

July 2, 2021

Ms. Melanie Bachman
Executive Director
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

Re: Docket No. CSC 461A - Greenwich Substation and Line Project, Development and Management Plan, Vol. 1, Part 1- Cos Cob Substation Modifications

Dear Ms. Bachman:

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

Response to CSC-03 Interrogatories dated 06/09/2021

CSC-001, 002, 003, 005, 006, 007, 008, 009, 011, 013, 014, 015, 018

Very truly yours,

Kathleen Shanley
Manager
Transmission, Siting
As Agent for CL&P
dba Eversource Energy

cc: Service List

**CL&P dba Eversource Energy
Docket CSC 461A - Greenwich Substation and Line
Project, Development and Management Plan, Vol. 1,
Part 1- Cos Cob Substation Modifications**

**Data Request CSC-03
Dated: 06/09/2021**

**Q-CSC-001
Page 1 of 1**

Witness:

Request from: Connecticut Siting Council

Question:

Pursuant to CGS §16-50o, submit any agreements entered into with any party to the certification proceedings held in Docket 461 and 461A, including, but not limited to, the Town and Pet Pantry, or with any third party, in connection with the construction or operation of the GSLP.

Response:

An electronic and one hard copy of the Settlement Agreement between The Connecticut Light and Power Company dba Eversource (“Eversource”) and the Town of Greenwich (“Settlement Agreement with the Town”) and an electronic and 15 hard copies of the Settlement Agreement with Pet Pantry will be forwarded to the Council under separate cover. The Settlement Agreement that Eversource entered into with Pet Pantry was not directly in connection with the construction or operation of the GSLP. Instead, the Settlement Agreement with Pet Pantry concerned: (a) the resolution of the summary eviction litigation between the parties including the date for Pet Pantry to vacate the property at 290 Railroad Avenue; (b) the sale of Eversource's "pole yard" property at 281 Railroad Avenue (“Pole Yard Property”) to Pet Pantry following completion of the GSLP; and (c) Pet Pantry’s support of Eversource’s proposed project in Docket 461A. The sale of the Pole Yard Property to Pet Pantry was approved by the Connecticut Public Utilities Regulatory Authority (in Docket 18-10-20). The selling price for the Pole Yard Property was set based on appraisals of the property’s fair value; the gain on the sale associated with difference between selling price and the property’s net book value will be applied to reduce Eversource’s stranded cost balance.

Eversource did not enter into any other agreements with parties to the Docket 461 and/or Docket 461A proceedings, or with any third parties in connection with the construction or operation of the GSLP.

**CL&P dba Eversource Energy
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**Data Request CSC-03
Dated: 06/09/2021**

**Q-CSC-002
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Witness:

Request from: Connecticut Siting Council

Question:

What methodology does Eversource use to determine an acceptable delta between estimated project costs and actual project costs? What is the acceptable delta? Were the final costs of each of the GSLP components within this acceptable delta? Explain.

Response:

Eversource does not recognize any delta between estimated and actual costs as “acceptable.” Eversource closely monitors costs throughout a project to ensure that all costs are reasonable and works to mitigate cost increases when possible. The actual costs for the GSLP were reasonable and warranted based on the competitive bids received, actual conditions encountered in the field and longer construction hour schedules.

**CL&P dba Eversource Energy
Docket CSC 461A - Greenwich Substation and Line
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Part 1- Cos Cob Substation Modifications**

**Data Request CSC-03
Dated: 06/09/2021**

**Q-CSC-003
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Witness:
Request from: Connecticut Siting Council

Question:

Page 9 of D&M Plan Volume II, Part 2 states, "Once constructed, the pedestrian bridge will be owned and maintained by the Town. Eversource will be solely responsible for its transmission facilities and will be allowed unrestricted access for maintenance and service of the transmission lines in accordance with the agreement developed between the Town and Eversource." Submit the agreement.

Response:

In accordance with Section 2 of the Settlement Agreement with the Town (included in Eversource's response to Q-CSC-001), the Town is now the owner of the pedestrian bridge and responsible for its maintenance; Eversource is solely responsible for maintenance and service of its transmission lines.

