EVERSOURCE

Project Approval Form

Project Title: [redacted]	**Project Number:** CD02353
Date Prepared: 05/08/2025	**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:** 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: 12/31/25	**NWS Excludable:** ☒ Yes ☐ No
Total Capital Request: $579.8K; 100% Reimbursable	**Authorization Type:** Full Funding

1. Executive Summary

Full funding is being requested for this project at a cost of $579.8K which is 76.5% of the partial funding capital estimate of $757.7K. The estimated in-service date is December 31, 2025. There is no scope change on the project. The variance between the full funding and partial funding estimate is due to an overestimation of labor costs.

The original project was presented as follows:

[redacted] s proposing a 991-kW photovoltaic (PV) generator at [redacted] A distribution impact study determined the proposed generator has no negative impact on voltage or thermal violations on the distribution system. The generator does not cause any flicker or rapid voltage change at the point of interconnection or anywhere on the [redacted]

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	Year 2025	Year 2026	Year 2027	Total
Direct Capital Costs				
Internal Labor and Construction Equipment	56.0	0.0	0.0	56.0
Outside Services	85.6	0.0	0.0	85.6
Materials	91.4	0.0	0.0	91.4
Removals	7.6	0.0	0.0	7.6
Risk and Contingency	40.5	0.0	0.0	40.5
Other	0.0	0.0	0.0	0.0
Subtotal – Direct Costs	**281.1**	**0.0**	**0.0**	**281.1**
Indirect Capital Costs				
Indirect/Overheads (including benefits)	298.7	0.0	0.0	298.7
Capitalized interest or AFUDC, if any	0.0	0.0	0.0	0.0
Subtotal – Indirect Costs	**298.7**	**0.0**	**0.0**	**298.7**
Total Gross Capital Costs	**579.8**	**0.0**	**0.0**	**579.8**
Customer Contribution	**-579.8**	**0.0**	**0.0**	**-579.8**
Total Net Capital Project Costs	0.0	0.0	0.0	0.0

Explain unique payment provisions, if applicable

Distribution cost including O&M	$845,233
CIAC Tax: 16%	$135,237
Total Distribution cost	$980,470
Witness Test	$2,000
TOTAL Customer Contribution in Aide of Construction. **To be paid by customer**	$982,470

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

The DER applicant is proposing a photovoltaic generator [redacted] The customer will be responsible for all electrical design on the load side of the Eversource-owned primary meter. [redacted]

An impact study was performed to study the effect of this generator on the [redacted] All generation online or in queue ahead of the proposed generator was included in the impact study. The study found no negative impact to voltage or thermal limits on the distribution system due to the proposed generator. [redacted]

b. Project Need

The DER customer, [redacted] has requested Eversource to determine the impact of the generator on the electric power system. The impact study found there to be no negative impact on the feeders supplied by the [redacted]. The new services will only benefit the DER customer and will allow the customer to access the Eversource EPS. All equipment downstream of the primary meter will be owned and operated by the customer.

[redacted]

c. Project Scope



4. Alternatives Considered

NWS *(remove unselected option)*

If NWS is excludable, complete the NWS Exclusion Criteria table and remove NWS option from the Project Option Comparison table below:

If NWS is not excludable, include NWS in Project Option Comparison table and remove NWS Exclusion Criteria table below:

NWS Exclusion Criteria (select all that apply)

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

*Maintenance, Asset condition or safety related justification: (If applicable, provide explanation on how the asset has met or exceeded its useful life)

Option Summary

Preferred: Project is a compliance obligation - no alternatives considered – no financial benefit.

