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Operations Project Authorization Form

Project Title: [redacted] Load Relief	**Project Number: CD01660**
Date Prepared: 07/05/2023	**Company:** Eversource CT
Organization: Electric Field Operations	**Class(es) of Plant:** D Line
Project Initiator: [redacted]	**Project Category:** OVERLOADS-SPECIFIC PROJECTS
Project Manager: [redacted]	**Project Type:** Specific
Project Sponsor: [redacted]	**Capital Investment part of original Operating Plan:** Yes
Estimated in service date: 12/31/2023	**Emergency Related Request?** No
Eng./Constr. Resources Budgeted? Yes	**Facility Type** (check all that apply): ☐ PTF ☐ non-PTF ☒ Distribution
Total Gross Capital Request: $1,049K	**Authorization Type:** Full Funding

Executive Summary

Full funding is now being requested for this project at a cost of $1,049K. This cost is 161% on the initial funding estimate of $670K. The cost overruns on this project were due to contractor labor cost and overhead charges. This job was originally estimated to be completed by internal line crews, but to meet construction schedule, contractors had to be used to complete the job. The alternate option would have seen an increase in cost as well because the work was assigned to contractor crews to meet schedule.

The original project was presented as follows:

This project is requesting $670,000 for the budget year 2023 to [redacted]

This project assumes that CD01271 and CD00801 are completed. See attachments below in ***References***.

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Project Costs Summary

Note: Dollar values are in thousands

Capital Costs	2023	2024	2025+	Total
Internal Labor and Construction Equipment	13.6	0.0	0.0	13.6
Outside Services	465.4	0.0	0.0	465.4
Materials	60.9	0.0	0.0	60.9
Removals	38.4	0.0	0.0	38.4
Risk and Contingency	73.2	0.0	0.0	73.2
Other	0.0	0.0	0.0	0.0
Subtotal	**651.6**	**0.0**	**0.0**	**651.6**

Indirect Capital Costs	2023	2024	2025+	Total
Indirects/Overheads (including benefits)	396.9	0.0	0.0	396.9
Capitalized interest or AFUDC, if any	0.0	0.0	0.0	0.0
Subtotal	**396.9**	**0.0**	**0.0**	**396.9**
Total Capital Costs (Gross)	**1,048.5**	**0.0**	**0.0**	**1,048.5**
Less Total Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**
Project Costs (Net of Reimbursement)	**1,048.5**	**0.0**	**0.0**	**1,048.5**

Technical Justification:

Project Need, Objective and Justification:

[redacted]

Project Scope:
Option 1

[redacted]

Refer to map below:

[redacted]
Map1-option1.pdf

Major Material:

1) 556 TW ---------- 10,500''
2) Poles ---------- 26

Background:

[redacted]

Alternatives Considered:

Were alternative solutions considered/applicable? Include any cost/benefit analysis.

Alternatives were considered (please describe below)

Option 2 (Estimated cost: $245,000)

[redacted]

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[redacted]

Refer to map below:

[redacted]Map2-option2.pdf

Although option 2 is the cheaper option, option 1 was chosen as the preferred option because it provided added capacity for the circuits feeding the Greenwich area, and offers more switching capability. With this job being executed by contractor crews, this option would have increased in cost, similarly, like the preferred option did.

Project Option Comparison

Design Criteria	Option		
	1 – Circuit Upgrade	2 – Load transfer	
[redacted]			
Cost	$670K	$245K	
Cost / MVA added	$372K/MVA	$/MVA	
Cost / CM Saved	$/CM	$/CM	
Cost / CI Saved	$/CI	$/CI	
Preferred option			

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Regulatory Approvals:

Are Regulatory body approvals needed for the project?
No

Project Schedule

Milestone/Phase Name	Estimated Date
100% Engineering Completion	2022
Construction Start	January 2023
Testing/Commissioning	May 2023
In Service Date	June 2023

Risks and Risk Mitigation Plans

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2023	Low	Included contingency costs in the funding request. Perform detailed Field Analysis and walk down in project development to avoid potential issues.
Internal construction resources not available to perform the work.	2023	High	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Storm delays	2023	Medium	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2023	Low	Schedule work to minimize system abnormal time. Most of this work will require system to be abnormal for any extended period of time.

References

PAF_CD00801_Tomac 12H Islanded Subs

CD01271 PAF.docx

Brownhouse_Rd_103.pdf

4-Way Insulated Splice.pdf

MH667 N WALL Ratings 22M10@300.›

Option 1

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

[redacted]Map1-option1.pdf

[redacted]Map1-option1-2.pdf

[redacted]one-line-option1.pc

load Projections-option1

[redacted]utage data. 2021-2017.xlsx

Pole info.xlsx

Option 2

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

[redacted] Map2-option2.pdf

[redacted]

load Projections-option2

Cost Estimate Backup Details

CD01660_project_needs_statement.pdf