Q-CSC-004

**CL&P dba Eversource Energy
Docket CSC 461A - Greenwich Substation and Line Project,
Development and Management Plan, Vol. 1, Part 1- Cos Cob
Substation Modifications**

**Data Request CSC-03
Dated: 06/09/2021**

Question:

Page 11 of D&M Plan Volume II, Part 2 states, "Estimated cost to Eversource of \$1.44 million... Eversource coordinated with the Town to share costs associated with the pedestrian bridge."

a. Provide a detailed table of the shared costs associated with the pedestrian bridge attributable to the Town and Eversource. b. Provide specific reasons for the actual cost of the pedestrian bridge.

Response:

- a. Eversource and the Town of Greenwich shared responsibility for tasks associated with the design and installation of the pedestrian bridge in accordance with Section 2 of the Settlement Agreement with the Town (included in Eversource's response to Q-CSC-001). The Settlement Agreement with the Town outlines the scope of the respective responsibilities of Eversource and the Town of Greenwich for the pedestrian bridge; each party paid for tasks associated with its responsibilities. Eversource does not have any records as to the costs that were incurred by the Town to complete the Town's tasks.
- b. Eversource incurred costs (see response to Q-CSC-022) for its tasks associated with the pedestrian bridge under a lump sum contract to furnish and install the fabricated components of the bridge, a contract for engineering oversight and Eversource administrative support.

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**Data Request CSC-03
Dated: 06/09/2021**

**Q-CSC-005
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Witness:

Request from: Connecticut Siting Council

Question:

On pages 159-160 of the July 25, 2017 evidentiary hearing transcript, Eversource testified that it had never worked out an agreement with any town where the difference in the cost of a project element, such as the pedestrian bridge, was paid for by the town rather than the ratepayers. Explain why Eversource ultimately entered into an agreement with the Town, how the agreement was reached and why Connecticut ratepayers paid for the total cost of the pedestrian bridge.

Response:

The selected route for the transmission lines required that the cables extend across Indian Harbor, and the feasible crossing options were underwater construction options or attaching the cables to the new pedestrian bridge. As set out in Section 2 of the Settlement Agreement with the Town, the parties agreed to share in the responsibilities for the pedestrian bridge as part of the GSLP. The cost and time required for cofferdams or other underwater construction across the bottom of the Indian Harbor tidal pond were subject to various risks including additional time for environmental permitting for the crossing, unexpected subsurface conditions on the pond bed, town-owned sanitation sewer facilities located in Indian Harbor, deeper water levels in some portions of the pond that could have rendered the construction work substantially more challenging and costly than estimated. Attaching the transmission line cables to the bridge avoided these risks and costs of cofferdams or other underwater construction method. Accordingly, the costs associated with the pedestrian bridge incurred by Eversource as part of the GSLP are reasonable project costs that Connecticut ratepayers would properly bear.

Witness:

Request from: Connecticut Siting Council

Question:

Page 69 of the July 25, 2017 evidentiary hearing transcript references a reduction in width of the pedestrian bridge from 12 feet to 8 feet to save costs. Council Finding of Fact #244 states, "The bridge itself would have a lifespan of 50 years. The wood pedestrian decking would be approximately eight feet wide and would have a lifespan of 10 years." Page 26 of D&M Plan Volume II, Part 2 states the pedestrian bridge has a width of 12 feet. a. What were the costs associated with the installation of concrete pedestrian decking as compared to wood pedestrian decking? b. What were the costs associated with expanding the bridge to a width from 8 to 12 feet to accommodate the Town's water and gas utilities? c. How did the Town contribute to the cost of the expanded bridge to accommodate its water and gas utilities? d. Is Eversource responsible for replacement of the pedestrian bridge structure? If so, at what estimated cost?