5. Project Schedule

Add any additional milestones that are pertinent to the project

Milestone/Phase Name	Estimated Date
Partial Approval	05/09/2024
100% Detailed Engineering Completion	12/09/2024
Fully Funded	05/15/2025
Construction Start	06/31/2025
In Service Date	12/31/2025

6. Regulatory Decisions

7. Codes and Standards

8. Risk and Contingencies

Contingencies:

Risk Mitigation:

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2025	Low	The 24% contingency is included in the cost. Additionally, this is a standard design with no complications to increase cost
Customer Permission / Siting Council / Municipal approvals/ Wetlands Permitting	2025	Low	Eversource requires limited easement.
Internal construction resources not available to perform the work.	2025	Low	The proposed in-service date is 12/31/2025 which is twenty months away
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. All equipment will be standard.
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

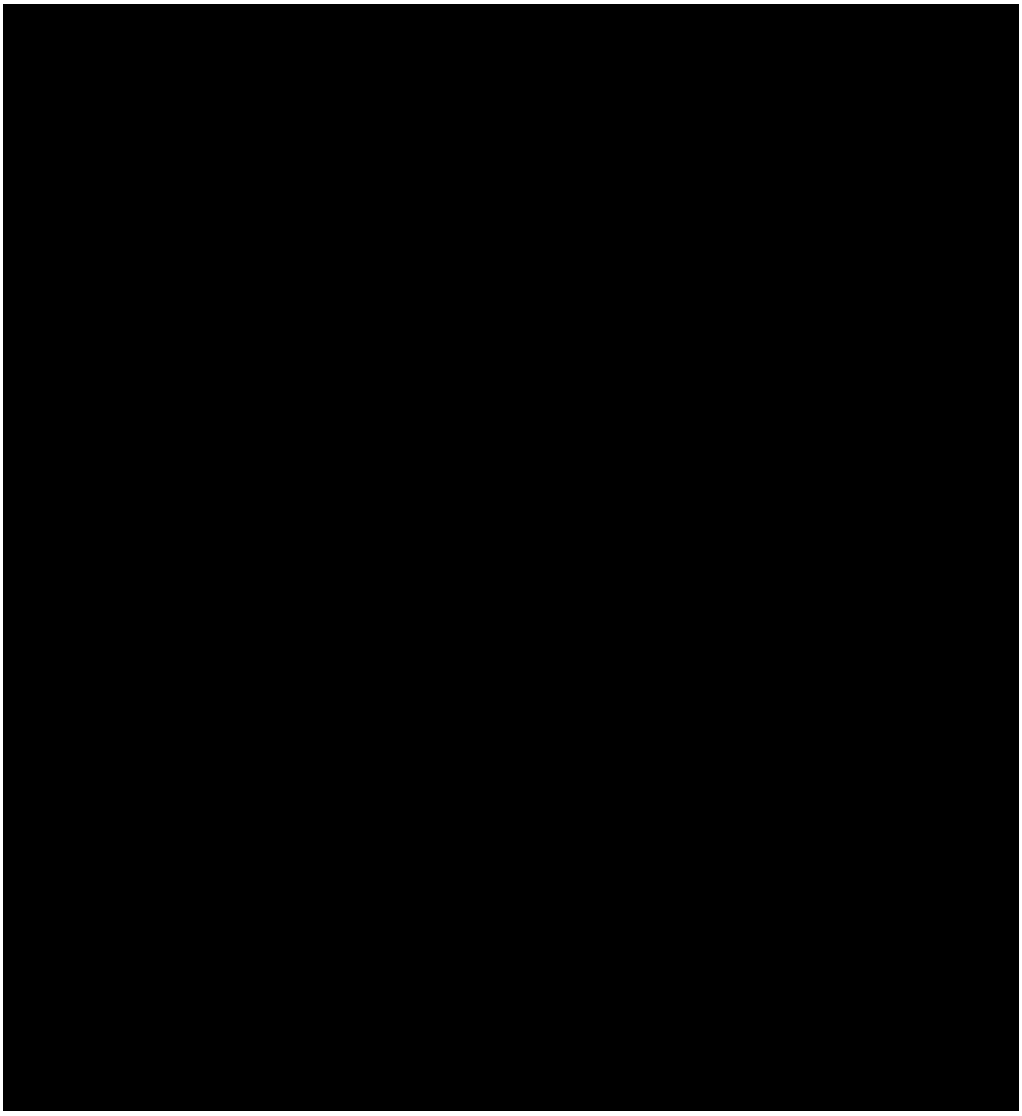
Technological risks involving integration of new technology	2025	Low	Before use of new technology ensure support of standards and manufacture. Schedule project to accommodate for extra time or ensure new technology is not on the critical path. All equipment to be installed is approved by Standards.
Wetlands / Environmentally sensitive area	2025	Low	The new service requires limited access to the customer's property and is not expected to affect any wetlands.

