EVERSOURCE

Project Approval Form

Project Title: River Rd Reconductor	Project Number: CD01917
Date Prepared: 05/28/2024	**Company:** Eversource CT
Organization: Electric System Operations	**Project Category:** Lines - Conductor
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: 12/16/2022	
Total Capital Request: $320.9K	**Authorization Type:** Full Funding

1. Executive Summary

Full funding is being requested for this project at a cost of **$320.9K** which is 142.6% of the partial funding capital estimate of $225K. There is no scope change on the project. The variance between the full funding and partial funding estimate resulted from a revised estimate per unit cost of labor and materials. Additionally, this project's full funding estimate was generated in 2022, which is associated with a 30% increase to the total cost relative to units used today. Project CD01917 was put in service on 12/16/2022 and all WOs have been closed; therefore, no additional charges are anticipated for this project.

The Original Project was presented as follows:

- This section of River Rd in Putnam is found on the lateral reliability program for 2022. It is a heavily treed area of the [redacted] and has received 22 outages in the last four years with 20 being tree related. Reconductoring this area with tree wire and a ridge pin construction as well as upgrading the aging plant will increase the reliability to this lateral tap. According to Vegetation Management 40 trees were removed from this area this past year and outages have still occurred. [redacted] Converting this area will allow for new transformers and the removal of multiple step-up transformers that are feeding customers along this road.

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	2022	Year 2	Year 3+	Total
Direct Capital Costs				
Internal Labor and Construction Equipment	63.0	0.0	0.0	63.0
Outside Services	66.3	0.0	0.0	66.3
Materials	20.1	0.0	0.0	20.1
Removals	57.4	0.0	0.0	57.4
Risk and Contingency	6.3	0.0	0.0	6.3
Other	0.6	0.0	0.0	0.6
Subtotal – Direct Costs	**213.8**	**0.0**	**0.0**	**213.8**
Indirect Capital Costs	**2025**	**Year 2**	**Year 3+**	**Total**
Indirect/Overheads (including benefits)	104.6	0.0	0.0	104.6
Capitalized interest or AFUDC, if any	2.4	0.0	0.0	2.4
Subtotal – Indirect Costs	**107.0**	**0.0**	**0.0**	**107.0**
Total Gross Capital Costs	**320.9**	**0.0**	**0.0**	**320.9**
Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**
Total Net Capital Project Costs	**320.9**	**0.0**	**0.0**	**320.9**

Explain unique payment provisions, if applicable:

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

[redacted]

b. Project Need

[redacted]

c. Project Scope

[redacted]

4. Alternatives Considered

[redacted]

Major Material:

- **5,250' 1/0 TW**
- **13 Xfmr's**
- **1 167kva Step-Down Xfmr**
- **15 poles**

5. Project Schedule

Add any additional milestones that are pertinent to the project:

Milestone/Phase Name	Estimated Date
Partial Approval	02/08/2022
100% Detailed Engineering Completion	07/01/22
Fully Funded	06/14/2024
Construction Start	08/01/22
In Service Date	12/16/22

6. Regulatory Decisions

N/A

7. Codes and Standards

N/A

8. Risk and Contingencies

N/A

9. References

N/a

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

Attachment	Included in Submittal?
A. Partial Funding PAF Form	*YES*
B. Map	*YES*
C. Project Needs Statement	*YES*

Operations Project Authorization Form

Project Title: River Rd Reconductor	**Project Number: CD01917**
Date Prepared: 02/08/2022	**Company:** Eversource CT
Organization: EFO	**Class(es) of Plant:** D Line
Project Initiator: [redacted]	**Project Category: Line**
Project Manager: [redacted]	**Project Type:** Specific
Project Sponsor: [redacted]	**Capital Investment part of original Operating Plan:** No
Estimated in service date: 2022	**Emergency Related Request?** No
Eng./Constr. Resources Budgeted? Yes	**Facility Type** (check all that apply): ☐ PTF ☐ non-PTF ■ Distribution
Total Gross Capital Request: $225k	**Authorization Type:** Initial Funding

Executive Summary

This section of River Rd in Putnam is found on the lateral reliability program for 2022. It is a heavily treed area of the [redacted] and has received 22 outages in the last four years with 20 being tree related. Reconductoring this area with tree wire and a ridge pin construction as well as upgrading the aging plant will increase the reliability to this lateral tap. According to Vegetation Management 40 trees were removed from this area this past year and outages have still occurred. [redacted] Converting this area will allow for new transformers and the removal of multiple step-up transformers that are feeding customers along this road.

Project Costs Summary

See APS3 and APS8 requirements and consult with Plant Accounting for capital/O&M determination. Use published loaders for benefits, materials, and invoices, maintained by the Director, Budget and Internal Reporting.

Note: Dollar values are in thousands

Capital Costs	Year 1	Year 2	Year 3+	Total
Internal Labor and Construction Equipment	$8	$0	$0	$8
Outside Services	$80	$0	$0	$80
Materials	$25	$0	$0	$25

Removals	$13	$0	$0	$13
Risk and Contingency	$11	$0	$0	$11
Other	$0	$0	$0	$0
Subtotal	**$137**	**$0**	**$0**	**$137**
Indirect Capital Costs	**Year 1**	**Year 2**	**Year 3+**	**Total**
Indirects/Overheads (including benefits)	$83	$0	$0	$83
Capitalized interest or AFUDC, if any	$5	$0	$0	$5
Subtotal	**$88**	**$0**	**$0**	**$88**
Total Capital Costs (Gross)	**$225**	**$0**	**$0**	**$225**

Technical Justification:

Project Need, Objective and Justification

[redacted] Rd is on the lateral reliability program for 2022. This is because in the last 4 years This area has experienced 22 outages with 20 being tree related. Some of the plant on this road dates to 1946 vintage. [redacted]

Project Scope

[redacted]

Background

[redacted]

Alternatives Considered:

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

Alternatives were considered (please describe below)

This projects alternative is to reconductor this section of River Rd without converting it. Average tree trimming will be performed and poles will be replaced as needed. Only one wire will be reconductored to tree wire and cross arm construction will remain. The total for this alternative will be approximately $177,500.

