Operations Project Authorization Form

Approved at May 29, 2019 EPAC
Link to Meeting Minutes

Date Prepared: May 13, 2019	**Project Title:** [redacted]
Company: Eversource CT	**Project ID Number: CS00341**
Organization: Asset Management	**Work Order Number: DSQ72028**
Project Initiator: [redacted]	**Class(es) of Plant: Distribution Substation**
Project Manager: [redacted]	**Project Category: Stations - Transformers**
Project Sponsor: [redacted]	**Project Type: Specific**
Estimated in service date: Completed – ISD 9/30/18	**Project Purpose: Replace failed equipment**
Eng. /Constr. Resources Budgeted? Y	**If Transmission Project: Distribution Project – non-PTF**
Authorization Type: Full Funding	**Capital Investment Part of Original Operating Plan? Y**
Total Request: $216.6K	**O&M Expenses Part of the Original Operating Plan? N**

Financial Requirements:

Project Authorization

ERM: _____

FP&A: _____

Executive Summary

This Project Authorization For (PAF) is seeking full funding approval of $216.6K for the [redacted]. The initial annual project number DSQ72028 was established to [redacted] is typically handled by an annual with direct spending of less than $100K. However, there were additional costs for parts and labor. Also, the transformer [redacted] These additional costs caused the total Direct spending to exceed $100K with a total expenditure of $216.6K. The project was completed in 2018 and placed into service on September 30, 2018.

Project Costs Summary

Note: Dollar values are in thousands

	Prior Authorized	2017	2018	2019	Totals
Capital Additions - Direct	$95.4	$18.9	$107.0	$4.6	$130.5
Less Customer Contribution	$0	$0	$0	$0	$0
Removals net of Salvage ____%	$0.0	$0.0	$0.0	$0.0	$0.0
Total - Direct Spending	**$95.4**	**$18.9**	**$107.0**	**$4.6**	**$130.5**
Capital Additions - Indirect	$1.6	$13.0	$69.7	$3.4	$86.1
Subtotal Request	**N/A**	**$31.9**	**$176.7**	**$8.0**	**$216.6**
AFUDC	N/A	$0	$0	$0	$0
Total Capital Request	**N/A**	**$31.9**	**$176.7**	**$8.0**	**$216.6**
O&M	N/A	$0	$0	$0	$0
Total Request	**$97.0**	**$31.9**	**$176.7**	**$8.0**	**$216.6**

The Prior Authorized column represents the cost of the LTC contact replacement scope approved under the annual work order DSQ72028 (see attached).

Financial Evaluation

Note: Dollar values are in thousands

Direct Capital Costs	2017	2018	2019	Total
Straight Time Labor	$12.9	$91.1	$4.1	**$108.1**
Overtime Labor	$2.0	$1.8	$0.0	**$3.8**
Outside Services	$0.2	$1.9	$0.5	**$2.6**
Materials	$3.8	$12.2	$0.0	**$16.0**
Other, including contingency amounts (describe)	$0.0	$0.0	$0.0	**$0.0**
Total	**$18.9**	**$107.0**	**$4.6**	**$130.5**

Indirect Capital Costs	2017	2018	2019	Total
Indirects/Overheads (including benefits)	$13.0	$69.7	$3.4	**$86.1**
Capitalized interest or AFUDC, if any	$0	$0	$0	**$0**
Total	**$13.0**	**$69.7**	**$3.4**	**$86.1**

Total Capital Costs	**$31.9**	**$176.7**	**$8.0**	**$216.6**
Less Total Customer Contribution	$0	$0	$0	$0
Total Capital Project Costs	**$31.9**	**$176.7**	**$8.0**	**$216.6**
Total O&M Project Costs	**$0**	**$0**	**$0**	**$0**

Reconciliation of Cost Increase

The annual work order DSQ72028 was estimated at $95.4K (direct costs) to [redacted]. The capital charges shall be transferred from DSQ72028 to CS00341.

