EVERSOURCE

Supplement Authorization Form

Project Title: [redacted] **Auto Loop Scheme Install**	**Project Number: CD01103**
Date Prepared: 05/01/2026	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** SMART SWITCHES PROGRAM
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: $306K	**Approved In-Service Date:** 12/31/2020
Supplement Request: $218K	**Estimated In-Service Date:** 12/31/2021
Total Capital Request: $524K	**Authorization Type: Supplement Request**
	Reason: Cost Overage

1. Project Background

This project has been established to provide an [redacted], this is a completely underground zone making it extremely costly to break up into a smaller zone.

The first zone of this circuit is ranked 72. As a result of 3 events in 2018 affecting this large+ customer zone this circuit has been escalated and requested by engineering and operations leadership to be addressed.

The supplemental request for this project is $218K and the full funding capital request for this project was $306K, bringing the total capital request to $524K or a 71% increase from the full funding request.

2. Supplement Justification Overview

This project incurred no scope change from full funding to supplemental. Additional costs were incurred due to the proximity to the railroad.

3. Supplement Justification Detail

Additional contractor labor and material costs associated with the overhead work drove up the overall cost of the project. Due to clearance issues with the adjacent railroad and overall field conditions, additional poles and the orientation of the feeders needed to be reengineered.

4. Supplement Cost Summary (Project Total)

Line-item Category	To Date Spend	Prior Authorized	Variance (Supplemental Request)	New Total Request (Add Prior Authorized and Variance)
Internal Labor and Construction Equipment	16.0	35.1	-19.9	15.2
Outside Services	135.3	23.9	104.4	128.3
Materials	167.3	126.3	32.4	158.7
Removals	0.0	0.0	16.4	16.4
Risk and Contingency	10.3	0.0	10.3	10.3
Other	-1.9	0.7	-2.5	-1.8
SUBTOTAL DIRECTS W/ RISKS	**327.1**	**186.1**	**141.0**	**327.1**
Indirect / Overhead (including benefits)	186.6	116.6	70.1	186.6
AFUDC	10.6	3.5	7.1	10.6
Subtotal – Indirect Costs	**197.3**	**120.1**	**77.2**	**197.3**
TOTAL CAPITAL REQUEST	**524.4**	**306.1**	**218.3**	**524.4**
Reimbursables/Customer Contribution	0.0	0.0	0.0	0.0
PROJECT TOTAL (LESS REIMBURSABLES)	**524.4**	**306.1**	**218.3**	**524.4**

New Total Request by Year (if applicable)

Note: If multi-year project, include actuals for current and years past, and then show forecasted spend for upcoming years.

Line-item Category	Year 2019	Year 2020	Year 2021	Year 2022	Year 2023	Year 2024	Year 2025	Total
Internal Labor and Construction Equipment	0.5	0.0	13.7	1.0	-0.1	0.2	-0.1	15.2
Outside Services	4.3	0.0	115.6	8.2	-0.6	1.8	-0.8	128.3
Materials	5.3	0.0	142.9	10.1	-0.8	2.2	-1.0	158.7
Removals	0.5	0.0	14.3	1.0	-0.1	0.2	0.4	16.4
Risk and Contingency	0.0	0.0	0.0	0.0	0.0	0.0	10.3	10.3
Other	-0.1	0.0	-1.6	-0.1	0.0	0.0	0.0	-1.8
SUBTOTAL DIRECTS W/ RISKS	**10.5**	**0.0**	**284.8**	**20.2**	**-1.6**	**4.4**	**8.8**	**327.1**
Indirect / Overhead (including benefits)	15.7	0.0	327.6	-121.6	-2.7	-32.3	0.0	186.6
AFUDC	0.6	0.0	3.1	6.9	0.0	0.0	0.0	10.6
Subtotal – Indirect Costs	**16.3**	**0.0**	**330.7**	**-114.7**	**-2.7**	**-32.3**	**0.0**	**197.3**
TOTAL CAPITAL REQUEST	**26.8**	**0.0**	**615.5**	**-94.6**	**-4.3**	**-27.9**	**8.8**	**524.4**
Reimbursables/Customer Contribution	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PROJECT TOTAL (LESS REIMBURSABLES)	**26.8**	**0.0**	**615.5**	**-94.6**	**-4.3**	**-27.9**	**8.8**	**524.4**

5. Lessons Learned

Future projects should include extra contingency for contractor costs and extra attention to pole placement when working in close proximity to the railroad.