Major Material:

- **5,250' 1/0 TW**
- **13 Xfmr's**
- **1 167kva Step-Down Xfmr**
- **15 poles**

Project Schedule

Milestone/Phase Name	Estimated Date
100% Engineering Completion	07/01/22
Construction Start	08/01/22
In Service Date	12/31/22

Risks and Risk Mitigation Plans

List top risks and mitigation plans associated with this project. Include any contingency related to each risk.

(Permitting/siting; environmental; outage constraints; customer/community outreach; material delivery; constructability challenges; etc.)

References


River Rd Fuse 1013 Outage history.xlsx


River Rd Fuse 1013 Convert recondcutor.p


CD01917_project_needs_statement.pdf

B. Map

[redacted]

C. Project Needs Statement

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01917
River Rd, Putnam Reconductor

Work Classification

Category: Line
Type: REL1
Type Desc: RELIABILITY IMPROVE SPEC PROJ
Work Type:

Ownership / Management

AWC: Danielson
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 #: CD01917

River Rd, Putnam Reconductor

Project Option Summary

ID	Description	Segments	Preliminary Estimate	Construction Estimate	Variance	IEEE $/CMS	All (w/Storm)	Prfrd

Segments

ID	Title	Preliminary Estimate	Construction Estimate	Variance	IEEE $/CMS	All (w/Storm)
1	Reconductor with conversion (Preferred)	$229,923			$0.00	$0.00
2	Reconductor no Convertion (Alt 1)	$177,504			$0.00	$0.00

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01917

River Rd, Putnam Reconductor

Background / Scope

Issue:

This seciton of River Rd beyond fuse 1013-1/2 has been a 3/5/10 or more multple times. It is now on a list for laterals to be addressed. The road has experienced 22 outages in the last 4 years.

Project Description:

[redacted]

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 #: CD01917

River Rd, Putnam Reconductor

Design Alternative CD01917-01

General Information

Segment: 1 - Reconductor with conversion (Preferred) Status: Draft

Segment Type: RECONDUCTORING - OTHER Town: PUTNAM Budget Year: 2022

Work Type: LT-Conversion-Recond Trimming Required: ☐ In Service Date: 12/31/2023

Description: [redacted]

Itemized Work List

ID	Major Grid	Minor Grid	Description of Work to be Performed
1	[redacted]		

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01917

River Rd, Putnam Reconductor

Design Alternative CD01917-01

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	20.00%
SubTotal:	$191,602
Contingency Amount:	$38,320
Estimate:	$229,923
Reimbursement:	$0
Net Amount:	**$229,923**

Description:

Item Description	CU	Amount
XF OH - OH XF - 1ph	16-OH45	$27,424.80
EQUIPMENT OH - Conversion - CUTOVER	16-OH58	$6,957.60
POLE OH - POLE - 1ph (CL&P custodian) 5 Poles added for additional pole replacements	16-OH13	$14,420.00
TRAFFIC OH/DB/UG - Traffic Control - Police Officer 5% of total	16-ALL18	$10,000.00
XF OH - Stepdown - 1ph - on POLE Install at pole 981	16-OH49	$6,800.00
OH WIRE OH-Reconductor w/175 Mil Tree Wire-1ph (any gauge) Reconductor from pole 1013-1/2 to pole 981.	16-OH25	$126,000.00

[redacted]

Associated / Impacted Devices

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

Connecticut Light & Power
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Specific Project Proposal - Project #: CD01917
River Rd, Putnam Reconductor

Design Alternative CD01917-01

Reliability Projection

Title:

Outage Start Date: 2/1/2018 Outage End Date: 2/1/2022 Years History: 4.00

[redacted]

Connecticut Light & Power
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Specific Project Proposal - Project #: CD01917
River Rd, Putnam Reconductor

Design Alternative CD01917-02

General Information

Segment: 2 - Reconductor no Convertion (Alt 1) Status: Draft

Segment Type: RECONDUCTORING - OTHER Town: PUTNAM Budget Year: 2022

Work Type: LT-Reconductoring Trimming Required: ☐ In Service Date: 12/31/2023

Description: [redacted]

Itemized Work

ID	Major Grid	Minor Grid	Description of Work to be Performed

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01917

River Rd, Putnam Reconductor

Design Alternative CD01917-02

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	20.00%
SubTotal:	$147,920
Contingency Amount:	$29,584
Estimate:	$177,504
Reimbursement:	$0
Net Amount:	**$177,504**

Description:

Item Description	CU	Amount
OH WIRE OH-Reconductor w/175 Mil Tree Wire-1ph (any gauge)	16-OH25	$126,000.00
POLE OH - POLE - 1ph (CL&P custodian) 5 Poles added for additional pole replacements	16-OH13	$14,420.00
TRAFFIC OH/DB/UG - Traffic Control - Police Officer 5% for traffic.	16-ALL18	$7,500.00

[redacted]

Associated / Impacted Devices

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

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01917

River Rd, Putnam Reconductor

Design Alternative CD01917-02

Reliability Projection

Title:

Outage Start Date: 2/1/2018 Outage End Date: 2/1/2022 Years History: 4.00

[redacted]