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

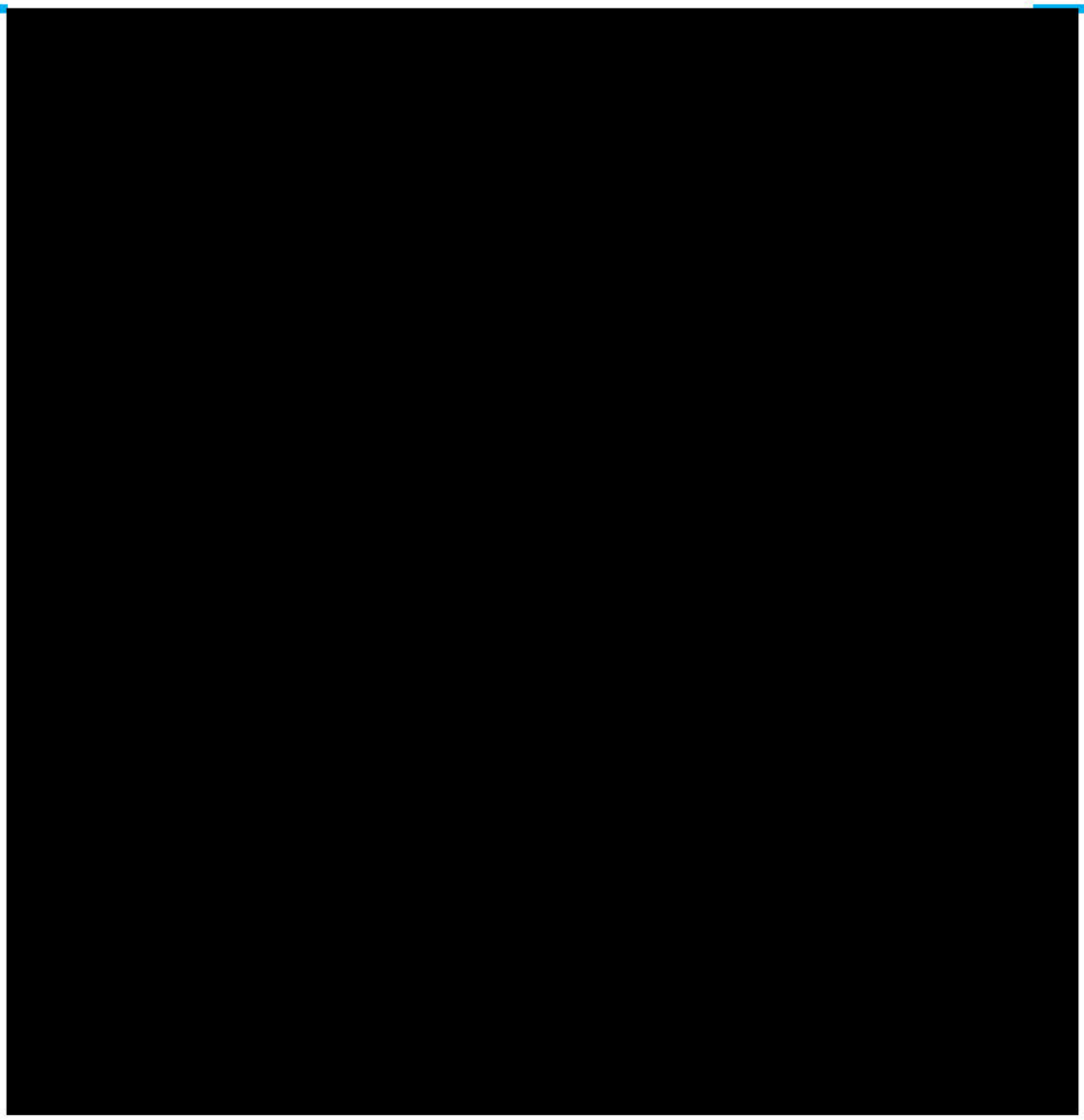
10. Attachments (One Line Diagrams, Images, etc.)