Response:

Please see responses below:

- a) Eversource and the Town of Greenwich evaluated multiple options for the deck width and material. A 12-foot-wide concrete decking was selected because it was suitable and cost-effective in the long run. Cost estimates were not developed for options not acceptable to both Eversource and the Town. However, an earlier edition of the estimates supplied by the Town of Greenwich's engineers showed an approximately 7% estimated cost increase by switching from the wood decking to the concrete decking alternative.
- b) The cost estimates included within the D&M plan pertain to a 12 foot width concrete decking bridge design. There was no final cost estimate related to the 8 foot width alternative.
- c) The Town's water line was installed on the pedestrian bridge by Blakeslee Arpaia Chapman ("Blakeslee"). Although Blakeslee was also Eversource's bridge contractor for GSLP, no costs for the Town's water line were incurred by Eversource as part of GSLP because the Town's work was completed pursuant to a contract directly between Blakeslee and Aquarion Water Company ("Aquarion"). Eversource was advised by an Aquarion representative that the cost for the Town's work was paid by Aquarion in accordance with its customary practice when federal funding is not available to a municipality to cover such cost, which was the case here. The Town's gas line was not installed on the pedestrian bridge.

d) No. In accordance with the Settlement Agreement with the Town, the Town of Greenwich now owns the bridge and has the sole responsibility for its maintenance, repair, and replacement.

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**Data Request CSC-03
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**Q-CSC-007
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Witness:
Request from: Connecticut Siting Council

Question:
What are Eversource's total estimated costs associated with the entire pedestrian bridge over its useful life?

Response:
Eversource's total estimated costs associated with the pedestrian bridge over its useful life are approximately \$2.9 million dollars, the total costs of the bridge construction. Beyond the costs of construction, there are no ongoing costs for Eversource associated with the pedestrian bridge over its useful life. The routine maintenance on this segment of the transmission line and its components is accounted for in Eversource's maintenance budget and has a comparable level of effort and expense as other existing transmission lines that Eversource routinely maintains.

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**Data Request CSC-03
Dated: 06/09/2021**

**Q-CSC-008
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**Witness:
Request from: Connecticut Siting Council**

Question:
Page 8 of the GSLP Final Report indicates one request was submitted for a work hour modification to synchronize hours for the Indian Harbor Crossing segments. Provide the cost attributable to the one request for a work hour modification.

Response:
No additional costs resulted from this work hour modification. The request to synchronize these hours with the adjacent underground duct bank scope of work allowed for the two scopes of work to be completed concurrently, thereby creating work and schedule efficiencies associated with connecting the pedestrian bridge and its components to the underground transmission duct bank.

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**Data Request CSC-03
Dated: 06/09/2021**

**Q-CSC-009
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Witness:
Request from: Connecticut Siting Council

Question:
At what time did Eversource become aware of the difference in the estimated and actual costs of the pedestrian bridge?

Response:
Eversource became aware of the difference between estimated and projected actual costs of the pedestrian bridge, which is about 1% of the originally estimated GSLP costs, when we completed the evaluation of the competitive construction bids on 10/10/19.

**ATTACHMENT 5 - REVISED
ACTUAL CONSTRUCTION COST OF THE FACILITY**

The actual construction cost of the Project is as follows:

Cost Categories	Total (\$M)
<ul style="list-style-type: none">• Cos Cob and Prospect Substation Work and Distribution Feeder Modifications	This cost is confidential Proprietary Information**
<ul style="list-style-type: none">• Transmission Line Construction	This cost is confidential Proprietary Information **
<ul style="list-style-type: none">• Greenwich Substation with Brick Wall	This cost is confidential Proprietary Information **
<ul style="list-style-type: none">• Pedestrian/Transmission Line Bridge Over Indian Harbor	This cost is confidential Proprietary Information **
TOTAL	\$131.1

** The individual category cost amounts are confidential Proprietary Information. They are being submitted subject to the September 1, 2015 protective order issued in Docket Number 461.

Witness:

Request from: Connecticut Siting Council

Question:

Page 8 of the Council's Opinion in Docket 461 states, in part, "The Council has a responsibility to the Connecticut ratepayers to encourage both the Town and Eversource to develop a mutually suitable solution to meet Greenwich's electric needs... In regards to the transmission line routes presented in the Application,... the cost is prohibitively expensive and relies too much on Connecticut ratepayers." (Emphasis added). Please compare the estimated costs of the GSLP in Docket 461 to the actual costs of the GSLP in the Final Report and explain how the actual costs in the Final Report are not prohibitively expensive nor too reliant on Connecticut ratepayers.

