Operations Project Authorization Form

Date Prepared: 6/20/2019	**Project Title:** [redacted]
Company/ies: Eversource CT	**Project ID Number:** CD01317
Organization: Distribution Engineering	**Class(es) of Plant:** Distribution
Project Initiator: [redacted]	**Project Category:** Smart Switch Program
Project Manager: [redacted]	**Project Type:** Specific
Project Sponsor: [redacted]	**Project Purpose:** Install automatic sectionalizing devices to reduce zone sizes.
Estimated in service date: 12/31/2020	**If Transmission Project: PTF?** NA
Eng. / Constr. Resources Budgeted? Yes	**Capital Investment Part of Original Operating?** Yes
Authorization Type: Initial Funding	**O&M Expenses Part of the Original Operating?** Yes
Total Request: $287,521	

Financial Requirements:

Project Authorization
ERM: _____

FP&A: _____

Executive Summary

Zone [redacted] commercial and residential customers on [redacted] and [redacted]

Project CD01317 will address the [redacted]

Additionally, the [redacted] customers. Project CD01317 will install one [redacted]

Project Costs Summary

	Prior Authorized	2020	2021	2022+	Totals
Capital Additions - Direct	$0	$164,149	$0	$0	$164,149
Less Customer Contribution	$0	$0	$0	$0	$0
Removals net of Salvage ____%	$0	$3,889	$0	$0	$3,889
Total - Direct Spending	$0	$168,038	$0	$0	$168,038
Capital Additions - Indirect	$0	$105,268	$0	$0	$105,268
Subtotal Request	$0	$273,306	$0	$0	$273,306
AFUDC	$0	$3,279	$0	$0	$3,279
Total Capital Request	$0	$276,585	$0	$0	$276,585
O&M	$0	$10,936	$0	$0	$10,936
Total Request	$0	$287,521	$0	$0	$287,521

Financial Evaluation

Direct Capital Costs	Year 1	Year 2	Year 3+	Total
Straight Time Labor	$24,904	$0	$0	$24,904
Overtime Labor	$6,766	$0	$0	$6,766
Outside Services	$21,624	$0	$0	$21,624
Materials	$114,078	$0	$0	$114,078
Other, including contingency amounts (describe)	$666	$0	$0	$666
Total Direct Costs	**$168,038**	**$0**	**$0**	**$168,038**

Indirect Capital Costs	Year 1	Year 2	Year 3+	Total
Indirects/Overheads (including benefits)	$105,268	$0	$0	$105,268
Capitalized interest or AFUDC, if any	$3,152	$0	$0	$3,152
Total Indirect Costs	**$108,420**	**$0**	**$0**	**$108,420**
Total Capital Costs	**$276,459**	**$0**	**$0**	**$276,459**
Less Total Customer Contribution	**$0**	**$0**	**$0**	**$0**
Total Capital Project Costs	**$276,459**	**$0**	**$0**	**$276,459**
Total O&M Project Costs	**$11,062**	**$0**	**$0**	**$11,062**
Total Project Cost	**$287,521**	**$0**	**$0**	**$287,521**

Technical Justification

Project Need Statement

[redacted]

Project Objectives

The main goal of the Smart Switch Program is to reduce the number of customers exposed to an outage event. Project CD01317 proposes to [redacted]

The preferred option will install one [redacted]

Project Scope

The preferred option is Option 1 which consists of Segments 1 and 2.

Segment 1 ([redacted] Zone)

- Install [redacted]

[redacted]

Background / Justification:

The justification for this project is our current initiative to reduce the number of customers exposed to an outage event.

Business Process and / or Technical Improvements:

This Smart Switch Program will increase the number of automated devices on the system. In addition, this upgrade allows for better system visibility, faster restoration, faster outage isolation and faster reconfiguration of the system during planned and unplanned switching events. Customer zones are reduced to 500 customers or less where possible.

Alternatives Considered with Cost Estimates





[redacted]

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Initial Funding Approval	June 2019
Detail Design Engineering	October 2019
Full Funding Approval	March 2020
Construction Complete	December 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	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	2019	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach
Internal construction 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.
Internal engineering resources not available to perform the work.	2019	Low	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. Install temporary bypasses/equipment if system will be abnormal for extended periods

References

N/A

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

CD01317_project_needs_statement.pdf

[redacted] ONE LINE DIAGRAM BEFORE.p

[redacted] ONE LINE DIAGRAM AFTER (2).

VISIO MAP BEFORE.pdf

VISIO MAP AFTER (Prefered).pdf

Loadsheet Option1 final design.xlsx