drains and structural fill. This roughly corresponds to an elevation range of 825- 828. The closest down gradient wetlands are located near elevation 800, well below the expected groundwater table on the site. Because of the low permeability soils and the difference in elevation, no impacts to the wetlands are anticipated as a result of the proposed foundations.

How would downstream wetlands and watercourses (Jack's Brook) be affected by these changes?

It is not expected that these improvements will affect the direction of the groundwater flow. Additionally, the lowering of the groundwater table on the site will have no effect on down gradient wetlands and watercourses including Jack's Brook.

In testimony at the January 29, 2015 hearing, it was indicated that the till is quite impermeable, and that the water moves in distinct pathways through the till. These pathways are akin to subterranean streams. Have these been identified and mapped?

Glacial till is relatively impermeable. It is a misconception that water moves in distinct pathways akin to subterranean streams. Rather the ground water exists as a relatively homogeneous mass within the pores of the soil and moves slowly through the soil in a generally downhill direction.

Address thermal changes to water exiting the site resulting from holding water in open detention basins as opposed to underground movement through the till.

The original plans called for dry bottom basins which would not have any open standing water. Recent correspondence from CT DEEP on the U.S. Army Corps of Engineers Connecticut General Permit Category 2 Application indicates that constructed wetland basins would be preferable as a means of providing additional mitigation for the project's unavoidable impact to wetlands. This would be accomplished through the creation of wetland habitats within the basin's bottom that would provide additional stormwater quality renovation as well as supporting wildlife habitat in a secondary capacity. Wetland habitats that would be created in the two basins include pool areas that would retain 4 to 5 feet of water along with a fringe of native aquatic and semi-aquatic plants and low marsh and high marsh native wetland plants that are suitable for the basin's various hydrologic zones.

Although stormwater wetlands can raise water temperatures, the thermal impact from the introduction of two stormwater wetland basins will be negligible for a few reasons. The slightly higher temperatures that may exist in the basin bottoms during the summer months are mitigated though the extensive flow paths that the stormwater takes after exiting the basins. These paths include swales, pipes and overland flow.

Additionally, the proposed wet bottom stormwater basins will have 4'-5' deep forebays and micro-pool areas which provide deeper, cooler water to further mitigate any thermal impacts. These have been designed in accordance with the recommendations found in the CT DEEP 2004 Stormwater Quality Manual. The plans and details for the stormwater wetlands are shown on sheets C310, C320 and C321 in Appendix J of the Civil 1 Stormwater Management and Erosion Control Report revised February 13, 2015.

Also, the proposed wetland plantings within the basins will provide some shade to the water retained in these systems, which will help moderate the water temperature. Finally, the principal concern with stormwater thermal impacts is associated with discharges into

streams or waterbodies and more particularly to cold water fishery resources where elevated water temperatures can exceed fish and aquatic invertebrate tolerance limits. The project's two proposed stormwater discharge points from these basins are to forested hillside seep wetland systems that contain seasonal intermittent watercourse features. These receiving headwater wetland systems are not classified as cold water fishery resources and therefore are not considered to be sensitive to possible thermal effects from stormwater discharges. In addition, these receiving wetland areas have the capacity to attenuate any minor thermal impacts associated with the stormwater discharges through contact with the forested (shaded) wetland vegetation and soil.

Which is the current situation? Address whether the stormwater management plan on C-310 alters the current discharges east and west on the site.

The drainage area map depicting pre- and post-development conditions is shown in Appendix A of the attached Stormwater Management and Erosion Control Report as revised February 13, 2015, which is submitted as a bulk exhibit. The black dashed lines indicate the existing drainage areas with one drainage area (EXDA-1) draining to the east and the rest of the areas (EXDA-2 through 6) draining to the west. The post-development drainage areas are depicted with a blue dashed line. For the sake of the storm drainage calculations a distinction is made between areas which receive detention (i.e. PRDA-1D) and those areas which do not receive detention (i.e. PRDA-1ND).

The existing drainage areas sizes and runoff curve numbers are shown in Appendix B, page 5 of the attached Stormwater Management and Erosion Control Report. The proposed drainage areas sizes and runoff curve numbers are shown in Appendix C, page 6.

A summary of the pre- and post-development flows is given on pages 3 and 4 of the Stormwater Management and Erosion Control Report for each of the drainage areas for the 2, 10, 25, 50 and 100-year storms. In general, it is the goal to match the pre- and post-development goals as closely as possible with some reductions in the larger storms. As can be seen on the chart, minor decreases or equal flows are shown for both the east and west sides. The overall result is that the pre- and post-development flows are closely matched.

Does water leaving the site still reflect the sub watershed contributions in the pre-construction condition?

As discussed above, the pre- and post-development flows are closely matched.

Address the potential for the dewatering of wetlands 2 and 3, and or alterations in hydroperiod of Wetlands 2 and 3, by the filling of Wetland 1 and/or the current stormwater management plan shown on C-310.

The map entitled "Wetlands Watershed Delineation (Wetlands 2 and 3)" shows the existing and proposed drainage areas contributing to Wetlands 2 and 3. This map can be found on page 2 of Appendix A in the Stormwater Management and Erosion Control Report last revised February 13, 2015.

