EVERSOURCE

Project Approval Form

Project Title: State Pier Off-Shore Wind	Project Number: CD01534
Date Prepared: 10/18/2023	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** SPECIFIC PROJECTS-NEW SRVCE
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: 6/30/23	
Total Capital Request: $1,135.9K ($384.5K reimbursement)	**Authorization Type:** Full Funding

1. Executive Summary

This project addresses the need to supply new load that will be operating from the [redacted]

Connecticut Governor Ned Lamont announced on February 11, 2020, that the State of Connecticut and its partners [redacted], and Eversource have reached a final agreement on a harbor development plan for the [redacted] Connecticut, that will transform the pier into a world-class offshore wind center and bring hundreds of well-paying jobs to the area.

The developer has requested Eversource to remove its facilities in the area of development by June 29, 2021, and be able to supply a 3.8 MVA load by October 6, 2022.

10/26/23 – Full Funding request. The Partial Funding estimate is $907.8K, approved at CTPAC on 11/12/20. Full Funding estimate is $1,135.9K, a difference of $228.1K, or a 25% increase. There was no scope change. Project was completed in July 2023.

Labor costs are higher than what was in the original estimate. The current approved estimate was prepared using legacy unit costs, which are approximately 30% lower than the estimates used today to account for an increase in material and labor costs. If today's estimates were used, the Partial Funding estimate would have been $1,180K.

- Partial Funding using Legacy Estimating Units: $907.8K.
- Partial Funding using today's estimating units: $1,180K.
- Workorder estimates: $736.3K
- Full Funding amount based on workorders actual charges: $1,135.9K.

- Difference between Workorder Actuals vs. Workorder Estimates: **$399.6K.**
    - Reasons for increase (workorder actuals vs. workorder estimates):
        - Labor & overtime: $231K vs. $91K; difference: $130K.
        - Material: $241K vs. $185K; difference: $56K.
        - Outside Services: $131K vs. $33K; difference: $98K.
        - Allocations: $480K vs. $368K; difference: $122K.
        - Total difference: **$406K.**

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	Year 2021	Year 2022	Year 2023	Total
Direct Capital Costs				
Internal Labor and Construction Equipment	10.8	183.6	8.3	202.7
Outside Services	6.7	113.6	5.1	125.5
Materials	12.3	209.0	9.4	230.7
Removals	1.3	22.8	2.0	26.2
Risk and Contingency	0.0	0.0	22.3	22.3
Other	0.9	14.8	0.7	16.3
Subtotal – Direct Costs	**32.1**	**543.9**	**47.7**	**623.7**
Indirect Capital Costs				
Indirect/Overheads (including benefits)	60.3	453.3	-33.6	480.0
Capitalized interest or AFUDC, if any	0.8	28.8	2.6	32.2
Subtotal – Indirect Costs	**61.1**	**482.1**	**-31.0**	**512.2**
Total Gross Capital Costs	**93.2**	**1,026.0**	**16.7**	**1,135.9**
Customer Contribution	-32.5	-387.7	35.7	**-384.5**
Total Net Capital Project Costs	**60.7**	**638.3**	**52.4**	**751.4**

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

Connecticut Governor Ned Lamont announced on February 11, 2020, that the State of Connecticut and its partners [redacted] and Eversource have reached a final agreement on a harbor development plan for the [redacted], Connecticut, that will transform the pier into a world-class offshore wind center and bring hundreds of well-paying jobs to the area. Eversource is required to supply this load with reliable circuits.

b. Project Need

This project addresses the need to supply new load that will be operating from the [redacted] in New London, CT. The [redacted] will become a hub for assembling and shipping out to sea wind turbines. A reliable source of power to supply the load requirement of [redacted] is required. A recloser loop-scheme will be constructed for increased reliability.

c. Project Scope

[redacted]

[redacted]

1.	[redacted]	$136,320
2.	[redacted] preferred source, [redacted] alternate	$574,115
3.	USCGA 9L03 preferred source	$120,520
4.	Primary metering	$76,800

Major Material:

Two Sectionalizing Reclosers and controls

One Tie Recloser and control

375 feet 750 kcmil Cu cable (9L02)

1,500 feet 556 AL tree wire

150 feet 750 kcmil Cu (9L03)

