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Operations Supplement Request Form

Approved on June 8, 2022 EPAC

Link to Meeting Minutes

Project Title: [redacted] **Network Monitoring System**	**Project Number: CS00238**
Date Prepared: 06/03/2022	**Company: Eversource CT**
Organization: System Planning	**Class(es) of Plant: D SS**
Project Initiator: [redacted]	**Project Category: Stations - Other**
Managing Organization: Other	**Schedule ID#: N/A**
Project Manager: [redacted]	**Project Type: Specific**
Project Sponsor: [redacted]	**Capital Investment part of original Op Plan: Yes**
Project Manager's Director: [redacted]	**Estimated in service date: 6/30/2022**
Current Authorized Amount: $278K	**Emergency Related Request? No**
Supplement Request: $52K	**Supplement Type: Supplement**
Total Capital Request: $330K	**ISO-NE Approval Required (check all that apply):** ☐ **PAC** ☐ **TCA**

[1] BACKGROUND

The current authorized amount for this project is $278K, which was approved in PowerPlan on October 24, 2018. The supplemental request is $52K making the total request $330K. The spend to date amount is $330K. [redacted]

Construction on Project CS00238 originally began in 2018 with the start of the [redacted]

Due to a change in capital project priorities this project was put on hold until 2021. [redacted] hese additional construction requirements

increased material costs and labor hours. It also pushed the in-service date forward from December 2018 to June 2022. This project is 95% complete.

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[3] SUPPLEMENT JUSTIFICATION DETAIL

The reasons for the project authorization supplement of $52K are summarized below.

1. **Materials (by Eversource): $23K –** [redacted] design. There was also a cost increase for the new more expensive feeder sensors.
2. **Construction: $12K** – There will be an increase in contractor labor due to additional materials needed for the new style sensors.
3. **Other: $5K** – District labor
4. **Risk: $5K** – Needed to cover the remaining additional work required to finish the project.
5. **Indirects/Overheads:$4K** – A factor of the direct costs and rates applied at the time of the estimate.
6. **AFUDC: $3** – Additional AFUDC is due to project delays in the ISD associated with change in resources and new feeder sensor re-design delays.

Total Supplement Request: $52K

See attached for the original authorization document.

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[4] SUPPLEMENT COST SUMMARY

The table below summarizes the line item categories from the original project estimates and the updated project estimates.

Note: Dollar values are in thousands:

Line item Category	Prior Authorized	New Total Request	Variance (Supplemental Request)
1. ROW / Easements / Land Acquisition	$	$	$
2. Environmental Approvals / Permits	$	$	$
3. Outreach	$	$	$
4. Siting Approvals / Permits	$	$	$
5. Engineering / Design	$	$	$
6. Materials (Eversource purchased)	$52	$75	$23
7. Construction (incl matl's by contractors)	$45	$57	$12
8. Testing / Commissioning	$	$	$
9. Project Mgmt. Team	$	$	$
10. Removals	$	$	$
11. Other- District Labor	$73	$78	$5
12. Risks	$0	$5	$5
SUBTOTAL DIRECTS W/ RISKS	**$170**	**$215**	**$45**
13. Indirects/Overhead	$106	$110	$4
14. AFUDC	$2	$5	$3
PROJECT TOTAL – BASELINE BUDGET	**$278**	**$330**	**$52**
15. Contingency	$	$	$
TOTAL CAPITAL REQUEST	**$278**	**$330**	**$52**
16. Reimbursables/Customer Contribution			
PROJECT TOTAL (LESS REIMBURSABLES)	**$278**	**$330**	**$52**

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Total Supplement Request by Year

Note: Dollar values are in thousands:

Line item Category	2022	20XX	20XX	20XX	Total
1. ROW / Easements / Land Acquisition	$	$	$	$	$
2. Environmental Approvals / Permits	$	$	$	$	$
3. Outreach	$	$	$	$	$
4. Siting Approvals / Permits	$	$	$	$	$
5. Engineering / Design	$	$	$	$	$
6. Materials (Eversource purchased)	$23	$	$	$	$23
7. Construction (incl matl's by contractors)	$12	$	$	$	$12
8. Testing / Commissioning	$	$	$	$	$
9. Project Mgmt. Team	$	$	$	$	$
10. Removals	$	$	$	$	$
11. Other	$5	$	$	$	$5
12. Risks	$5	$	$	$	$5
SUBTOTAL DIRECTS W/ RISKS	**$45**	**$**	**$**	**$**	**$45**
13. Indirects/Overhead	$4	$	$	$	$4
14. AFUDC	$3	$	$	$	$3
PROJECT TOTAL – BASELINE BUDGET	**$52**	**$**	**$**	**$**	**$52**
15. Contingency	$	$	$	$	$
TOTAL CAPITAL REQUEST	**$52**	**$**	**$**	**$**	**$52**
16. Reimbursables/Customer Contribution	$	$	$	$	$
PROJECT TOTAL (LESS REIMBURSABLES)	**$52**	**$**	**$**	**$**	**$52**
O&M	$	$	$	$	$
TOTAL REQUEST	**$52**	**$**	**$**	**$**	**$52**

