Operations Project Authorization Form

Date Prepared: 08/24/2018	**Project Title:** [redacted]
Company/ies: Eversource CT	**Project ID Number: CS00306**
Organization: Asset Management	**Class(es) of Plant: Distribution Substation**
Project Initiator: [redacted]	**Project Category: General Modernization**
Project Manager: [redacted]	**Project Type: Specific**
Project Sponsor: [redacted]	**Project Purpose: Replace failed equipment**
Estimated in service date: completed	**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: $208,107	

Financial Requirements:

Project Authorization

ERM: _____

FP&A: _____

Executive Summary

This project is seeking full funding of $208,107 to cover the capital [redacted]. Annual project DSQ72021 was created to address the emergent [redacted]. The annual was created to assume charges for the [redacted]. Last recorded spend was in 10/2017. The procurement of LTC contact kits for other substations were ordered under this annual.

Project Costs Summary

Note: Dollar values are actuals:

	Prior Authorized	2017	Totals
Capital Additions - Direct	$70,500	$141,217	$141,217
Less Customer Contribution	$0	$	$
Removals net of Salvage ____%	$13,100	$35,304	$35,304
Total - Direct Spending	$83,600	$176,521	$176,521
Capital Additions - Indirect	$	$31,585	$31,585
Subtotal Request	$83,600	$208,107	$208,107
AFUDC	$	$	$
Total Capital Request	$83,600	$208,107	$208,107
O&M	$	$	$
Total Request	$83,600	$208,107	$208,107

Financial Evaluation

Note: Dollar values are actuals:

Direct Capital Costs	2017	Total
Straight Time Labor	$9,273	$9,273
Overtime Labor	$5,041	$5,041
Outside Services	$97,359	$97,359
Materials	$64,670	$64,670
Other, including contingency amounts (describe)	$180	$180
Total Direct Costs	$176,522	$176,522

Indirect Capital Costs	2017	Total
Indirects/Overheads (including benefits)	$31,585	$31,585
Capitalized interest or AFUDC, if any	$0	$0
Total Indirect Costs	$31,585	$31,585

Total Capital Costs	$208,107	$208,107
Less Total Customer Contribution	$0	$0
Total Capital Project Costs	$208,107	$208,107
Total O&M Project Costs	$0	$0

Note: Explain unique payment provisions, if applicable

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: **N/A**

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: **N/A**

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: **ARO's do not apply to this project**

Are there other environmental cleanup costs associated with this project? If yes, please provide details: **None expected**

Technical Justification:

Project Need Statement

[redacted]

Project Objectives

[redacted]

Project Scope

[redacted]

Background / Justification

[redacted].

Business Process and / or Technical Improvements:

This project consisted of replacement of damaged equipment.

Alternatives Considered with Cost Estimates

There were no alternatives considered prior to the fault as this was an emergent replacement project to restore normal service.

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Project was completed	2017

Regulatory Approvals

N/A

Risks and Risk Mitigation Plans

Project has been completed

References
N/A

Reconciliation of Cost Increase
Annual work order DSQ72021 estimate was estimated at $83,600
The final project cost came to $208,107 with the last recorded spend in 10/2017

		Original estimate		Actuals		Delta
Materials		$17500		$64,670		$47170
Labor		$70500		$111672		$41172
Removals		$13,100		$35,304		$22,204

Material costs increased by $47,170
Labor costs increased by $41,172
Removal costs increased by $22,204