4. Alternatives Considered

[redacted]

Project Option Comparison

	[redacted]			
Circuit upgrades	$628,922	$516,999	$574,115	$1,538,917
Substation work*	$1,000,000	-	-	-
Removals – customer request	$136,320	$136,320	$136,320	$136,320
Primary Metering	$76,800	$76,800	$76,800	$76,800
Upgrade service to USCGA	$120,520	$120,520	$120,520	$120,520
Request Type	Partial	Partial	Full	Partial
Total Cost	$1,962.5K	$850.6K	$1,195.9K	$1,872.6K
Capital Cost	$1,864.1K	$808K	$1,135.9K	$1,778.7K
Expense Cost	$98.4K	$42.6K	$60K	$93.9K
Customer Contribution - Total	$1,842,042	$730,119	$454,588	$1,752,037
Customer Contribution - Capital	$1,556,525	$616,950	$384,500	$1,480,471
Eversource Cost - Total	$120,520	$120,520	$120,520	$120,520
Preferred option			X	

*Note: will be part of a substation project, will not be budgeted on a distribution level.

5. Project Schedule

Milestone/Phase Name	Estimated Date
Partial Approval	11/12/20
100% Detailed Engineering Completion	4/1/21
Fully Funded	10/26/23
Construction Start	9/1/21
In Service Date	6/30/23

6. Regulatory Decision

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.	2022/23	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	2022/23	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach.
Internal construction resources not available to perform the work.	2022/23	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.	2022/23	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2022/23	Low	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2022/23	Medium	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2022/23	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	2022/23	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	2022/23	Low	Use of mats and specialty equipment, only work during certain times of the year.

9. References

References
1.
2.
3.
4.
5.

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

Attachment	Included in Submittal?
A. Cost Estimate	*YES*
B. Geographic Circuit Map	*YES*
C. System One-Line	*YES*
D. Load Sheet	*YES*

Attachment A

Cost Estimate – Seg 1, Removals (Part of Preferred Option).

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01534
State Pier Offshore Wind

Design Alternative CD01534-01

Estimate

Preliminary Estimate Summary

Revision Number:	0
Contingency:	20.00%
SubTotal:	$113,600
Contingency Amount:	$22,720
Estimate:	$136,320
Reimbursement:	$0
Net Amount:	**$136,320**

Description: Remove Eversource facilities. Install new pole line to Amtrak.

Item Description	CU	$ / Per	Qty	Amount
OH WIRE OH - Remove circuit wire (3 phase)	16-OH37A	[redacted]		$6,400.00
UG CABLE UG - Cable Removal - all cables	16-UG117			$12,800.00
OH WIRE OH - Line Extension - 3ph (336 kcmil) new service supply to Amtrak	16-OH33			$62,400.00
OTHER OTHER remove 13 Eversource poles	16-ALL14			$26,000.00
OTHER OTHER remove two padmount transformers	16-ALL14			$6,000.00

Associated / Impacted Devices

Status	Type / SysID	Street / Cross St	Structure / Town	Circuit	Map	Cust	Notes
Existing	[redacted]	GROVE ST WILLIAMS ST	772 NEW LONDON	[redacted]			

Cost Estimate – Seg 2, New 9L11 Source Circuit

Connecticut Light & Power
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Specific Project Proposal - Project #: CD01534
State Pier Offshore Wind

Design Alternative CD01534-02

Estimate

Preliminary Estimate Summary

Revision Number:	0
Contingency:	28.00%
SubTotal:	$491,346
Contingency Amount:	$137,577
Estimate:	$628,922
Reimbursement:	$0
Net Amount:	**$628,922**