Attachment	*Included in Submittal?*
A. Site Plan	*YES*
B. Customer Single Line Diagram	*YES*
C. DER Project Form	*YES*
D. Partial Funding PAF	*YES*









Project Approval Form

Estimating Sheet

Code	Unit Type	Unit Description	Included	Unit of Measu	[redacted]	Total Cost	KEYWORD	
ALL11	ALL	ACT Estimate for System Projects Crews		$		$41,481	ACT	contractor adder 30% of precontingency subtotal
ALL14	ALL	OTHER	Item not in list	$		$80,000	OTHER	primary metering 1 @30K each, RTAC @50k
ALL17	ALL	OH/DB/UG - SWITCHING NonNetwork - Average	Labor per switching order	EA		$9,125	SWITCHING	
ALL19	ALL	OH/DB/UG - Traffic Control - Flagger	$300 / day / flagger, Rural area, secondary roads, 2 needed for reconductoring, multiple crews	$		$20,741	TRAFFIC	police 15% of precontingency subtotal
OH14	OH	OH - POLE - 3ph (Eversource custodian)	Install and shift any 3ph pole Eversource installs pole	LOC		$6,079	POLE	recloser pole
OH33	OH	OH - Line Extension - 3ph (336 kcmil)	Includes conductor, poles, poletops, arresters, c/o's, guys, average trimming	FT		$20,280	OH WIRE	
OH38	OH	OH - Recloser - 3ph	Includes Replacing Pole, 6 Stirrups, 6 arresters, 3 Vertical Disc Switches, Control, etc.	LOC		$62,388	SECTIONALIZE	15Q7-600R
OH61	OH	OH - Tree Trimming	Tree Trimming estimate from Arborist	$		$10,400	TREE	
Total					Sub-Total	$250,492		
			Contingency/Contractor Contingency/Urban Adder		24%	$60,118		
					Total	$310,610		

Estimating Sheet

Code	Unit Type	Unit Description	Included	Unit of Measu	[redacted]	Total Cost	KEYWORD
ALL11	ALL	ACT Estimate for System Projects Crews		$		$87,315	ACT
ALL17	ALL	OH/DB/UG - SWITCHING NonNetwork - Average	Labor per switching order	EA		$9,125	SWITCHING
ALL19	ALL	OH/DB/UG - Traffic Control - Flagger	$300 / day / flagger, Rural area, secondary roads, 2 needed for reconductoring, multiple crews	$		$43,658	TRAFFIC
OH14	OH	OH - POLE - 3ph (Eversource custodian)	Install and shift any 3ph pole Eversource installs pole	LOC		$12,158	POLE
OH26b	OH	OH - Reconductor w/ 175 Mil Tree Wire - 3ph - 336 kcmil	Includes conductor, 50% pole replacements, poletops guys, arresters, c/o's, average trimming	FT		$144,768	OH WIRE
OH31	OH	OH - Neutral	Labor and Material to install neutral conductor	FT		$13,312	OH WIRE
OH45	OH	OH - OH XF - 1ph	Install/replace, includes labor, material, but no pole, no XF cost	LOC		$2,742	XF
OH58	OH	OH - Conversion - CUTOVER	Switch taps, reconnect XF, bond neutral, etc. on day of conversion PER LOCATION	LOC		$3,479	EQUIPMENT
UG112	DB	DB/UG - #1 - 3-1/C (3ph) Al	Labor, material, straight splices, terminators	FT		$23,712	DB CABLE
UG131	UG	DB/UG - Padmount XF - 3ph	Labor and material to install. Includes elbows, but not XF cost.	EA		$24,567	XF
UG143	UG	DB/UG - Transformer Pad/Handhole	Labor and Material	EA		$24,214	ENCLOSURE
UG146	UG	DB/UG - Riser - 3ph	Includes pole replacement, labor, arrester, cutout, etc.	EA		$42,098	POLE
Total					Sub-Total	$431,148	
			Contingency/Contractor Contingency/Urban Adder		24%	$103,475	
					Total	$534,623	