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

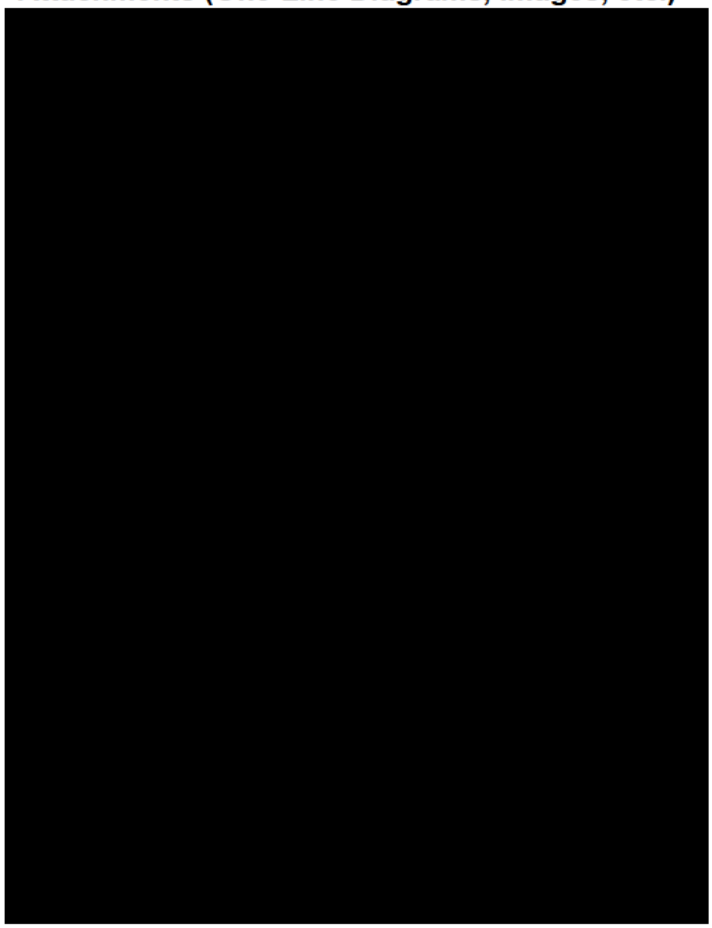
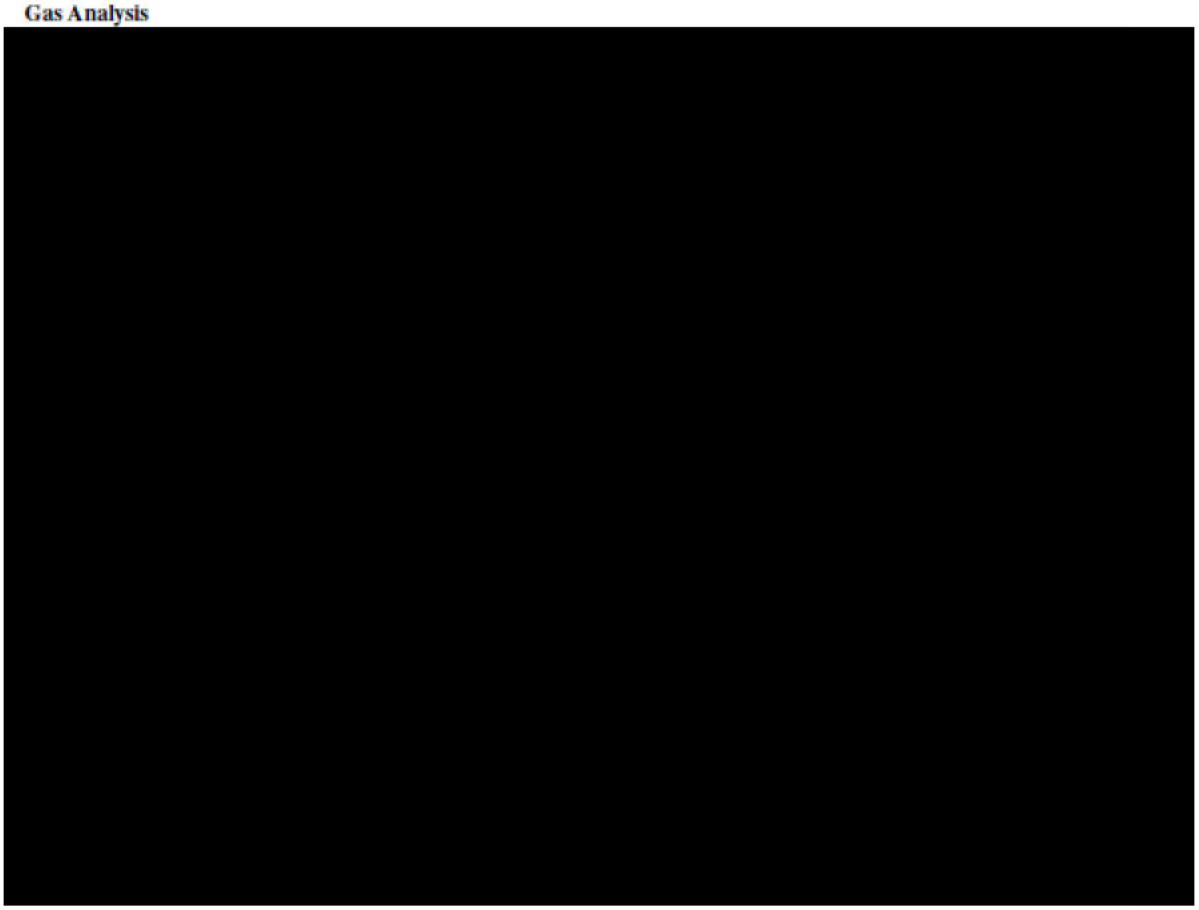


Figure 1 - Nomenclature diagram showing [redacted] location



Gas Analysis





Project Checklist – Transmission and Substation

Checklist for Studies and Processes of a Transmission & Substation Capital Project						
Project Name : [redacted] **Rebuild Failed** [redacted]						**PAF No: CS00306**
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?						Yes
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 Name: [redacted] **Rebuild Failed** [redacted]	**PAF No: CS00306**

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?	Engineering
Was the estimate reviewed by Eversource Estimating?	No

Cost Estimate Backup Details

Sum of amount				Column Labels			
Row Labels	CE Type	cost_elem	cost element description	107010	108030	186950	Grand Total
Direct	Contractors	S22	Other Outside Services	77886.8	19471.7	0	97358.5
	Contractors Total			77886.8	19471.7	0	97358.5
	Labor	L12	Labor Straight Time Non-Exempt	7418.23	1854.56	-2.3E-13	9272.79
		L22	Labor Overtime Non-Exempt	3585.28	896.32	-1.9E-13	4481.6
		L42	Labor Premium and Special Non-Exempt	447.2	111.8	-2.8E-14	559
	Labor Total			11450.71	2862.68	-4.5E-13	14313.39
	Materials	M11	Materials- Purchased	196.35	49.09	1.07E-14	245.44
		M12	Materials- Stores	51539.54	12884.87		64424.41
	Materials Total			51735.89	12933.96	1.07E-14	64669.85
	Misc Other	E13	Meals	144	36	0	180
	Misc Other Total			144	36	0	180
Direct Total				141217.4	35304.34	-4.4E-13	176521.74
Indirect	Indirect	ZAS	Admin and Eng OH- Acct Use Only	1650.18	383.58		2033.76
		ZNP	Non Productive Time Loader- Acct Use Onl	2119.53	529.88		2649.41
		ZPB	Payroll Benefit Loader- Acct Use Only	5460.67	1365.16		6825.83
		ZST	Stores Loader- Acct Use Only	16221.42	1158.67		17380.09
		ZVE	Vehicle Costs Clearing- Acct Use Only	2156.93	539.23		2696.16
	Indirect Total			27608.73	3976.52		31585.25
Indirect Total				27608.73	3976.52		31585.25
Grand Total				168826.13	39280.86	-4.4E-13	208106.99