Description: New 9L11 circuit, 9L02 backup

Item Description	CU	$ / Per	Qty	Amount
UG CABLE DB/UG - 750/1000 - 3-1/C (3ph) Cu 1000 kcmil Cu getaway	16-UG114B	[redacted]		$22,080.00
OH WIRE OH-Install Aerial Cable-existing poles (any gauge) 750 kcmil AL a/c	16-OH36			$27,600.00
UG CABLE DB/UG - 750/1000 - 3-1/C (3ph) Cu 750 kcmil Cu from MH #132 to pole [redacted]	16-UG114B			$36,000.00
CONDUIT UG-Ductline-up to 12 duct - Traveled Way / Paved Ductbank from MH #132 to pole [redacted]	16-UG137			$93,840.00
CONDUIT UG-Ductline-up to 12 duct-Non- Traveled/Non-Paved Ductbank from reactor to riser pole	16-UG138			$37,760.00
POLE OH - POLE - 3ph (CL&P custodian) Eversource poles [redacted]	16-OH14			$23,380.00
POLE OH - POLE - 3ph (Telephone custodian) Frontier poles [redacted]	16-OH12			$7,120.00
SECTIONALIZE OH - Recloser - 3ph new [redacted] one-way TR	16-OH38			$47,989.60
OH WIRE OH-Reconductor w/175 Mil Tree Wire-3ph- 556 kcmil reconductor #2 Cu, [redacted]	16-OH27			$46,560.00

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Specific Project Proposal - Project #: CD01534

State Pier Offshore Wind

Design Alternative CD01534-02

OH WIRE OH-Reconductor w/175 Mil Tree Wire-3ph- 556 kcmil reconductor [redacted] with 556 TW	16-OH27	[redacted]	$69,840.00
OH WIRE OH - Remove circuit wire (3 phase) remove existing pri o[redacted]	16-OH37A		$1,920.00
OH WIRE OH - Remove circuit wire (1 phase) remove single-phase [redacted]	16-OH37		$2,160.00
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average switching	16-ALL17		$35,096.00
TRAFFIC OH/DB/UG - Traffic Control - Police Officer traffic	16-ALL18		$40,000.00

Associated / Impacted Devices

Status	Type / SysID	Street / Cross St	Structure / Town	Circuit	Map	Cust	Notes
Existin	[redacted]	GORDON CT WILLIAMS ST	NEW LONDON	[redacted]	[redacted]	[redacted]	
Existin		GORDON CT WILLIAMS ST	NEW LONDON			0	
Existin		New Street - TBD				0	

Cost Estimate – Seg 3, 9L09 Source Circuit

Connecticut Light & Power
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Specific Project Proposal - Project #: CD01534
State Pier Offshore Wind

Design Alternative — CD01534-03

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	28.00%
SubTotal:	$403,906
Contingency Amount:	$113,094
Estimate:	$516,999
Reimbursement:	$0
Net Amount:	$516,999
Description:	9L09 preferred source, 9L02 backup

Item Description	CU	$ / Per	Qty	Amount
UG CABLE DB/UG - 750/1000 - 3-1/C (3ph) Cu 750 kcmil Cu from MH #132 to pole [redacted]	16-UG114B	[redacted]		$36,000.00
CONDUIT UG-Ductline-up to 12 duct - Traveled Way / Paved Ductbank from MH #132 to pole [redacted]	16-UG137			$93,840.00
POLE OH - POLE - 3ph (CL&P custodian) Eversource poles [redacted]	16-OH14			$23,380.00
POLE OH - POLE - 3ph (Telephone custodian) Frontier poles, [redacted]	16-OH12			$7,120.00
SECTIONALIZE OH - Recloser - 3ph new [redacted]ne-way TR	16-OH38			$47,989.60
OH WIRE OH-Reconductor w/175 Mil Tree Wire-3ph- 556 kcmil reconductor [redacted]	16-OH27			$69,840.00
OH WIRE OH-Reconductor w/175 Mil Tree Wire-3ph- 556 kcmil reconducto[redacted]	16-OH27			$46,560.00
OH WIRE OH - Remove circuit wire (3 phase) Remove #2 Cu [redacted]	16-OH37A			$1,920.00
OH WIRE OH - Remove circuit wire (1 phase) Remove single-phase on [redacted]	16-OH37			$2,160.00

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Specific Project Proposal - Project #: CD01534
State Pier Offshore Wind

Design Alternative CD01534-03

SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average switching	16-ALL17	[redacted]	$35,096.00
TRAFFIC OH/DB/UG - Traffic Control - Police Officer traffic	16-ALL18		$40,000.00

Cost Estimate – Seg 4, 9L02 Source Circuit (Preferred Option)