Partial Funding PAF

EVERSOURCE

Project Approval Form

Project Title: [redacted]	**Project Number:** CD02353
Date Prepared: 04/19/2024	**Company:** Eversource CT
Organization: Distributed Energy Resource Planning	**Project Category:** Generation/Interconnection
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	
Total Capital Request: $757.7k *100% Reimbursable	**Authorization Type:** Partial Funding

1. Executive Summary

The purpose of this funding request is to approve the 100% reimbursable preliminary estimate of $845,233 for [redacted] The estimated in service date is December 31, 2025. The preliminary estimate also includes CIAC and witness test fees. The 100% reimbursable total capital request is $757.7k.

[redacted] is proposing a 991 kW photovoltaic (PV) generator at [redacted] connecting to the [redacted] A distribution impact study determined the proposed generator has no negative impact on voltage or thermal violations on the distribution system. The generator does not

[redacted]

1

Refer to Distribution Capital Project Approval Process
JA-AM-2001-B, Rev.1

Project Approval Form

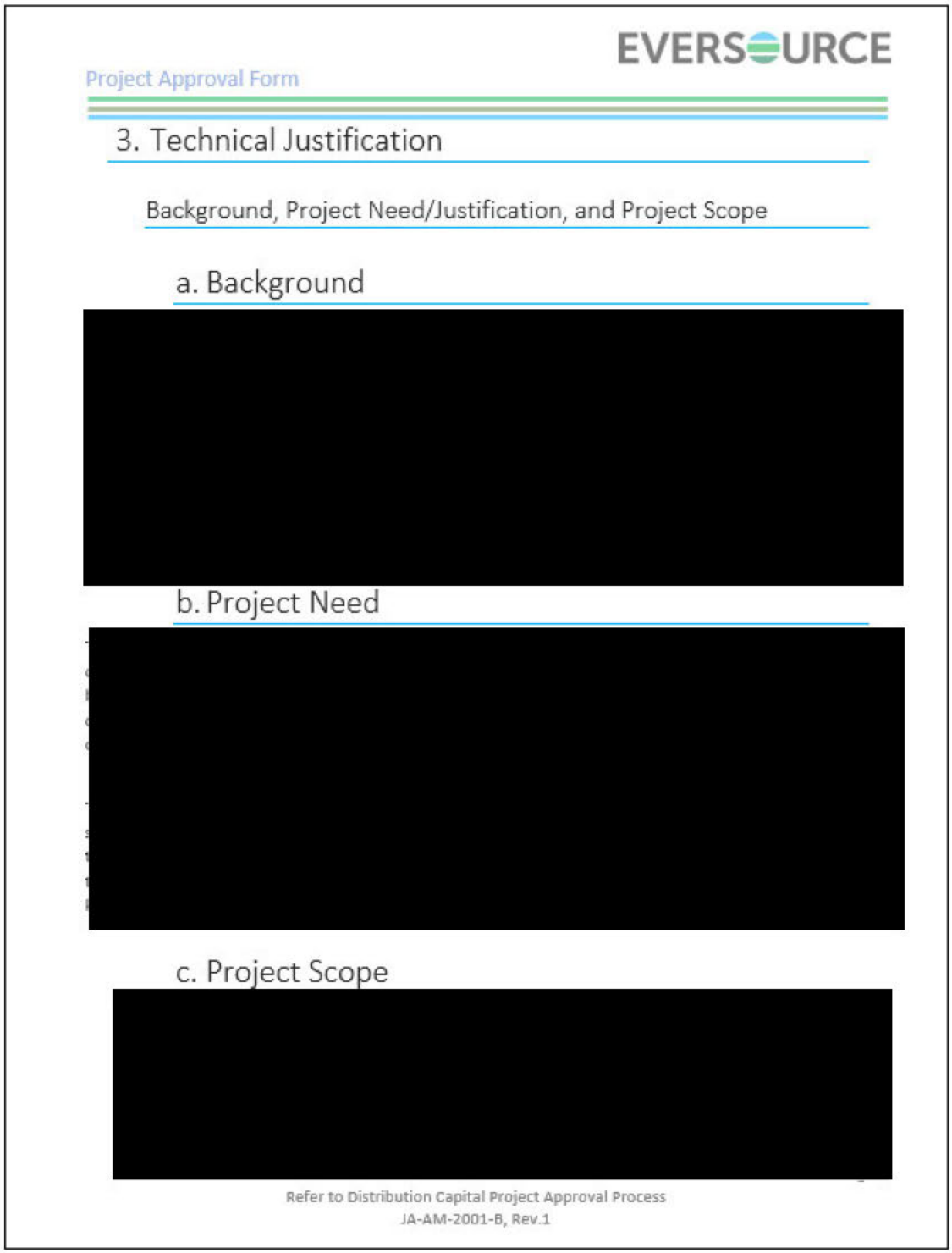
2. Project Cost Summary

Capital Costs	Year 2025	Year 2026	Year 2027+	Total
Direct Capital Costs				
Internal Labor and Construction Equipment	45.0	0.0	0.0	45.0
Outside Services	244.2	0.0	0.0	244.2
Materials	99.5	0.0	0.0	99.5
Removals	101.5	0.0	0.0	101.5
Risk and Contingency	4.9	0.0	0.0	4.9
Other	0.0	0.0	0.0	0.0
Subtotal – Direct Costs	**495.2**	**0.0**	**0.0**	**495.2**
Indirect Capital Costs				
Indirect/Overheads (including benefits)	248.1	0.0	0.0	248.1
Capitalized interest or AFUDC, if any	16.3	0.0	0.0	16.3
Subtotal – Indirect Costs	**262.5**	**0.0**	**0.0**	**262.5**
Total Gross Capital Costs	**757.7**	**0.0**	**0.0**	**757.7**
Customer Contribution	**-757.7**	**0.0**	**0.0**	**-757.7**
Total Net Capital Project Costs	**0.0**	**0.0**	**0.0**	**0.0**

Distribution cost including O&M	$845,233
CIAC Tax: 16%	$135,237
