EVERSOURCE

Project Approval Form

Project Title: [redacted]	**Project Number:** CD01431
Date Prepared: 12/09/2024	**Company:** Eversource CT
Organization: Distributed Energy Resource Planning	**Project Category:** Distributed Generation
Project Initiator: [redacted]	**Project Type:** Specific
Initiating Organization: [redacted]	**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: $129K (100% reimbursable)	**Authorization Type:** Full Funding

1. Executive Summary

Full funding is being requested for this project at a cost of $129.4K which is 33.96% of the partial funding capital estimate of $381K. CD01431 was partially approved on 10/31/2019. The variance between the full funding and partial funding estimate is due to a reduced scope requested by the customer. This project was originally designed as an eight primary meter site, while it is now being reduced by 7 poles and 7 primary meters, leading to substantially less cost in labor and materials.

The original project was presented as follows:

- [redacted] *is proposing an aggregate photovoltaic site of 1968 kW, operating at unity power factor. The site will consist of eight 250 kW parcels each with their own designated primary metering. The solar farm will be located at* [redacted] *The proposed* [redacted] *facility will* [redacted] *Eversource DER Planning will prescribe the project a standard ramp rate to prevent any flicker concerns.*
- *To date, the customer has returned an executed interconnection agreement and has provided payment. Total payment that Eversource is expected to receive, per the Interconnection Agreement, is $405K. This includes any additional costs related to CIAC and witness testing.*

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	2025	Total
Internal Labor and Construction Equipment	9.9	9.9
Outside Services	4.6	4.6
Materials	58.0	58.0
Removals	2.3	2.3
Risk and Contingency	9.0	9.0
Other	0.0	0.0
Subtotal	**83.7**	**83.7**

Indirect Capital Costs	2025	Total
Indirects/Overheads (including benefits)	45.6	45.6
Capitalized interest or AFUDC, if any	0.0	0.0
Subtotal	**45.6**	**45.6**
Total Capital Costs (Gross)	**129.4**	**129.4**
Less Total Customer Contribution	**-129.4**	**-129.4**
Project Costs (Net of Reimbursement)	**0**	**0**

Explain unique payment provisions, if applicable:

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

The DER applicant is proposing a new service at their photovoltaic facility located at [redacted]. There is currently no electrical service to the proposed solar farm. The customer proposed underground trenching through their field to interconnect the solar farm. However, it is Eversource preference to stop ownership at the load side of the primary meter and have the customer be responsible for downstream connectivity.

b. Project Need

The DER customer, [redacted], has requested to [redacted]. The Eversource fast track screens and supplemental screening found there to be no thermal, voltage, or other circuit issues because of the DER installation.

This new service project authorization form initially proposed to install ten new poles for service. One pole will be for the clean pole designated for future communication and one pole will be for a site-dedicated recloser. The rest of the new service equipment will be eight primary meters; one for each of the 250 kW parcels. The new service will only benefit the DER customer and will allow the customer access to the Eversource electric power system to provide clean, photovoltaic electricity.

c. Project Scope

New service poles will be needed to provide electrical service from the [redacted] to the proposed solar farm at [redacted]. The new service will likely [redacted]. The new service will also consist of one site-dedicated recloser and eight individual primary meters. The change of point of ownership occurs on the load side of the Eversource owned primary meter.

Major Material:

- 1x primary meters
- 200 feet of new service conductor
- 1x overhead recloser
- 1x riser poles

4. Alternatives Considered

Project is a compliance obligation - no alternatives considered - no financial benefit

There are currently no alternate circuits that could interconnect the proposed DER. Based on Eversource standards, the proposed new service design is typical of what Eversource field engineering would procure.

5. Project Schedule

Add any additional milestones that are pertinent to the project

Milestone/Phase Name	Estimated Date
Partial Funding	Oct 2019
Full Funding	Dec 2024
In Service Date	Dec 2025

6. Regulatory Decisions

N/a

7. Codes and Standards

N/a

8. Risk and Contingencies

Risk Mitigation:

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	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	2023	Low	Design to minimize customer impact. Scope of work is a new service. Should not have issues getting customer permission/other approvals.
Internal construction resources not available to perform the work.	2023	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.	2023	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2023	Low	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2023	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	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	2023	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	2023	Low	No presence of wetlands or environmentally sensitive areas. New service will be installed as close to the road as possible to limit any environmental impacts.