Connecticut Light & Power
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Specific Project Proposal - Project #: CD01534
State Pier Offshore Wind

Design Alternative CD01534-04

Estimate

Preliminary Estimate Summary

Revision Number:	0
Contingency:	28.00%
SubTotal:	$448,527
Contingency Amount:	$125,588
Estimate:	$574,115
Reimbursement:	$0
Net Amount:	**$574,115**

Description: 9L02 preferred source, 9L09 backup

Item Description	CU	$ / Per	Qty	Amount
UG CABLE DB/UG - 750/1000 - 3-1/C (3ph) Cu 750 kcmil Cu from MH #132 to pole [redacted]	16-UG114B	[redacted]		$36,000.00
CONDUIT UG-Ductline-up to 12 duct - Traveled Way / Paved Ductbank from MH #132 to pole [redacted]	16-UG137			$93,840.00
POLE OH - POLE - 3ph (CL&P custodian) Eversource poles, [redacted]	16-OH14			$23,380.00
POLE OH - POLE - 1ph (Telephone custodian) Frontier poles, [redacted]	16-OH11			$3,752.00
SECTIONALIZE OH - Recloser - 3ph new 9L02-70S, [redacted] and 9L02-90T, [redacted]	16-OH38			$95,979.20
OH WIRE OH-Reconductor w/175 Mil Tree Wire-3ph- 556 kcmil reconductor [redacted]	16-OH27			$69,840.00
OH WIRE OH-Reconductor w/175 Mil Tree Wire-3ph- 556 kcmil reconductor [redacted]	16-OH27			$46,560.00
OH WIRE OH - Remove circuit wire (3 phase) remove #2 Cu, [redacted]	16-OH37A			$1,920.00
OH WIRE OH - Remove circuit wire (1 phase) remove single-phase [redacted]	16-OH37			$2,160.00

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Specific Project Proposal - Project #: CD01534
State Pier Offshore Wind

Design Alternative			CD01534-04
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average switching	16-ALL17	[redacted]	$35,096.00
TRAFFIC OH/DB/UG - Traffic Control - Police Officer traffic	16-ALL18		$40,000.00

Cost Estimate – Seg 5, 9L07 Source Circuit

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01534
State Pier Offshore Wind

Design Alternative CD01534-05

Estimate

Preliminary Estimate Summary	
Revision Number:	0
Contingency:	28.00%
SubTotal:	$1,202,279
Contingency Amount:	$336,638
Estimate:	$1,538,917
Reimbursement:	$0
Net Amount:	**$1,538,917**
Description:	9L07 preferred source, 9L09 backup

Item Description	CU	$ / Per	Qty	Amount
UG CABLE DB/UG - 750/1000 - 3-1/C (3ph) Cu 750 kcmil Cu cable from MH #132 to MH #260 to new riser pole on [redacted]	16-UG114B	[redacted]		$211,200.00
CONDUIT UG-Ductline-up to 12 duct - Traveled Way / Paved ductbank on [redacted]	16-UG137	[redacted]		$688,160.00
POLE OH - POLE - 3ph (CL&P custodian) Eversource poles, [redacted]	16-OH14	[redacted]		$14,028.00
POLE OH - POLE - 3ph (Telephone custodian) Frontier poles, [redacted]	16-OH12	[redacted]		$7,120.00
SECTIONALIZE OH - Recloser - 3ph new [redacted]	16-OH38	[redacted]		$95,979.20
OH WIRE OH-Reconductor w/175 Mil Tree Wire-3ph- 556 kcmil reconductor [redacted]	16-OH27	[redacted]		$59,752.00
OH WIRE OH-Reconductor w/175 Mil Tree Wire-3ph- 556 kcmil reconducto [redacted]	16-OH27	[redacted]		$46,560.00
OH WIRE OH - Remove circuit wire (3 phase) remove #2 Cu, [redacted]	16-OH37A	[redacted]		$1,920.00
OH WIRE OH - Remove circuit wire (3 phase) remove 1/0 TW [redacted]	16-OH37A	[redacted]		$2,464.00

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Connecticut Light & Power
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Specific Project Proposal - Project #: CD01534
State Pier Offshore Wind

Design Alternative			CD01534-05
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average switching	16-ALL17	[redacted]	$35,096.00
TRAFFIC OH/DB/UG - Traffic Control - Police Officer traffic	16-ALL18		$40,000.00

Cost Estimate – Seg 6, USCGA Work (Part of Preferred Option).

