EVERSOURCE

Supplement Authorization Form

Project Title: Energy Release MH Covers - Eastern	**Project Number:** CD02325
Date Prepared: 02/02/2026	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** UNDERGROUND STRUCTURE ISSUE
Initiating Organization: Distribution	**Project Type:** Specific
Project DDE: [redacted]	**Capital Investment part of 5-year 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)
Current Authorized Amount: $136K	**Approved In-Service Date:** 12/31/2024
Supplement Request: $74.4K	**Estimated In-Service Date:** 04/30/2026
Total Capital Request ($): $210.4K	**Authorization Type:** Supplement Request
	Reason: Cost Overage

1. Project Background

Supplemental funding of $74.4K is being requested for this project, which results in a total project cost of $210.4K. There is no scope change in the project. The project was created to install Energy Release MH covers at 24 priority 1 manholes in Eastern Connecticut.

2. Supplement Justification Overview

Increased labor rates, material costs and loaders since the project's inception in 2024 resulted in cost overages. There is 1 location left to complete this project, and that cover will be replaced in April, 2026

3. Supplement Justification Detail

Cost overages are due mainly to the following:

Direct Costs – Net Increase of $12.7K

- Contractor cost increase by $17K due to the delay in the project, increasing the labor rates
- Material cost increased by $14.5K due to higher costs of the frames and covers.
- Decreases in internal labor, removals and risk and contingencies help offset the increased direct cost

Indirect Costs - Increase of $61.6K

- Higher loader rates since project was approved.

4. Supplement Cost Summary (Project Total)

Capital Costs	To Date Spend	Prior Authorized	Supplemental Request	Total Request
Internal Labor and Construction Equipment	0.2	8.1	-7.9	0.2
Outside Services	36.3	19.3	17.0	36.3
Materials	51.0	36.5	14.5	51.0
Removals	10.0	13.6	-3.6	10.0
Risk and Contingency	2.2	9.5	-7.3	2.2
Other	0.0	0.0	0.0	0.0
Subtotal	**99.7**	**87.0**	**12.7**	**99.7**

Indirect Capital Costs	To Date Spend	Prior Authorized	Supplemental Request	Total Request
Indirects/Overheads (including benefits)	108.8	49.0	59.8	108.8
Capitalized interest or AFUDC, if any	1.9	0.0	1.9	1.9
Subtotal	**110.6**	**49.0**	**61.6**	**110.6**
Total Capital Costs (Gross)	**210.4**	**136.0**	**74.4**	**210.4**
Less Total Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**
Project Costs (Net of Reimbursement)	**210.4**	**136.0**	**74.4**	**210.4**

New Total Request by Year (if applicable)

Capital Costs	2024 Actual	2025 Actual	2026 Estimate	TOTAL
Internal Labor & Equipment	0.0	0.2	0.0	0.2
Outside Services	0.0	32.8	3.5	36.3
Materials	0.0	46.1	4.9	51.0
Removals	0.0	8.8	1.2	10.0
Risk and Contingency	0.0	0.0	2.2	2.2
Other	0.0	0.0	0.0	0.0
SUBTOTAL Direct Cost	**0.0**	**87.8**	**11.9**	**99.7**
Indirects / Overheads	0.0	96.1	12.7	108.8
AFUDC	0.0	1.9	0.0	1.9
SUBTOTAL Indirect Cost	**0.0**	**98.0**	**12.7**	**110.6**
TOTAL Capital Request	**0.0**	**185.8**	**24.6**	**210.4**
Less Total Customer Contribution	0.0	0.0	0.0	**0.0**
TOTAL Project Cost	**0.0**	**185.8**	**24.6**	**210.4**

5. Lessons Learned

N/A

EVERSOURCE

Supplement Authorization Form

Full Funding PAF

Project Title: Energy Release MH covers – Eastern 2024	**Project Number: CD02325**
Date Prepared: 02/26/2024	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** UNDERGROUND STRUCTURE ISSUE
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: 12/31/2024	
Total Capital Request: $135.9K	**Authorization Type:** Full Funding

6. Executive Summary

Full funding is being requested for this project at a cost of **$135.9K** which is 75.5% of the partial funding capital estimate of $180K. There is no scope change on the project. The variance between the full funding and partial funding estimate is due to utilization of McAllen's unit pricing to generate a cost estimate, which decreased the contractor cost of the project.