[5] LESSONS LEARNED

Attachments

Attachment A – CS00238 [redacted] Network Monitoring System PAF, dated 07/10/2018

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Project Authorization Form

Operations Project Authorization Form

Approved at August 1, 2018 EPAC

[Link to Meeting Minutes]

Date Prepared: 7/10/2018	**Project Title: [redacted] – Network Monitoring System**
Company/ies: Eversource CT	**Project ID Number: CS00238**
Organization: Distribution Design	**Class(es) of Plant: Distribution Substation**
Project Initiator: [redacted]	**Project Category: Network Automation**
Project Manager: [redacted]	**Project Type: Specific**
Project Sponsor: [redacted]	**Project Purpose: Underground Network Automation**
Estimated in service date: 12/31/2018	**If Transmission Project: PTF? N/A**
Eng. /Constr. Resources Budgeted? No	**Capital Investment Part of Original Operating Plan? Yes**
Authorization Type: Full Funding	**O&M Expenses Part of the Original Operating Plan? No**
Total Request: $277,908	

Financial Requirements:

Project Authorization
ERM: _____

FP&A: _____

Executive Summary

This project is the [redacted] This project in conjunction with CD00629 and CD00944 [redacted]

[redacted]

[redacted]

This project was approved on 11/8/2017 for $60,663 for engineering, with an overall estimate of $606,632.

Following detailed design, **the total project request is** $277,908.

The revised cost figures are based on a better understanding of the project scope, and most current material price estimates.

Project Costs Summary

	Prior Authorized	2018	2019	Totals
Capital Additions - Direct	$37	$170	$0	$170
Less Customer Contribution	$0	$0	$0	$0
Removals net of Salvage ____%	$0	$0	$0	$0
Total - Direct Spending	$37	$170	$0	$170
Capital Additions - Indirect	$23	$105	$0	$105
Subtotal Request	$60	$275	$0	$275
AFUDC	$1	$3	$0	$3
Total Capital Request	$61	$278	$0	$278
O&M			$0	
Total Request	$61	$278	$0	$278

Financial Evaluation

Direct Capital Costs	**2018**	**2019**	**2020+**	**Total**
Straight Time Labor	$73	$	$	$73
Overtime Labor	$0	$	$	$0
Outside Services	$45	$	$	$45
Materials	$52	$	$	$52
Other, including contingency amounts (describe)	$0	$	$	$0
Total Direct Costs	$170	$	$	$170

Indirect Capital Costs	**2018**	**2019**	**2020+**	**Total**
Indirects/Overheads (including benefits)	$105	$	$	$105
Capitalized interest or AFUDC, if any	$3	$	$	$3
Total Indirect Costs	$107	$	$	$107

Total Capital Costs	$278	$	$	$278
Less Total Customer Contribution	$0	$	$	$0
Total Capital Project Costs	$278	$	$	$278
Total O&M Project Costs	$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? If yes, please provide details: No

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

Technical Justification:

Project Need Statement

[redacted]
(see Attachment #1).

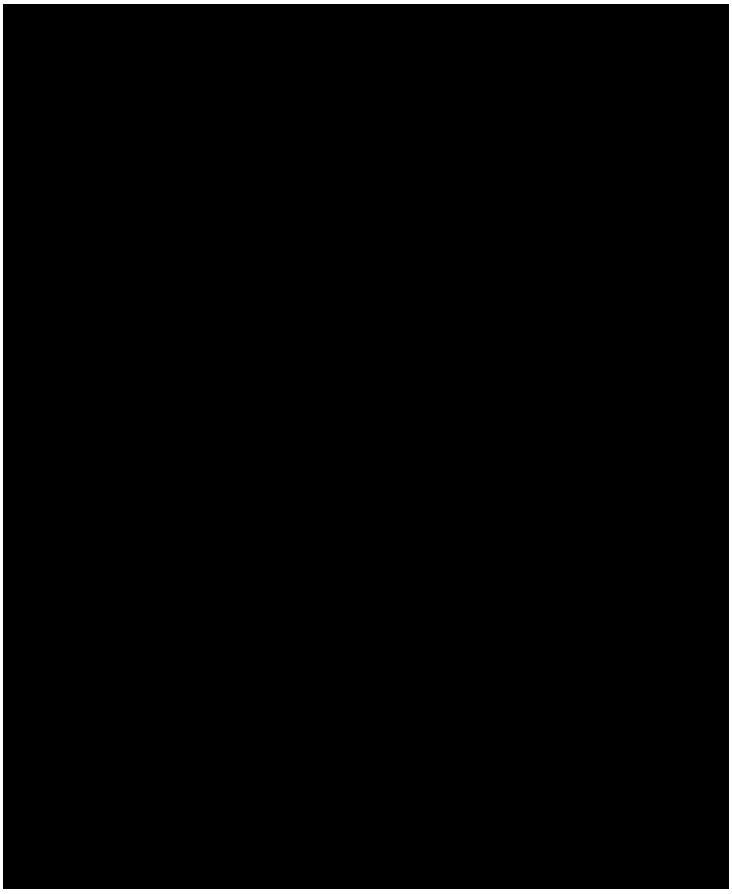
Project Objectives

[redacted]

