EVERSOURCE

Supplement Authorization Form

Project Title: Rockville-Mansfield System Modernization	Project Number: CD00563
Date Prepared: 01/21/2025	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** RELIABILITY IMPROVE SPEC PROJ
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: $8,595K	**Approved In-Service Date:** 12/31/2023
Supplement Request: $963K	**Estimated In-Service Date:** 12/31/2024
Total Capital Request ($): $9,559K	**Authorization Type:** Supplement Request
	Reason: Cost Overage

1. Project Background

The current authorized amount for CD00563 is **$8,595K.** A supplemental authorization of **$963K** is requested to meet the total capital request of **$9,559K,** or 111% of Full Funding estimate.

The original project was presented as follows:

The [redacted] *A Transmission based solution was investigated but due to a high estimated cost of $198M a Distribution alternative solution was developed.*

Project CD00563 – Rockville/Mansfield System Modernization, together with Project CD00262 – [redacted] *, will accomplish multiple objectives including* [redacted]

CD00563 is a multi-year project spread across 6 years to accommodate workloads and budget constraints; 2018 – 2023.

CD00563 received Initial Funding authorization of $900K at the 3/23/2017 TRC meeting in Berlin, CT. The Initial Funding authorized amount is approximately 10% of the original preliminary estimated project cost of $9,981,067 as per TRC guidelines in place at the time.

The Detail Design has been completed for Segment 3 and Segment 6 (2018 - 2019 work). As such, we are now requesting Full Funding authorization of $3,452K for Segments 3 & 6 (2018 and 2019 work), which is 77.3% of the Initial Funding amount ($4,464.7K), a decrease of $1,012K. There is no change in scope. Everything requested in the Initial Funding estimate is included in the Full Funding design.

2. Supplement Justification Overview

Additional funding is requested with primary drivers being material inflation and increased labor costs.

The major material additions included replacement of [redacted] In addition, the work was performed at night on premium time to reduce the outage impact to customers.

Lastly, significantly more matting was required (approximately $230K) than estimated for the ROW pole replacements, and a vacuum truck was required instead of digger (auger) for pole sets in the ROW.

3. Supplement Justification Detail

While CD00563 is requesting a supplement that is 111% of the full funding estimate, the direct cost actuals are 23% over the full funding request, which is driving project onto the compliance report.

4. Supplement Cost Summary (Project Total)

Capital Costs	To Date Spend	Prior Auth	Supplement Request	**Total** (Prior Auth + Suppl Req)
Internal Labor & Equipment	173.8	537.0	-363.3	173.8
Outside Services	3,598.8	2,919.6	679.2	3,598.8
Materials	2,324.4	1,419.8	904.6	2,324.4
Removals	369.1	366.0	3.1	369.1
Risk and Contingency	12.3	6.6	5.7	12.3
Other	9.9	9.9	0.0	9.9
SUBTOTAL Direct Cost	**6,488.3**	**5,258.9**	**1,229.4**	**6,488.3**
Indirects / Overheads	2,723.6	3,244.2	-520.6	2,723.6
AFUDC	346.7	92.3	254.4	346.7
SUBTOTAL Indirect Cost	**3,070.3**	**3,336.5**	**-266.1**	**3,070.3**
TOTAL Capital Request	**9,558.6**	**8,595.3**	**963.3**	**9,558.6**
Less Total Customer Contribution	0.0	0.0	0.0	0.0
TOTAL Project Cost	**9,558.6**	**8,595.3**	**963.3**	**9,558.6**

New Total Request by Year (if applicable)

Capital Costs	2017	2018	2019	2020	2021
Internal Labor & Equipment	3.2	21.5	68.9	5.0	2.9
Outside Services	0.2	115.7	1,423.9	31.1	-17.9
Materials	8.6	211.2	215.1	55.8	7.0
Removals	0.0	13.1	154.1	-1.1	3.3
Risk and Contingency					
Other	0.0	0.1	1.6	0.0	0.0
SUBTOTAL Direct Cost	**12.0**	**361.6**	**1,863.6**	**90.8**	**-4.6**
Indirects / Overheads	9.0	171.3	941.6	-33.1	25.0
AFUDC	0.5	6.4	37.2	8.0	5.4
SUBTOTAL Indirect Cost	**9.5**	**177.8**	**978.8**	**-25.0**	**30.4**
TOTAL Capital Request	**21.5**	**539.4**	**2,842.4**	**65.8**	**25.8**
Less Total Customer Contribution	0.0	0.0	0.0	0.0	0.0
TOTAL Project Cost	**21.5**	**539.4**	**2,842.4**	**65.8**	**25.8**