The Original Project was presented as follows:

Energy Release MH covers are made such that they do not dislodge from MH structures in the event of a splice/cable failure in the manholes. Eversource created a program to replace existing MH covers throughout its territory with new energy release manhole covers. This will begin in 2024 with a $1.5M investment across the state. Years 2025 and beyond will see investments being made as well. The $1.5M for 2024 will be spent across the 3 divisions with the highest priority holes being done first. Holes are prioritized as shown:

Priority	*Description*
1	*Outdoor Dining Areas*
2	*High Pedestrian and Vehicular Traffic*
3	*Downtown areas*
4	*Holes containing High Fault Duty circuits*
5	*Getaway manholes*
6	*Other*

Of the $1.5M allocated for next year, $583.3K has already been allocated for two previously presented and approved projects (CD02220 and CD02254) to install a total of 74 covers in Greenwich, CT. The remaining $929.2K will be used to replace 124 covers that have been identified as priority 1 throughout the state at an average cost of approximately $7,500 each in 2024.

This project is being created to request Partial Funding at a cost of $180K to install Energy Release MH covers at 24 priority 1 holes in the Eastern region of Connecticut throughout 2024. The manholes being addressed are shown in Attachment "B".

Location Information:

Division: Eastern

Districts: East Hampton, Madison, New London

City: Various Cities/Towns

7. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	2024	Year 2	Year 3+	Total
Internal Labor and Construction Equipment	8.1	0.0	0.0	8.1
Outside Services	19.3	0.0	0.0	19.3
Materials	36.5	0.0	0.0	36.5
Removals	13.6	0.0	0.0	13.6
Risk and Contingency	9.5	0.0	0.0	9.5
Other	0.0	0.0	0.0	0.0
Subtotal	**87.0**	**0.0**	**0.0**	**87.0**

Indirect Capital Costs	2024	Year 2	Year 3+	Total
Indirects/Overheads (including benefits)	49.0	0.0	0.0	49.0
Capitalized interest or AFUDC, if any	0.0	0.0	0.0	0.0
Subtotal	**49.0**	**0.0**	**0.0**	**49.0**
Total Capital Costs (Gross)	**135.9**	**0.0**	**0.0**	**135.7**
Less Total Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**
Project Costs (Net of Reimbursement)	**135.9**	**0.0**	**0.0**	**135.9**

8. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

Two types of Energy Release Manhole Covers and Frames were piloted on Eversource's system in early 2023 – Neenah and East Jordan. The preference is for East Jordan (EJ) covers. Some specifications of EJ covers and frames are as follows:

- Designed to restrain the cover during explosion.
- Cover is allowed to lift providing relief of internal pressure.
- Currently tooled for various sizes ranging from 26" – 40" diameter. Other sizes are available upon request.
- Heavy duty (AASHTO H25 rated)
- Optional security bolt



b. Project Need

Cable faults in manholes sometimes cause an explosion that dislodges the manhole covers and they get launched up in the air. This poses a danger to pedestrians and could cause property damage. Eversource created a program to proactively replace all manhole covers throughout the state with new energy release covers. These new covers would release the energy caused from faults and gaseous build up in these manholes, and not allow the covers to be dislodged from the manholes. There are approximately 8,400 manholes on Eversource's UG system that are not of the Energy Release type – 835 of these are in the Eastern region. At an average cost of

approximately $7,500 per manhole cover replacement, 24 high priority covers will be replaced in Eastern Connecticut throughout 2024.

c. Project Scope

Replace 24 existing manhole frame and covers with new energy release frames and covers according to highest priorities throughout Eastern AWCs as shown in Attachment "B".

9. Alternatives Considered

The alternative to doing this project would be to leave the existing manhole frames and covers in place. Eversource has developed a program to proactively replace existing manhole frames and covers with safer energy release frames and covers.

10. Project Schedule

Milestone/Phase Name	Estimated Date
Partial Approval	November 2023
100% Detailed Engineering Completion	March 2024
Fully Funded	April 2024
Construction Start	April 2024
In Service Date	December 2024

11. Regulatory Decisions

N/A

12. Codes and Standards

N/A

13. Risk and Contingencies

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2024	Low	Included contingency costs in the funding request. Perform detailed Field Analysis and walk down in project development to avoid potential issues.
Customer Permission / Siting Council / Municipal approvals	2024	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach.
Internal construction resources not available to perform the work.	2024	High	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2024	High	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Technological risks involving integration of new technology	2024	Low	Before use of new technology ensure support of standards and manufacturer. Schedule project to accommodate for extra time or ensure new technology is not on the critical path.

