EVERSOURCE

Project Approval Form

Project Title: CDOT 135-331 [redacted]	**Project Number:** CD01663
Date Prepared: 09/18/2023	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** Line Relocations/Act of Public Authority
Project Initiator: [redacted]	**Project Type:** Specific
Initiating Organization: Distribution	**Capital Investment part of original Op Plan:** Yes
Project Manager: [redacted]	**Emergency Related Request?** No
Project Sponsor: [redacted]	**Facility Type** (check all that apply)**:** ☐ PTF ☐ non-PTF ☒ Distribution ☐ N/A (General Plant)
Required in service date: 12/31/2023	
Total Capital Request: $848.9K ($169.9K is reimbursable)	**Authorization Type:** Full Funding

1. Executive Summary

Full funding is being requested for this project at a cost of $848.9K -- $169.9K of which is estimated to be reimbursed by the State of CT. This cost is 180% of the partial funding cost of $472.3K. There is no scope change in the project. This project was originally estimated with the lower preliminary estimating dollars and the 30% increase was never added to account for the lower unit estimates. Furthermore, the job was completed by Contractor crews resulting in higher labor and overhead costs. Had the Partial estimate accounted for higher unit prices and contractor crews, the original estimate would have been $798.2K. This would make the Full Funding request 106% of the preliminary estimate. The project was established to relocate then replace Eversource's facilities in the vicinity of the [redacted] CT to facilitate CDOT project 135-331. The project is being done in 2 parts – a temporary relocation to facilitate installation of the new bridge, and the permanent installation of Eversource's facilities when the new bridge is complete.

The temporary scope of work includes relocation of the [redacted] through a temporary ROW, which is to be built as part of the state highway project.

The permanent scope includes the [redacted] and removal of the temporary facilities. Conduits will be installed underneath the new bridge to facilitate Eversource's future needs.

A portion of the project is 50% reimbursable, per Trigger #1 of the Utility Relocation Cost memo in attachment A.

#	Trigger Project	Utility Co.'s Share of Relocation Cost	Laws
1	State Roadway Projects	• Utility Co. pays 50% • Applies whenever utilities abutting or in a "state highway or any other public highway" must be relocated because of "the construction or reconstruction of a state highway". • DOT is obligated to design the project in a manner that minimizes costs to DOT and Eversource • If DOT and Eversource cannot agree on location of the relocated equipment, Commissioners of DOT & PURA resolve the dispute • If DOT and Eversource cannot agree on allocation of the costs for the relocation work, then either may file claim in court. • But C.G.S. § 13a-126a states Utility Co. pays 0% for any utility relocations requested by DOT for "aesthetic" reasons	• C.G.S. § 13a-126 • C.G.S. § 13a-126a

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	Prior Actuals 2021	Prior Actuals 2022	Estimated Future Spend	Total
Internal Labor and Construction Equipment	32.6	1.9	60.1	94.7
Outside Services	61.7	3.7	113.9	179.3
Materials	51.7	3.1	95.5	150.3
Removals	12.0	0.7	26.9	39.6
Risk and Contingency	0.0	0.0	66.9	66.9
Other	-0.4	0.0	0.0	-0.4
Subtotal	**157.6**	**9.4**	**363.3**	**530.3**

Indirect Capital Costs	Prior Actuals 2021	Prior Actuals 2022	Estimated Future Spend	Total
Indirects/Overheads (including benefits)	236.3	2.7	74.7	313.7
Capitalized interest or AFUDC, if any	4.9	0.0	0.0	4.9
Subtotal	**241.2**	**2.7**	**74.7**	**318.6**
Total Capital Costs (Gross)	**398.8**	**12.1**	**437.9**	**848.9**
Less Total Customer Contribution	**0.0**	**0.0**	**-169.9**	**-169.9**
Project Costs (Net of Reimbursement)	**398.8**	**12.1**	**268.0**	**678.9**

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

Eversource will relocate their facilities at the request of customers as they perform various construction projects. Some Connecticut General Statutes states how utilities are reimbursed for various projects (see attachment A). **This project is being done at the request of the state, and as such is 50% reimbursable based on CT General statute 13a-126.**

b. Project Need

Eversource will need to relocate the existing OH facilities in the vicinity of the bridge, to provide access for a construction crane, for the bridge replacement. A ROW along the east side of [redacted] will provide adequate safety clearance, for the crane operation, throughout the project.

c. Project Scope

Two temporary poles will be installed in the ROW, [redacted]

Upon completion of the bridge, Eversource will install facilities as follows:

[redacted]

4. Alternatives Considered

Eversource is required to comply with the State's request under Connecticut General Statutes sections 13a-126 and 13a-126a.

