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May 21, 2009

Mr. S. Derek Phelps  
Executive Director  
Connecticut Siting Council  
10 Franklin Square  
New Britain, CT 06051

RECEIVED  
MAY 21 2009  
CONNECTICUT  
SITING COUNCIL

Re: Docket No. 370 - CT Greater Springfield Reliability Project

Dear Mr. Phelps:

This letter provides the response to requests for the information listed below.

CL&P responses to the remaining 25 interrogatories in OCC-02 are in progress. We apologize for the delay.

Response to OCC-02 Interrogatories dated 04/24/2009  
OCC-028, 034, 035, 046, 049, 050, 053, 056, 059, 060

Very truly yours,

*Robert Carberry /tr*

Robert Carberry  
Project Manager  
NEEWS Siting and Permitting  
NUSCO  
As Agent for CL&P

cc: Service List

The Connecticut Light and Power Company  
Docket No. 370

Data Request OCC-02  
Dated: 04/24/2009  
Q-OCC-028  
Page 1 of 1

Witness: CL&P Panel  
Request from: Office of Consumer Counsel

**Question:**

Please provide CL&P's best estimate of the effect of the CVETRP alone, without any other portions of the NEEWS system, on the difference between Connecticut and Hub or WCMA locational market prices in the ISO energy market.

**Response:**

GSRP and MMP are reliability projects. They were designed to correct transmission facility overloads and unacceptable low-voltage conditions. They were not designed for the purpose of reducing locational market prices in the ISO energy market or to provide other market benefits. CL&P believes that, because GSRP will address system conditions that typically result in differences in LMP's, such as by increasing transfer limits between Massachusetts and Connecticut and increasing the reliability of the greater Springfield transmission system (thereby reducing the need to dispatch local and higher cost generation), the projects may reduce market prices. However, CL&P does not forecast such effects in the regular course of its business of providing regulated transmission services, and has not attempted to do so with respect to GSRP. In contrast to the demonstrable reliability benefits of a transmission project, its ancillary future economic benefits (like those of a generating plant) are necessarily speculative. Any such projection requires multiple assumptions concerning, among other things, future system topology, future market conditions, and future market rules; and these assumptions become more uncertain as a projection reaches further out into the future. Accordingly, CL&P has retained an economic consulting firm to estimate the ancillary economic benefits of GSRP and other NEEWS projects, including their impact on the LFRM. CL&P will provide that report to the Council, the OCC, and the service list when it is finished.

Witness: CL&P Panel  
Request from: Office of Consumer Counsel

**Question:**

With respect to the statement that "The Needs Analysis determined that these resources were not sufficient to reliably serve the Springfield area load; and that the Springfield Area would suffer a "load deficiency" in 2009 and through the end of the study period in 2016. Needs Analysis, at 10, 11." (Application p. F-26)

- a. Please reconcile the 874 MW of Springfield capacity for 2009 listed in Needs Analysis Table 3-1 with the 1,289 MW of existing Springfield capacity listed in Application Table F-1.
- b. Please identify the 31 MW of capacity over 60 years old assumed retired in Needs Analysis Tables 3-1 and 3-2.
  - i. Please identify the units listed in Application Table F-1 that total 31 MW, or reconcile Table F-1 with Needs Analysis Tables 3-1 and 3-2.
- c. Please provide the derivation of the unavailable generation in Needs Analysis Tables 3-1 and 3-2.
- d. Please specify whether the "CT" and "RI" columns refer to the load and capacity in the states, in the load zones of those names, or the RSP areas of those names.

**Response:**

- a. The 874 MW of Springfield capacity listed in Table 3-1 of the Need Analysis does not include approximately 412 MW of Stony Brook generation. The generation capacity for the Springfield area listed in the Needs Analysis, Table 3-1, contains the generation located within this area that is directly connected and serves the load on the 115-kV transmission system west of the Ludlow Substation. The Stony Brook generating station is radially connected to the 345-kV bus at the Ludlow Substation. The operation of the Stony Brook generating units does not reduce the requirement of the system to bring power into the Springfield area to serve customer load.
- b. The 31 MW of generation listed in Table 3-1 of the Needs Analysis is Cobble Mountain generation. Table F-1 of the Application derates Cobble Mountain generation to 17 MW.
- c. ISO-NE developed the unavailable generation levels listed in Tables 3-1 and 3-2. The ISO-NE derivation may be provided in their response to Data Request OCC-02, Q-OCC-062.
- d. For Connecticut, the load includes the entire state. However, the capacity includes only in-state generation and does not include the Lake Road facility. For Rhode Island, National Grid would be the best source for the information requested on specific load-serving substations and generating plant locations.

