EVERSOURCE

Supplement Authorization Form

Project Title: [redacted] Contingency Load Relief	**Project Number:** CD01048
Date Prepared: 04/27/2026	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** UG CABLE & EQUIPMNT REPLACEMNT
Initiating Organization: Distribution	**Project Type:** Specific
Project DDE: [redacted]	**Capital Investment part of 5-year plan?** Yes
Project Manager: [redacted]	**Emergency Related Request?** No
Project Sponsor: [redacted]	**Facility Type** (check all that apply)**:** ☐ PTF ☐ non-PTF ☒ Distribution ☐ N/A (General Plant)
Current Authorized Amount: $2,204.9K	**Approved In-Service Date:** 12/31/2019
Supplement Request: $507.2K	**Estimated In-Service Date:** 12/31/2020
Total Capital Request: $2,712.0K	**Authorization Type:** Supplement Request
	Reason: Cost Overage

1. Project Background

[redacted]

2. Supplement Justification Overview

Supplemental funding of $507.2K was requested to complete the project due mainly to added outside services, contractor labor and inflation. The $507.2K is an additional 23% of the previously approved $2,204.9K making the total project cost $2,712.0K.

3. Supplement Justification Detail

Additional contractor costs were incurred due to the complexity of the project – some of this work needed to be completed overnight. Additional contractor costs contributed to the increase in overall cost. This project originally started in 2018 but was not completed until 2023. A rate of 4% inflation per year contributed to the supplemental cost of the project.

4. Supplement Cost Summary (Project Total)

Capital Costs	To Date Spend	Prior Authorized	Supplemental Request	Total Request
Internal Labor and Construction Equipment	424.8	442.5	-51.0	391.5
Outside Services	673.8	313.6	307.5	621.1
Materials	272.3	389.5	-138.5	251.0
Removals	0.0	0.0	110.2	110.2
Risk and Contingency	53.2	0.0	53.2	53.2
Other	36.8	0.0	33.9	33.9
Subtotal	**1,460.9**	**1,145.5**	**315.4**	**1,460.9**

Indirect Capital Costs	To Date Spend	Prior Authorized	Supplemental Request	Total Request
Indirects/Overheads (including benefits)	1,136.6	1,041.7	94.9	1,136.6
Capitalized interest or AFUDC, if any	114.6	17.7	96.9	114.6
Subtotal	**1,251.1**	**1,059.3**	**191.8**	**1,251.1**
Total Capital Costs (Gross)	**2,712.0**	**2,204.9**	**507.2**	**2,712.0**
Less Total Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**
Project Costs (Net of Reimbursement)	**2,712.0**	**2,204.9**	**507.2**	**2,712.0**

New Total Request by Year (if applicable)

Capital Costs	0	2018	2019	2020	2021	2022	2023	TOTAL
Internal Labor & Equipment	0.0	3.2	274.2	19.5	-1.5	113.0	-16.9	391.5
Outside Services	0.0	5.1	435.0	30.9	-2.4	179.3	-26.8	621.1
Materials	0.0	2.0	175.8	12.5	-1.0	72.5	-10.8	251.0
Removals	0.0	0.9	74.1	5.3	-0.4	30.6	-0.2	110.2
Risk and Contingency	0.0	0.0	0.0	0.0	0.0	0.0	53.2	53.2
Other	0.0	0.3	23.8	1.7	-0.1	9.8	-1.5	33.9
SUBTOTAL Direct Cost	**0.0**	**11.5**	**983.0**	**69.9**	**-5.5**	**405.2**	**-3.1**	**1,460.9**
Indirects / Overheads	0.0	18.0	946.7	52.0	5.5	135.3	-20.9	1,136.6
AFUDC	0.0	0.3	67.0	26.0	3.1	3.6	14.5	114.6
SUBTOTAL Indirect Cost	**0.0**	**18.3**	**1,013.7**	**78.0**	**8.6**	**138.9**	**-6.4**	**1,251.1**
TOTAL Capital Request	**0.0**	**29.8**	**1,996.7**	**147.9**	**3.1**	**544.0**	**-9.5**	**2,712.0**
Less Total Customer Contribution	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
TOTAL Project Cost	**0.0**	**29.8**	**1,996.7**	**147.9**	**3.1**	**544.0**	**-9.5**	**2,712.0**