5. Project Schedule

Milestone/Phase Name	Estimated Date
Partial Approval	February 2021
100% Detailed Engineering Completion	June 2021
Fully Funded	September 2023
Construction Start	July 2021
In Service Date	December 2023

6. Regulatory Decisions

N/A

7. Codes and Standards

N/A

8. Risk and Contingencies

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.	2022	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.

System abnormal configuration	2023	High	Schedule work to minimize system abnormal time. Install temporary bypasses/equipment if system will be abnormal for extended periods.
Wetlands / Environmentally sensitive area	2021	Low	Use of mats and specialty equipment, only work during certain times of the year.

9. References

References
1. N/A

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

Attachment	Included in Submittal?
A. Utility Relocation Cost memo	*YES*
B. Cost Estimate	*YES*
C. Duct bank design sketch	*YES*
D. Partial Funding PAF	*YES*

Attachment A – Utility Relocation Cost Memo

Updated: 12/29/18: Eversource CT: Guidelines For Cost Reimbursement For Utility Relocations

#	Trigger Project	Utility Co.'s Share of Relocation Cost	Laws
1	State Roadway Projects	• Utility Co. pays 50% • Applies whenever utilities abutting or in a "state highway or any other public highway" must be relocated because of "the construction or reconstruction of a state highway". • DOT is obligated to design the project in a manner that minimizes costs to DOT and Eversource • If DOT and Eversource cannot agree on location of the relocated equipment, Commissioners of DOT & PURA resolve the dispute • If DOT and Eversource cannot agree on allocation of the costs for the relocation work, then either may file claim in court. • But C.G.S. § 13a-126a states Utility Co. pays 0% for any utility relocations requested by DOT for "aesthetic" reasons	• C.G.S. § 13a-126 • C.G.S. § 13a-126a
2	Rail Facility Projects	•Utility Co. pays 100% •Applies when DOT orders a Utility Co. to relocate utility equipment on or in a rail structure or road abutting a rail structure • *But Utility Co. entitled to 50% reimbursement for relocation of facilities abutting or on state highways or any other public highway when triggered by DOT's construction or reconstruction of a state highway*	C.G.S. § 13b-283(e)
3	Federal Surface Transportation Urban Program Roadway Projects	• Utility Co. pays 100% •Check if the relocation is triggered by a "federal surface transportation urban program roadway"[1] project • *But Utility Co. entitled to 50% reimbursement for relocation of facilities abutting or on state highways or any other public highway when triggered by DOT's construction or reconstruction of a state highway*	C.G.S. § 13a-98f
4	State Flood Control Projects	•Utility Co. pays 0% •Applies whenever the construction of any flood control project, including its reservoirs, for which the State has agreed to provide the necessary lands, easements and rights-of-way, requires the readjustment, relocation or removal of utility equipment	C.G.S. § 25-83a
5	Municipal Redevelopment Authority Projects	Utility Co. pays 50%	C.G.S. § 8-133a
6	All Other Municipal Projects	• Betterments:[2] Utility Co. pays 0% • "Proprietary" Projects:[3] Utility Co. pays 0% • Sewer or Pollution Abatement Projects:[4] Utility Co. pays 0% • All Other Municipal Projects that Require Utility Relocations: 1st Relocation: Utility Co. pays 100% 2nd Relocation during Course of Exact Same Project: Utility Co. pays 0%	See footnotes

[1] "Federal surface transportation urban program roadway or facility" means "any state or locally maintained roadway or facility that is deemed eligible for surface transportation urban program funding in accordance with the Transportation Equity Act for the 21st Century, all amendments to said act and all applicable federal regulations". C.G.S § 13a-98m.
[2] An example of a "betterment" would be if a municipality wanted existing above-ground utilities installed underground or relocated to a different location for aesthetic reasons, or to enhance recreational or community use of the area. PURA's Sep. 18, 2013 decision in Docket No. 13-03-11 states that a "municipality does not have the authority to order . . . betterments to the system and thus shift that cost to the utility, ***unless the betterment is proven to be in the public interest of utility ratepayers***."[2] Additionally, PURA's June 26, 1991 decision in Docket No. 86-02-14 concluded that – unless a municipality could demonstrate to PURA that a betterment provided "a direct benefit to . . . utilities or their ratepayers, or that a public necessity exits for" the betterment – then the municipality was solely responsible for the cost of the betterment.[2]
[3] PURA's Dec. 12, 1990 letter order in Docket No. 90-03-21 states that the term "proprietary" means that the utility relocation work is being performed for the benefit of a specific business, commercial development project or customer, and the work is not being performed for the overall safety and welfare of the general public. For example, road widenings for construction of a new or upgraded shopping plaza are "proprietary" and the associated utility relocation work must be paid for 100% by the developer and/or the municipality.
[4] Whenever a municipality obtains funding from the State to pay for any portion of the cost to construct or reconstruct sewers or pollution abatement facilities, C.G.S. § 22a-470 requires it to provide 100% reimbursement to a Utility Company to relocate its utility facilities, subject to a deduction for salvage value and depreciation.

