Operations Project Authorization Form

Approved at October 16, 2019 EPAC
Link to Meeting Minutes

Date Prepared: September 30, 2019	**Project Title: [redacted] LTC Controls Replacement**
Company/ies: Eversource CT	**Project ID Number: CS00361**
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/Obsolete Equipment**
Estimated in service date: 12/20/18 (Actual)	**If Transmission Project, PTF/Non-PTF: Distribution - Non-PTF**
Eng. / Constr. Resources Budgeted? Yes	**Capital Investment Part of Original Operating Plan: Yes**
Authorization Type: Full Funding	**O&M Expenses Part of the Original Operating Plan: No**
Total Request: $162.8K	

Financial Requirements:

Project Authorization

ERM: _____

FP&A: _____

Executive Summary

This project authorization is seeking full funding approval of $162.8K for the replacement of [redacted] was part of annual work order DSN62007 estimated to be less than $100K in 2016. However, there were additional cost incurred during the project construction cycle that caused significant cost increase. The increase in cost was the use of external contractor resources.

The expenditures for the completed scope of work was $162.8K. In addition to the [redacted] The final cost of the project is $162.8K. This project went in service on December 20, 2018.

Project Costs Summary

Note: Dollar values are in thousands

	Prior Authorized	2016	2017	2018	Totals
Capital Additions - Direct	$76.90	$0.47	$5.60	$141.20	$147.27
Less Customer Contribution	$ -	$ -	$ -	$ -	$ -
Removals net of Salvage ____%	$ -	$ -	$ -	$ -	$ -
Total - Direct Spending	$76.90	$0.47	$5.60	$141.20	$147.27
Capital Additions - Indirect	$1.60	$0.44	$1.24	$13.85	$15.53
Subtotal Request	$78.50	$0.91	$6.84	$155.05	$162.80
AFUDC	$ -	$ -	$ -	$ -	$ -
Total Capital Request	$78.50	$0.91	$6.84	$155.05	$162.80
O&M	$ -	$ -	$ -	$ -	$ -
Total Request	$78.50	$0.91	$6.84	$155.05	$162.80

The “Prior Authorized” column represents cost of the LTC contact replacement scope approved under the annual work order DSN62007. The total costs posted in Power Plan as of 8/5/19 is $162.8K.

Financial Evaluation

Note: Dollar values are in thousands

Direct Capital Costs	2016	2017	2018	Totals
Straight Time Labor	$0.47	$1.05	$8.86	$10.38
Overtime Labor	$ -	$0.13	$2.83	$2.96
Outside Services	$ -	$4.42	$114.68	$119.10
Materials	$ -	$ -	$14.62	$14.62
Other, including contingency amounts (describe)	$ -	$ -	$0.21	$0.21
Total Direct Costs	**$0.47**	**$5.60**	**$141.20**	**$147.27**
Indirect Capital Costs	2016	2017	2018	Totals
Indirects/Overheads (including benefits)	$0.44	$1.24	$13.85	$15.53
Capitalized interest or AFUDC, if any	$ -	$ -	$ -	$ -
Total Indirect Costs	**$0.44**	**$1.24**	**$13.85**	**$15.53**
Total Capital Costs	**$0.91**	**$6.84**	**$155.05**	**$162.80**
Less Total Customer Contribution	$ -	$ -	$ -	$ -
Total Capital Project Costs	**$0.91**	**$6.84**	**$155.05**	**$162.80**
Total O&M Project Costs	$ -	$ -	$ -	$ -

Note: Explain unique payment provisions, if applicable:

“Other” costs included expenses for meals and mileage.

Reconciliation of Cost Increase

The annual work order DSN62007 estimate was estimated at $76.9K plus a two percent increase for indirect charges. The capital charges shall be transferred from DSN62007 to CS00361.

		Original estimate		Actuals		Delta
Materials		$10.00		$14.62		$4.62
Labor/Services		$66.90		$132.65		$65.75
Indirects		$1.60		$15.53		$13.93
Totals		**$78.50**		**$162.80**		**$84.30**

Future Financial Impacts:

Provide below the estimated future costs that will result from the project: N/A
Note: Dollar values are in thousands

Future Costs	Year 20__	Year 20__	Year 20__	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

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: N/A
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

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: No

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

Technical Justification:

Project Need Statement

The annual work order (W.O.) DSN62007 issued in March 2016 was needed to replace the [redacted]

[redacted]

Project Objectives

The objective was to replace the [redacted].

Project Scope

The [redacted]

Background / Justification

The basis of this project was to initiate a work order to refurbish/replace aging contact [redacted]

Business Process and / or Technical Improvements:

[redacted]

Alternatives Considered with Cost Estimates

There were no alternatives considered [redacted]

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Preliminary Investigation	Complete - 2016
Equipment Testing	Complete - 2017 & 2018
Construction Begin	Complete - 2017 & 2018
Construction Completion	Complete - 2018
In Service Date	Complete - 12/20/2018

Regulatory Approvals

None

Risks and Risk Mitigation Plans

N/A – The project has been completed.

References

None

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

- Work Order

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EVERSOURCE ENERGY SERVICE COMPANY
ORIGINAL WORK ORDER

TITLE: [redacted]	PROJ./W.O. NO: DSN62007	
SYSTEM PROJECT TITLE: WR 2700030	PROJ. CONSTR. MGR.: [redacted]	DATE ISSUED: 6/9/16
OP. CO /DIVISION/ DISTRICT: EVERSOURCE CT-WESTERN-Stamford	PROJECT ENGINEER: [redacted]	

PERSONNEL ASSIGNMENTS

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

DISTRICT AUTOMATION			REQUESTED BY:
[redacted]			[redacted]

DESCRIPTION OF ENGINEERING WORK INVOLVED
Furnish necessary engineering and design using a 2016 annual work order to replace the [redacted]

Note: Any charges associated with the [redacted] on work order DSN22023 should be transferred to this work order, but just for the 2X, not for the 1X.