Capital Costs		2022	2023	2024	Projected Spend
Internal Labor & Equipment		2.8	47.2	22.2	173.8
Outside Services		604.5	1,062.3	378.9	3,598.8
Materials		1,063.7	568.6	194.5	2,324.4
Removals		141.3	241.3	-182.9	369.1
Risk and Contingency				12.3	12.3
Other		0.3	6.2	1.6	9.9
SUBTOTAL Direct Cost		**1,812.6**	**1,925.6**	**426.6**	**6,488.3**
Indirects / Overheads		474.0	978.6	157.1	2,723.6
AFUDC		38.0	207.5	43.8	346.7
SUBTOTAL Indirect Cost		**511.9**	**1,186.1**	**201.0**	**3,070.3**
TOTAL Capital Request		**2,324.6**	**3,111.6**	**627.5**	**9,558.6**
Less Total Customer Contribution		0.0	0.0	0.0	0.0
TOTAL Project Cost		**2,324.6**	**3,111.6**	**627.5**	**9,558.6**

5. Lessons Learned

N/A

Full Funding PAF:

Operations Project Authorization Form

Date Prepared: 3/18/2021	**Project Title:** Rockville-Mansfield System Modernization
Company/ies: Eversource CT	**Project ID Number: CD00563**
Organization: Distribution Engineering	**Class(es) of Plant:** Distribution
Project Initiator: [redacted]	**Project Category:** Reliability – Load Growth
Project Manager: [redacted]	**Project Type:** Specific
Project Sponsor: [redacted]	**Project Purpose:** Improve reliability and allow for future l growth through system modernization.
Estimated in service date: 12/31/2023	**If Transmission Project: PTF?** NA
Eng. /Constr. Resources Budgeted? Yes	**Capital Investment Part of Original Operating Plan?**
Authorization Type: Full Funding – 2018 and 2019 Work; Initial Funding – 2021, 2022 and 2023 Work.	**O&M Expenses Part of the Original Operating Plan?** Yes
Total Request: $8,888,789 (2018 – 2019: $3,452,094; *2021-$210,981, 2022-$3,767,419, 2023-	

Financial Requirements:

Project Authorization

ERM: _____

FP&A: _____

Executive Summary

***Dollars were brought into 2021 to accommodate** [redacted].

The [redacted] A Transmission based solution was investigated but due to a high estimated cost of $198M a Distribution alternative solution was developed.

Project CD00563 – Rockville/Mansfield System Modernization, together with Project CD00262 – [redacted]

CD00563 is a multi-year project spread across 6 years to accommodate workloads and budget constraints; 2018 – 2023.

CD00563 received Initial Funding authorization of $900K at the 3/23/2017 TRC meeting in Berlin, CT. The Initial Funding authorized amount is approximately 10% of the original preliminary estimated project cost of $9,981,067 as per TRC guidelines in place at the time.

The Detail Design has been completed for Segment 3 and Segment 6 (2018 - 2019 work). As such, we are now requesting Full Funding authorization of $3,452K for Segments 3 & 6 (2018 and 2019 work), which is 77.3% of the Initial Funding amount ($4,464.7K), a decrease of $1,012K. There is no change in scope. Everything requested in the Initial Funding estimate is included in the Full Funding design

At this time, we are also requesting Initial Funding authorization of $5,436,695 for the remaining years of the project, 2021 – 2023.

Project Costs Summary

	Prior Authorized	2018-2020	2021	2022	2023	Totals
Capital Additions - Direct	$0	$1,793,082	$120,292	$2,148,016	$831,456	$4,892,846

Less Customer Contribution	$0	$0	$0	$0	$0	$0
Removals net of Salvage ____%	$0	$80,013	$11,099	$198,192	$76,716	$366,020
Total - Direct Spending	$0	$1,873,095	$131,391	$2,346,208	$908,172	$5,258,866
Capital Additions - Indirect	$0	$1,400,853	$71,533	$1,277,349	$494,437	$3,244,173
Subtotal Request	$0	$3,273,948	$202,925	$3,623,558	$1,402,609	$8,503,039
AFUDC	$0	$53,855	$1,618	$28,891	$11,183	$95,547
Total Capital Request	$0	$3,327,803	$204,542	$3,652,449	$1,413,792	$8,598,586
O&M	$0	$124,291	$6,439	$114,970	$44,503	$290,203
Total Request	$0	$3,452,094	$210,981	$3,767,419	$1,458,295	$8,888,789