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01534
State Pier Offshore Wind

Design Alternative — CD01534-06

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	28.00%
SubTotal:	$94,157
Contingency Amount:	$26,364
Estimate:	$120,521
Reimbursement:	$0
Net Amount:	**$120,521**

Description: install new 9L01-72S, modify existing 9L01-93T to pick up 9L01

Item Description	CU	$ / Per	Qty	Amount
UG CABLE DB/UG - 350/500 - 3-1/C (3ph) Cu 500 kcmil Cu from mh #210 to riser pole [redacted]	16-UG114	[redacted]		$6,960.00
SECTIONALIZE OH-Vertical Disconnect Switches-600/900 amp 3-1ph install in-lines on new TR for visible break.	16-OH43			$10,283.20
SECTIONALIZE OH - Recloser - 3ph new 9L01-72S, [redacted] for USCGA	16-OH38			$47,989.60
SECTIONALIZE OH - Recloser Control - setting changes only new one-way TR to pick up [redacted] for USCGA	16-OH39A			$4,885.60
UG CABLE UG - Cable Removal - all cables remove 9L01 cable from mh #210 to riser pole [redacted]	16-UG117			$2,000.00
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average switching	16-ALL17			$14,038.40
TRAFFIC OH/DB/UG - Traffic Control - Police Officer traffic	16-ALL18			$8,000.00

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Cost Estimate – Seg 7, Primary Metering (Part of Preferred Option).

Connecticut Light & Power
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Specific Project Proposal - Project #: CD01534
State Pier Offshore Wind

Design Alternative CD01534-07

Estimate

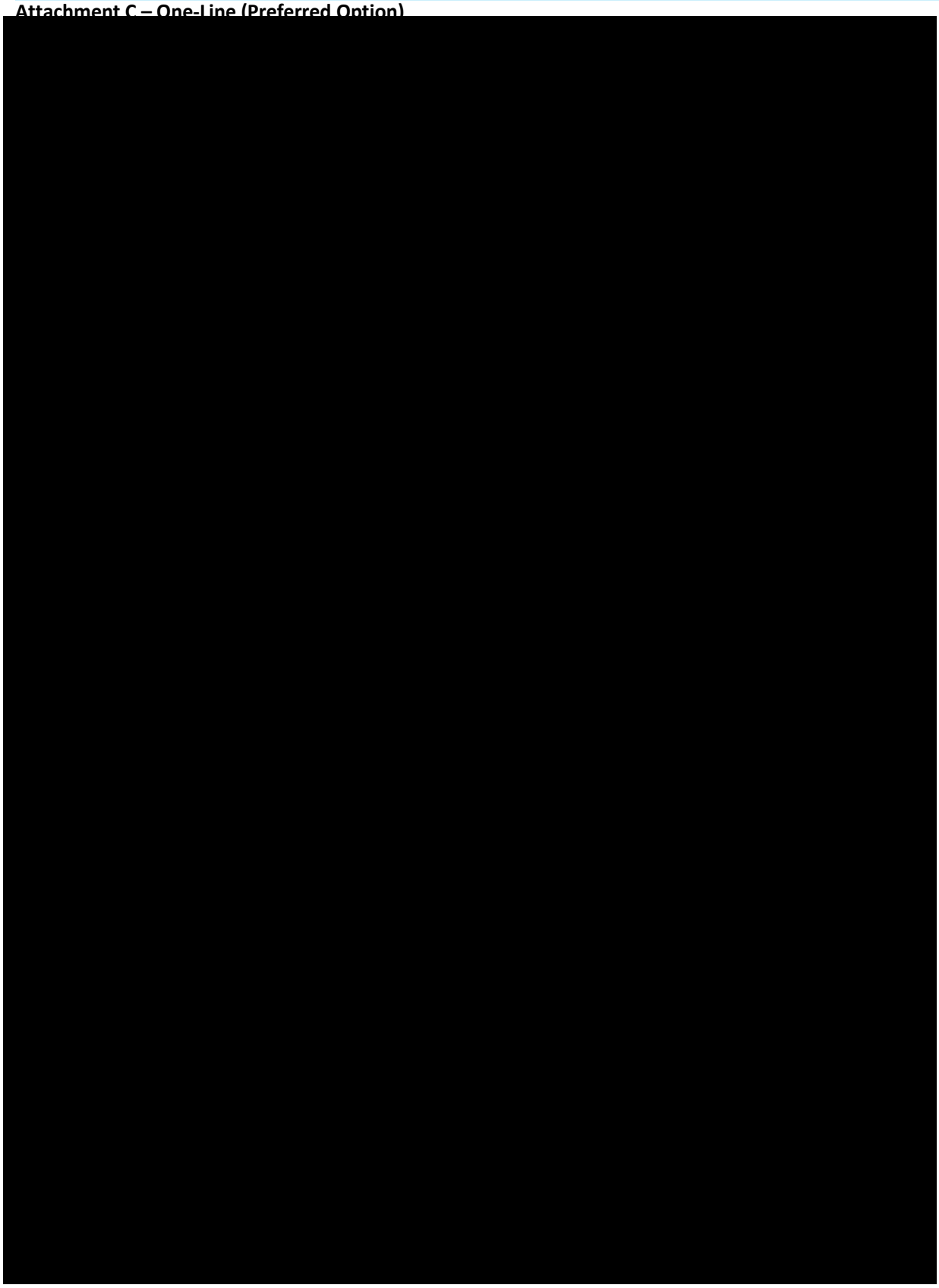
	Preliminary Estimate Summary
Revision Number:	0
Contingency:	28.00%
SubTotal:	$60,000
Contingency Amount:	$16,800
Estimate:	$76,800
Reimbursement:	$0
Net Amount:	**$76,800**
Description:	install primary metering with risers

