



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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VIA ELECTRONIC MAIL

April 26, 2018

Kathleen M. Shanley
Manager – Transmission Siting
Eversource Energy
P.O. Box 270
Hartford, CT 06141-0270

RE: **LIFE-CYCLE 2017** - Connecticut Siting Council Investigation into Life-Cycle Costs of Electric Transmission Lines.

Dear Ms. Shanley:

The Connecticut Siting Council (Council) requests your responses to the enclosed questions no later than May 17, 2018. To help expedite the Council's review, please file individual responses as soon as they are available.

Please forward the original and 20 copies to this office. In accordance with the State Solid Waste Management Plan, the Council is requesting that all filings be submitted on recyclable paper, primarily regular weight white office paper. Please avoid using heavy stock paper, colored paper, and metal or plastic binders and separators. Fewer copies of bulk material may be provided as appropriate.

Any request for an extension of time to submit responses to interrogatories shall be submitted to the Council in writing pursuant to §16-50j-22a of the Regulations of Connecticut State Agencies.

Sincerely,

Melanie A. Bachman
Executive Director

MB/MP

c: Council Members

LIFE-CYCLE 2017
Eversource Energy Pre-Hearing Interrogatories, Set Two

Cost of Losses and other Calculations

34. Referencing Eversource's May 23, 2017 responses to questions 3 and 5 of the Council interrogatories, why is the load growth rate -0.07 percent for overhead transmission and -0.70 percent for underground transmission? If the load growth rates were intended to be the same, provide the correct load growth rate.
35. Does the Loss Factor of 0.3800 vary (i.e. increase or decrease) over the 40 year life cycle, or is it assumed constant? Explain.
36. Is the Capital Recovery Factor (CRF) of 0.1251 the same for overhead and underground and assumed constant for the 40 years?
37. Reference Eversource's May 23, 2017 responses to questions 3 and 5 of the Council interrogatories and the appendix of the Life-Cycle 2012 Report (2012 LC Report) dated November 15, 2012 on the Council's website under "Publications." Provide the complete Cost of Losses calculations for the four overhead configurations and the four underground configurations identified in the responses to questions 3 and 5, dated May 23, 2017. For example, provide a sample first year loss calculation similar to page APPDX-25 of the 2012 LC Report for each configuration, and provide the "Losses" column data for years 1 through 40 similar to pages APPDX-9 through APPDX-16 of the 2012 LC Report. Please utilize the load growth rate(s) determined in response to question 34.
38. Do the First Capital Costs numbers identified in the response to question 5 dated May 23, 2017 for High-pressure Fluid Filled (HPFF) transmission neglect fluid pumping and cooling equipment for a given line because it is considered line termination equipment at the endpoints of the line (e.g. located at a substation), or are such equipment costs included in the first costs on an average per-mile basis?