

**CENTRAL MAINE POWER COMPANY**  
**RESPONSE TO OFFICE OF THE PUBLIC ADVOCATE'S DATA REQUEST**  
**NO. 2**  
**DOCKET No. 2008-255**

**October 21, 2008**

**OPA-02-05**

- Q.** On page 27 of 573 of Exhibit I-1, the consequence of the Maine SPSs, in most cases, is described as separating the BHE system off the system interconnection with New Brunswick and to cease power flows from BHE's system and New Brunswick into CMP and the rest of New England.
- a. Please describe the relevant standards, criteria, guidelines, etc. by NERC, NPCC, NE-ISO, NEPOOL, the New Brunswick system operator, and/or others that address system separation, and provide a copy of each.
  - b. If any of these relevant standards, criteria, guidelines, etc. by NERC, NPCC, NE-ISO, NEPOOL, the New Brunswick system operator, and/or others that address system separation have changed in the past five years, please describe the nature of the change and provide a copy of the document, standard, criteria, and/or guideline before the change or changes.
  - c. Please describe the reliability consequences of such separations for CMP, and provide a copy of any studies and/or analyses, and the data used therein, on which knowledge of these consequences is based.
  - d. Please describe the reliability consequences of such separations for BHE, and provide a copy of any studies and/or analyses, and the data used therein, on which knowledge of these consequences is based.
  - e. Please describe the reliability consequences of such separations for New Brunswick, and provide a copy of any studies and/or analyses, and the data used therein, on which knowledge of these consequences is based.
  - f. Please provide a description of such separations that have occurred over the past ten years, including (i) date of occurrence, (ii) the duration of the separation, (iii) list the faulted component, (iv) describe the cause of the fault, (v) describe the SPS or SPSs involved, (vi) describe how many CMP retail customers and how many CMP wholesale customers experienced an electric service interruption due to each separation, and the duration of those interruptions, (vii) describe how many BHE retail customers and how many BHE wholesale customers experienced an electric

service interruption due to each separation, and the duration of those interruptions, (viii) describe how many retail customers in New Brunswick and how many wholesale customers in New Brunswick experienced an electric service interruption due to each separation, and the duration of those interruptions,

- A. a. – b. Please refer to OPA-02-04 for all standards and criteria documents.
- c. Please refer to CES-02-09, included here for reference:  
“The separation of major portions of Maine and eastern Canada from the rest of New England is only a violation of NERC standards if the consequences violate any of the reliability standards of ISO-NE’s Planning Procedure 3 – ‘Reliability Standards for the New England Area Bulk Power Supply System’ and NPCC’s Document A-02 – ‘Basic Criteria for Design and Operation of Interconnected Power Systems.’ The reliability standards include thermal loading, voltage and stability criteria in addition to loss of a major part of the system. In the system planning analysis conducted for MPRP, the separation of eastern Canada, BHE and part of the CMP system from the remainder of the ISO-NE control area did result in thermal loading and voltage violations of the criteria listed in the study, whether or not the Special Protection Systems functioned correctly.”
- More information on the reliability assessment of the Maine SPSs can be found in Volume VIII, Exhibit I-2, Section 8 on page 106 of 373.
- d. Bangor Hydro Electric’s service territory is located between Central Maine Power Company and the Canadian Maritimes. With a loss of Section 388 and SPS action associated with the Maxcy’s-Bucksport SPS, a controlled separation occurs of Bangor Hydro and the Canadian Maritimes from CMP and the Eastern Interconnection. Under these conditions, Bangor Hydro’s system remains connected to the Canadian Maritimes and depends on the Maritimes control area for all bulk power supply services and support. Historically, these services have generally been stable and allowed Bangor Hydro to survive the separation with minimal impact. The reliability consequences of this island condition in the future were not evaluated in the MPRP analysis.
- e. With both lines to Canada open, the Canadian Maritimes are separated from the Eastern Interconnection. This condition occurs less frequently with the addition of the second New Brunswick tie line. The Maritimes control area is designed to withstand and capable of withstanding this

separation. The largest concern for the Maritimes is a condition when they are importing and have a generation deficiency. Upon a system separation under these conditions, underfrequency load shedding could result. The reliability consequences of this island condition were not evaluated in the MPRP analysis.

- f. CMP does not archive SPS operations and system separations, but they have occurred several times over the last several years.

**Response Prepared and Submitted By:**

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