EVERSOURCE

Supplement Authorization Form

Project Title: [redacted]	**Project Number:** CD00801
Date Prepared: 05/01/2026	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** ISLANDED SUBSTATION 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: $8,207.0K	**Approved In-Service Date:** 12/31/2020
Supplement Request: $1,401.7K	**Estimated In-Service Date:** 12/31/2020
Total Capital Request: $9,608.7K	**Authorization Type:** Supplement Request
	Reason: Cost Overage

1. Project Background

This project was established to address the [redacted]

2. Supplement Justification Overview

Supplemental funding of $1,401.7K was requested to complete the project due mainly to added removals and inflation. The $1,401.7K is an additional 17% of the previously approved $8,207.0K making the total project cost $9,608.7K.

3. Supplement Justification Detail

The project was implemented over an extended period from 2017 through 2023, resulting in cost escalation driven in part by an assumed annual inflation rate of approximately 4%. Additional labor costs were also incurred due to the need for night work, as well as added work required to perform equipment removals and system cutovers necessary to complete the project.

4. Supplement Cost Summary (Project Total)

Capital Costs	To Date Spend	Prior Authorized	Supplemental Request	Total Request
Internal Labor and Construction Equipment	227.2	194.1	-3.1	191.0
Outside Services	4,574.6	3,907.3	-61.7	3,845.5
Materials	1,092.9	933.5	-14.7	918.7
Removals	0.0	0.0	939.8	939.8
Risk and Contingency	188.4	160.9	27.5	188.4
Other	2.3	2.0	0.0	2.0
Subtotal	**6,085.4**	**5,197.7**	**887.7**	**6,085.4**

Indirect Capital Costs	To Date Spend	Prior Authorized	Supplemental Request	Total Request
Indirects/Overheads (including benefits)	3,301.9	2,820.2	481.7	3,301.9
Capitalized interest or AFUDC, if any	221.4	189.1	32.3	221.4
Subtotal	**3,523.3**	**3,009.3**	**514.0**	**3,523.3**
Total Capital Costs (Gross)	**9,608.7**	**8,207.0**	**1,401.7**	**9,608.7**
Less Total Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**
Project Costs (Net of Reimbursement)	**9,608.7**	**8,207.0**	**1,401.7**	**9,608.7**

New Total Request by Year (if applicable)

Capital Costs	2017	2018	2019	2020	2021	2022	2023	TOTAL
Internal Labor & Equipment	3.4	7.0	80.0	58.0	23.4	20.4	-1.3	191.0
Outside Services	68.7	141.9	1,611.2	1,168.5	471.7	410.3	-26.7	3,845.5
Materials	16.4	33.9	384.9	279.2	112.7	98.0	-6.4	918.7
Removals	16.2	33.4	379.3	275.1	111.1	96.6	28.1	939.8
Risk and Contingency	0.0	0.0	0.0	0.0	0.0	0.0	188.4	188.4
Other	0.0	0.1	0.8	0.6	0.2	0.2	0.0	2.0
SUBTOTAL Direct Cost	**104.8**	**216.3**	**2,456.3**	**1,781.4**	**719.1**	**625.5**	**182.1**	**6,085.4**
Indirects / Overheads	26.2	117.9	1,299.3	1,050.3	474.5	458.7	-125.0	3,301.9
AFUDC	2.6	5.4	96.8	61.8	53.9	0.8	0.0	221.4
SUBTOTAL Indirect Cost	**28.9**	**123.3**	**1,396.1**	**1,112.1**	**528.4**	**459.5**	**-125.0**	**3,523.3**
TOTAL Capital Request	**133.7**	**339.6**	**3,852.3**	**2,893.5**	**1,247.6**	**1,085.0**	**57.1**	**9,608.7**
Less Total Customer Contribution	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
TOTAL Project Cost	**133.7**	**339.6**	**3,852.3**	**2,893.5**	**1,247.6**	**1,085.0**	**57.1**	**9,608.7**

