Operations Project Authorization Form

Project Title: [redacted] **Alternate Source From** [redacted]	**Project Number: CD01983**
Date Prepared: 08/31/2023	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** RELIABILITY IMPROVE SPEC PROJ
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: 12/30/2023	
Total Capital Request: $120.6K	**Authorization Type:** Full Funding

1. Executive Summary

[redacted]

Project CD01983 was initially presented on May 12, 2023, and approved for $96K. However, the full funding request ($120.6K) reflects a 25% increase from its original estimate ($96K) caused by an increase in indirect charges that were accrued during late 2022 and early 2023 due to material shortages. The project was originally planned to be completed in 2022.

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	2022	2023	Total
Internal Labor and Construction Equipment	25.6	11.2	25.6
Outside Services	9.9	4.3	9.9
Materials	11.1	4.9	11.1
Removals	0.0	0.0	0.0
Risk and Contingency	0.0	0.0	0.0
Other	2.9	1.3	2.9
Subtotal	**49.5**	**21.6**	**71.1**

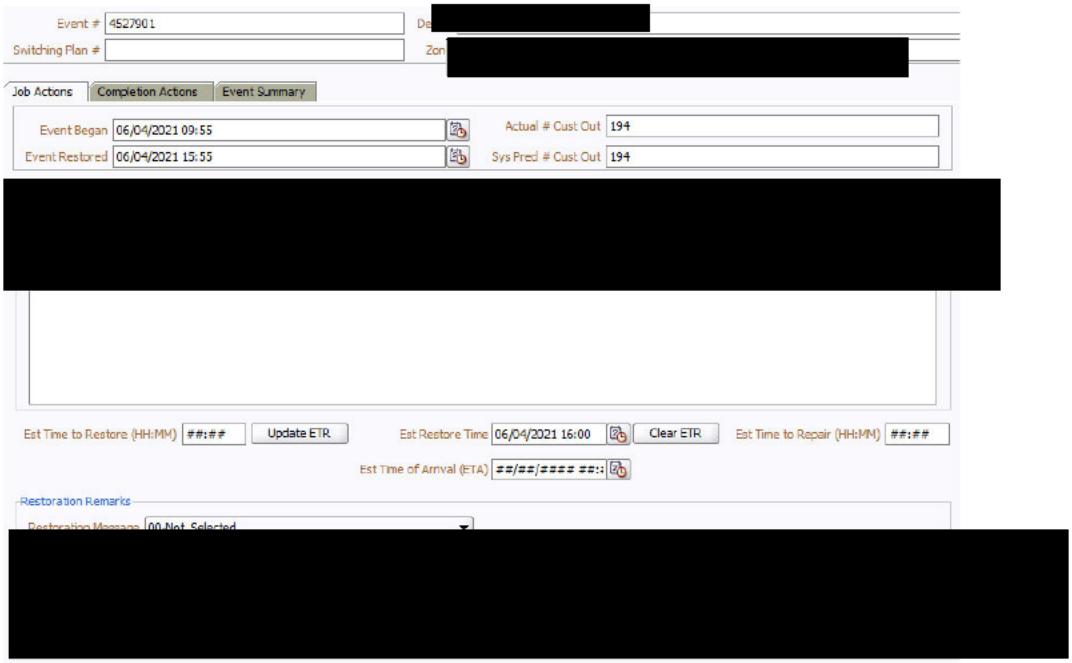
Indirect Capital Costs	2022	2023	Total
Indirects/Overheads (including benefits)	34.4	15.1	49.5
Capitalized interest or AFUDC, if any	0.0	0.0	0.0
Subtotal	**34.4**	**15.1**	**49.5**

