Operations Project Authorization Form

Date Prepared: 08/16/2019	**[redacted] Overload & Station Balancing**
Company/ies: CT	**Project ID Number: CD01362**
Organization: Electric	**Class(es) of Plant: Distribution**
Project Initiator: [redacted]	**Project Category: Load**
Project Manager: [redacted]	**Project Type: Specific**
Project Sponsor: [redacted]	**Project Purpose: Increase Capacity on [redacted] & Balance Station Transformers**
Estimated in service date: 06/01/2020	**If Transmission Project: PTF? NA**
Eng. /Constr. Resources Budgeted? No	**Capital Investment Part of Original Operating Plan?**
Authorization Type: Initial Funding	**O&M Expenses Part of the Original Operating Plan?**
Total Request: $495,000	

Executive Summary

This project has been established to address [redacted] Substation. Two issues have been identified during the 2019 heat wave. [redacted]

Financial Evaluation

	Prior Authorized	2020	20__	20__+	Totals
Capital Additions - Direct	$0	$282,602	$0	$0	$282,602
Less Customer Contribution	$0	$0	$0	$0	$0
Removals net of Salvage ____%	$0	$6,695	$0	$0	$6,695
Total - Direct Spending	$0	$289,297	$0	$0	$289,297
Capital Additions - Indirect	$0	$181,230	$0	$0	$181,230
Subtotal Request	$0	$470,527	$0	$0	$470,527
AFUDC	$0	$5,645	$0	$0	$5,645
Total Capital Request	$0	$476,172	$0	$0	$476,172
O&M	$0	$18,828	$0	$0	$18,828
Total Request	$0	$495,000	$0	$0	$495,000

Direct Capital Costs	Year 1	Year 2	Year 3+	Total
Straight Time Labor	$42,875	$0	$0	$42,875
Overtime Labor	$11,649	$0	$0	$11,649
Outside Services	$37,228	$0	$0	$37,228
Materials	$196,399	$0	$0	$196,399
Other, including contingency amounts (describe)	$1,147	$0	$0	$1,147
Total Direct Costs	**$289,297**	**$0**	**$0**	**$289,297**

Indirect Capital Costs	Year 1	Year 2	Year 3+	Total
Indirects/Overheads (including benefits)	$181,230	$0	$0	$181,230
Capitalized interest or AFUDC, if any	$5,427	$0	$0	$5,427
Total Indirect Costs	**$186,658**	**$0**	**$0**	**$186,658**
Total Capital Costs	**$475,955**	**$0**	**$0**	**$475,955**
Less Total Customer Contribution	**$0**	**$0**	**$0**	**$0**
Total Capital Project Costs	**$475,955**	**$0**	**$0**	**$475,955**
Total O&M Project Costs	**$19,045**	**$0**	**$0**	**$19,045**

Total Project Cost	**$ 495,000**	**$ -**	**$ -**	**$ 495,000**

Technical Justification:

Project Need Statement

This project has been established to address the following issues at [redacted].

[redacted]

Project Objectives

The main objectives of this project are as follows.

[redacted]

Project Scope

In order to meet the above objectives, this project proposes the following:

[redacted]

Background / Justification

[redacted]

As noted above, this project will also address the [redacted]

Business Process and / or Technical Improvements:

[redacted]

Alternatives Considered with Cost Estimates

Alternative	Cost Breakdown		Total Cost	Comments
1 Create a new independent feeder to relieve some of the [redacted] and also off of the transformers at the station.	Fuel Cell	$30M	$31.5M	While this option today is realistic, it's still a venture not undertaken by Eversource, is extremely costly and would require Siting Council approvals.
	Land Purchase.	$1M		
	Removals and Police Protection	$50K		
2 In addition to preferred option, [redacted]	Relocate Recloser	$75K	$75K	This alternative would actually be in addition to the preferred option described above.
3 Reconductor 8,000' of 336 TW with 8,000' of 556 TW	Reconductor on cross arms 8,000'	$800K	$992K	[redacted]

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Prelininary Engineering Approval	September 2019
Detail Design	December 2019
Construction	June 2020

Regulatory Approvals

None

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	Low	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 ot require system to be abnormal for any extended period of time.

References: *none*

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

