EVERSOURCE

Project Approval Form

Project Title: [redacted]	**Project Number:** CD01459
Date Prepared: 06/27/2025	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** Distributed Generation
Project Initiator: [redacted]	**Project Type:** Specific
Initiating Organization: Distributed Energy Resources	**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: 06/30/2024	**NWS Excludable:** ☒ Yes ☐ No
Total Capital Request: $250.9K (100% Reimbursable)	**Authorization Type:** Full Funding

1. Executive Summary

[redacted] The distribution impact study found there to be no voltage issues during minimum and maximum loading at the full 2MW output of the PV system. Power quality was determined to be acceptable. The customer will need a new three phase service including a dedicated recloser, a 50-foot three phase line extension, and one primary meter. The customer will not be permitted to operate on the alternate feed due to the transmission study only covering the primary feed. A DSCADA scheme will be needed to implement this. [redacted] The distribution system impact study also determined that the proposed DER will not need a direct transfer trip scheme. Customer contribution 100%. The price includes a 28% contingency, a 11% CIAC and witness test costs.

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

The partial funding estimate for this project was $424.9K capital and was approved at the 9/23/2021 CTPAC. The full funding request is $250.9K capital. The difference in cost equates to $174.0K, a decrease of 41% of the cost of the project. There was one scope change in this project that was requested by the customer. That was to install one primary meter rather than four.

The cost difference between the partial and full funding requests were due to 2 factors. The first being the customer's request to use 1 primary meter rather than 4. This change reduced the cost by $153.6K ($120K + the 28% contingency adder). The other factor is the 800 ft of reconductoring and 200 ft line extension that was originally estimated in the project. The final configuration was to add 2 phases of 1/0 ACSR TW to the existing single phase 1/0 ACSR TW 800 ft pole line and to construct a 50 ft line extension rather than a 200 ft. line extension.

2. Project Cost Summary

Financial Evaluation ($000's)

Capital Costs	2022	2023	2024	Total
Internal Labor and Construction Equipment	0.0	4.3	1.9	6.2
Outside Services	0.0	0.0	75.2	75.2
Materials	0.0	0.0	72.7	72.7
Removals	0.0	0.1	4.3	4.4
Risk and Contingency	0.0	0.0	17.5	17.5
Other	0.0	0.0	0.0	0.0
Subtotal	**0.0**	**4.4**	**171.6**	**176.0**

Indirect Capital Costs	2022	2023	2024	Total
Indirects/Overheads (including benefits)	0.0	10.4	63.6	74.0
Capitalized interest or AFUDC, if any	0.0	0.3	0.7	1.0
Subtotal	**0.0**	**10.7**	**64.2**	**75.0**
Total Capital Costs (Gross)	**0.0**	**15.1**	**235.8**	**250.9**
Less Total Customer Contribution	**-97.1**	**0.0**	**-153.8**	**-250.9**
Project Costs (Net of Reimbursement)	**-97.1**	**15.1**	**82.0**	**0.0**

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

[redacted] The customer will be responsible for all electric design on the load side of the Eversource-owned recloser.

This proposal will allow for the interconnection of clean, photovoltaic power and will allow the DER applicant to interconnect to the Eversource EPS and fulfill their ZREC requirements. There is currently no electrical services to the existing facilities.

b. Project Need

The DER customer, [redacted], has requested Eversource to determine the impact of its generator on the area EPS [redacted] The new service will only benefit the DER customer and will allow the customer access to the Eversource EPS to provide clean, photovoltaic electricity.

c. Project Scope

<u>New Service</u>

[redacted]

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 are currently no alternate circuits that could interconnect the proposed DG. 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 Approval	June 2023
100% Detailed Engineering Completion	July 2023
Construction Start	August 2023
In Service Date	June 2024

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.	2023	High	Actual costs came in higher than estimated costs.
Customer Permission / Siting Council / Municipal approvals/ Wetlands Permitting	2023	Low	Permission was granted for the easement onto the property.
Internal construction resources not available to perform the work.	2023	Low	Internal crews performed the installation of the new service.
Internal engineering resources not available to perform the work.	2023	Low	Internal engineering resources designed the new service.
Materials Shortage or long lead times	2023	Low	Primary meters and reclosers are readily in stock and were procured/installed.
Storm delays	2023	Low	Customer in service date was met.
System abnormal configuration	2023	Low	System was normally configured for the installation of new service.
Technological risks involving integration of new technology	2023	Low	All equipment installed is standard and in stock.

Wetlands / Environmentally sensitive area	2023	Low	No wetlands encountered for the new service.

9.