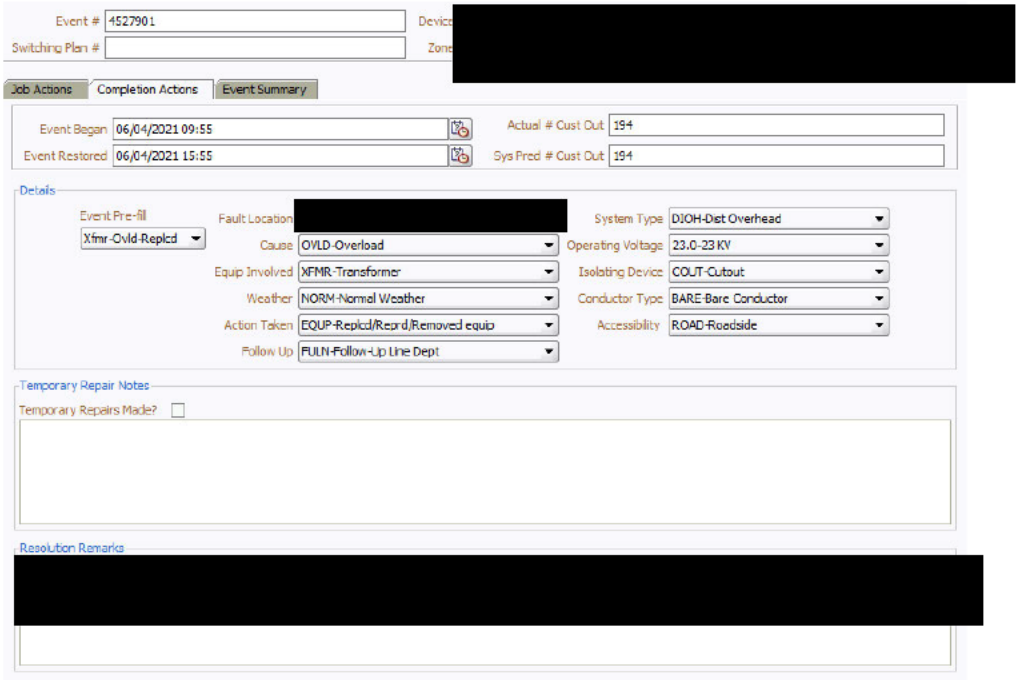
Total Capital Costs (Gross)	**83.9**	**36.7**	**120.6**

Less Total Customer Contribution	**0.0**	**0.0**	**0.0**
Project Costs (Net of Reimbursement)	**83.9**	**36.7**	**120.6**

3.Technical Justification

a. Background





b. Project Need

[redacted]

c. Project Scope

Preferred Proposal (Includes the following material
Total Cost $120.6K

[redacted]

Major Material:

- 2 Frontier poles, 3 Eversource poles
- 4 sets of three-phase cutouts
- 2 sets of three-phase 18 kV lightning arresters
- 3 sets of three-phase 6 kV lightning arresters
- 300’ three-phase 1/0 ACSR TW
- 300’ 1/0 ACSR neutral
- 3-333 kVA step-down transformers

4. Alternatives Considered

(This option was not selected due to the highest cost when compared to the preferred option)

Alternatives were considered (please describe below)

Option #2, Voltage Conversion
Total Cost: $950K

[redacted]

Regulatory Approvals:

No

If yes, provide detailed regulatory approvals.

5. Project Schedule

Milestone/Phase Name	Estimated Date
100% Engineering Completion	6/1/2022
Construction Start	8/1/2022
Testing/Commissioning	04/15/2023
In Service Date	9/31/2023

6. Regulatory Decisions

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.	2022-2023	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	2022-2023	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach.
Internal construction resources not available to perform the work.	2022-2023	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.	2022-2023	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2022-2023	High	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2022-2023	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2022-2023	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	2022-2023	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	2022-2023	Low	Use of mats and specialty equipment, only work during certain times of the year.

9. References

References

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

Attachment	Included in Submittal?
A. Project Need Statement	*YES*
B. Geographical Map	*YES*
C. Steps down and N.O point diagram	*YES*
D. One line	*YES*
E. Load Summary	*YES*
F. Outage history	*YES*

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

CD01983 Needs Statement.pdf
CD01983 Geographic Map.pd
CD01983 Step-Downs.pdf
CD01983 N.O. Point.pdf
CD01983 One Line.pdf
CD01983 Load Sheet.xlsx
CD01983 Outage History_2018-2022.xl

- Attachment A

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01983

[redacted]

Design Alternative CD01983-01

Estimate

Preliminary Estimate Summary

Revision Number:	0
Contingency:	20.00%
SubTotal:	$81,557
Contingency Amount:	$16,311
Estimate:	$97,868
Reimbursement:	$0
Net Amount:	$97,868

Description:

Item Description	CU	Amount
TREE OH - Tree Trimming	16-OH61	$10,000.00
SECTIONALIZE OH - Cutouts or Arresters - 3ph 65K C/O, 100A C/O, 200A C/O, 300A solids, 18kV LA (2), 6kV LA (3)	16-OH20	$20,836.80
OH WIRE OH - Neutral P.141 - 3223	16-OH31	$1,920.00
OH WIRE OH - Remove circuit wire (3 phase) P.141-140	16-OH37A	$480.00
OH WIRE OH - Line Extension - 3ph (336 kcmil) P.141-3223	16-OH33	$31,200.00
XF OH - Stepdowns, 3-1ph - on one POLE P.2464	16-OH50	$10,000.00
POLE OH - POLE - 3ph (Telephone custodian) P.3223, 139	16-OH12	$7,120.00