9. References

N/a

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

Attachment	Included in Submittal?
A. Partial Funding PAF Form	*YES*
B. Site Plan	*YES*
C. Project Needs Statement	*YES*
D. Feeder Diagram	*YES*

Attachment A: Partial Funding PAF Form

Operations Project Authorization Form

Project Title: [redacted]	**Project Number:** CD01431
Date Prepared: 10/06/2022	**Company:** Eversource CT
Organization: Electric Field Operations	**Class(es) of Plant:** D Line
Project Initiator: [redacted]	**Project Category:** Distributed Generation
Project Manager: [redacted]	**Project Type:** Specific
Project Sponsor: [redacted]	**Capital Investment part of original Operating Plan:** No
Estimated in service date: October 1, 2023	**Emergency Related Request?** No
Eng./Constr. Resources Budgeted? No	**Facility Type** (check all that apply): ☐ PTF ☐ non-PTF ☒ Distribution
Total Gross Capital Request: 381K	**Authorization Type:** Initial Funding

Executive Summary

[redacted] is proposing an aggregate photovoltaic site of 1968 kW, operating at unity power factor. The site will consist of eight 250 kW parcels each with their own designated primary metering. The solar farm will be located at [redacted] on the [redacted]. The proposed [redacted] facility will [redacted] Eversource DER Planning will prescribe the project a standard ramp rate to prevent any flicker concerns.

To date, the customer has returned an executed interconnection agreement and has provided payment. Total payment that Eversource is expected to receive, per the Interconnection Agreement, is $405K. This includes any additional costs related to CIAC and witness testing.

Project Costs Summary

Note: Dollar values are in thousands

Capital Costs	Year 2022	Year 2023	Year 2024+	Total
Direct Capital Costs				
Internal Labor and Construction Equipment	$32	$0	$0	$32
Outside Services	$108	$0	$0	$108
Materials	$88	$0	$0	$88
Removals	$13	$0	$0	$13
Risk and Contingency	($34)	$0	$0	($34)
Other	$0	$0	$0	$0
Subtotal – Direct Costs	**$206**	**$0**	**$0**	**$206**
Indirect Capital Costs				
Indirect/Overheads (including benefits)	$175	$0	$0	$175
Capitalized interest or AFUDC, if any	$0	$0	$0	$0
Subtotal – Indirect Costs	**$175**	**$0**	**$0**	**$175**
Total Gross Capital Costs	**$381**	**$0**	**$0**	**$381**
Customer Contribution	**($389)**	**$0**	**$0**	**($389)**
Total Net Capital Project Costs	**($8)**	**$0**	**$0**	**($8)**

Technical Justification:

Project Need, Objective and Justification:

The DER customer, [redacted] has requested to interconnect to the [redacted] The Eversource fast track screens and supplemental screening found there to be no thermal, voltage, or other circuit issues because of the DER installation.

This new service project authorization form is proposing to install ten new poles for service. One pole will be for the clean pole designated for future communication and one pole will be for a site-dedicated recloser. The rest of the new service equipment will be eight primary meters; one for each of the 250 kW parcels. The new service will only benefit the DER customer and will allow the customer access to the Eversource electric power system to provide clean, photovoltaic electricity.

Project Scope:

New Service

New service poles will be needed to provide electrical service from the [redacted] to the proposed solar farm at [redacted] The new service will likely [redacted] The new service will also consist of one site-dedicated recloser and eight individual primary meters. The change of point of ownership occurs on the load side of the Eversource owned primary meter.

Major Material:

- 8x primary meters
- 200 feet of new service conductor
- 1x overhead recloser
- 8x riser poles

Background:

The DER applicant is proposing a new service at their photovoltaic facility located at [redacted] There is currently no electrical service to the proposed solar farm. The customer proposed underground trenching through their field to interconnect the solar farm. However, it is Eversource preference to stop ownership at the load side of the primary meter and have the customer be responsible for downstream connectivity.