Total Distribution cost	$980,470
Witness Test	$2,000
TOTAL Customer Contribution in Aide of Construction. paid by customer	$982,470

2

Refer to Distribution Capital Project Approval Process
JA-AM-2001-B, Rev.1



Project Approval Form

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

[redacted]

b. Project Need

[redacted]

c. Project Scope

[redacted]

Refer to Distribution Capital Project Approval Process
JA-AM-2001-B, Rev.1

EVERSOURCE
Project Approval Form

[redacted]

4. Alternatives Considered

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

5. Project Schedule

Milestone/Phase Name	Estimated Date
Preliminary Engineering	04/12/2024
Detailed Design	TBD
Construction	6/31/2025
Anticipated In Service Date	12/31/2025

6. Regulatory Decisions

No regulatory body approvals are needed for this project.

7. Codes and Standards

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

8. Risk and Contingencies

Contingencies: The cost estimate includes a 24% contingency

Risk Mitigation: No dollars were allocated for risk. Risk is expected to be minimal.

4

Refer to Distribution Capital Project Approval Process
JA-AM-2001-B, Rev.1

EVERSOURCE
Project Approval Form

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2025	Low	The 24% contingency is included in the cost. Additionally, this is a standard design with no complications to increase cost
Customer Permission / Siting Council / Municipal approvals/ Wetlands Permitting	2025	Low	Eversource requires limited easement.
Internal construction resources not available to perform the work.	2025	Low	The proposed in service date is 12/31/2025 which is twenty months away
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. All equipment will be standard.
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 manufacture. Schedule project to accommodate for extra time or ensure new technology is not on the critical path. All equipment to be installed is approved by Standards.