5. Lessons Learned

N/A

6. Full Funding PAF

Operations Project Authorization Form

Date Prepared: 04/18/2019	**Project Title: [redacted] Contingency Load Relief**
Company/ies: Eversource CT	**Project ID Number: CD01048**
Organization: Electric	**Class(es) of Plant: Distribution**
Project Initiator: [redacted]	**Project Category: Peak Load growth**
Project Manager: [redacted]	**Project Type: Specific**
Project Sponsor: [redacted]	**Project Purpose: Contingency Load Relief**
Estimated in service date: 12/31/2019	**If Transmission Project: PTF?**
Eng. /Constr. Resources Budgeted? Yes	**Capital Investment Part of Original Operating Plan? Y**
Authorization Type: Full Funding	**O&M Expenses Part of the Original Operating Plan? Y**
Total Request: $2,333,231	

Financial Requirements:

Project Authorization
ERM: _____

FP&A: _____

Executive Summary

[redacted]

Project CD01048 received Initial Funding authorization of $1,346k total dollars ($100k for engineering) at the 12/7/2017 CT-PAC meeting. The detail design has been completed and we are requesting Full Funding in the amount of $2,333k, an increase of $987k or 73% over the Initial Funding authorization. The additional cost is due to the following.

[redacted] **The additional cost associated with this reconductoring is about $680k.**

The remainder of the added cost is due to underestimated contract labor & equipment charges, which includes a premium to meet the 6/1/2019 in-service date for segments 1 & 3.

Project Costs Summary

Supplement Authorization Form

	Prior Authorized*	Additional Request	2019	2020+	Total **
Capital Additions Direct	$0	$0	$ 1,074,116	$ -	$1,074,116
Less Customer Contribution	$0	$0	$ -	$ -	$0
Removals Net of Salvage	$0	$0	$ 71,423	$ -	$71,423
Total - Direct Spending	$0	$0	$ 1,145,539	$ -	$1,145,539
Capital Additions - Indirect	$0	$0	$ 1,041,658	$ -	$1,041,658
AFUDC	$0	$0	$ 17,653	$ -	$17,653
Total Capital Request	$96,500	$2,108,350	$ 2,204,850	$ -	$2,204,850
O&M	$3,500	$124,881	$ 128,381	$ -	$128,381
Total Request	**$100,000**	**$2,233,231**	**$ 2,333,231**	**$ -**	**$2,333,231**

* Amount currently approval in PowerPlan

** Total authorization needed in PowerPlan based on ACT

Financial Evaluation

Direct Capital Costs	2019	2020	2021	Total
Straight Time Labor	$ 310,090	$ -	$ -	$ 310,090
Overtime Labor	$ 132,387	$ -	$ -	$ 132,387
Outside Services	$ 313,550	$ -	$ -	$ 313,550
Materials	$ 389,512	$ -	$ -	$ 389,512
Other, including contingency amounts	$ -	$ -	$ -	$ -
Total	$ 1,145,539	$ -	$ -	$ 1,145,539

Indirect Capital Costs	2019	2020	2021	Total
Indirects/Overheads (including benefits)	$ 1,041,658	$ -	$ -	$ 1,041,658
Capitalized interest or AFUDC, if any	$ 17,653	$ -	$ -	$ 17,653
Total	$ 1,059,311	$ -	$ -	$ 1,059,311
Total Capital Costs	$ 2,204,850	$ -	$ -	$ 2,204,850
Less Total Customer Contribution	$ -	$ -	$ -	$ -
Total Capital Project Costs	$ 2,204,850	$ -	$ -	$ 2,204,850
Total O&M Project Costs	$ 128,381	$ -	$ -	$ 128,381
Total Project Cost	**$ 2,333,231**	**$ -**	**$ -**	**$ 2,333,231**

Future Financial Impacts:

Provide below the estimated future costs that will result from the project:
Note: Dollar values are in thousands:

Future Costs	Year 20__	Year 20__	Year20__	Year 20__+	Total Future Project Costs
Capital	$ -	$ -	$ -	$ -	$ -
O&M	-	-	-	-	-
Other	-	-	-	-	-
TOTAL	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Describe the estimated future Capital, O&M and/or Other costs noted above:

What functional area(s) will these future costs be funded in?_____
A representative from the respective functional area is required to be included as a project approver.