[redacted]

EVERSOURCE

Project Approval Form

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01983 [redacted]

Design Alternative CD01983-01

Associated / Impacted Devices

Status	Type / SysID	...	Notes
Existing	[redacted]		
Existing			

Reliability Projection

Title:

Outage Start Date: 5/5/2018 Outage End Date: 5/5/2022 Years History: 4.00

[redacted]

[redacted]

EVERSOURCE

Project Approval Form



EVERSOURCE

Project Approval Form

[redacted]

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

EVERSOURCE

Project Approval Form

Operations Project Authorization Form

Project Title: [redacted] **Alternate Source From** [redacted]	**Project Number: CD01983**
Date Prepared: 05/12/2022	**Company:** Eversource CT
Organization: Electric Field Operations	**Class(es) of Plant:** D Line
Project Initiator: [redacted]	**Project Category:** RELIABILITY IMPROVE SPEC PROJ
Project Manager: [redacted]	**Project Type:** Specific
Project Sponsor: [redacted]	**Capital Investment part of original Operating Plan:** Yes
Estimated in service date: 12/31/22	**Emergency Related Request?** No
Eng./Constr. Resources Budgeted? No	**Facility Type** (check all that apply): ☐ PTF ☐ non-PTF ☒ Distribution
Total Gross Capital Request: $96K	**Authorization Type:** Initial Funding

Executive Summary

[redacted]

Project Costs Summary

Note: Dollar values are in thousands

Capital Costs	Year 1	Year 2	Year 3+	Total
Internal Labor and Construction Equipment	$4	$0	$0	$4
Outside Services	$33	$0	$0	$33
Materials	$19	$0	$0	$19
Removals	$4	$0	$0	$4
Risk and Contingency	($0)	$0	$0	($0)
Other	$0	$0	$0	$0
Subtotal	**$59**	**$0**	**$0**	**$59**
Indirect Capital Costs	**Year 1**	**Year 2**	**Year 3+**	**Total**
Indirects/Overheads (including benefits)	$34	$0	$0	$34
Capitalized interest or AFUDC, if any	$2	$0	$0	$2
Subtotal	**$37**	**$0**	**$0**	**$37**
Total Capital Costs (Gross)	**$96**	**$0**	**$0**	**$96**

Technical Justification:

Project Need, Objective and Justification:

[redacted]

Project Scope:

[redacted]

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EVERSOURCE

Project Approval Form

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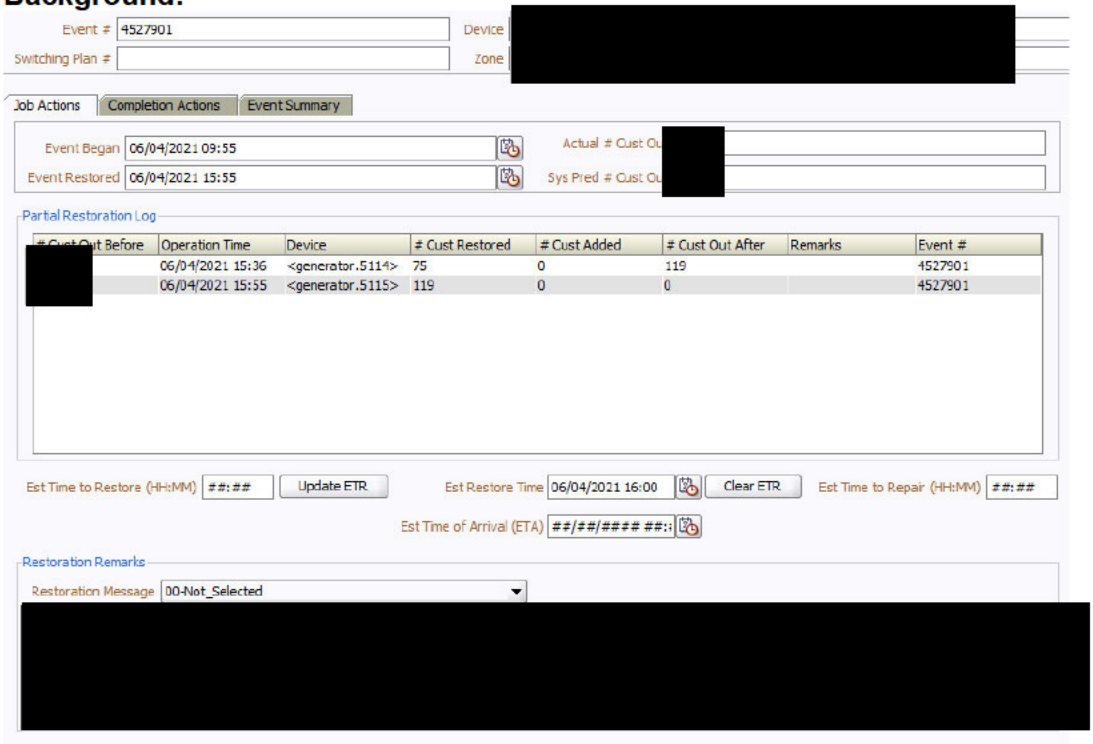