Item Description	CU	$ / Per	Qty	Amount
OTHER	16-ALL14	[redacted]		$60,000.00
OTHER $30K per primary metering				

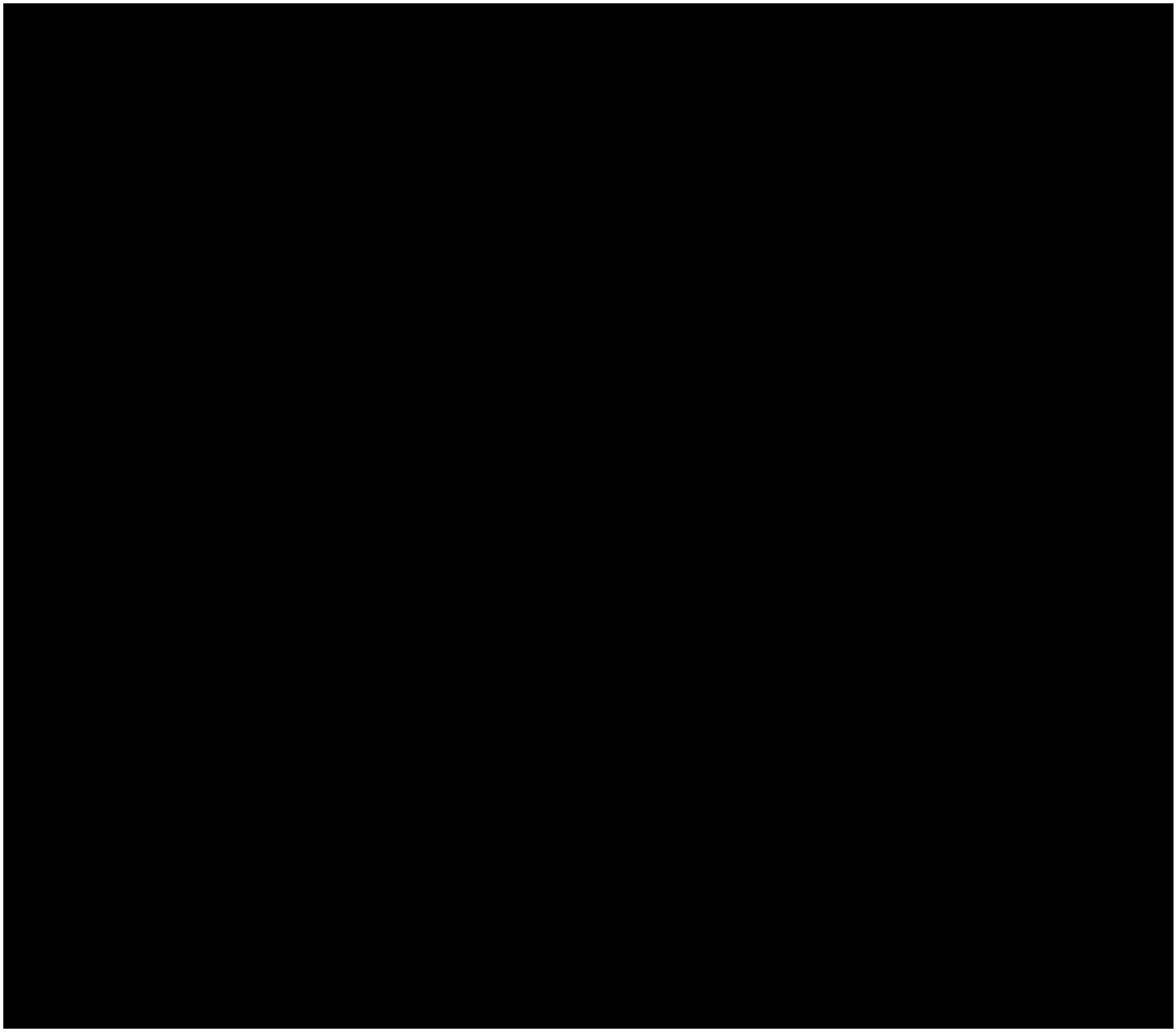
Attachment B – Geo Circuit Map (Preferred Option)



