EVERSOURCE
Project Authorization Form

Operations Project Authorization Form

Date Prepared: 05/12/2020	**Project Title: [redacted] New Service**
Company/ies: Eversource CT	**Project ID Number: CD01549**
Organization: Distribution Electric	**Class(es) of Plant: Distribution**
Project Initiator: [redacted]	**Project Category: Specific Project New Service**
Project Manager [redacted]	**Project Type: Specific**
Project Sponsor: [redacted]	**Project Purpose: Conversion from 4.8kV to 13.8kV**
Estimated in service date: 2020	**If Transmission Project: PTF? N/A**
Eng. /Constr. Resources Budgeted?	**Capital Investment Part of Original Operating Plan? N**
Authorization Type: Full Funding	**O&M Expenses Part of the Original Operating Plan? N**
Total Request: $456k	

Financial Requirements:

Project Authorization

ERM: _____

FP&A: _____

Executive Summary

An existing commercial customer, [redacted], is expanding their processing facility to add gravel/rock crushing equipment. The customer is requesting a [redacted]

[redacted]

Separate work request (WR#3399247/WO#1B030992) was created for the new service work to be completed on private property which includes a customer contribution for the installation of a 2500kVA transformer, 3 phase riser, and 1000' of #1 AL underground cable. The site-specific work will be done on an annual and is not part of this project.

Project Costs Summary

	Prior Authorized	2020	2021	2022	Totals
Capital Additions - Direct	$0	$236,744	$0	$0	$236,744
Less Customer Contribution	$0	$0	$0	$0	$0
Removals net of Salvage ____%	$0	$10,564	$0	$0	$10,564
Total - Direct Spending	$0	$247,308	$0	$0	$247,308
Capital Additions - Indirect	$0	$184,957	$0	$0	$184,957
Subtotal Request	$0	$432,266	$0	$0	$432,266
AFUDC	$0	$7,111	$0	$0	$7,111
Total Capital Request	$0	$439,377	$0	$0	$439,377
O&M	$0	$16,410	$0	$0	$16,410
Total Request	$0	$455,787	$0	$0	$455,787

Financial Evaluation

Direct Capital Costs	Year 1	Year 2	Year 3+	Total
Straight Time Labor	$34,423	$0	$0	$34,423
Overtime Labor	$5,865	$0	$0	$5,865
Outside Services	$109,210	$0	$0	$109,210
Materials	$96,969	$0	$0	$96,969
Other, including contingency amounts (describe)	$841	$0	$0	$841
Total Direct Costs	**$247,308**	**$0**	**$0**	**$247,308**

Indirect Capital Costs	Year 1	Year 2	Year 3+	Total
Indirects/Overheads (including benefits)	$184,957	$0	$0	$184,957
Capitalized interest or AFUDC, if any	$6,851	$0	$0	$6,851
Total Indirect Costs	**$191,808**	**$0**	**$0**	**$191,808**
Total Capital Costs	**$439,117**	**$0**	**$0**	**$439,117**
Less Total Customer Contribution	**$0**	**$0**	**$0**	**$0**
Total Capital Project Costs	**$439,117**	**$0**	**$0**	**$439,117**
Total O&M Project Costs	**$16,670**	**$0**	**$0**	**$16,670**
Total Project Cost	**$455,787**	**$0**	**$0**	**$455,787**

Technical Justification:

Project Need Statement

[redacted]

Separate work request (WR#3399247/WO#1B030992) was created for the new service work to be completed on private property which includes a customer contribution for the installation of a [redacted]. The site-specific work will be done on an annual and is not part of this project.

Project Objectives

- [redacted]

Project Scope

[redacted]

Major Material:

- 1 – 3-167kva step-down transformer
- 3 – OH Poles telephone custodians
- 7- OH -1 PH Transformers
- 7,000' of 1/0 ACSR TW Neutral
- 600' of 1/0 ACSR TW primary line extension

Background / Justification

[redacted]
Eversource also does not currently stock these transformers and would need to keep a spare in case of a transformer failure.

Business Process and / or Technical Improvements:

- Convert [redacted] to have the capacity to accept new load

Alternatives Considered with Cost Estimates

Design Criteria	Options	
[redacted]		
Cost	$456k	$993.5k
Preferred option	X	

Alternative 2 was not chosen for the following reasons:

- [redacted]
- This option would not have met the customer's in-service date
- High cost

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Preliminary Approval	07/2020
Detailed Design	07/2020
Construction Start Date	09/2020
Construction End Date	10/2020

Regulatory Approvals

N/A

Risks and Risk Mitigation Plans

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2020	Medium	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	2020	Medium	Design to minimize customer impact. Project Preplanning and customer/community outreach
Internal construction resources not available to perform the work.	2020	High	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.	2020	Medium	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Storm delays	2020	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2020	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.)

1. Project Maps

   CD01549 Map.pdf

2. Project One Line

   CD0159 One_line.pdf

3. Cost Estimate backup details

   CD01549_project_needs_statement.pdf

4. Customer Load Sheet

   Load Sheet.pdf