Financial Evaluation

Direct Capital Costs	2018-2020	2021	2022	2023	Total
Straight Time Labor	$260,719	$8,933	$159,522	$61,748	$490,922
Overtime Labor	$44,418	$1,630	$29,113	$11,269	$86,431
Outside Services	$827,150	$89,706	$1,601,845	$620,043	$3,138,744
Materials	$734,435	$30,731	$548,761	$212,415	$1,526,343
Other, including contingency amounts (describe)	$6,371	$390	$6,967	$2,697	$16,425
Total Direct Costs	**$1,873,093**	**$131,391**	**$2,346,208**	**$908,172**	**$5,258,864**

Indirect Capital Costs	2018-2020	2021	2022	2023	Total
Indirects/Overheads (including benefits)	$1,400,853	$71,533	$1,277,349	$494,437	$3,244,173
Capitalized interest or AFUDC, if any	$51,886	$1,568	$28,002	$10,839	$92,296
Total Indirect Costs	**$1,452,739**	**$73,102**	**$1,305,352**	**$505,276**	**$3,336,469**
Total Capital Costs	**$3,325,834**	**$204,493**	**$3,651,560**	**$1,413,448**	**$8,595,333**
Less Total Customer Contribution	$0	**$0**	**$0**	**$0**	**$0**
Total Capital Project Costs	**$3,325,834**	**$204,493**	**$3,651,560**	**$1,413,448**	**$8,595,333**
Total O&M Project Costs	**$126,262**	**$6,488**	**$115,859**	**$44,847**	**$293,456**
Total Project Cost	**$3,452,094**	**$210,981**	**$3,767,419**	**$1,458,295**	**$8,888,789**

Project Need Statement

The [redacted] A Transmission based solution was investigated but due to a high estimated cost of $198M a Distribution alternative solution was developed.

Project Objectives

Project CD00563 in conjunction with Project CD00262 – [redacted]

Project Scope

Project CD00563 will significantly improve the reliability in the area by constructing [redacted] under CD00262.

The aging infrastructure will be upgraded and modernized throughout employing Eversource's state of the art DSCADA system and DSCADA automatic devices reducing the size of customer zones to below 500 customers.

Major Material

[redacted]

Background / Justification

The [redacted].

- [redacted]
  - [redacted]
- [redacted]
  - [redacted].

This project will address the [redacted]

- [redacted]
- [redacted]

- Will save future upgrade and maintenance costs at [redacted] and [redacted]

Business Process and / or Technical Improvements:

[redacted]

Alternatives Considered with Cost Estimates

1. Construct a new [redacted]. This request was submitted to Transmission but a preliminary estimate of $198M was deemed too high.

2. [redacted] is available to be used in CL&P's distribution system so this was not considered as a realistic alternative.

3. [redacted] The cost of doing so would easily exceed $10M just for the distribution line work. Another $3M+ would be required for a [redacted]

Project Schedule

This project is a multi-year project spread across 6 years to accommodate workloads and budget constraints

- Project to begin in 2018 and scheduled to be completed in 2023

[redacted]

- Expected completion by 12/31/2023

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.	2018 - 2023	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	2018 - 2023	Medium	Design to minimize customer impact. Project Preplanning and customer/community outreach
Internal construction resources not available to perform the work.	2018 - 2023	High	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Internal engineering resources not available to perform the work.	2017 - 2022	Medium	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2018 - 2023	Low	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2018 – 2023	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2018 - 2023	Low	Schedule work to minimize system abnormal time. Install temporary bypasses/equipment if system will be abnormal for extended periods
Technological risks involving integration of new technology	2018 - 2023	Low	Before use of new technology ensure support of standards and manufacture. Schedule project to accommodate for extra time or ensure new technology is not on the critical path.

Wetlands / Environmentally sensitive area	2018 - 2023	Medium	Use of mats and specialty equipment, only work during certain times of the year

References

CD00563_project_needs_statement rev 3-1

Rockville-Mansfield System Modernization

One-Line Diagrams, Attachments, and Images

Project One-Line 3-15-21.pdf

TRC Meeting Minutes 03-23-17.d