Alternatives Considered:

Project is a compliance obligation - no alterntives considered - no financial benefit

There are currently no alternate circuits that could interconnect the proposed DER. Based on Eversource standards, the proposed new service design is typical of what Eversource field engineering would procure.

Regulatory Approvals:

No

Project Schedule

Milestone/Phase Name	Estimated Date
100% Engineering Completion	10/31/2019
Construction Start	03/01/2023
Testing/Commissioning	09/01/2023
In Service Date	10/01/2023

Risks and Risk Mitigation Plans

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	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	2023	Low	Design to minimize customer impact. Scope of work is a new service. Should not have issues getting customer permission/other approvals.
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Wetlands / Environmentally sensitive area	2023	Low	No presence of wetlands or environmentally sensitive areas. New service will be installed as close to the road as possible to limit any environmental impacts.

Attachment B: Site Plan



Attachment C: Project Needs Statement

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01431

[redacted] 1968 kW PV

Work Classification

Category: Line
Type: NB3
Type Desc: DISTRIBUTED GENERATION-L4
Work Type:

Ownership / Management

AWC: New London
Statewide: No
Owner: [redacted]
Manager:

Project Information

Status: Draft
SPS #:
AIS Score:
Associated Projects:
Assignment ID:
Patrol Find ID:

Budget Summary - Preferred Option

--- No Preferred Option Selected / Created ---

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01431

[redacted] 1968 kW PV

Project Option Summary

ID	Description	Segments	Preliminary Estimate	Construction Estimate	Variance	IEEE $/CMS	All (w/Storm)	Prfrd
O1	New Service	1	$0	$0		$0.00	$0.00	☐

Segments

ID	Title	Preliminary Estimate	Construction Estimate	Variance	IEEE $/CMS	All (w/Storm)
1	New Service	$0			$0.00	$0.00

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01431
[redacted] 1968 kW PV

Background / Scope

Issue:

Project Description:

Other Considerations:

Revision / ACT Comments:

If we don't do this project, what will happen?

Environmental

Water Pollution: No Change Soil Contamination: No Change Natural Habitats: No Change

Alternatives considered based on Environmental Impact or Description of Aspects Oil Spill Risks Considered? ☐

Safety Concerns With This Project? ☐

Explain:

External Stakeholders

Customer Impact / Involvement

Cust. Impacted: Approx. Pole Count (NU):

Crit. Cust. Impacted: Approx. Pole Count (Other):

Adjoining Property Owner Consent Required: ☐ Town Hearing Required: ☐

Other Utility Pole Custodian Area: ☐ Easement Required: ☐

State Highway Permit Required: ☐

Relocation / New Service

New Srvc. Contact: Requestor Type:

Customer Type: State Highway Project #:

Request Number: Route #:

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01431

[redacted] 1968 kW PV

Design Alternative CD01431-01

General Information

Segment: 1 - New Service | Status: Prelim Design Submitted

Segment Type: NEW SERVICE | Town: MONTVILLE | Budget Year: 2021

Work Type: Other | Trimming Required: ☐ | In Service Date: 07/02/2021

Description: Provide new service via a site-dedicated recloser to eight seperately metered PV arrays. The total site aggregate behind one recloser will be 1968 kW.

Itemized Work List

ID	Major Grid	Minor Grid	Description of Work to be Performed
1			Provide new service to a 1.968 kW PV array.

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01431

North Silver Brook Holdings 1968 kW PV

Design Alternative CD01431-01

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	0.00%
SubTotal:	$360,000
Contingency Amount:	$0
Estimate:	$360,000
Reimbursement:	$360,000
Net Amount:	**$0**

Description:

Item Description	CU	[redacted]	Amount
OTHER	16-ALL14		$360,000.00

OTHER
Site dedicated recloser, eight primary meters, line extension to feed site

Associated / Impacted Devices

Status	Type / SysID	Street / Cross St	Structure / Town	[redacted]	Map	Cust	Notes
Existing	[redacted]						