5
Refer to Distribution Capital Project Approval Process
JA-AM-2001-B, Rev.1

EVERSOURCE
Project Approval Form

Wetlands / Environmentally sensitive area	2025	Low	The new service requires limited access to the customer's property and is not expected to affect any wetlands.

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

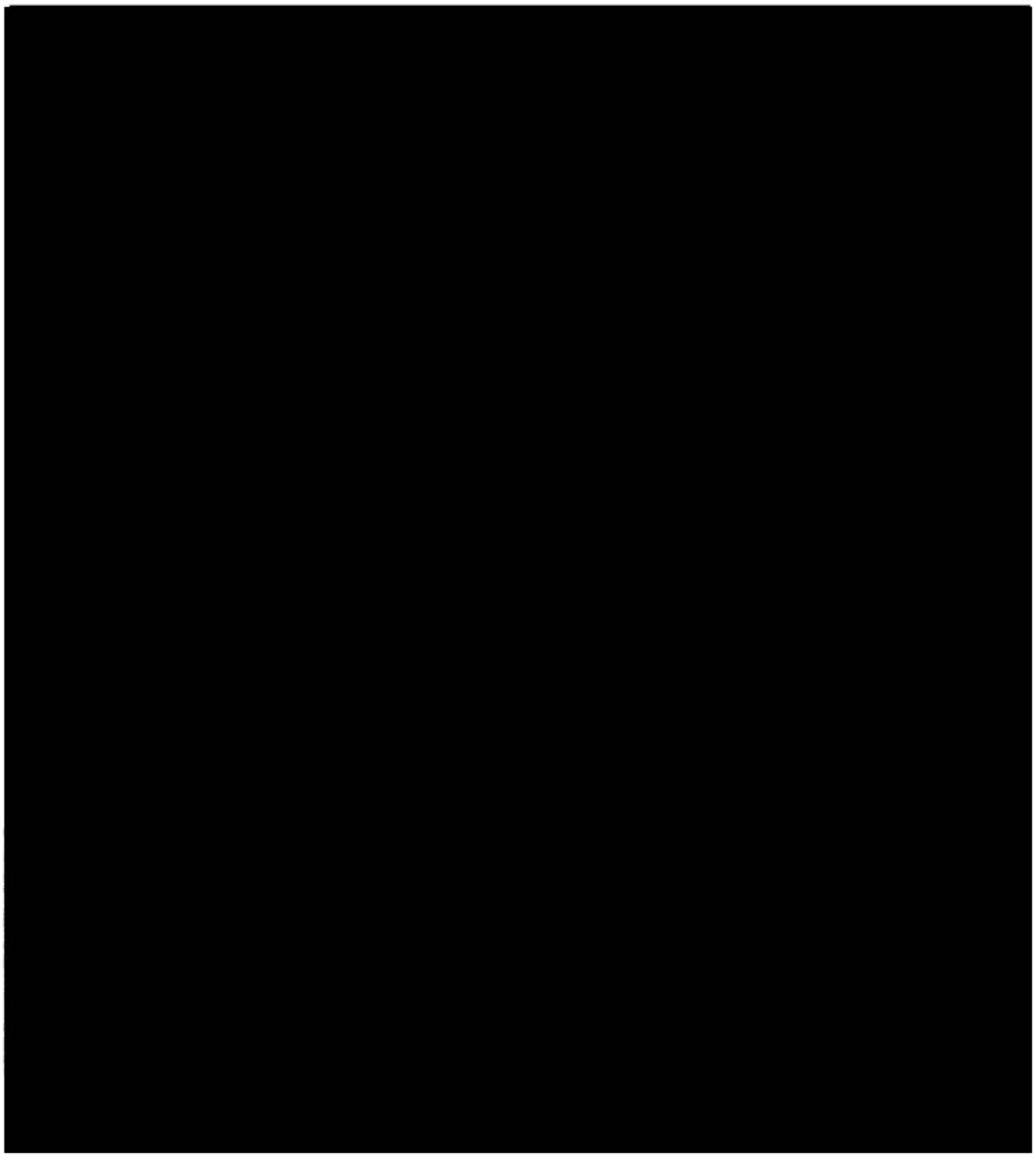
10. Attachments (One Line Diagrams, Images, etc.)