	Original estimate	Actuals	Delta
Materials	$20.4	$16.0	($4.4)
Labor/Services	$75.0	$114.5	$39.5
Indirects	$1.6	$86.1	$84.5
Totals	**$97.0K**	**$216.6K**	**$119.6K**

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? N/A

<u>If this is other than a Reliability Project, please complete the section below;</u>

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

Future Benefits	Year 20__	Year 20__	Year 20__	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? N/A

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

Is there an ARO associated with this project? If yes, please provide details: AROs do not apply to this project
Are there other environmental cleanup costs associated with this project? If yes, please provide details: None

Technical Justification:

Project Need Statement

The 2018 scheduled major maintenance and inspection of the [redacted] omenclature Diagram. [redacted] is considered a capital project per Plant Accounting based on guidance for refurbishment projects.

Project Objectives

[redacted]

Project Scope

The project scope associated with annual DSQ72028 was to return the [redacted]

Background / Justification

The [redacted]

Typical [redacted]

[redacted]

Business Process and / or Technical Improvements:

[redacted]

Alternatives Considered with Cost Estimates

[redacted]

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Construction Start	Q3 2017
Project In-Service	September 30, 2018
Project Closed out	TBD

Regulatory Approvals

N/A

Risks and Risk Mitigation Plans

The project has been completed and there were no risks associated with the project.

References

N/A

Attachments

- Attachment A - Original Work Order and Budget
- Attachment B - [redacted] – Nomenclature Diagram

EVERSOURCE
Project Authorization Form

Attachment A - Original Work Order and Budget

EVERSOURCE ENERGY SERVICE COMPANY
SUBSTATION PROJECT ASSIGNMENT

TITLE: [redacted] – [redacted]		PROJ./W.O. NO: DSQ72028
SYSTEM PROJECT TITLE: WR 2918243	PROJ. CONSTR. MGR.: [redacted]	DATE ISSUED: 5/19/17
OP. CO /DIVISION/ DISTRICT: EVERSOURCE CT- EASTERN-Madison	PROJECT ENGINEER: [redacted]	

PERSONNEL ASSIGNMENTS:

PROTECTION	DESIGN	CIVIL	METER ENGINEERING
-	[redacted]	-	[redacted]

DISTRIBUTION AUTOMATION			REQUESTED BY:
[redacted]			[redacted]

Eversource Distribution Annual Work Order – Failed/Failing Equipment
(This work order will be tracked separately as "Failed/Failing Equipment")

DESCRIPTION OF ENGINEERING WORK INVOLVED:
Assume Charges Work Order. This 2017 annual work order will assume charges for the [redacted] Construction will acquire all necessary equipment and material in order to complete the project. Also, marked-up drawings will not be required from the field for the purpose of creating as-builts.

SCHEDULED ISD: 6/30/17
ACTUAL ISD:

CIVIL DRAWING ISSUE: N/A
P/C PKG to DESIGN: N/A
PHYS DRAWING ISSUE: N/A
ELEC DRAWING ISSUE: N/A

Annual Project Estimate

Activity	$ Estimate
Labor – Electrical Construction	43300.00
Labor – Civil Construction	0.00
Labor – Electrical Test	14900.00
Labor – Engineering	1100.00
Labor –Removal	15700.00
Material	20400.00
Loaded Project Estimate Total	**95400.00**

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: [redacted]					**PAF No: CS00341**
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 Name: [redacted]	**PAF No: CS00341**
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