6. Full Funding PAF

Operations Project Authorization Form

Date Prepared: 5/1/2018	**Project Title: Triangle [redacted] Auto Loop Scheme Install**
Company/ies: CT	**Project ID Number: CD01103**
Organization: Electric	**Class(es) of Plant: Distribution**
Project Initiator: [redacted]	**Project Category: Smart Switch**
Project Manager: [redacted]	**Project Type: Specific**
Project Sponsor: [redacted]	**Project Purpose: Auto Loop Scheme**
Estimated in service date: 12/31/2020	**If Transmission Project: PTF? NA**
Eng. /Constr. Resources Budgeted? No	**Capital Investment Part of Original Operating Plan?**
Authorization Type: Initial Funding	**O&M Expenses Part of the Original Operating Plan?**
Total Request: $318,400	

Executive Summary

[redacted] this is a completely underground zone making it extremely costly to break up into a smaller zone.

The first zone of this circuit is ranked 72. As a result of 3 events in 2018 effecting this large customer zone this circuit has been escalated and requested by engineering and operations leadership to be addressed.

Project Costs Summary

	Prior Authorized	2020__	20__	20__+	Totals
Capital Additions - Direct	$0	$181,779	$0	$0	$181,779
Less Customer Contribution	$0	$0	$0	$0	$0
Removals net of Salvage ____%	$0	$4,306	$0	$0	$4,306
Total - Direct Spending	$0	$186,085	$0	$0	$186,085
Capital Additions - Indirect	$0	$116,573	$0	$0	$116,573
Subtotal Request	$0	$302,658	$0	$0	$302,658
AFUDC	$0	$3,631	$0	$0	$3,631
Total Capital Request	$0	$306,289	$0	$0	$306,289
O&M	$0	$12,111	$0	$0	$12,111
Total Request	$0	$318,400	$0	$0	$318,400

Project Financial Evaluation

Direct Capital Costs	Year 1	Year 2	Year 3+	Total
Straight Time Labor	$27,578	$0	$0	$27,578
Overtime Labor	$7,493	$0	$0	$7,493
Outside Services	$23,946	$0	$0	$23,946
Materials	$126,330	$0	$0	$126,330
Other, including contingency amounts (describe)	$738	$0	$0	$738
Total Direct Costs	**$186,085**	**$0**	**$0**	**$186,085**

Indirect Capital Costs	Year 1	Year 2	Year 3+	Total
Indirects/Overheads (including benefits)	$116,573	$0	$0	$116,573
Capitalized interest or AFUDC, if any	$3,491	$0	$0	$3,491
Total Indirect Costs	**$120,064**	**$0**	**$0**	**$120,064**
Total Capital Costs	**$306,149**	**$0**	**$0**	**$306,149**

Less Total Customer Contribution	**$0**	**$0**	**$0**	**$0**
Total Capital Project Costs	**$306,149**	**$0**	**$0**	**$306,149**
Total O&M Project Costs	**$12,251**	**$0**	**$0**	**$12,251**

Total Project Cost	**$ 318,400**	**$ -**	**$ -**	**$ 318,400**

Technical Justification:

Project Need Statement

This project has been established to address the following:

- [redacted]

Project Objectives

The main objectives of this project are as follows.

- [redacted].
- Ability for all loops to operate during heat waves without going over normal ratings.

Project Scope

In order to meet the above objectives, this project proposes the following:

[redacted]

Background / Justification

[redacted]

Business Process and / or Technical Improvements:

[redacted]

Alternatives Considered with Cost Estimates

Alternative	Cost Breakdown		Total Cost	Comments
Bring in feeders from a different substation to back up [redacted]	From 28M6 5,700'	$1.1M	$2M	While it is more beneficial to have back up from a different substation these costs are not feasible.
	From 28M14,900'	$988K		
2. Create a new feeder in the commercial district of White St.	Fuel Cell	$30M	$31M	While this option today is realistic, it's still a venture not undertaken by Eversource, is extremely costly and would require Siting Council approvals.
	Land purchase	$1M		
3. Do nothing		0	$0	[redacted]

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Prelininary Engineering Approval	December2018
Detail Design	July 2019
Construction	December 2020

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.	2020	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.	2020	Medium	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.

Storm delays	2020	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2020	Low	Schedule work to minimize system abnormal time. Most of this work will ot require system to be abnormal for any extended period of time.

References

2018-08-14 Smart Switch Ranking mas

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

CD01103_project_needs_statement.pdf

Detail Map Loop Scheme Proposal 11

ONE LINE [redacted] LOOP SCHEME.vsd

Project Load Summary.xlsx

Leap_Zone_Projections [redacted].xlsx

Leap_Zone_Projections_[redacted].xlsx

Leap_Zone_Projections_[redacted].xlsx