14. References

References
1. N/A

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

Attachment	Included in Submittal?
A. Cost Estimate	*YES*
B. Priority 1 Manholes	*YES*
C. Manhole Summary	*YES*

Supplement Authorization Form

Design Alternative CD02325-01

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	24.00%
SubTotal:	$149,435
Contingency Amount:	$35,864
Estimate:	$185,299
Reimbursement:	$0
Net Amount:	**$185,299**

Description:

Item Description	CU	[redacted]	Amount
OTHER OTHER Cost to replace 24 manhole covers	23-ALL14		$149,435.00

[redacted]

Priority 1 Summary		
Zone	**LOC District**	**Count**
CT CENTRAL	HARTFORD	19
CT EASTERN	MADISON	17
	NEW LONDON	7
CT WESTERN	NEWTOWN	5
	NORWALK	23
	STAMFORD	38
	TORRINGTON	2
	WATERBURY	13
Grand Total		**124**

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Supplement Authorization Form

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Date Prepared: 10/26/2023	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** UNDERGROUND STRUCTURE ISSUE
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: 12/31/2024	
Total Capital Request: $180K	**Authorization Type: Partial Funding**

1. Executive Summary

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Priority	Description
1	Outdoor Dining Areas
2	High Pedestrian and Vehicular Traffic
3	Downtown areas
4	Holes containing High Fault Duty circuits
5	Getaway manholes
6	Other

Of the $1.5M allocated for next year, $583.3K has already been allocated for two previously presented and approved projects (CD02220 and CD02254) to install a total of 74 covers in Greenwich, CT. The remaining $929.2K will be used to replace 124 covers that have been identified as priority 1 throughout the state at an average cost of approximately $7,500 each in 2024.

This project is being created to request Partial Funding at a cost of $180K to install Energy Release MH covers at 24 priority 1 holes in the Eastern region of Connecticut throughout 2024. The manholes being addressed are shown in Attachment "B".

Location Information:

Division: Eastern

Districts: East Hampton, Madison, New London

City: Various Cities/Towns

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	2024	2025	2026+	Total
Internal Labor and Construction Equipment	3.8	0.0	0.0	3.8
Outside Services	73.9	0.0	0.0	73.9
Materials	4.6	0.0	0.0	4.6
Removals	42.8	0.0	0.0	42.8
Other	0.1	0.0	0.0	0.1
Risk and Contingency	0.0	0.0	0.0	0.0
Subtotal	**125.3**	**0.0**	**0.0**	**125.3**

Indirect Capital Costs	2024	2025	2026+	Total
Indirects/Overheads (including benefits)	54.2	0.0	0.0	54.2
Capitalized interest or AFUDC, if any	0.6	0.0	0.0	0.6
Subtotal	**54.8**	**0.0**	**0.0**	**54.8**
Total Capital Costs (Gross)	**180.0**	**0.0**	**0.0**	**180.0**
Less Total Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**
Project Costs (Net)	**180.0**	**0.0**	**0.0**	**180.0**

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

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6. Regulatory Decisions

N/A

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9. References

References
1. N/A

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

Attachment	Included in Submittal?
A. Cost Estimate	*YES*
B. Priority 1 Manholes	*YES*
C. Manhole Summary	*YES*

Attachment A: Cost Estimate.

Design Alternative CD02325-01

Estimate

Preliminary Estimate Summary

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Contingency:	24.00%
SubTotal:	$149,435
Contingency Amount:	$35,864
Estimate:	$185,299
Reimbursement:	$0
Net Amount:	**$185,299**
Description:	

Item Description	CU	[redacted]	Amount
OTHER	23-ALL14		$149,435.00
OTHER Cost to replace 24 manhole covers			

Attachment B: Eastern Priority 1 Manholes



Attachment C: Priority 1 Manhole Summary

Priority 1 Summary		
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CT EASTERN	MADISON	17
	NEW LONDON	7
CT WESTERN	NEWTOWN	5
	NORWALK	23
	STAMFORD	38

	TORRINGTON	2
	WATERBURY	13
Grand Total		**124**