Actual Cost Backup Details

Cost Breakdown for WO# DSQ72028

04/15/2019

				FERC Account #			
Cost_Type	Year	CE_Type	DESCRIPTION	106010	107010	108030	Total
Direct	2017	Labor	Labor Overtime Non-Exempt		1,284.93	321.22	1,606.15
Direct	2017	Labor	Labor Premium and Special Non-Exempt		202.64	50.67	253.31
Direct	2017	Labor	Labor Straight Time Non-Exempt		10,278.83	2,569.70	12,848.53
		Labor Total		-	11,766.40	2,941.59	14,707.99
Direct	2017	Materials	Materials- Direct Purchase Distribution Trans		543.38	135.84	679.22
Direct	2017	Materials	Materials- Purchased		2,520.41	630.10	3,150.51
		Materials Total		-	3,063.79	765.94	3,829.73
Direct	2017	Misc Other	Meals		88.00	22.00	110.00
Direct	2017	Misc Other	Rent Expense-External		87.26	21.82	109.08
		Misc Other Total		-	175.26	43.82	219.08
	2017 Total			-	15,005.45	3,751.35	18,756.80
Direct	2018	Contractors	Other Outside Services		85.63	22.67	108.30
		Contractors Total		-	85.63	22.67	108.30
Direct	2018	Labor	Labor Overtime Non-Exempt		1,124.05	316.55	1,440.60
Direct	2018	Labor	Labor Premium and Special Non-Exempt		325.24	89.10	414.34
Direct	2018	Labor	Labor Straight Time Non-Exempt		71,825.15	19,167.69	90,992.84
		Labor Total		-	73,274.44	19,573.34	92,847.78
Direct	2018	Materials	Materials- Direct Purchase Distribution Trans		135.84	(135.84)	-
Direct	2018	Materials	Materials- Purchased		3,852.69	(630.10)	3,222.59
Direct	2018	Materials	Materials- Stores		8,989.66		8,989.66
		Materials Total		-	12,978.19	(765.94)	12,212.25
Direct	2018	Misc Other	Employee Expense Other		33.03	8.74	41.77
Direct	2018	Misc Other	Meals		93.86	26.14	120.00
Direct	2018	Misc Other	Mileage		1,388.31	367.53	1,755.84
Direct	2018	Misc Other	Miscellaneous Accounting Adjustments	168,590.00	(168,590.00)		-
Direct	2018	Misc Other	Rent Expense-External		21.82	(21.82)	-
		Misc Other Total		168,590.00	(167,052.98)	380.59	1,917.61
	2018 Total			168,590.00	(80,714.72)	19,210.66	107,085.94
Direct	2019	Labor	Labor Straight Time Non-Exempt		3,220.66	852.68	4,073.34
		Labor Total		-	3,220.66	852.68	4,073.34
Direct	2019	Misc Other	Mileage		396.76	105.04	501.80
Direct	2019	Misc Other	Miscellaneous Accounting Adjustments	6,277.14	(6,277.14)		-
		Misc Other Total		6,277.14	(5,880.38)	105.04	501.80
	2019 Total			6,277.14	(2,659.72)	957.72	4,575.14
Direct Total				174,867.14	(68,368.99)	23,919.73	130,417.88
Indirect	2017	Indirect	Admin and Eng OH- Acct Use Only		216.49	54.12	270.61
Indirect	2017	Indirect	Non Productive Time Loader- Acct Use Only		2,177.96	544.49	2,722.45
Indirect	2017	Indirect	Payroll Benefit Loader- Acct Use Only		5,611.20	1,402.80	7,014.00
Indirect	2017	Indirect	Vehicle Costs Clearing- Acct Use Only		2,413.84	603.45	3,017.29
		Indirect Total		-	10,419.49	2,604.86	13,024.35
	2017 Total			-	10,419.49	2,604.86	13,024.35
Indirect	2018	Indirect	Admin and Eng OH- Acct Use Only		668.42	155.76	824.18
Indirect	2018	Indirect	Non Productive Time Loader- Acct Use Only		10,788.85	2,883.04	13,671.89
Indirect	2018	Indirect	Payroll Benefit Loader- Acct Use Only		33,911.15	9,058.90	42,970.05
Indirect	2018	Indirect	Stores Loader- Acct Use Only		1,109.70		1,109.70
Indirect	2018	Indirect	Vehicle Costs Clearing- Acct Use Only		8,811.66	2,362.22	11,173.88
		Indirect Total		-	55,289.78	14,459.92	69,749.70
	2018 Total			-	55,289.78	14,459.92	69,749.70
Indirect	2019	Indirect	Admin and Eng OH- Acct Use Only		28.86	7.65	36.51
Indirect	2019	Indirect	Non Productive Time Loader- Acct Use Only		443.81	117.50	561.31
Indirect	2019	Indirect	Payroll Benefit Loader- Acct Use Only		1,711.33	453.08	2,164.41
Indirect	2019	Indirect	Vehicle Costs Clearing- Acct Use Only		475.72	125.95	601.67
		Indirect Total		-	2,659.72	704.18	3,363.90
	2019 Total			-	2,659.72	704.18	3,363.90
Indirect Total				-	68,368.99	17,768.96	86,137.95
Grand Total				174,867.14	(0.00)	41,688.69	216,555.83

[redacted]