EVERSOURCE

Project Approval Form

Project Title: VCP [redacted]	Project Number: CD02283
Date Prepared: 10/31/2025	**Company:** Eversource CT
Organization: Distributed Energy Resource Planning	**Project Category:** Distributed Generation
Project Initiator: [redacted]	**Project Type:** Specific
Initiating Organization: Distributed Energy Resources	**Capital Investment part of original Op Plan:** No
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	**NWS Excludable:** ☒ Yes ☐ No
Total Capital Request: $252.3 (100% Reimbursable)	**Authorization Type:** Full Funding

1. Executive Summary

VCP is proposing a 0.975 MW photovoltaic (PV) project, located at [redacted] Suffield CT. The project will interconnect to the [redacted] ([redacted]) at 23kV.

The three-phase line extension will tap the existing three phase near pole 854 with a new junction pole. The new service will extend west on to the customer property. The new three-phase service will consist of a recloser and primary meter, the primary meter pole will mark the point in change in ownership from Eversource to the customer. The set of voltage regulators on poles 843, 3095, and 3096 [redacted] cannot accommodate reverse power flow and will be replaced with a 1200kVAR cap. The set of regulators on pole 4888 [redacted]) cannot accommodate reverse power and will need to be reprogrammed with updated settings. A dynamic study was completed for this project and found no risk of islanding or over voltage concerns.

- Project Location
  - Division: Central
  - District: Tolland AWC
  - City/Town: Suffield

- Partial funding estimate approved for $284.7K at 11/22/2023 CTPAC.
- Full funding estimate is $252.3K, a $32.4K (11.4%) reduction.
- There is no change in scope.

- The Full Funding estimate is less due to Eversource crews identified to perform the work versus the Partial Funding estimate which called for Contractor crews.
- This factor was partially offset by an increase in material cost.

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	2025	Total
Internal Labor and Construction Equipment	29.6	29.6
Outside Services	0.0	0.0
Materials	80.0	80.0
Removals	3.5	3.5
Risk and Contingency	17.6	17.6
Other	0.0	0.0
Subtotal	**130.7**	**130.7**

Indirect Capital Costs	2025	Total
Indirects/Overheads (including benefits)	121.6	121.6
Capitalized interest or AFUDC, if any	0.0	0.0
Subtotal	**121.6**	**121.6**
Total Capital Costs (Gross)	**252.3**	**252.3**
Less Total Customer Contribution	**-252.3**	**-252.3**
Project Costs (Net of Reimbursement)	**0.0**	**0.0**

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

Both sets of voltage regulators were confirmed with the circuit to need upgrades to accommodate reverse powerflow. The circuit owner decided that a capacitor would be better suited at the voltage regulator set on pole 843, 3095,3096. The MA west distributed generation department was included in the coordination for the project. The 29A1 alternate feed was modeled with MA approved models and the study found there to be no impact on the system.

b. Project Need

The goal of this project is to provide service to the DER applicant to allow their generator to interconnect to the Eversource EPS. This project proposes the installation of a site-dedicated recloser and primary meter.

c. Project Scope

The three-phase line extension will tap the existing three phase near pole 854 with a new junction pole. The new service will extend west on to the customer property. The new three-phase service will consist of a recloser and primary meter, the primary meter pole will mark the point in change in ownership from Eversource to the customer. The set of voltage regulators on poles 843, 3095, and 3096 ([redacted]) cannot accommodate reverse power flow and will be replaced with a 1200 kVAR cap. The set of regulators on pole 4888 ([redacted] cannot accommodate reverse power and will to be reprogrammed with updated settings. A dynamic study was completed for this project and found no risk of islanding or over voltage concerns.

4. Alternatives Considered

NWS Exclusion Criteria (select all that apply)

☐ Project cost < $250k	☐ New Service
☐ CDOT Relocation	☒ Generator interconnection project
☐ Maintenance, Asset condition or safety related*	

There were no alternatives considered. The 12C48 is the only feasible feeder in the vicinity of the project.

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5. Project Schedule

Add any additional milestones that are pertinent to the project

Milestone/Phase Name	Estimated Date
Partial Approval	11/22/2023
100% Detailed Engineering Completion	9/30/2025
Fully Funded	11/7/2025
Construction Start	12/01/2025
In Service Date	12/31/2025

6. Regulatory Decisions

N/A

7. Codes and Standards

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	High/Medium/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.
Internal engineering 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	Low	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	High/Medium/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	2025	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.

Wetlands / Environmentally sensitive area	2025	Low	Use of mats and specialty equipment, only work during certain times of the year.

9. References

References

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

Attachment	Included in Submittal?
A. Partial Funding PAF	*YES*

EVERSOURCE

Project Approval Form

A. Partial Funding PAF

Project Title: VCP [redacted]	**Project Number: CD02283**
Date Prepared: 11/06/2023	**Company:** Eversource CT
Organization: Distributed Energy Resource Planning	**Project Category:** Distributed Generation
Project Initiator: [redacted]	**Project Type:** Specific
Initiating Organization: Distributed Energy Resources	**Capital Investment part of original Op Plan:** No
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	**NWS Excludable:** ☒ Yes ☐ No
Total Capital Request: $284.7 (100% Reimbursable)	**Authorization Type:** Partial Funding

1. Executive Summary

The purpose of this request is to approve the 100% reimbursable partial funding estimate of $284,711. This preliminary engineering estimate includes a 20% contingency for a projected December 31, 2024, in service date. Note, the total gross capital does not include the CIAC tax or witness test cost.