The Connecticut Light and Power Company  
Docket No. 370

Data Request OCC-02  
Dated: 04/24/2009  
Q-OCC-035  
Page 1 of 2

Witness: CL&P Panel  
Request from: Office of Consumer Counsel

**Question:**

Please provide the Springfield loads from the 2009 ISO-NE load forecast corresponding to the 2009 and 2016 Springfield loads reported in Needs Analysis Tables 3-1 and 3-2.

**Response:**

The attachment on page 2 of 2 contains 90/10 peak-load forecast data for the western Massachusetts substations, including the substations within the Springfield area, based on the 2009 ISO-NE CELT Report dated April 2009.



The Connecticut Light and Power Company  
Docket No. 370

Data Request OCC-02  
Dated: 04/24/2009  
Q-OCC-046  
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Witness: CL&P Panel  
Request from: Office of Consumer Counsel

**Question:**

Please provide ISO-NE's rules and standards for real-time 10-minute spinning reserves, 10-minute non-spinning reserves and 30-minute operating reserves for:

- a. the Springfield area
- b. Western Massachusetts
- c. Connecticut.

**Response:**

ISO-NE Operating Procedure No. 8 titled Operating Reserve and Regulation, dated October 1, 2006 identifies the requirements for operating reserves for the New England control area. An internet link to this document follows this response. The rules and standards for calculating real-time 10-minute spinning reserves, 10-minute non-spinning reserves and 30-minute operating reserves throughout New England, including Springfield, Western Massachusetts and Connecticut, are in this procedure.

[http://www.iso-ne.com/rules\\_proceeds/operating/isone/op8/op8\\_rto\\_final.pdf](http://www.iso-ne.com/rules_proceeds/operating/isone/op8/op8_rto_final.pdf)

The Connecticut Light and Power Company  
Docket No. 370

Data Request OCC-02  
Dated: 04/24/2009  
Q-OCC-049  
Page 1 of 1

Witness: CL&P Panel  
Request from: Office of Consumer Counsel

**Question:**

Please provide the generation and interface tables, comparable to those shown in redacted Attachment A.4 of CSC-018, SP0 1 Bulk for:

- a. Each N-1 dispatch from each of the "all-lines-in" base dispatch runs (D1, D2, D3, the D2 sensitivity with 100 MW on the CSC line, and each of the cases with Meridian and Towantic).
- b. Each N-1-1 dispatch from each of the base dispatch runs.

**Response:**

Attachment A.5 of the study report titled "*Analysis of the Technical Effectiveness of Proposed Generation at Meriden & Oxford, Ct in Resolving Springfield and North-Central Connecticut Area Transmission Reliability Problems*" was included in the CSC-01, Q-CSC-018-SP01 bulk materials, in both CEII form for qualified recipients and in redacted form for others on the Service List, and contains the requested generation and interface tables. The attachment is titled "ATTACHMENT A.5: *POWERFLOW DISPATCH SUMMARY DOCUMENT*" and contains seven power-flow summary documents arranged in the following order.

1. Power-flow summary for Dispatch D1, "all-lines-in" case used for N-1 analysis
2. Power-flow summary for Dispatch D1, "all-lines-in" case used for N-1-1 analysis
3. Power-flow summary for Dispatch D2, "all-lines-in" case used for N-1 analysis
4. Power-flow summary for Dispatch D2, "all-lines-in" case used for N-1-1 analysis
5. Power-flow summary for Dispatch D3, "all-lines-in" case used for N-1 analysis
6. Power-flow summary for Dispatch D3, "all-lines-in" case used for N-1-1 analysis
7. Power-flow summary for Dispatch D2, "all-lines-in" case with flow on CSC set to 100 MW; case used for N-1 analysis

The Connecticut Light and Power Company  
Docket No. 370

Data Request OCC-02  
Dated: 04/24/2009  
Q-OCC-050  
Page 1 of 1

Witness: CL&P Panel  
Request from: Office of Consumer Counsel

**Question:**

Please clarify whether overloads in the power simulations are defined based on long-term-emergency (LTE) ratings or some other standard.