5. Lessons Learned

N/A

6. Full Funding PAF

Operations Project Authorization Form

Date Prepared: November 30, 2018	**Project Title:** [redacted]
Company/ies: Eversource CT	**Project ID Number: CD00801**
Organization: Distribution	**Class(es) of Plant: Overhead and Underground**
Project Initiator: [redacted]	**Project Category: Islanded Substation**
Project Manager: [redacted]	**Project Type: Specific**
Project Sponsor: [redacted]	**Project Purpose: Eliminate Stranded Load**
Estimated in service date: 12/31/2020	**If Transmission Project: PTF? N/A**
Eng. /Constr. Resources Budgeted? Y	**Capital Investment Part of Original Operating Plan? Y**
Authorization Type: Full Funding	**O&M Expenses Part of the Original Operating Plan? Y**
Total Request: $8,206,576	

Financial Requirements:

Project Authorization

ERM: _____

FP&A: _____

Executive Summary

This project was established to address the [redacted]

Project CD00801 received Partial Funding authorization of $7,765k at the 8/9/2018 CT_PAC meeting for construction of segment 09. The detail design has now been completed for the entire project and we are requesting Full Funding authorization of $8,207k, an increase of $442k or 5.7% of the Partial ACT Authorization. There is no change in scope.

Project Costs Summary

	Prior Authorized*	Additional Request	2019	2020+	Total **
Capital Additions Direct	$0	$0	$ 2,203,800	$ 2,206,048	$4,409,848
Less Customer Contribution	$0	$0	$ -	$ -	$0
Removals Net of Salvage	$0	$0	$ 102,362	$ 643,200	$745,563
Total - Direct Spending	$0	$0	$ 2,306,163	$ 2,849,248	$5,155,411
Capital Additions - Indirect	$0	$0	$ 1,193,473	$ 1,464,694	$2,658,167
AFUDC	$0	$0	$ 35,292	$ 26,423	$61,715
Total Capital Request	$726,880	$7,148,412	$ 3,534,928	$ 4,340,365	$7,875,292
O&M	$43,120	$288,164	$ 175,315	$ 155,970	$331,284
Total Request	**$770,000**	**$7,436,576**	**$ 3,710,242**	**$ 4,496,334**	**$8,206,576**

* Amount currently approval in PowerPlan

** Total authorization needed in PowerPlan based on ACT

The Prior Authorized amount listed above reflects 10% of the original estimated project cost, for engineering authorization, and not the Partial ACT authorization received on 8/9/2018.

Financial Evaluation

Direct Capital Costs	2019	2020	2021	Total
Straight Time Labor	$ 71,653	$ 122,960	$ -	$ 194,614
Overtime Labor	$ -	$ -	$ -	
Outside Services	$ 1,633,503	$ 2,314,006	$ -	$ 3,947,509
Materials	$ 601,006	$ 412,282	$ -	$ 1,013,288
Other, including contingency amounts	$ -	$ -	$ -	$ -
Total	$ 2,306,163	$ 2,849,248	$ -	$ 5,155,411

Indirect Capital Costs	2018	2018	2020	Total
Indirects/Overheads (including benefits)	$ 1,193,473	$ 1,464,694	$ -	$ 2,658,167
Capitalized interest or AFUDC, if any	$ 35,292	$ 26,423	$ -	$ 61,715
Total	$ 1,228,765	$ 1,491,117	$ -	$ 2,719,882

Total Capital Costs	$ 3,534,928	$ 4,340,365	$ -	$ 7,875,292
Less Total Customer Contribution	$ -	$ -	$ -	$ -
Total Capital Project Costs	$ 3,534,928	$ 4,340,365	$ -	$ 7,875,292
Total O&M Project Costs	$ 175,315	$ 155,970	$ -	$ 331,284
Total Project Cost	**$ 3,710,242**	**$ 4,496,334**	**$ -**	**$ 8,206,576**

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

This project has been established to [redacted]

Project Objectives

[redacted]

Project Scope

This project proposes to [redacted]

Background / Justification

The following outages were experienced by the customers fed from [redacted] due to loss of source (outage data from 1/1/2007 to 12/31/2016):