Response:

The estimated total cost of the GSLP as initially proposed to the Council in Docket No. 461 was approximately \$139 Million. The total actual costs as reported in the Final Report for Docket 461A are approximately \$131 Million.¹

The reduced-scope option presented to the Council in Docket 461A was the minimum scope project that could fulfill the identified need for the new bulk substation in central Greenwich and a reliable transmission connection to the new substation to address the substantial needs for improved reliability of electric service in Greenwich. This need for reliability improvements was the result of various unique characteristics associated with the Greenwich electric system, as recognized by the Council's Opinion in Docket No. 461A, which included the following:

- Greenwich is at the farthest southwest extent of Eversource's electric network in Connecticut and electrically isolated from other areas of the state.
- Greenwich had been served by a unique and antiquated electric system that was designed to serve a much lower load level under which most of the Town was served by a single bulk-power substation, Cos Cob Substation.
- Electric service to customers in the downtown Greenwich area had heavily relied on four 27.6 kV distribution feeders from Cos Cob Substation that have had a history of not operating to design standards and under certain combination of contingency events could result in load shedding or loss of power to customers.
- Prospect Substation is at the end of its life-span.

The placement of overhead transmission lines along and within the Connecticut Department of Transportation (CDOT) railroad corridor was eliminated as an option by

CDOT and other options for overhead transmission lines in Greenwich to supply the new substation were not feasible or reasonable.

As explained in Eversource's responses to other Council interrogatories, the actual costs incurred to construct the GSLP were higher than the original estimate due primarily to higher than estimated contractor bid costs in the competitive bids received, actual conditions encountered in the field and longer construction hour schedules.

To achieve the much-needed reliability improvements to the Greenwich electric system, these additional costs (which could not be anticipated based on the information available at the time of the development of the estimated costs) were reasonable and warranted.

Moreover, Connecticut ratepayers would have had to bear the costs resulting from any failures of Greenwich's single bulk-power substation as well as the costs of any piecemeal solutions that might have delayed, but would not have avoided, the need for a second bulk-power substation in Greenwich. Thus, the actual costs were not prohibitively expensive and were not too reliant on Connecticut ratepayers.

¹This is the total cost as set out in the attached redacted revised Attachment 5 to the GSLP Final Report (an unredacted version of Attachment 5 will be submitted separately subject to Protective Order). The revision to Attachment 5 reflects the net effect of a settlement following dispute resolution concerning a contractor's request for a change order.

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**Q-CSC-013
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Witness:

Request from: Connecticut Siting Council

Question:

Identify how and in what dockets, motions and/or decisions the Public Utilities Regulatory Authority approved the GSLP costs.

Response:

The transmission costs associated with the GSLP project are FERC-jurisdictional costs, and therefore the calculation and recovery of these costs are permitted under the FERC approved open access transmission tariff.

While the allocated shares of these FERC-jurisdictional costs, including GSLP, are not directly approved by the Public Utilities Regulatory Authority (PURA), their recovery from Connecticut's retail customers occurs through the PURA-administered Transmission Adjustment Clause (TAC), the mechanism by which Connecticut retail customers pay for transmission-related costs.

Connecticut General Statutes § 16-19b(d) authorizes such FERC-jurisdictional costs to be recovered from retail customers through the TAC charge. Following the enactment of § 16-19b, PURA established the framework for the periodic review and reconciliation of FERC jurisdictional costs collected through the TAC in a December 14, 2005 decision in Docket No. 05-08-03. Section 16-19b(d) states in relevant part that “[t]he Public Utilities Regulatory Authority's authority to review the prudence of costs shall not apply to any matter [in the TAC] over which any agency, department or instrumentality of the federal government has exclusive jurisdiction, or has jurisdiction concurrent with that of the state and has exercised such jurisdiction to the exclusion of regulation of such matter by the state.”

Most recently, PURA's December 2, 2020 Decision in Docket No. 20-01-01 updated the procedural framework for the periodic review and reconciliation of several reconciling retail rates in the Company's annual Rate Adjustment Mechanisms (RAM) proceeding, including the TAC. Under PURA's updated construct, the TAC rate is to be set annually from May – April based upon prior year actual transmission-related costs billed to The Connecticut Light and Power Company dba Eversource Energy (CL&P) These costs include Regional Network Service costs, Local Network Service costs and other FERC-jurisdictional transmission costs. In support of the actual costs billed to CL&P, annually, Eversource provides TAC cost exhibits and underlying invoice detail for PURA to review, responds to discovery requests, and participates in PURA-administered hearings on the TAC.