Attachment C – One-Line (Preferred Option)



Attachment D – Load Sheet (Preferred Option)



EVERSOURCE
Project Authorization Form

Operations Project Authorization Form

Date Prepared: 11/05/20	Project Title: State Pier Offshore Wind
Company/ies: Eversource CT	Project ID Number: CD01534
Organization: Distribution Electric	Class(es) of Plant: Distribution
Project Initiator [redacted]	Project Category: Line
Project Manage[redacted]	Project Type: New Service
Project Sponsor [redacted]	Project Purpose: Supply new load
Estimated in service date: 6/2021; 8/2022	If Transmission Project: PTF? N/A
Eng. /Constr. Resources Budgeted?	Capital Investment Part of Original Operating Plan?
Authorization Type: Partial Funding	O&M Expenses Part of the Original Operating Plan?
Total Request: $907,754 ($787,235 customer contribution)	

Financial Requirements:

Project Authorization
ERM: _____

FP&A: _____

Executive Summary

This project addresses the need to supply new load that will be operating from th[redacted]in New London, CT. The load requirement is 3.8 MVA. The state pier will be used to assemble wind turbines and ship offshore for installation.

Connecticut Governor Ned Lamont announced on February 11, 2020, that the State of Connecticut and its partners [redacted]nd Eversource have reached a final agreement on a harbor development plan for the [redacted]n New London, Connecticut, that will transform the pier into a world-class offshore wind center and bring hundreds of well-paying jobs to the area.

The developer has requested Eversource to remove its facilities in the area of development by June 29, 2021 and be able to supply a 3.8 MVA load by October 6, 2022.

The New Business policies have been applied to determine the customer contribution, which is $787,235, as shown under the Financial Evaluation tab. Eversource will construct an automatic recloser loop for the USCGA for reliability, which has been estimated to be $120,520. The customer contribution of $787,235 and Eversource's cost of $120,520 is the total project cost of $907,755.