- (a) Please specify how long transmission circuits are assumed able to operate above the LTE or other standard used.

**Response:**

Power flows for contingency analyses (N-1) are based on the applicable emergency ratings in accordance with ISO-NE Planning Procedure No. 3 titled, Reliability Standards for the New England Area Bulk Power Supply System. Under N-1 contingency conditions the applicable emergency rating is a transmission facility's Long Time Emergency (LTE) rating developed in accordance with ISO-NE Planning Procedure No. 7 titled "Procedure for Determining and Implementing Transmission Facility Ratings in New England". During the summer period a transmission facility may be operated in N-1 conditions up to its LTE rating for up to 12 hours. A power flow on a transmission facility which exceeds its LTE rating must be reduced to below that rating within 15 minutes by system operator action.

**The Connecticut Light and Power Company**  
**Docket No. 370**

**Data Request OCC-02**  
**Dated: 04/24/2009**  
**Q-OCC-053**  
**Page 1 of 1**

**Witness:** CL&P Panel  
**Request from:** Office of Consumer Counsel

**Question:**

Please clarify whether the "D1 With CT Import 1700 MW" dispatch case is the dispatch following the N-1 contingency with the system operating in dispatch mode D1.

**Response:**

The "D1 with CT Import 1700 MW" dispatch is the dispatch following the N-1 contingency with the system operating in dispatch mode D1 prior to the N-1-1 contingency.

The Connecticut Light and Power Company  
Docket No. 370

Data Request OCC-02  
Dated: 04/24/2009  
Q-OCC-056  
Page 1 of 1

Witness: CL&P Panel  
Request from: Office of Consumer Counsel

**Question:**

Please provide the PDF attachments described at pp. 16, 17 and 84 of CSC-018, SP01 Bulk, as pdf files.

- a. If available, please provide all of CSC-018, SP01 Bulk, as a searchable pdf.

**Response:**

The PDF attachments described in pp. 16, 17 and 84 of the CSC-01, Q-CSC-01-SP01 Bulk were provided in searchable PDF file format on a compact disk in both CEII form for qualified recipients and in redacted form for others on the Service List. These attachments are titled:

Power flow summary - Meriden Plant  
Power flow summary - Towantic Plant  
Attachment A.5: *Powerflow Dispatch Summary Document*

The Connecticut Light and Power Company  
Docket No. 370

Data Request OCC-02  
Dated: 04/24/2009  
Q-OCC-059  
Page 1 of 1

Witness: CL&P Panel  
Request from: Office of Consumer Counsel

**Question:**

Please explain why Devon 7 and 8 are listed as generating in the Power Flow Summaries.

- a. Are these units currently operating, or expected to return to service?

**Response:**

Devon 7 and 8 have been retired. The units were in the original ISO-NE base cases used for the need analyses. The updated need analyses will remove these units from service, and other Connecticut units will be dispatched to maintain the same Connecticut Import level. This will not have any material impact on the results due to the location of these generating units in the Connecticut transmission system.

The Connecticut Light and Power Company  
Docket No. 370

Data Request OCC-02  
Dated: 04/24/2009  
Q-OCC-060  
Page 1 of 1

Witness: CL&P Panel  
Request from: Office of Consumer Counsel

**Question:**

Please identify the generation listed as GLNBROOK in the Power Flow Summaries.

**Response:**

The Glenbrook STATCOM is listed as GLNBROOK in power-flow summaries. The Glenbrook STATCOM is modeled in the power-flow base cases as a generator that does not produce megawatts but which produces or absorbs MVARs. The power output in megawatts is always listed as zero, and the reactive output of the STATCOM varies between +/- 150 MVARs.