Date	Customers Affected	Duration	Customer Minutes	Cause
04/25/2016	1160	577	668,735	[redacted]
10/19/2012	1130	27	30,510	
08/06/2012	1130	530	471,732	
08/05/2012	1132	116	159,305	
11/30/2011	1137	145	164,865	
05/31/2008	1122	91	102,102	

Business Process and / or Technical Improvements:

The proposed project will provide for the following improvements:

[redacted]

Alternatives Considered with Cost Estimates

Alternative	Cost Breakdown	Total Cost	Comments
[redacted]	$4.3M	$7.8M	[redacted]
	$1.2M		
	$2.3M		
	$2.9M	$4.4M	
	$1.5M		
	$2.5M	$8.0M	
	$1.2M		
	$4.3M		
	$3.5M	$9.0M	
	$1.2M		
	$4.3M		
	$3.5M	$10.M	
	$2.5M		
	$4.3M		
	$12.7M	$18M	
	$4.3M		
	$1.2M		
	$0.	$0.	

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Initial Funding Authorization	Completed
Detail Design, Segment 09	Completed
Partial Funding Authorization, Segment 09	Completed
Detail Design, Remainder of Project	Completed
Full Funding Authorization	December 2018
Construction Completion – Segments 06, 07 & 09	December 2019
Construction Completion – Segments 02, 03 & 04	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.	2019-2020	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.	2019-2020	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Internal engineering resources not	2018	N/A (Completed)	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.

available to perform the work.			
Materials Shortage or long lead times	2019-2020	Low	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2019-2020	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2019-2020	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

DSEM 05.301 - Contingency Planning

DSEM05-301.pdf

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

CD00801 Project Map Revised 07-11-

CD00801 Load Projections Summar

Cost Estimate Backup Details



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eeds_statement_ACT

Project Checklist – Transmission and Substation

INSTRUCTIONS:
It is the responsibility of the initiator to contact the area disciplines to determine if the project considerations contained in this list are applicable to their project. They should fill out the checklist and determine a transition plan for the purpose of project execution.

Checklist for Studies and Processes of a Transmission & Substation Capital Project					
Project Name :				**PAF No:**	
Facility Type: ☐ BPS	☐ BES	☐ PTF	☐ non-PTF	☐ CIP	☐ Distribution
PLANNING					
Is a NX-9 required?				Choose an item	
Is an ISO-NE PAC presentation required?				Choose an item	
Is a PPA required?				Choose an item	
Is a TCA Application Required?				Choose an item	
PLANNING/PROTECTION & CONTROLS					
Are RAS/SPS/UVLs affected?				Choose an item	
OPERATIONS					
Outage Required?	☐ Primary Equipment (Power Transfer)	☐ Secondary Equipment (P&C only)	☐ Outage Not Required		
Do SCLL Conditions Exist?				Choose an item	
Has an outage schedule been approved?				Choose an item	
Are Operations & Maintenance procedures/training required?				Choose an item	
STANDARDS					
Does the project include standard equipment and designs?				Choose an item	
SUBSTATION ENGINEERING					
Does this impact Revenue Metering				Choose an item	
Is preliminary short circuit/ breaker duty analysis required?				Choose an item	
Are there any changes to the baseline audible noise?				Choose an item	
Is there an impact to the existing ground grid?				Choose an item	
Is a Transient Over Voltage (TOV) analysis required?				Choose an item	
P&C ENGINEERING					
OP-22 - Are PMUs and DDR required?				Choose an item	
If BPS, is an NPCC Directory #4 presentation required?				Choose an item	

Checklist for Studies and Processes of a Transmission & Substation Capital Project	
Project Name :	**PAF No:**
TRANSMISSION LINE ENGINEERING	
Are there any changes that affect the baseline EMF?	Choose an item
Are there any changes that affect the baseline EMI?	Choose an item
Is there an impact to the existing ground grid?	Choose an item
SITING	
Is a Siting filing required?	Choose an item
PERMITTING	
Is there any permitting required?	Choose an item
Siting & Construction Services (Outreach)	
What is the level of outreach expected?	Choose an item
INITIATOR	
Has a field constructability review been completed?	Choose an item



