

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS  
ENERGY FACILITIES SITING BOARD

IN RE: INVENERGY THERMAL DEVELOPMENT :  
APPLICATION TO CONSTRUCT AND OPERATE : DOCKET NO. SB 2015-06  
THE CLEAR RIVER ENERGY CENTER :

**OFFICE OF ENERGY RESOURCES'**  
**THIRD SET OF DATA REQUESTS DIRECTED TO INVENERGY**

- 3-1** Pre-filed testimony submitted by Ryan Hardy of PA Consulting Group, Inc. (“PA”) on behalf of Invenergy summarized the results of PA’s analysis of the Clear River Energy Center (“CREC”) on the New England electricity markets. Mr. Hardy’s analysis concluded that the addition of CREC “will lead to an average annual reduction of 1,037,000 short tons of CO<sub>2</sub>, 2,399 short tons of NO<sub>x</sub>, and 2,984 short tons of SO<sub>2</sub> in the New England and New York region over the 2019-2022 timeframe.” For New England alone, the analysis revealed that average annual reduction in CO<sub>2</sub> due to the addition of CREC would be 135,000 short tons. (See p. 16 of 30.) Exhibit RH-2 (Confidential) to Mr. Hardy’s testimony, dated April 22, 2016, provides details of the analytic method. Please address the following with respect to Exhibit RH-2:
- (a) What was the source of the load forecast data for New England and New York in PA’s analysis? Are more recent forecasts publicly available?
  - (b) What was the source and vintage of the natural gas price forecasts for Henry Hub, Algonquin Basis and Algonquin Delivered shown in Table 1 of Exhibit RH-2? Please provide an updated gas price forecast.
  - (c) What was the source and vintage of the projected Regional Greenhouse Gas Initiative (“RGGI”) CO<sub>2</sub> allowance prices shown in Table 3? Please provide an updated CO<sub>2</sub> allowance price forecast, in light of recent RGGI auctions, the 2016 RGGI Program Review, and other regulatory and market developments.
  - (d) Please provide an update to Tables A.4(a) and A.4(b), firm capacity additions and retirements summary, in light of recent market developments, including the results of FCA #11, and new renewable and clean energy resources procured through state initiatives.
- 3-2** For each subpart (a) through (d) in Data Request 3-1 above, describe how applying the information updated since April 22, 2016 to PA’s analysis would change Mr. Hardy’s conclusions regarding the average annual reduction of CO<sub>2</sub> emissions in New England and New York, and New England alone, ascribable to the addition of CREC.
- 3-3** Please provide an updated analysis of the Invenergy’s proposed CREC project, using the most currently available information on New England and New York markets, including the updates identified in Data Request 3-1. Provide the following information derived from PA’s market model in electronic spreadsheet format with all cell formats and cell references intact.
- (a) Provide the annual change in CO<sub>2</sub>, NO<sub>x</sub>, and SO<sub>2</sub> emissions ascribable to the addition of CREC across New England and New York.

- (b) Provide the emissions of CO<sub>2</sub> for each control area or RTO across the study region, other than New England and New York, for each year of the forecast, with and without CREC.
- (c) Provide the fuel use by type (including but not limited to natural gas, coal, distillate fuel oil, kerosene, jet fuel, residual fuel oil), for each year of the forecast, with and without CREC. The data should cover the same years for which Invenenergy provides CO<sub>2</sub> impact results.
- (d) For each technology type listed below, provide the annual MWh of generation with and without CREC, for ISO-NE and NYISO.
  - (1) Combined cycle plants
  - (2) Combustion turbines
  - (3) Oil-fired steam plants
  - (4) Coal-fired plants
  - (5) Nuclear
  - (6) Wind
  - (7) Hydro (excluding pumped storage)
  - (8) Solar
  - (9) Imports
  - (10) Biomass, landfill gas
  - (11) Other
- (e) Provide the total annual generation (MWh) for the Rhode Island zone

OFFICE OF ENERGY RESOURCES  
By its Attorney,



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Dated: April 10, 2017

CERTIFICATE OF SERVICE

I certify that the original and ten copies of this Data Request were sent to the Energy Facility Siting Board, by regular U.S. mail. In addition, PDF copies of the Data Request were served electronically on the entire service list of this Docket. I certify that all of the foregoing was done on April 10, 2017.



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