EVERSOURCE

Project Approval Form

Project Title: 2025 Eastern-Madison CI Rank 1-100 - 1Z-	Project Number: CD02537
Date Prepared: 02/19/2025	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** SMART SWITCHES PROGRAM
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: 12/31/2025	
Total Capital Request: $218.1K	**Authorization Type:** Full Funding

1. Executive Summary

Full funding is being requested for this project at a cost of **$218.1K** which is 94.3% of the partial funding capital estimate of $231.3K. CD02537 was partially approved in October 2024. There is no scope change on the project. This project falls within the 15% threshold relative to the initial funding request and is therefore being requested with no changes anticipated.

The Original Project was presented as follows:

- *The Smart Switch Program includes the installation of additional smart switch devices (reclosers) on circuits with zones impacting 500 or more customers. Reducing the size of customer zones will minimize the customers affected in the event of future outages – improving SAIDI, SAIFI and CEMI. These additional reclosers will also provide additional telemetry towards the implementation of DMS.*
- *CD02537 will address zones with many customers interrupted over a four-year period within the Madison district.*
- [redacted]*. The zone addressed and the customers involved are summarized here:*

AWC	*ZONE_DVCNAME*	*CUST IN ZONE*
[redacted]		

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	2025	2026	2027	Total
Internal Labor and Construction Equipment	20.3	0.0	0.0	20.3
Outside Services	0.0	0.0	0.0	0.0
Materials	92.7	0.0	0.0	92.7
Removals	3.0	0.0	0.0	3.0
Risk and Contingency	15.2	0.0	0.0	15.2
Other	0.0	0.0	0.0	0.0
Subtotal	**131.3**	**0.0**	**0.0**	**131.3**

Indirect Capital Costs	2025	2026	2027	Total
Indirects/Overheads (including benefits)	86.8	0.0	0.0	86.8
Capitalized interest or AFUDC, if any	0.0	0.0	0.0	0.0
Subtotal	**86.8**	**0.0**	**0.0**	**86.8**
Total Capital Costs (Gross)	**218.1**	**0.0**	**0.0**	**218.1**
Less Total Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**
Project Costs (Net of Reimbursement)	**218.1**	**0.0**	**0.0**	**218.1**

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

The Smart Switch Program is a continuation of an Eversource initiative of a multi-year program to improve circuit reliability by adding automatic or SCADA sectionalizing devices on overhead distribution circuits. The

Smart Switch Program focuses on breaking up customer zones and lowering the average number of customers impacted by a backbone interruption.

b. Project Need

[redacted]

c. Project Scope

The scope for this project is as follows:

[redacted]

4. Alternatives Considered

An alternative for this project was to "do nothing," but this wasn't selected as it doesn't address the large customer zones that would be affected by a single location outage.

[redacted]. However, the installation of a second Smart Switch would better protect a large customer side tap so this was chosen as the preferred solution.

5. Project Schedule

Add any additional milestones that are pertinent to the project

Milestone/Phase Name	Estimated Date
Partial Approval	Oct 2024
100% Detailed Engineering Completion	Feb 2025
Fully Funded	Mar 2025
Construction Start	Apr2025
In Service Date	Dec 2025

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.	2025	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	2025	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach.
Internal construction resources not available to perform the work.	2025	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2025	Medium	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2025	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2025	Low	Schedule work to minimize system abnormal time. Install temporary bypasses/equipment if system will be abnormal for extended periods.

9. References

N/A

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

Attachment	Included in Submittal?
A1. Partial Funding PAF Form	*YES*
A. Cost Estimate	*YES*
B. Load Sheets	*YES*
C. One-lines	*YES*
D. Geographic maps	*YES*

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Project Approval Form

Attachment A1: Partial Funding PAF Form

Project Title: 2025 Eastern-Madison CI Rank 1-100 - 1Z-2R	**Project Number:** CD02537
Date Prepared: 08/30/2024	**Company: Eversource CT**
Organization: Distribution Engineering	**Project Category: SMART SWITCHES PROGRAM**
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
Required in service date: 12/31/2025	
Total Capital Request: $231.3K	**Authorization Type:** Partial Funding

1. Executive Summary

The Smart Switch Program includes the installation of additional smart switch devices (reclosers) on circuits with zones impacting 500 or more customers. Reducing the size of customer zones will minimize the customers affected in the event of future outages – improving SAIDI, SAIFI and CEMI. These additional reclosers will also provide additional telemetry towards the implementation of DMS.