If this is other than a Reliability Project, please complete the section below;

Provide below the estimated financial benefits that will result from the project:
Note: Dollar values are in thousands:

Future Benefits	Year 20__	Year 20__	Year20__	Year 20__+	Total Future Project Benefits
Capital	$ -	$ -	$ -	$ -	$ -
O&M	-	-	-	-	-
Other	-	-	-	-	-
TOTAL	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Describe the estimated future Capital, O&M and/or Other benefits noted above:

What functional area(s) will these benefits be reflected in?_____
A representative from the respective functional area is required to be included as a project approver.

Asset Retirement Obligation (ARO) and/ or Environmental Cleanup Costs (Environmental Liabilities):

Is there an ARO associated with this project? If yes, please provide details:

Are there other environmental cleanup costs associated with this project? If yes, please provide details:

Technical Justification:

Project Need Statement

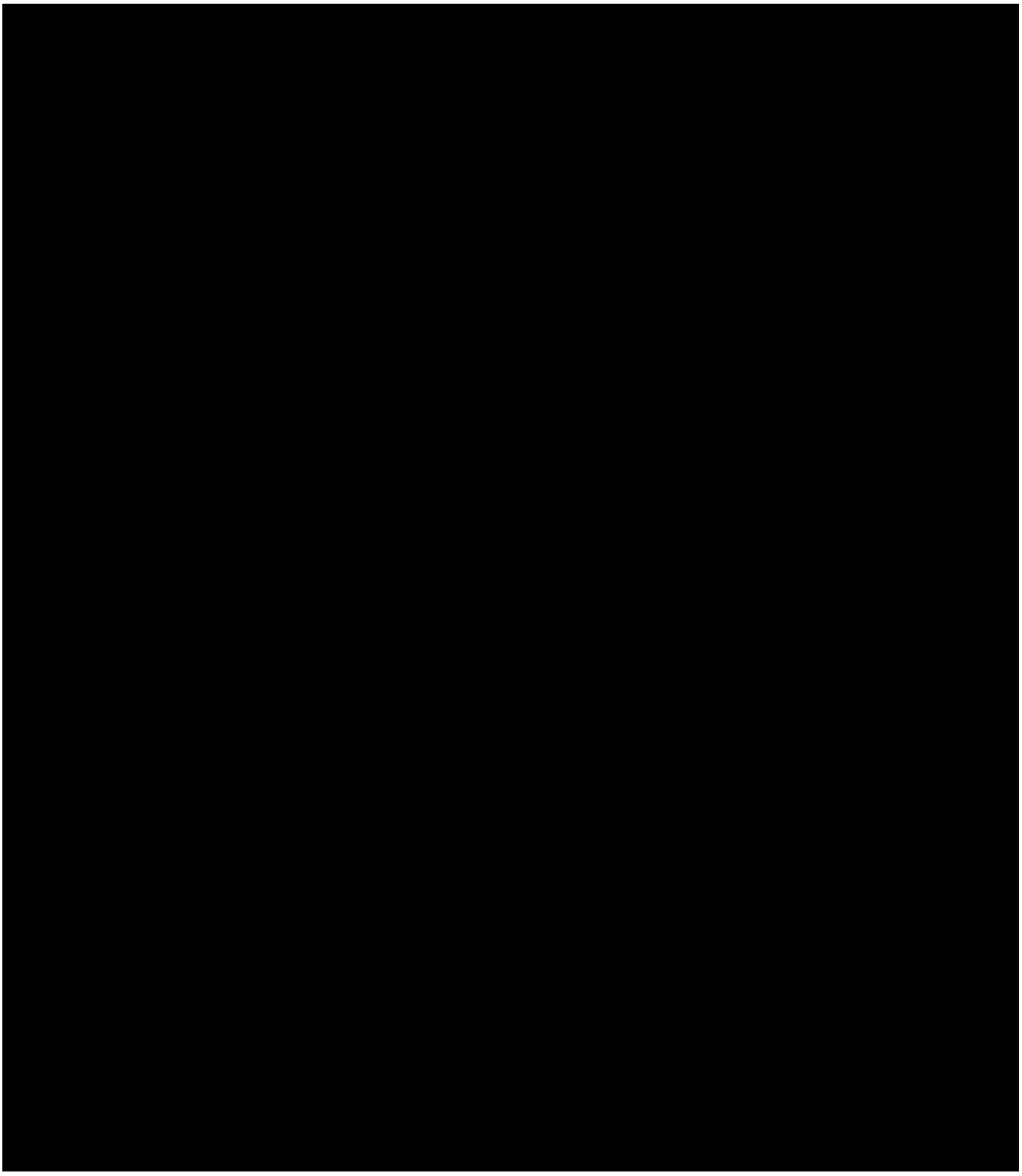


Project Objectives

The main objectives of this project are as follows.

- Reduce loading to bring contingent loading on affected feeders and transformers to below their respective summer normal rating.
- Ensure normal loading on affected feeders and transformers remain below 90% of their respective summer normal rating.
- Reconfigure double circuit pole line where both the normal and alternate source supply the same group of customers, to the extent reasonably possible.
- Reconfigure circuits to eliminate circuit ties with circuits that eminate from the same bus.
- Ensure that any new automatic sectionalizing zone serves less than 500 customers (ref. DSEM 02.301).

Project Scope



[redacted]

Background / Justification

[redacted]

Business Process and / or Technical Improvements:

1. **Reducing the load on the Mianus 16Q-1X and the 16Q-2X will allow the remaining transformer to continue to operate without exceeding its summer normal rating for the contingent loss of one of the two transformers.**
2. **The double circuit pole line reconfiguration for the 16Q2 and the 16Q7 reduces the exposure of loss of both circuits for a single event for feeder which back up each other.**
