EVERSOURCE
Project Authorization Form

Operations Project Authorization Form

Approved at February 06, 2019 EPAC
Link to Meeting Minutes

Date Prepared: January 11, 2019	**Project Title:** [redacted]
Company/ies: Eversource CT	**Project ID Number: CS00336**
Organization: Asset Management	**Class(es) of Plant: Distribution Substation**
Project Initiator: [redacted]	**Project Category: Stations - Transformers**
Project Manager: [redacted]	**Project Type: Specific**
Project Sponsor: [redacted]	**Project Purpose: Replace failed equipment**
Estimated in service date: Complete – ISD 11/18	**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? N**
Total Request: $132K	

Financial Requirements:

Project Authorization

ERM: _____

FP&A: _____

Executive Summary

This PAF is seeking full funding approval of $132K for the [redacted] refurbishment project. [redacted] is typically handled by an annual with direct spending less than $100K. However, the additional need to [redacted] resulted in additional costs for parts and labor. Also, since the [redacted] The additional scope associated with the [redacted] caused the total "Direct" spending to exceed $100K with a total expenditure of $132K. The project was completed in November 2018.

Project Costs Summary
Note: Dollar values are in thousands

	Prior Authorized	2018	2019	Totals
Capital Additions - Direct	$100	$129.5	$0	$129.5
Less Customer Contribution	$0	$0	$0	$0
Removals net of Salvage 25%	$0	$0.0	$0	$0
Total - Direct Spending	$100	$129.5	$0	$129.5
Capital Additions - Indirect	$1.9	$2.5	$0	$2.5
Subtotal Request	$101.9	$132	$0	$132
AFUDC	$0	$0	$0	$0
Total Capital Request	$101.9	$132	$0	$132
O&M	$0	$0	$0	$0
Total Request	**$101.9**	**$132**	**$0**	**$132**

The "Prior Authorized" column represents cost of the [redacted] scope. The "2018" column represents the total cost including the additional cost due to the barrier board replacement, causing the annual funding limit of $100K in direct costs to be exceeded, as shown in the column "Totals".

Financial Evaluation
Note: Dollar values are in thousands

Direct Capital Costs	2018	2019	Total
Straight Time Labor	$1.6	$0	$1.6
Overtime Labor	$1	$0	$1
Outside Services	$113.9	$0	$113.9
Materials	$13	$0	$13
Other, including contingency amounts (describe)	$0	$0	$0
Total	**$129.5**	**$0**	**$129.5**

Indirect Capital Costs	2018	2019	Total
Indirects/Overheads (including benefits)	$2.5	$0	$2.5
Capitalized interest or AFUDC, if any	$0	$0	$0
Total	**$2.5**	**$0**	**$2.5**

Total Capital Costs	**$132**	**$0**	**$132**
Less Total Customer Contribution	$0	$0	$0
Total Capital Project Costs	**$132**	**$0**	**$132**
Total O&M Project Costs	$0	$0	$0

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? N/A
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? N/A
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? No If yes, please provide details:

Are there other environmental cleanup costs associated with this project? No If yes, please provide details:

Technical Justification:

Project Need Statement

The 2018 scheduled major maintenance and inspection of the [redacted]

Project Objectives

The project objective is to [redacted]

Project Scope

To return the [redacted].

Background / Justification

The [redacted]. The transformer was manufactured by Pennsylvania and was placed into service in 1970. [redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Business Process and / or Technical Improvements:

[redacted]

Alternatives Considered with Cost Estimates

There were no alternatives considered for the emergent need to replace [redacted]

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Project was completed	November 2018 (Actual ISD)

Regulatory Approvals

N/A

Risks and Risk Mitigation Plans

N/A – The project has been completed.

References

N/A

Reconciliation of Cost Increase

The annual work order DSQ82014 estimate was $78.3K (direct costs) to replace the worn LTC contacts. The final project cost came to $132.0K with the additional scope identified above and last recorded expenditure in 11/2018.

	Original estimate	Actuals	Delta
Materials	$10.5	$13.0	$2.5
Labor/Services	$67.8	$116.5	$48.7
Indirects	$1.5	$2.5	$1.0
Totals	**$79.8K**	**$132K**	**$52.2K**

Project Checklist – Transmission and Substation

Checklist for Studies and Processes of a Transmission & Substation Capital Project						
Project Name: [redacted]						**PAF No: CS00336**
Facility Type: ☐ BPS	☐ BES	☐ PTF	☐ non-PTF	☐ CIP	☒ Distribution	
PLANNING						
Is a NX-9 required?					No	
Is an ISO-NE PAC presentation required?					No	
Is a PPA required?					No	
Is a TCA Application Required?					No	
PLANNING/PROTECTION & CONTROLS						
Are RAS/SPS/UVLs affected?					No	
OPERATIONS						
Outage Required?	☒ Primary Equipment (Power Transfer)		☐ Secondary Equipment (P&C only)		☐ Outage Not Required	
Do SCLL Conditions Exist?					No	
Has an outage schedule been approved?					Yes	
Are Operations & Maintenance procedures/training required?					No	
STANDARDS						
Does the project include standard equipment and designs?					Yes	
SUBSTATION ENGINEERING						
Does this impact Revenue Metering					No	
Is preliminary short circuit/ breaker duty analysis required?					No	
Are there any changes to the baseline audible noise?					No	
Is there an impact to the existing ground grid?					No	
Is a Transient Over Voltage (TOV) analysis required?					No	
P&C ENGINEERING						
OP-22 - Are PMUs and DDR required?					No	
If BPS, is an NPCC Directory #4 presentation required?					No	

Checklist for Studies and Processes of a Transmission & Substation Capital Project	
Project [redacted]	**PAF No: CS00336**
TRANSMISSION LINE ENGINEERING	
Are there any changes that affect the baseline EMF?	No
Are there any changes that affect the baseline EMI?	No
SITING	
Is a Siting filing required?	No
PERMITTING	
Is there any permitting required?	No
SITING & CONSTRUCTION SERVICES (OUTREACH)	
What is the level of outreach expected?	None
INITIATOR	
Has a field constructability review been completed?	Yes
INVESTMENT RECOVERY	
Does the project require development of an Investment Recovery plan?	No
COST ESTIMATING	
How was the cost estimate prepared?	Other (specify below)
Who prepared the estimate?	Actual Costs
Was the estimate reviewed by Eversource Estimating?	No