EVERSOURCE

Project Approval Form

Project Title: [redacted], [redacted]	**Project Number:** CD01776
Date Prepared: 11/24/2023	**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: 6/30/2024	
Total Capital Request: $260,244 (100% Reimbursable)	**Authorization Type:** Full Funding

Executive Summary

The purpose of this request is to approve the 100% reimbursable Full funding estimate of $260,244. This preliminary engineering estimate includes a 24% contingency for a projected June 30, 2024, in service date. Note, the total gross capital does not include the CIAC tax or witness test cost.

[redacted] is proposing a 3.963 MW photovoltaic (PV) project, located at [redacted]. [redacted] The voltage regulators upgrades were approved under CD01680. However, CD01680 has been withdrawn, so the upgrades are now inherited by CD01776.

The new service will [redacted] this pole will mark the point in change in ownership from Eversource to the customer. A dynamic study was completed for this project and determined that there is no risk of islanding.

1. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	2024	2025	2026+	Total
Internal Labor and Construction Equipment	15.4	0.0	0.0	15.4
Outside Services	83.8	0.0	0.0	83.8
Materials	34.2	0.0	0.0	34.2
Removals	34.8	0.0	0.0	34.8
Other	1.7	0.0	0.0	1.7
Risk and Contingency	0.0	0.0	0.0	0.0
Subtotal	**169.9**	**0.0**	**0.0**	**169.9**

Indirect Capital Costs	2024	2025	2026+	Total
Indirects/Overheads (including benefits)	90.0	0.0	0.0	90.0
Capitalized interest or AFUDC, if any	0.0	0.0	0.0	0.0
Subtotal	**90.0**	**0.0**	**0.0**	**90.0**
Total Capital Costs (Gross)	**260.0**	**0.0**	**0.0**	**260.0**
Less Total Customer Contribution	**-260.0**	**0.0**	**0.0**	**-260.0**
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. Note, these values are subject to change after Eversource conducts a facility study to get detailed engineering.

Distribution cost Including O&M- Ball Park cost	$260,244
CIAC – Tax 16%	$41,639
Total Distribution cost	$301,883
Witness Test	$2,000
TOTAL Customer Contribution in Aide of Construction **paid by customer**	**$303,883**

2. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

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

[redacted] is proposing a 3.963 MW photovoltaic (PV) project, located at [redacted] The voltage regulators upgrades were approved under CD01680. However, CD01680 has been withdrawn, so the upgrades are now inherited by CD01776.

The new service will [redacted], this pole will mark the point in change in ownership from Eversource to the customer. A dynamic study was completed for this project and determined that there is no risk of islanding.

3. Alternatives Considered

4. Project Schedule

Milestone/Phase Name	Estimated Date
Partial Approval	7/14/2022
100% Detailed Engineering Completion	7/14/2022
Issuance of Interconnection Agreement	7/14/2022
Fully Funded	11/24/2023
Construction Start	01/01/2024
In Service Date	6/30/2024

5. Regulatory Decisions

N/A

6. Codes and Standards

See Section 8 below.

7. Risk and Contingencies

Contingencies:

A 24% contingency was added. The contingency will be refined after the project goes to a facility study.

Risk Mitigation:

Risk mitigation was not included at this time as the scope of work requires a detailed design (facility study) to be performed prior to issuance of an interconnection agreement.

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. The new service is a standard design and an included a facility study shall derive a construction grade estimate
Customer Permission / Siting Council / Municipal approvals	2024/2025	Medium	New service requires limited easement, and most ES facilities will be street side. This project requires ES to coordinate a line extension of about 700 feet from a highly trafficked intersection.
Internal construction resources not available to perform the work.	2025	Medium	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. Facility study is expected to be performed in house.
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	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	The new service poles/equipment will require a limited easement to the customer's site and is not anticipated to go in wetlands.

8. 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

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

Attachment	Included in Submittal?
A. Cost Estimate	*YES*
B. Geographic Map	*YES*

2016 Estimating Sheet (Updated 1/21/16)

Code	Unit Type	Unit Description	Included	Unit of Measu	Unit Co	Quanti	Total Cost	KEYW
OH47	OH	OH - Regulator - 1ph - on POLE	Replace Pole, install 1 regulator complete, except regulator cost	LOC	[redacted]		$65,920	EQUIP
OH13	OH	OH - POLE - 1ph (CL&P custodian)	Install and shift any 1ph pole CL&P installs pole	LOC			$2,884	Span G
OH14	OH	OH - POLE - 3ph (CL&P custodian)	Install and shift any 3ph pole CL&P installs pole	LOC			$14,028	
OH14A	OH	OH - JUNCTION POLE - 3ph (CL&P custodian)	Install and shift any 3ph JUNCTION with CLASS 1 pole - CL&P installs pole	LOC			$11,690	
OH14B	OH	OH - Install/Replace Anchor and Guy	Install new anchor and guy for new or existing pole	LOC			$1,318	
OH23	OH	OH - Insulating guy roc	Install insulated guy rod on existing guy	LOC			$1,070	INSULA
OH26a	OH	OH - Reconductor w/ 175 Mil Tree Wire - 3ph -1/0	Includes conductor, 50% pole replacements, poletops guys, arresters, c/o's, average trimming	FT			$12,320	OH WI
OH31	OH	OH - Neutral	Labor and Material to install neutral conductor	FT			$1,280	OH WI
OH38	OH	OH - Recloser - 3ph	Includes Replacing Pole, 6 Stirrups, 6 arresters, 3 Vertical Disc Switches, Control, etc.	LOC			$47,990	
OH52	OH	OH - Capacitor, any kVAR, any voltage	Replace pole, install Capacitor, arresters, cutouts, etc.	LOC			$20,684	EQUIP
OH54	OH	OH - Remove Capacitor, any kVAR	Remove capacitor and all associated equipment	LOC			$1,800	EQUIP
OH61	OH	OH - Tree Trimming	Tree Trimming estimate from Arborist	$			$2,000	TREE
Total					Sub-Total		$221,505	
			Contingency/Contractor Contingency/Urban Adder			20%	$44,301	
						Total	$265,806	

[redacted]	
C. Customer One Line	*YES*
[redacted]	
D. Feeder One Line	*YES*