Project Scope

[redacted]

[redacted]



[redacted]

Background / Justification

[redacted]

Business Process and / or Technical Improvements:

[redacted]

Alternatives Considered with Cost Estimates

[redacted]

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Substation Work	Fall 2018
ISD	12/31/2018

Regulatory Approvals

N/A

Risks and Risk Mitigation Plans

[redacted]

[redacted]

References

Digital Grid Project Scope Cost EST 2-041

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

Attachment #1

[redacted]

[redacted]

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] – Network Monitoring System			**PAF No: CS00238**
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?			**No**
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] – Network Monitoring System	PAF No: CS00238

TRANSMISSION LINE ENGINEERING	
Are there any changes that affect the baseline EMF?	No
Are there any changes that affect the baseline EMI?	No
Is there an impact to the existing ground grid?	No
SITING	
Is a Siting application or petition required?	No
PERMITTING	
Is there any permitting required?	No
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?	[redacted]
Was the estimate reviewed by Eversource Estimating?	No

Cost Estimate Backup Details

RESOURCES	Prior Yrs	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	TOTAL
DIRECT	Actual	Actual	Actual	Actual	Fcst	Fcst	Fcst	Fcst	Fcst	Fcst	Fcst	Fcst	Fcst	2018	Project
LT - CT_L01:Labor EESCO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	10.0	10.0
LT - CT_LO1:Labor EECT - Civil, Elect, Test	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.7	12.7	12.7	12.7	12.7	63.5	63.5
L01-LT - Total Labor	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**12.7**	**12.7**	**12.7**	**12.7**	**22.7**	**73.5**	**73.5**
AE - CT_EE0:Employee Expenses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	**0.0**
AM - CT_M12:Materials-Stores M11 Purchases	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.0	0.0	0.0	0.0	**52.0**	**52.0**
AO - CT_OS1:OS Svc-Contr Env	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	**0.0**
AQ - CT_OS0:OS Svc-Contr	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.0	0.0	0.0	**45.0**	**45.0**
AV - CT_V00:Vehicles	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	**0.0**
P1 - CT_A01:Other Misc Acct, Contingency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	**0.0**
KR - CT_C01:Contributions, Fees & Payments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	**0.0**
BR - CT_J00:Rents + Leases	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	**0.0**
Subtotal Direct - Excluding Labor	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**52.0**	**45.0**	**0.0**	**0.0**	**97.0**	**97.0**
Total Direct - Including Labor	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**12.7**	**64.7**	**57.7**	**12.7**	**22.7**	**170.5**	**170.5**
INDIRECT															
CT_ZNP:Non-Productive EESCO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	**1.5**	**1.5**
CT_ZNP:Non-Productive EECT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.9	1.9	1.9	1.9	**9.7**	**9.7**
CT_Z91:Alloc-Mat loaders (Excludes >25K)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0	0.0	**8.3**	**8.3**
CT_Z93:Alloc-PR load Payroll Benefits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	5.9	5.9	5.9	10.6	**34.2**	**34.2**
CT_Z94:Alloc-GSCOH EESCO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	**0.0**
CT_Z96:Alloc- E+S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	3.7	11.8	3.7	6.6	**29.5**	**29.5**
CT_Z92:Alloc-Misc Costs Cap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	1.6	0.5	0.9	**4.1**	**4.1**
CT_Z90:Alloc- AS+E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8	0.7	0.2	0.4	**2.4**	**2.4**
CT_Z98:Alloc - Veh Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5	2.5	4.5	**14.7**	**14.7**
	0.0	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**14.8**	**23.8**	**24.5**	**14.8**	**26.5**	**104.5**	**104.5**
Subtotal X-AFUDC	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**27.5**	**88.5**	**82.2**	**27.5**	**49.2**	**275.0**	**275.0**
CT_Z95:Alloc-AFUDC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.6	0.9	1.0	**2.9**	**2.9**
Total Project Prior To Date-->Month	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**27.6**	**88.8**	**82.9**	**28.4**	**50.3**	**277.9**	**277.9**
Total Project - Cumulative To Date	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**27.6**	**116.4**	**199.2**	**227.7**	**277.9**	**277.9**	