Attachment	Included in Submittal?
A. Site Plan	YES
B. Customer Single Line Diagram	YES
C. DER Project Form	YES









Attachment E

Estimating Sheet

Code	Unit Type	Unit Description	Included	Unit of Measu	[redacted]	Total Cost	KEYWORD	
ALL11	ALL	ACT Estimate for System Projects Crews		$		$41,481	ACT	contractor adder 30% of precontingency subtotal
ALL14	ALL	OTHER	Item not in ist	$		$80,000	OTHER	primary metering 1 @30K each, RTAC @50k
ALL17	ALL	OH/DB/UG - SWITCHING NonNetwork - Average	Labor per switching order	EA		$9,125	SWITCHING	
ALL19	ALL	OH/DB/UG - Traffic Control - Flagger	$300 / day / flagger, Rural area, secondary roads, 2 needed for reconductoring, multiple crews	$		$20,741	TRAFFIC	police 15% of precontingency subtotal
OH14	OH	OH - POLE - 3ph (Eversource custodian)	Install and shift any 3ph pole Eversource installs pole	LOC		$6,079	POLE	recloser pole
OH33	OH	OH - Line Extension - 3ph (336 kcmil)	Includes conductor, poles, poletops, arresters, c/o's, guys, average trimming	FT		$20,280	OH WIRE	
OH38	OH	OH - Recloser - 3ph	Includes Replacing Pole, 6 Stirrups, 6 arresters, 3 Vertical Disc Switches, Control, etc.	LOC		$82,386	SECTIONALIZE	15Q7-600R
OH61	OH	OH - Tree Trimming	Tree Trimming estimate from Arborist	$		$10,400	TREE	
Total					Sub-Total	$250,492		
			Contingency/Contractor Contingency/Urban Adder		24%	$60,118		
					Total	$310,610		

Estimating Sheet

Code	Unit Type	Unit Description	Included	Unit of Measu	[redacted]	Total Cost	KEYWORD
ALL11	ALL	ACT Estimate for System Projects Crews		$		$87,315	ACT
ALL17	ALL	OH/DB/UG - SWITCHING NonNetwork - Average	Labor per switching order	EA		$9,125	SWITCHING
ALL19	ALL	OH/DB/UG - Traffic Control - Flagger	$300 / day / flagger, Rural area, secondary roads, 2 needed for reconductoring, multiple crews	$		$43,658	TRAFFIC
OH14	OH	OH - POLE - 3ph (Eversource custodian)	Install and shift any 3ph pole Eversource installs pole	LOC		$12,158	POLE
OH26b	OH	OH - Reconductor w/ 175 Mil Tree Wire - 3ph - 336 kcmil	Includes conductor, 50% pole replacements, poletops guys, arresters, c/o's, average trimming	FT		$144,768	OH WIRE
OH31	OH	OH - Neutral	Labor and Material to install neutral conductor	FT		$13,312	OH WIRE
OH45	OH	OH - OH XF - 1ph	Install/replace, includes labor, material, but no pole, no XF cost	LOC		$2,742	XF
OH58	OH	OH - Conversion - CUTOVER	Switch taps, reconnect XF, bond neutral, etc. on day of conversion PER LOCATION	LOC		$3,479	EQUIPMENT
UG112	DB	DB/UG - #1 - 3-1/C (3ph) Al	Labor, material, straight splices, terminators	FT		$23,712	DB CABLE
UG131	UG	DB/UG - Padmount XF - 3ph	Labor and material to install. Includes elbows, but not XF cost.	EA		$24,567	XF
UG143	UG	DB/UG - Transformer Pad/Handhole	Labor and Material	EA		$24,214	ENCLOSURE
UG146	UG	DB/UG - Riser - 3ph	Includes pole replacement, labor, arrester, cutout, etc.	EA		$42,098	POLE
Total					Sub-Total	$431,148	
			Contingency/Contractor Contingency/Urban Adder		24%	$103,475	
					Total	$534,623	