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Project Authorization Form

Project Costs Summary
Note: Dollar values are in thousands

	Prior Authorized	2021	2022	20__+	Totals
Capital Additions - Direct	$0	$71	$401	$0	$472
Less Customer Contribution	$0	$0	$0	$0	$0
Removals net of Salvage ____%	$0	$3	$18	$0	$21
Total - Direct Spending	$0	$74	$419	$0	$493
Capital Additions - Indirect	$0	$55	$313	$0	$368
Subtotal Request	$0	$129	$732	$0	$861
AFUDC	$0	$2	$12	$0	$14
Total Capital Request	$0	$131	$744	$0	$875
O&M	$0	$5	$28	$0	$33
Total Request	$0	$136	$772	$0	$908

Financial Evaluation
Note: Dollar values are in thousands

Direct Capital Costs	Year 1	Year 2	Year 3+	Total
Straight Time Labor	$10	$58	$0	$69
Overtime Labor	$2	$10	$0	$12
Outside Services	$33	$185	$0	$218
Materials	$29	$164	$0	$193
Other, including contingency amounts (describe)	$0	$1	$0	$2
Total Direct Costs	**$74**	**$419**	**$0**	**$493**

Indirect Capital Costs	Year 1	Year 2	Year 3+	Total
Indirects/Overheads (including benefits)	$55	$313	$0	$368
Capitalized interest or AFUDC, if any	$2	$12	$0	$14
Total Indirect Costs	**$57**	**$325**	**$0**	**$382**
Total Capital Costs	**$131**	**$744**	**$0**	**$875**
Less Total Customer Contribution	**($118)**	**($669)**	**$0**	**($787)**
Total Capital Project Costs	**$13**	**$75**	**$0**	**$88**
Total O&M Project Costs	**$5**	**$28**	**$0**	**$33**

Note: Explain unique payment provisions, if applicable

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Project Authorization Form

Technical Justification:

Project Need Statement

This project addresses the need to supply new load that will be operating from the [redacted] in New London, CT. The [redacted] will become a hub for assembling and shipping out to sea wind turbines. A reliable source of power to supply the load requirement of 3.8 MVA is required. A recloser loop-scheme will be constructed for increased reliability.

Project Objectives

New load coming to the [redacted] in New London, CT, for the purpose of assembling and shipping wind turbines, will need to be supplied by a reliable circuit and backed up with an alternate circuit. This project will accomplish this objective.

Project Scope

[redacted]

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Project Authorization Form

Major Material

Two Sectionalizing Reclosers and controls
One Tie Recloser and control
375 feet 750 kcmil Cu cable (9L02)
1,500 feet 556 AL tree wire
150 feet 750 kcmil Cu (9L03)

Background / Justification

Connecticut Governor [redacted] announced on February 11, 2020, that the State of Connecticut and its partners [redacted] and Eversource have reached a final agreement on a harbor development plan for the [redacted] in New London, Connecticut, that will transform the pier into a world-class offshore wind center and bring hundreds of well-paying jobs to the area. Eversource is required to supply this load with reliable circuits.

Business Process and / or Technical Improvements:

Installing a recloser loop-scheme and reconductoring will provide increased reliability and will also prevent a circuit overload.

Alternatives Considered with Cost Estimates

[redacted]

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	[redacted]			
Circuit upgrades	$628,922	$516,999	$574,115	$1,538,917
Substation work*	$1,000,000	-	-	-
Removals – customer request	$136,320	$136,320	$136,320	$136,320
Primary Metering	$76,800	$76,800	$76,800	$76,800
Upgrade service to USCGA	$120,520	$120,520	$120,520	$120,520
Total Cost	$1,962,562	$850,639	$907,755	$1,872,557
Customer Contribution	$1,842,042	$730,119	$787,235	$1,752,037
Eversource Cost	$120,520	$120,520	$120,520	$120,520
Preferred option			X	

*Note: will be part of a substation project, will not be budgeted on a distribution level.

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Preliminary Approval	9/17/20
Detailed Design	12/31/20
Settings Requested	12/31/20
Remove Eversource Facilities	5/31/21
Construction Start Date	9/1/21
Construction End Date	8/30/22

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Risks and Risk Mitigation Plans

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2022	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	2022	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach.
Internal construction resources not available to perform the work.	2022	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.	2022	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2022	Low	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2022	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2022	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	2022	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.

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Wetlands / Environmentally sensitive area	2022	Low	Use of mats and specialty equipment, only work during certain times of the year.

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

CD01534 New Load Form [redacted] Offsh
[redacted] Leap_Zone_Projection
Leap_Zone_Projection
CD01534 One-lines [redacted] df
CD01534 Circuit Maps [redacted] Wind Statemen
CD01534 Need [redacted]