3. **Installation of reclosers in automatic loop scheme will limit the number of customers affected for events along the feeder backbone of the 11R3 to less than 500 customers (ref. DSEM 02-301).**

Alternatives Considered with Cost Estimates

Project Option Summary

ID	Description	Segments	Preliminary Estimate
O1	Reduce [redacted] load	1,3,4	$737,588
O2	Reduce [redacted] load & Repl [redacted] Cable	1,3,4,6	$847,143
O3	Reduce [redacted] load, [redacted] Cbl & Install Loop	1,2,3,4,6	$971,276
O4	Reduce [redacted] Load [redacted] Cable & Reroute [redacted]	1,2,4,5,6	$1,316,973
O5	Preferred Option: All Segments	1,2,3,4,5,6	$1,346,479

Segments

ID	Title	Preliminary Estimate
1	Load Transf[redacted]	$622,416
2	Create Loop[redacted]	$124,133
3	Load Transfe[redacted]	$29,507
4	Modify Loop: [redacted]	$85,666
5	Reroute [redacted] o Orchard St	$375,203
6	Replace [redacted] egress cable	$109,555

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Prelininary Engineering Approval	Complete
Detail Design	Complete
Full Funding Approval	April 2019
Construction, Segments 1 & 3	June 2019
Construction, Remainder of Project	December 2019

Regulatory Approvals

None

Risks and Risk Mitigation Plans

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2019	Medium	Included contingency costs in the funding request. Perform detailed Field Analysis and walk down in project development to avoid potential issues.
Customer Permission / Siting Council / Municipal approvals	2019	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach
Internal construction resources not available to perform the work.	2019	High	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.

Internal engineering resources not available to perform the work.	2018	Medium	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Storm delays	2019	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2019	Low	Schedule work to minimize system abnormal time. Install temporary bypasses/equipment if system will be abnormal for extended periods

References

DSEM 02.301 – Automatic Sectionalizing Device Guidelines

DSEM02-301.pdf

Attachments (One-Line Diagrams, Images, etc.)

1. **Project Map**

CD01048 Project Map Rev 4-17-2019.

2. **Project Load Summary**

CD01048 Project Load Summary.pdf

3. **Project Cost Back-up Details**



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