Attachment B – Cost Estimate

Temporary Relocation

Estimate

Preliminary Estimate Summary	
Revision Number:	0
Contingency:	20.00%
SubTotal:	$170,860
Contingency Amount:	$34,172
Estimate:	$205,032
Reimbursement:	$0
Net Amount:	**$205,032**
Description:	

Item Description	CU	$ / Per	Qty	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	16-ALL17	[redacted]		$7,019.20
TRAFFIC OH/DB/UG - Traffic Control - Police Officer	16-ALL18			$10,000.00
POLE OH - JUNCTION POLE - 3ph (CL&P custodian)	16-OH14A			$35,071.20
POLE OH - Install/Replace Anchor and Guy	16-OH14B			$3,955.20
OH WIRE OH - Ampact Connectors - 3ph (6 Ampacts)	16-OH22			$11,536.00
OH WIRE OH-Reconductor w/175 Mil Tree Wire-3ph- 336 kcmil	16-OH26b			$31,320.00
OH WIRE OH - Reconductor Open Wire Secondary w/ Triplex	16-OH30			$3,600.00
OH WIRE OH-Install Aerial Cable-existing poles (any gauge)	16-OH36			$41,400.00
OH WIRE OH - Remove circuit wire (3 phase)	16-OH37A			$640.00

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Design Alternative			CD01663-04
SECTIONALIZE OH-Vertical Disconnect Switches-600/900 amp 3-1ph	16-OH43	[redacted]	$10,283.20
UG CABLE DB/UG - 750/1000 - 3-1/C (3ph) Cu	16-UG114B		$9,600.00
UG CABLE UG - Cable Removal - all cables	16-UG117		$3,000.00
OH WIRE OH - Remove circuit wire (3 phase) Aerial cable removal	16-OH37A		$640.00
SECTIONALIZE OH - Cutouts or Arresters - 3ph Arresters	16-OH20		$2,315.20
OH WIRE OH - Remove circuit wire (1 phase) Rem Tpx	16-OH37		$480.00

Permanent Installation

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	24.00%
SubTotal:	$108,747
Contingency Amount:	$26,099
Estimate:	$134,847
Reimbursement:	$0
Net Amount:	**$134,847**
Description:	

Item Description	CU	$ / Per	Qty	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	16-ALL17	[redacted]		$7,019.20
TRAFFIC OH/DB/UG - Traffic Control - Police Officer	16-ALL18			$8,000.00
OH WIRE OH - Ampact Connectors - 3ph (6 Ampacts)	16-OH22			$8,652.00
OH WIRE OH-Reconductor w/175 Mil Tree Wire-3ph- 556 kcmil	16-OH27			$34,920.00
OH WIRE OH - Remove circuit wire (3 phase)	16-OH37A			$1,440.00
POLE OH - POLE - 3ph (CL&P custodian) Midspan pole	16-OH14			$4,676.00
OTHER OTHER Pole and anchor removals	16-ALL14			$3,500.00
OH WIRE OH - Remove circuit wire (3 phase) Rem aerial cable	16-OH37A			$1,440.00
OH WIRE OH-Install Aerial Cable-existing poles (any gauge) Riser on [redacted] to 600A switches on [redacted]	16-OH36			$39,100.00

Duct Bank Installation

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	20.00%
SubTotal:	$110,380
Contingency Amount:	$22,076
Estimate:	$132,456
Reimbursement:	$0
Net Amount:	**$132,456**
Description:	

Item Description	CU	$ / Per	Qty	Amount
TRAFFIC OH/DB/UG - Traffic Control - Police Officer	16-ALL18	[redacted]		$15,000.00
CONDUIT UG-Ductline-up to 12 duct - Traveled Way / Paved	16-UG137			$70,380.00
OTHER OTHER Test pits & contractor labor	16-ALL14			$25,000.00

Attachment C – Duct Bank Design Sketch



Attachment D – Partial Funding PAF

Operations Project Authorization Form

Date Prepared: 01.28.2021	**Project Title: CDOT 135-331** [redacted]
Company/ies: Eversource CT	**Project ID Number:CD01663**
Organization: Distribution Electric	**Class(es) of Plant: Distribution**
Project Initiator: [redacted]	**Project Category: Line**
Project Manager: [redacted]	**Project Type: Line Relocation by Public Authority L4**
Project Sponsor: [redacted]	**Project Purpose: Bridge and Culvert Replacement**
Estimated in service date:	**If Transmission Project: PTF? N/A**
Eng. /Constr. Resources Budgeted?	**Capital Investment Part of Original Operating Plan?**
Authorization Type: Preliminary	**O&M Expenses Part of the Original Operating Plan?**
Total Request: $472,335 (169,940 is reimbursable)	

Financial Requirements:

Project Authorization
ERM: _____

FP&A: _____

Executive Summary

This project is being established, to cover the costs associated, with the temporary relocation and restoration, of the permanent electric facilities, in conflict with state highway bridge replacement project [redacted]

The temporary scope includes [redacted]

A portion of the project is 50% reimbursable, per Trigger #1 of the attached Utility Relocation Cost memo.