The drainage area contributing to Wetland 2 will only have a minor decrease in area from 2.68 acres to 2.37 acres. In addition, the existing and proposed flows to Wetland 2 were

analyzed for the various design storms; refer to drainage summary on page 3 (design point 2A) of the revised Stormwater Management and Erosion Control Report. These calculations reveal only a 4 to 6 percent decrease range for the analyzed design storms. This decrease is considered minor and will not adversely affect the hydroperiod of Wetland 2 or have an adverse effect on the wetland's functions: groundwater recharge/discharge; flood flow alteration; sediment/toxicant/pathogen retention; nutrient removal/retention/transformation; production export; wildlife habitat; or endangered species habitat.

The drainage area contributing to Wetland 3 will decrease in area from 4.27 acres to 2.01 acres. A review of existing and proposed flows to Wetland 3 for the various design storms reveals a 20 to 30 percent decrease range for the analyzed design storms; refer to drainage summary on page 3 (design point 2B) of the revised Stormwater Management and Erosion Control Report. Wetland 3 is located off the subject property at the confluence of the CL&P electrical transmission corridor and Woodruff Hill Road cul-de-sac and as such the hydrology, soils and vegetation have been highly altered in the upper reaches of this wetland system due to previous development activities. In order to mitigate the impact of the reduction in drainage area contributing to Wetland 3, a roadside swale will be constructed along the east side of Woodruff Hill Road over top of an existing curtain drain to add additional watershed area. While there is a decrease in overall surface watershed area and flow, it should be noted that Wetland 3 is recharged by the curtain drain on the east side of Woodruff Hill Road during periods of seasonal high groundwater and during precipitation events so the overall potential effect to the hydrology is less than the calculations reveal. This curtain drain currently discharges to Wetland 3 and in the proposed developed condition and will continue to discharge to Wetland 3; this subsurface flow is not accounted for in the drainage calculations and provides for a longer period of time of water being discharged into Wetland 3. The reduction in contributing drainage area could result in a slight alteration of the hydroperiod for Wetland 3. However, this is not considered significant due to a few factors. First, the potential hydrology effect would only be experienced in the upper reaches of this wetland. As the wetland continues to flow downhill it picks up additional contributing drainage area so the reduction of 2.26-acre contributing area becomes a smaller and smaller percentage of the increasing contributing drainage area. Second, from a wetland function impact perspective, the groundwater discharge/recharge function would be the most sensitive to a possible hydrology alteration. Third, considering the existing disturbance to the hydrology of the upper reaches of Wetland 3 from previous development activities, possible impact to this function would not be considered significant.

Witness: Danielle Powers
Tanya Bodell

2i-Connecticut Siting Council Second Late-Filed Exhibit:

Check the retirement list and ensure its current accuracy in the event that some of the plants are already retired and/or out of service

RESPONSE:

The retirement list provided in Late-Filed Exhibit 2i, filed on January 22, 2015, was based on whether or not a delist bid was filed for a generating unit in the ISO-NE Forward Capacity Auction. However, a unit that is delisted may still continue to operate, which may have caused some confusion.

The following table lists generating units that have been retired in Connecticut since 1999 based on a comparison of the Connecticut Siting Council's 1998 Forecast of Loads and Resources versus its 2013 Forecast of Loads and Resources.

FACILITY	LOCATION	FUEL	WINTER RATING
AES Thames	Montville	Coal	182.65
Devon #7	Milford	Oil/Gas	109.00
Devon #8	Milford	Oil/Gas	109.00
So. Norwalk Electric Works	South Norwalk	Oil	16.67
Occum	Norwich	Hydro	0.80
Groton Landfill	Groton	Methane	0.14
Pfizer	Groton	Oil	25.00
G. Fox	Hartford	Gas	4.10
Groton Sub Base	Groton	Gas/Oil	18.50
Hartford Hospital	Hartford	Gas	5.00
Pratt & Whitney	E. Hartford	Gas	23.80
Lyme Hydro		Hydro	0.02
McCann Manufacturing		Hydro	0.06
Mechanicsville	Thompson	Hydro	0.27
Norwich 2nd St	Norwich	Hydro	0.53
Shelton Landfill	Shelton	Methane	1.74
Town of Manchester	Manchester	Methane	0.13
Anne Scott		Solar	0.01
Highfield Farms		Wind	0.02
Glen Falls	Mousup	Hydro	0.25
John Derizzi		Wind	0.01
		Total:	***497.7 MW***

The following table shows additional announced Connecticut retirements since the Council's 2013 Forecast of Loads and Resources.

Generating Resource Name	Capacity (MW)	State	Year of Retirement
Bridgeport Harbor 2	180.00	CT	2017
John Street #3	2.00	CT	2017
John Street #4	2.00	CT	2017
John Street #5	2.01	CT	2017
Norwalk Harbor 10 (3)	17.13	CT	2017
Norwalk Harbor 1	164.00	CT	2017
Norwalk Harbor 2	172.00	CT	2017
Wallingford Refuse	7.89	CT	2017
TOTAL	**547.03**		

The following table includes additional Connecticut generating capacity "at risk" according to the ISO-NE generation at-risk retirement study in 2012 discussed on pages 33-34 of Exhibit 2 to CPV Towantic's petition (the Concentric Report) and shown in Figure 18 of that report.

FACILITY	LOCATION	FUEL	CAPACITY (MW)
Bridgeport Harbor 3	CT	Coal	401
New Haven Harbor	CT	Oil	483
Middletown 2	CT	Oil	123
Middletown 3	CT	Oil	248
Middletown 4	CT	Oil	415
Montville 5	CT	Oil	85
Montville 6	CT	Oil	418
		Total:	***2,173 MW***