VCP is proposing a 0.975 MW photovoltaic (PV) project, located on [redacted] Suffield CT. The project will interconnect to the [redacted] at [redacted]

The three-phase line extension will tap the existing three phase near pole 854 with a new junction pole. The new service will extend west on to the customer property. The new three phase service will consist of a recloser and primary meter, the primary meter pole will mark the point in change in ownership from Eversource to the customer. The set of voltage regulators on poles 843, 3095, and 3096 ([redacted] cannot accommodate reverse power flow and will be replaced with a 1200kVAR cap. The set of regulators on pole 4888 [redacted]) cannot Accommodate reverse power and will to be retrofit with updated settings. A dynamic study was completed for this project and found no risk of islanding or over voltage concerns.

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	2025	2026	2027+	Total
Internal Labor and Construction Equipment	15.2	0.0	0.0	15.2
Outside Services	82.3	0.0	0.0	82.3
Materials	33.5	0.0	0.0	33.5
Removals	34.2	0.0	0.0	34.2
Other	1.7	0.0	0.0	1.7
Risk and Contingency	0.0	0.0	0.0	0.0
Subtotal	**166.8**	**0.0**	**0.0**	**166.8**

Indirect Capital Costs				
Indirects/Overheads (including benefits)	82.9	0.0	0.0	82.9
Capitalized interest or AFUDC, if any	5.5	0.0	0.0	5.5
Subtotal	**88.4**	**0.0**	**0.0**	**88.4**
Total Capital Costs (Gross)	**255.2**	**0.0**	**0.0**	**255.2**
Less Total Customer Contribution	**-255.2**	**0.0**	**0.0**	**-255.2**
Project Costs (Net)	**0.0**	**0.0**	**0.0**	**0.0**

The below table illustrates the total cost that will be shared with the customer in the interconnection agreement. It includes a CIAC contribution as well as witness test fee.

Distribution cost Including O&M	$284,711
CIAC – Tax 16%	$45,553
Total Distribution cost	$330,264
Witness Test	$2,000
TOTAL Customer Contribution in Aide of Construction **paid by customer**	**$332,264**

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

Both sets of voltage regulators were confirmed with the circuit to need upgrades to accommodate reverse powerflow. The circuit owner decided that a CAP would be better suited at the voltage regulator set on pole 843, 3095,3096. The MA west distributed generation department was included in the coordination for the project. The [redacted] was modeled with a MA approved models and the study found there to be no impacts on the system.

b. Project Need

The goal of this project is to provide service to the DER applicant to allow their generator to interconnect to the Eversource EPS. This project proposes the installation of a site-dedicated recloser and primary meter.

c. Project Scope

The three-phase line extension will tap the existing three phase near pole 854 with a new junction pole. The new service will extend west on to the customer property. The new three phase service will consist of a recloser and primary meter, the primary meter pole will mark the point in change in ownership from Eversource to the customer. The set of voltage regulators on poles 843, 3095, and 3096 ([redacted]) cannot accommodate reverse power flow and will be replaced with a 1200kVAR cap. The set of regulators on pole 4888 ([redacted] cannot Accommodate reverse power and will to be retrofit with updated settings. A dynamic study was completed for this project and found no risk of islanding or over voltage concerns.

4. Alternatives Considered

NWS

NWS Exclusion Criteria (select all that apply)

☐ Project cost < $250k	☐ New Service
☐ CDOT Relocation	☒ Generator interconnection project
☐ Maintenance, Asset condition or safety related*	

Project Option Comparison

Design Criteria	N/A DG project
Normal loads < 80% of UG rating	
Normal loads < 90% of OH rating	
Contingent loads < 100% of rating	
All zones < 500 customers	
Additional ties created	
Eliminates PILC	
Reconfigure double circuit pole lines where both the normal and alternate supply the same group of customers	
No automatic circuit ties with circuits emanating from the same bus	
Eliminate triple circuit pole line	
Authorization Type	
Capital Cost	
Expense Cost	
Total Cost	
Total Cost / MVA added	
Total Cost / CM Saved	
Total Cost / CI Saved	$0/CI

Preferred option	X

Option Summary

Preferred: There were no alternatives considered. The [redacted] the only feasible feeder in the vicinity of the project.

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5. Project Schedule

Add any additional milestones that are pertinent to the project

Milestone/Phase Name	Estimated Date
Partial Approval	11/16/2023
100% Detailed Engineering Completion	12/30/2023
Fully Funded	01/1/2024
Construction Start	03/01/2024
In Service Date	12/31/2024

6. Regulatory Decisions

N/A

7. Codes and Standards

See Section 9 below

8. Risk and Contingencies

Contingencies: Contingencies: A 20% contingency was used which is consistent with projects with an in-service date one year out.

Risk Mitigation:

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2025	High/Medium/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	2024/2025	High/Medium/Low	Design to minimize customer impact. Project Preplanning and customer/community outreach.
Internal construction resources not available to perform the work.	2025	High/Medium/Low	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.	2025	High/Medium/Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2025	High/Medium/Low	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2025	High/Medium/Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2025	High/Medium/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	2025	High/Medium/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.

Wetlands / Environmentally sensitive area	2025	High/Medium/Low	Use of mats and specialty equipment, only work during certain times of the year.

9. References

References
1. DSEM- Distributed Generation- Remote monitoring and control- 7.0
2. DSEM- Distributed Generation- General Standards- Large scale DER 1.4.1
3. DSEM- New Service- NB-3-7a
4. DER Planning Guide
5.

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

Attachment	Included in Submittal?
A. Cost Estimate	*YES*
B. P6 Schedule	*NO*
C. Geographic Map	*YES*
D. System and Station One-Lines	*NO*
E. Other	*N/A*
F.	

B. Cost Estimate:



C. Geographic Map