Additionally, there are certain distribution-related costs associated with these projects. These costs, to the extent known at the time of the Company's distribution rate case Settlement Agreement in its last rate case in PURA Docket No. 17-10-46, were included in the capital plan that CL&P presented in that Docket and are currently being recovered in base distribution rates. Further, any variation in the actual costs for this project and those included in the Settlement Agreement would be recovered in the Company's retail Electric Systems Improvement ("ESI") charge that is reconciled through the RAM proceedings each year and is subject to PURA's prudence review of such distribution-related costs in each RAM proceeding. The current RAM proceeding is PURA Docket No. 21-01-03.

Witness:

Request from: Connecticut Siting Council

Question:

Page 9 of Eversource's Post Hearing Brief indicates the pedestrian bridge would be less secure and less reliable than installing the cable in a trench with coffer dams. Explain in detail how the bridge is less secure and less reliable and the costs associated with more security and more reliability.

Response:

The bridge mounted transmission circuits would be less secure and less reliable when compared to an underground (underwater) installation for the following reasons:

1) Security: The bridge mounted transmission circuits are more susceptible to potential vandalism / terrorism when compared to an underground circuit. The bridge mounted circuits also have less physical protection from damage when compared to an underground circuit due to the lack of earth embedment and concrete encasement of the conduits when they are structure-mounted. To minimize possible damage to the bridge structure-mounted transmission circuits, each transmission circuit was encased in a 18 inch diameter steel pipe with a 3/8 inch wall thickness. The cost of the steel casings were included within the contractors bridge structure pay item so definitive costs for the casings is not known. The estimated probable cost of the two steel casings and associated hangers, wall sleeves etc. for the approximately 185 linear feet of casing installed was approximately \$200,000.

2) Reliability: Conduit bends required to offset the underground circuit to an above ground installation increased cable pulling tensions and sidewall pressures during installation, as compared to an all underground installation. The bridge conduit design is a bit more complex as it incorporates expansion and deflection components of the conduit system, which could require future maintenance. Also, the overall steel pipe protecting the transmission circuits on the bridge electrically does reduce slightly the current carrying capacity of the line due to higher conductor temperature. Nevertheless, the bridge-mounted circuit design kept these forces and conductor operating temperatures within manufacturers' allowable limits.

There are no additional practical mitigation measures that could be incorporated into the bridge-mounted circuit design to avoid or minimize the above-referenced risks to reliability of these circuits. Consequently, no additional costs for such measures were incurred.

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**Data Request CSC-03
Dated: 06/09/2021**

**Q-CSC-015
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Witness:

Request from: Connecticut Siting Council

Question:

Page 24 of Eversource's Post Hearing Brief indicates the Town informed Eversource that it would support the GSLP if Eversource would agree to construct it in strict accordance with the Town's requirements. What were the Town's requirements and how did the actual GSLP construction differ from the Town's requirements, if at all?

Response:

The Settlement Agreement with the Town did not require Eversource to strictly comply with the Town's requirements. Eversource agreed in Section 9 of the Settlement Agreement with the Town to obtain a limited number of local permits, according to a streamlined process.

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**Data Request CSC-03
Dated: 06/09/2021**

**Q-CSC-018
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Witness:
Request from: Connecticut Siting Council

Question:
Explain in detail the need for a 24-hour construction schedule.

Response:
For work both on Sound Shore Drive and Arch Street, 24-hour construction was needed to allow the installation of the underground duct bank to proceed more efficiently by not having to open and close the excavation each day and to limit the number of days that Sound Shore Drive needed to be closed to traffic. Along Arch Street, which is a very high traffic volume area, 24-hour construction also particularly reduced the disruption to retail establishments located there. For the work in the new Greenwich Substation, a 24-hour construction schedule was needed to accommodate the switchgear delivery which was subject to CT Department of Transportation travel restrictions. In addition, since delivery of the switchgear had been delayed, a 24-hour construction schedule was needed to install it so that the schedule for completion of the substation could be maintained. All of these requests were filed with and approved by the Council, prior to their implementation.