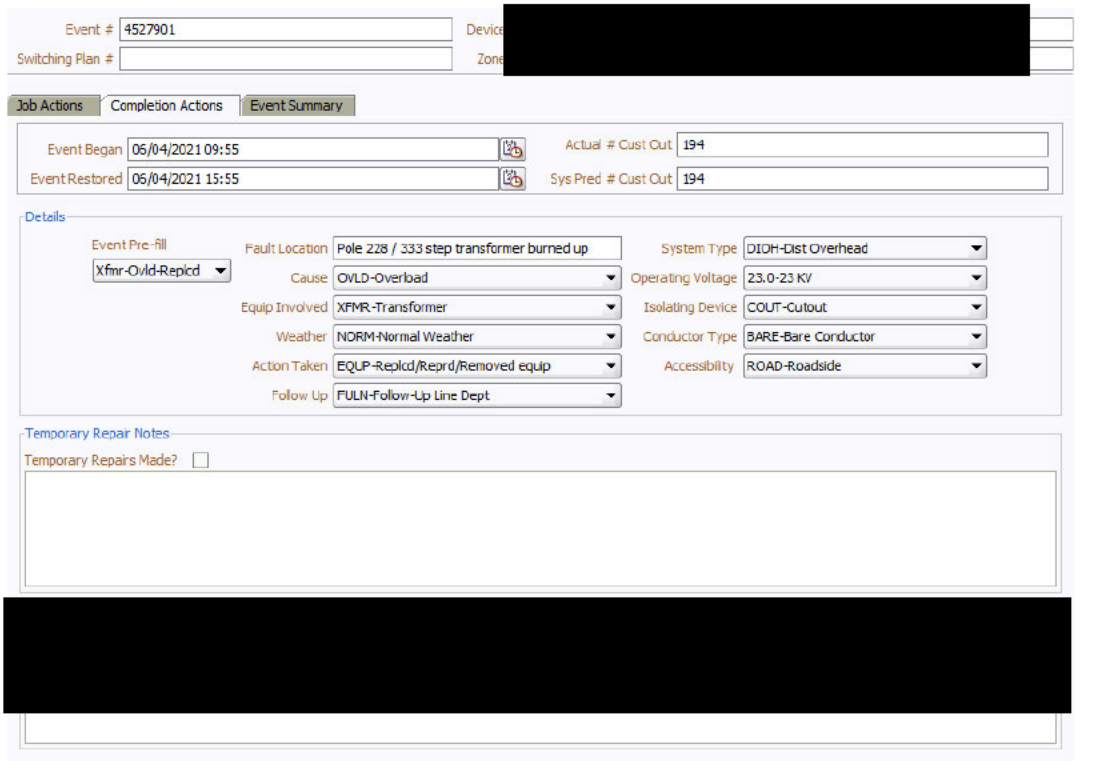

Alternatives Considered:

Were alternative solutions considered/applicable? Include any cost/benefit analysis.

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

Regulatory Approvals:

Are Regulatory body approvals needed for the project?
No

If yes, provide detailed regulatory approvals

Project Schedule

Milestone/Phase Name	Estimated Date
100% Engineering Completion	6/1/2022
Construction Start	8/1/2022
Testing/Commissioning	10/1/2022
In Service Date	12/31/2022

Risks and Risk Mitigation Plans

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2022-	Medium	Included contingency costs in the funding request. Perform detailed Field Analysis and walk down in project development to avoid potential issues.
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