CD02537 will address zones with a large number of customers interrupted over a four-year period within the Madison district.

[redacted]. The zone addressed and the customers involved are summarized here:

AWC	ZONE_DVCNAME	CUST IN ZONE
[redacted]		

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	2025	2026	2027+	Total
Internal Labor and Construction Equipment	12.6	0.0	0.0	12.6
Outside Services	25.9	0.0	0.0	25.9
Materials	120.1	0.0	0.0	120.1

Removals	13.8	0.0	0.0	13.8
Other	0.6	0.0	0.0	0.6
Risk and Contingency	0.0	0.0	0.0	0.0
Subtotal	**173.0**	**0.0**	**0.0**	**173.0**

Indirect Capital Costs	**2025**	**2026**	**2027+**	**Total**
Indirects/Overheads (including benefits)	55.6	0.0	0.0	55.6
Capitalized interest or AFUDC, if any	2.7	0.0	0.0	2.7
Subtotal	**58.3**	**0.0**	**0.0**	**58.3**
Total Capital Costs (Gross)	**231.3**	**0.0**	**0.0**	**231.3**
Less Total Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**
Project Costs (Net)	**231.3**	**0.0**	**0.0**	**231.3**

Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

The Smart Switch Program is a continuation of an Eversource initiative of a multi-year program to improve circuit reliability by adding automatic or SCADA sectionalizing devices on overhead distribution circuits. The

Smart Switch Program focuses on breaking up customer zones and lowering the average number of customers impacted by a backbone interruption.

b. Project Need

[redacted]

c. Project Scope

The scope for this project is as follows:

[redacted]

3. Alternatives Considered

An alternative for this project was to "do nothing," but this wasn't selected as it doesn't address the large customer zones that would be affected by a single location outage.

[redacted]. However, the installation of a second Smart Switch would better protect a large customer side tap so this was chosen as the preferred solution.

4. Project Schedule

Milestone/Phase Name	Estimated Date
Partial Approval	September 2024
100% Detailed Engineering Completion	February 2025
Fully Funded	March 2025
Construction Start	April 2025
In Service Date	December 2025

5. Regulatory Decisions

N/A

6. Codes and Standards

N/A

7. Risk and Contingencies

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation

Actual cost higher than estimated due to scope changes.	2025	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	2025	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach.
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Storm delays	2025	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2025	Low	Schedule work to minimize system abnormal time. Install temporary bypasses/equipment if system will be abnormal for extended periods.

8. References

References
1. N/A

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

Attachment	**Included in Submittal?**
A. Cost Estimate	*YES*
B. Load Sheets	*YES*
C. One-lines	*YES*
D. Geographic maps	*YES*

Attachment A: Cost Summary:

Madison AWC:

[redacted]

Design Alternative CD02537-01

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	24.00%
SubTotal:	$194,716
Contingency Amount:	$46,732
Estimate:	$241,448
Reimbursement:	$0
Net Amount:	**$241,448**
Description:	Inst one (2) new SS to sectionalize 30R15-70S zone

Item Description	CU	$ / Per	Qty	Amount
OTHER OTHER 30% Contractor adder	23-ALL14	[redacted]		$30,076.00
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Complex Backbone switching for (2) recloser installations	23-ALL16			$9,131.20
SECTIONALIZE OH-Vertical Disconnect Switches-600/900 amp 3-1ph In-line switches for recloser installations	23-OH43			$26,736.32
TRAFFIC OH/DB/UG - Traffic Control - Police Officer PD Traffic control - 2 locations (busy road)	23-ALL18			$4,000.00
SECTIONALIZE OH - Recloser - 3ph Two (2) recloser installations for SS application	23-OH38			$124,772.96

Attachment B: Load Sheets: *(There are no overloads)*

Madison AWC:

[redacted]



Attachment C: One Line Diagrams:

[redacted]

[redacted]



Madison AWC:

30R15



Attachment D: Geographic map:

Madison AWC:

[redacted]

Before



Madison AWC:

[redacted]

After

