Supplement Request Form

Project Title: XTRAN Pilot Project CT	**Project Number:** XTRANCT01
Date Prepared: 01/14/2025	**Company:** CL&P Electric Distribution 11 Choose an item. Choose an item.
Organization: Substation Technical Engineering	**Class(es) of Plant: Telecom**
Project Initiator: [redacted]	**Project Category: Stations - Telecommunications**
Project Manager: [redacted]	**Project Type:** Specific
Project Sponsor: [redacted]	**Project Purpose: Reliability**
Estimated in service date: 04/30/2025	**Capital Investment part of original Operating Plan:** Yes
Current Authorization Amount: $ 446K	**O&M Expenses part of request:** N/A
Supplement Request: $212K	**Other:**
Total Request: $658K	

Supplement Justification

Frontier, Verizon and AT&T are major providers of leased telecommunication services for Eversource in CT. Some of the circuits/services Eversource is leasing depend upon old copper networks that these providers will retire, or have already retired. Keeping these networks will drastically increase the price to Eversource. In addition to the copper retirement, some technologies, such as "T1s" used by Eversource in some locations, are no longer offered by Verizon in CT, thus there is a need to find alternatives to replace these technologies. (Eversource has already experienced a [redacted], driving the emergent need to replace this technology.) This project proposes the use of ethernet connections.

A new ethernet over fiber-based option is being offered by Frontier and Verizon. Using the XTRAN product, a new product available from Belden, Inc., Eversource is developing this new pilot project to test this new ethernet over fiber service. [redacted]. As this is new technology, it required more labor for testing, troubleshooting and implementation. [redacted] resulting in additional troubleshooting hours not captured in the original estimate. As Verizon is [redacted], Eversource has been tasked with engineering a solution to meet the timing of the cancellation of these old circuits.

The full funding request (FFR) of $446K was approved on 3/11/24 to purchase and install equipment, order and install new Verizon circuits, install power equipment as needed in the substations, test and commission equipment in the lab, test and commission equipment in the hub and remote sites and project

management. To date, $608.1K has been spent. In order to complete the project, additional internal labor will be needed to establish and test the connectivity of the remote circuits back to the hub locations.

This supplemental amount should allow for the completion of all remaining tasks as well as address the additional dollars already spent in 2024.

Justification for Additional Resources

Internal Labor – to date the project has incurred Eversource internal labor charges to design the new equipment and circuit needs, design the power support at remote substations, support the installation of new Verizon circuits, install and test equipment in the lab environment, and install and test equipment in the remote and hub locations. The following tasks still remain:

- [redacted]
  - Internal labor to support Verizon providing connectivity from substations to Hub sites ([redacted])
  - [redacted]

Outside Services – All of the outside services work has been completed. Extra costs were incurred for an outside contractor to complete the DC/AC power installations at [redacted] substations.

Materials – All of the materials have been ordered, received and installed. Additional costs were incurred for substation materials to support the DC/AC power work, as well as additional cards and SFPs to support the installation of the materials in the lab, hub sites and the substations. Equipment was also purchased for the [redacted] locations to support the WMA XTRAN Pilot project.

All risk and contingency has been removed as the remaining costs will be for Eversource internal labor and should be minimal to complete the project as noted above.

Supplement Cost Summary

Appendix 5
Subsidiary Board Approval Package Template

Capital Costs	Prior Authorized	Supplemental Request	Total
Direct Capital Costs			
Internal Labor	35	76	$ 111
Outside Services	8	9	$ 17
Materials	310	117	$ 427
Removals			$ -
Risk and Contingency	35	-35	$ -
Other			$ -
Subtotal	$ 388	$ 167	$ 555
Indirect Capital Costs			
Indirect/Overheads (including benefits)	58	45	$ 103
Capitalized interest or AFUDC, if any			$ -
Subtotal	$ 58	$ 45	$ 103
Total Customer Contribution			$ -
Total Capital Project Costs	**$ 446**	**$ 212**	**$ 658**