References
1. N/A

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

Attachment	Included in Submittal?
A. Cost Estimate	*YES*
B. Geographic Map	*YES*
C. One-Line	*YES*
D. Partial Funding PAF	*YES*

Attachment A - Cost Estimate:

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Project Approval Form

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01459 [redacted]

Work Classification

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

Ownership / Management

AWC: Tolland
Statewide: No
Owner: [redacted]
Manager:

Project Information

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

Budget Summary - Preferred Option

Distribution Impact Study

2022

ID	Title	Status	Rev #	Contingency	Expenditure Amount	Net Estimate
1	Distribution Impact Study	Prelim	0	0%	$30,000	$30,000
				2022 Total:	$30,000	$30,000
				Total Project:	$30,000	$30,000

Estimate

Preliminary Estimate Summary

Revision Number:	0
Contingency:	28.00%
SubTotal:	$309,034
Contingency Amount:	$86,530
Estimate:	$395,564
Reimbursement:	$395,564
Net Amount:	$0
Description:	

Item Description	CU	$ / Per	Qty	Amount
OTHER OTHER 4 primary meters	16-ALL14	[redacted]		$120,000.00
OTHER OTHER CIAC	16-ALL14			$30,000.00
OTHER OTHER Cutouts and arrestors	16-ALL14			$1,371.00
OTHER OTHER laber per switching order	16-ALL14			$3,510.00
OTHER OTHER Line extension	16-ALL14			$17,600.00
OTHER OTHER Reconductor 800' of 1/0	16-ALL14			$49,280.00
OTHER OTHER Retrofit regulator with CL7 control box	16-ALL14			$15,000.00
OTHER OTHER Three phase recloser	16-ALL14			$47,990.00
OTHER OTHER Traffic Control	16-ALL14			$2,000.00

Attachment B - Geographic Map:



Attachment C – One-Line:



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Project Approval Form

Attachment D – Partial PAF

Project Title: [redacted] New Service	**Project Number:** CD01459
Date Prepared: 04/03/2024	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** Distributed Generation
Project Initiator: [redacted]	**Project Type:** Specific
Initiating Organization: Distribution	**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: 06/30/2023	
Total Capital Request: $425K (100% Reimbursable)	**Authorization Type: Partial Funding**

1. Executive Summary

Partial Funding is being requested for this project at a cost of $425K, all of which is reimbursable.

[redacted] The [redacted]. The distribution impact study found there to be no voltage issues during minimum and maximum loading at the full 2MW output of the PV system. Power quality was determined to be acceptable. [redacted] will be done as part of an Eversource project (CD01066). [redacted]. The distribution system impact study also determined that the proposed DER will not need a direct transfer trip scheme. Customer contribution 100%. The price includes a 28% contingency, a 11% CIAC and witness test costs.

2. Project Cost Summary

Capital Costs	2022	2023	2024	Total
Internal Labor and Construction Equipment	0.0	1.3	24.0	25.2
Outside Services	0.0	6.8	130.1	137.0
Materials	0.0	2.8	53.0	55.8
Removals	0.0	2.8	54.1	57.0
Other	0.0	0.1	2.6	2.8
Risk and Contingency	0.0	0.0	0.0	0.0
Subtotal	**0.0**	**13.9**	**263.9**	**277.8**

Indirect Capital Costs	Year 1	Year 2	Year 3+	Total
Indirects/Overheads (including benefits)	0.0	7.4	139.9	147.2
Capitalized interest or AFUDC, if any	0.0	0.0	0.0	0.0
Subtotal	**0.0**	**7.4**	**139.9**	**147.2**
Total Capital Costs (Gross)	**0.0**	**21.2**	**403.7**	**425.0**
Less Total Customer Contribution	**0.0**	**-21.2**	**-403.7**	**-425.0**
Project Costs (Net)	**0.0**	**0.0**	**0.0**	**0.0**

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

[redacted]. The customer will be responsible for all electric design on the load side of the Eversource-owned recloser.

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b. Project Need

The DER customer, [redacted], has requested Eversource to determine the impact of its generator on the area EPS [redacted]. The new service will only benefit the DER customer and will allow the customer access to the Eversource EPS to provide clean, photovoltaic electricity.

c. Project Scope

New Service

[redacted]

4. Alternatives Considered

There are currently no alternate circuits that could interconnect the proposed DG. 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 Approval	June 2023
100% Detailed Engineering Completion	July 2023
Construction Start	August 2023

Milestone/Phase Name	Estimated Date
In Service Date	December 2023

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.	2023	High	Actual costs came in higher than estimated costs.
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References
1. N/A

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

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

Attachment B – Geographic Map