SCHEDULED ISD: 12/29/17
ACTUAL ISD:

CIVIL DRAWING ISSUE: 03/31/17
P/C PKG to DESIGN: 12/16/16
PHYS DRAWING ISSUE: 03/31/17
ELEC DRAWING ISSUE: 03/31/17

Annual Project Estimate

Activity	$ Estimate
Labor – Electrical Construction	18450.00
Labor – Civil Construction	10000.00
Labor – Electrical Test	12200.00
Labor – Engineering	18500.00
Labor – Removal	7800.00
Material	10000.00
Loaded Project Estimate Total	**76950.00**

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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] LTC Controls Replacement			**Project ID Number: CS00361**		
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		
Are ISO-NE OP-24 Appendix B updates necessary?			No		

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Checklist for Studies and Processes of a Transmission & Substation Capital Project	
Project Name: [redacted] **LTC Controls Replacement**	**Project ID Number: CS00361**
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# DSN62007

09/26/2019

				FERC Account #		
Cost_Type	Year	CE_Type	DESCRIPTION	107010	108030	Total
Direct	2016	Labor	Labor Straight Time Exempt	379.46	94.87	474.33
		Labor Total		379.46	94.87	474.33
	2016 Total			379.46	94.87	474.33
Direct	2017	Contractors	Engineering Design Services	3,538.00	884.51	4,422.51
		Contractors Total		3,538.00	884.51	4,422.51
Direct	2017	Labor	Labor Overtime Non-Exempt	103.85	25.96	129.81
Direct	2017	Labor	Labor Premium and Special Non-Exempt	7.84	1.96	9.80
Direct	2017	Labor	Labor Straight Time Exempt	62.61	15.65	78.26
Direct	2017	Labor	Labor Straight Time Non-Exempt	768.36	192.09	960.45
		Labor Total		942.66	235.66	1,178.32
	2017 Total			4,480.66	1,120.17	5,600.83
Direct	2018	Contractors	Contractor Labor	81,479.72	20,369.95	101,849.67
Direct	2018	Contractors	Contractor- Unit Price	7,294.43	1,823.61	9,118.04
Direct	2018	Contractors	Engineering Design Services	2,774.80	693.70	3,468.50
Direct	2018	Contractors	Refuse Removal and Recycling	191.20	47.80	239.00
		Contractors Total		91,740.15	22,935.06	114,675.21
Direct	2018	Labor	Labor Overtime Non-Exempt	2,263.76	565.95	2,829.71
Direct	2018	Labor	Labor Premium and Special Non-Exempt	373.75	93.44	467.19
Direct	2018	Labor	Labor Straight Time Exempt	3,344.85	836.24	4,181.09
Direct	2018	Labor	Labor Straight Time Non-Exempt	3,372.02	843.00	4,215.02
		Labor Total		9,354.38	2,338.63	11,693.01
Direct	2018	Materials	Materials- Stores	11,698.03	2,924.55	14,622.58
		Materials Total		11,698.03	2,924.55	14,622.58
Direct	2018	Misc Other	Employee Expense Other	6.38	1.59	7.97
Direct	2018	Misc Other	Meals	104.00	26.00	130.00
Direct	2018	Misc Other	Mileage	58.86	14.72	73.58
		Misc Other Total		169.24	42.31	211.55
	2018 Total			112,961.80	28,240.55	141,202.35
Direct Total				117,821.92	29,455.59	147,277.51
Indirect	2016	Indirect	Admin and Eng OH- Acct Use Only	10.24	2.57	12.81
Indirect	2016	Indirect	Gen Ser Co Benefit Loader- Acct Use Only	276.05	69.02	345.07
Indirect	2016	Indirect	Non Productive Time Loader- Acct Use Only	65.99	16.50	82.49
Indirect	2016	Indirect	Vehicle Costs Clearing- Acct Use Only	0.08	0.02	0.10
		Indirect Total		352.36	88.11	440.47
	2016 Total			352.36	88.11	440.47
Indirect	2017	Indirect	Admin and Eng OH- Acct Use Only	55.52	13.89	69.41
Indirect	2017	Indirect	Gen Ser Co Benefit Loader- Acct Use Only	744.18	186.03	930.21
Indirect	2017	Indirect	Non Productive Time Loader- Acct Use Only	175.06	43.76	218.82
Indirect	2017	Indirect	Vehicle Costs Clearing- Acct Use Only	19.80	4.94	24.74
		Indirect Total		994.56	248.62	1,243.18
	2017 Total			994.56	248.62	1,243.18
Indirect	2018	Indirect	Admin and Eng OH- Acct Use Only	612.20	153.04	765.24
Indirect	2018	Indirect	Gen Ser Co Benefit Loader- Acct Use Only	3,778.65	944.68	4,723.33
Indirect	2018	Indirect	Non Productive Time Loader- Acct Use Only	1,417.25	354.31	1,771.56
Indirect	2018	Indirect	Payroll Benefit Loader- Acct Use Only	2,099.36	524.84	2,624.20
Indirect	2018	Indirect	Stores Loader- Acct Use Only	2,175.33	543.83	2,719.16
Indirect	2018	Indirect	Vehicle Costs Clearing- Acct Use Only	1,000.46	250.12	1,250.58
		Indirect Total		11,083.25	2,770.82	13,854.07
	2018 Total			11,083.25	2,770.82	13,854.07
Indirect Total				12,430.17	3,107.55	15,537.72
Grand Total				130,252.09	32,563.14	162,815.23