The reimbursement amount is estimated to be $169,940, which is 50% of the cost to relocate and reinstall the existing facilities that conflict with the bridge construction. The installation of new conduits underneath the new bridge is considered a betterment to Eversource, and therefore cost of $132,456 will be funded solely by Eversource. The net cost of this project to Eversource is therefore estimated to be $302,395.

Utility relocation cost memo.pdf

Project Costs Summary

	Prior Authorized	2021	2022	2023+	Totals
Capital Additions - Direct	$0	$163,682	$65,565	$0	$229,247
Less Customer Contribution	$0	$0	$0	$0	$0
Removals net of Salvage ____%	$0	$22,179	$8,884	$0	$31,063
Total - Direct Spending	$0	$185,861	$74,449	$0	$260,310
Capital Additions - Indirect	$0	$118,220	$47,354	$0	$165,574
Subtotal Request	$0	$304,081	$121,803	$0	$425,884

AFUDC	$0	$6,878	$2,755	$0	$9,633
Total Capital Request	$0	$310,960	$124,558	$0	$435,518
O&M	$0	$26,288	$10,530	$0	$36,817
Total Request	$0	$337,247	$135,088	$0	$472,335

Financial Evaluation

Direct Capital Costs	2021	2022	2023+	Total
Straight Time Labor	$15,763	$6,314	$0	$22,078
Overtime Labor	$2,493	$998	$0	$3,491
Outside Services	$128,723	$51,561	$0	$180,284
Materials	$37,507	$15,024	$0	$52,530
Other, including contingency amounts (describe)	$1,376	$551	$0	$1,927
Total Direct Costs	**$185,861**	**$74,449**	**$0**	**$260,310**

Indirect Capital Costs	2021	2022	2023+	Total
Indirects/Overheads (including benefits)	$118,220	$47,354	$0	$165,574
Capitalized interest or AFUDC, if any	$6,331	$2,536	$0	$8,867
Total Indirect Costs	**$124,551**	**$49,890**	**$0**	**$174,441**
Total Capital Costs	**$310,412**	**$124,339**	**$0**	**$434,751**
Less Total Customer Contribution	**$0**	**$0**	**$0**	**$0**
Total Capital Project Costs	**$310,412**	**$124,339**	**$0**	**$434,751**
Total O&M Project Costs	**$26,835**	**$10,749**	**$0**	**$37,584**
Total Project Cost	**$ 337,247**	**$ 135,088**	**$ -**	**$ 472,335**

Technical Justification:

Project Need Statement

Eversource will need to relocate the existing OH facilities in the vicinity of the bridge, to provide access for a construction crane, for the bridge replacement. A ROW along the east side of [redacted] will provide adequate safety clearance, for the crane operation, throughout the project.

Project Objectives

The relocation of the OH lines will provide a safe environment, by eliminating potential electrical hazards. It also provides Eversource with the opportunity to upgrade the facilities to today's engineering standards.

Project Scope

The temporary pole line will be installed in a [redacted] to enable the replacement of the bridge, without electrical interference. This will provide the construction crews with a safe work environment throughout the project.

[redacted]

Upon completion of the bridge, Eversource will install facilities as follows:

[redacted]

Background / Justification

This project is being done at the request of the state, and as such is 50% reimbursable based on CT General statute 13a-126.

Business Process and / or Technical Improvements:

Along with the betterment of having [redacted]

Alternatives Considered with Cost Estimates

Eversource is obligated to perform this work based on Connecticut General Statute 13a-26

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Preliminary Approval	2/15/21
Inst temp pole line & remove existing OH facilities	2021
Install new duct bank	2022
Install permanent facilities	2022

Regulatory Approvals

N/A

Risks and Risk Mitigation Plans

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2021	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.	2021	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
System abnormal configuration	2021	High	Schedule work to minimize system abnormal time. Install temporary bypasses/equipment if system will be abnormal for extended periods.
Wetlands / Environmentally sensitive area	2021	Low	Use of mats and specialty equipment, only work during certain times of the year.

References

CD01663_project_needs_statement.pdf

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

Signed Permit [redacted] Sta

CD01163-03 Civil SK.pdf

Cross Section - Staging.pdf