EVERSOURCE
Project Authorization Form

# Operations Project Authorization Form

| | |
|---|---|
| **Date Prepared:** Aug 25, 2020 | **Project Title:** [redacted] Reliability Improvement & Conversion |
| **Company/ies:** Eversource CT | **Project ID Number:** CD01612 |
| **Organization:** Distribution Electric | **Class(es) of Plant:** Distribution |
| **Project Initiator:** [redacted] | **Project Category:** Line |
| **Project Manager:** [redacted] | **Project Type:** Specific |
| **Project Sponsor:** [redacted] | **Project Purpose:** Reliability Improvement |
| **Estimated in service date:** December 31, 2021 | **If Transmission Project: PTF?** N/A |
| **Eng. /Constr. Resources Budgeted?** | **Capital Investment Part of Original Operating Plan?** |
| **Authorization Type:** Preliminary | **O&M Expenses Part of the Original Operating Plan?** |
| **Total Request:** $ 811,061.19 | |

## Financial Requirements:

### Project Authorization

ERM: _____

FP&A: _____

### Executive Summary

The purpose of this project is to address the large customer zone with recurring outages. [redacted] had experienced several interruptions since 2016 with about [redacted]. We also received multiple customer complaints from [redacted]. This area has been EET'd in 2017 and is scheduled to be trimmed in 2021. [redacted]

This project proposes to [redacted]

## Project Costs Summary

*Note: Dollar values are in thousands*

| | Prior Authorized | 2021 | 2022 | 2023+ | Totals |
|---|---|---|---|---|---|
| Capital Additions - Direct | $0 | $489,156 | $0 | $0 | $489,156 |
| Less Customer Contribution | $0 | $0 | $0 | $0 | $0 |
| Removals net of Salvage ____% | $0 | $20,477 | $0 | $0 | $20,477 |
| Total - Direct Spending | $0 | $509,633 | $0 | $0 | $509,633 |
| Capital Additions - Indirect | $0 | $276,879 | $0 | $0 | $276,879 |
| Subtotal Request | $0 | $786,512 | $0 | $0 | $786,512 |
| AFUDC | $0 | $12,623 | $0 | $0 | $12,623 |
| Total Capital Request | $0 | $799,134 | $0 | $0 | $799,134 |
| O&M | $0 | $11,927 | $0 | $0 | $11,927 |
| Total Request | $0 | $811,061 | $0 | $0 | $811,061 |

## Financial Evaluation

*Note: Dollar values are in thousands*

| Direct Capital Costs | 2021 | 2022 | 2023+ | Total |
|---|---|---|---|---|
| Straight Time Labor | $11,673 | $0 | $0 | $11,673 |
| Overtime Labor | $7,914 | $0 | $0 | $7,914 |
| Outside Services | $447,368 | $0 | $0 | $447,368 |
| Materials | $43,105 | $0 | $0 | $43,105 |
| Other, including contingency amounts (describe) | ($427) | $0 | $0 | ($427) |
| **Total Direct Costs** | **$509,633** | **$0** | **$0** | **$509,633** |

| Indirect Capital Costs | 2021 | 2022 | 2023+ | Total |
|---|---|---|---|---|
| Indirects/Overheads (including benefits) | $276,879 | $0 | $0 | $276,879 |
| Capitalized interest or AFUDC, if any | $12,434 | $0 | $0 | $12,434 |
| **Total Indirect Costs** | **$289,313** | **$0** | **$0** | **$289,313** |
| | | | | |
| **Total Capital Costs** | **$798,946** | **$0** | **$0** | **$798,946** |
| | | | | |
| Less Total Customer Contribution | **$0** | **$0** | **$0** | **$0** |
| | | | | |
| **Total Capital Project Costs** | **$798,946** | **$0** | **$0** | **$798,946** |
| | | | | |
| **Total O&M Project Costs** | **$12,115** | **$0** | **$0** | **$12,115** |
| | | | | |
| **Total Project Cost** | **$ 811,061** | **$ -** | **$ -** | **$ 811,061** |

**Technical Justification:**

**Project Need Statement**

This project has been established to address Reliability issues for [redacted] customers on [redacted] being fed from [redacted] with 2 outages since the recent tropical storm. [redacted]

Therefore, the project calls for [redacted]

**Project Objectives**

Improve System Reliability & Resiliency for streets with multiple outage history.

**Project Scope**

[redacted]

**Major Material:**

| | |
|---|---|
| 10,066 ft. | 1/0 Tree Wire |
| 10,066 ft. | Neutral Wire |
| 33 | OH Transformer |
| 3 | UG Transformer |

**Business Process and / or Technical Improvements**:

[redacted]

**Background / Justification**

Since the zone on [redacted] with [redacted]

## Outage History

[redacted] Outages 2016 - 2020.xlsx

## Alternatives Considered with Cost Estimates

[redacted]

### Project Option Comparison

| | [redacted] | |
|---|---|---|
| Cost | $811,061.19 | $1,194,293.40 |
| Cost / MVA added | | |
| Cost / CM Saved | 3.74 | 5.64 |
| Cost / CI Saved | 4,172.04 | 5,969.11 |

## Project Schedule

| Milestone/Phase Name | Estimated Completion Date |
|---|---|
| Preliminary Approval | November 2020 |
| Construction Approval | December 2020 |
| Start Construction | January 2021 |
| End of Construction | April 2021 |

**Risks and Risk Mitigation Plans**

| Risk Event | Risk Horizon | Likelihood of Occurrence | Risk Mitigation |
|---|---|---|---|
| Actual cost higher than estimated due to scope changes. | 2021 | 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 | 2021 | Low | Design to minimize customer impact. Project Preplanning and customer/community outreach |
| Internal construction resources not available to perform the work. | 2021 | Medium | 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. | 2021 | Medium | Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost. |
| Storm delays | 2021 | Medium | If storm activity delays work, we may be forced to use external resources. |
| System abnormal configuration | 2021 | Low | Schedule work to minimize system abnormal time. Most of this work will require system to be abnormal for any extended period of time. |

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

| Need Statement | Geo Map | One-line - Existing | Load Sheet - Existing |
|---|---|---|---|
| CD01612_project_needs_statement.pdf | [redacted] | | |