Appendix 2
Operations Project Authorization Form

Operations Project Authorization Form

Project Title: [redacted] **Smart Switch**	**Project Number: CD01916**
Date Prepared: 02/28/2022	**Company:** Eversource CT
Organization: EFO	**Class(es) of Plant:** D Line
Project Initiator: [redacted]	**Project Category: Line**
Project Manager: [redacted]	**Project Type:** Program
Project Sponsor: [redacted]	**Capital Investment part of original Operating Plan:** No
Estimated in service date: 12/31/2023	**Emergency Related Request?** No
Eng./Constr. Resources Budgeted? Yes	**Facility Type** (check all that apply)**:** ☐ PTF ☐ non-PTF ☒ Distribution
Total Gross Capital Request: $159k	**Authorization Type:** Initial Funding

Executive Summary

Project CD01916 seeks to protect [redacted] The total cost for this project is $159k.

Project Costs Summary

Note: Dollar values are in thousands

Capital Costs	2023	2024	2025	Total
Internal Labor and Construction Equipment	$14	$0	$0	$14
Outside Services	$18	$0	$0	$18
Materials	$58	$0	$0	$58
Removals	$4	$0	$0	$4
Risk and Contingency	$1	$0	$0	$1
Other	$0	$0	$0	$0
Subtotal	**$95**	**$0**	**$0**	**$95**
Indirect Capital Costs	**2023**	**2024**	**2025**	**Total**

Indirects/Overheads (including benefits)	$63	$0	$0	$63
Capitalized interest or AFUDC, if any	$2	$0	$0	$2
Subtotal	**$65**	**$0**	**$0**	**$65**
Total Capital Costs (Gross)	**$159**	**$0**	**$0**	**$159**

Technical Justification:

Project Need, Objective and Justification

This project has been established to [redacted]

Project Scope

The scope of this project is as follows:

[redacted]

Background

The Smart Switch Program is a continuation of an initiative that was approved as part of the System Resiliency PURA Docket 12-07-06RE01 which is a multiyear program to improve circuit reliability by adding automatic sectionalizing devices on overhead distribution circuits. The Smart Switch Program focuses on breaking up customer zones and lowering the average number of customers impacted by a backbone interruption.

The 2018 Smart Switch Ranking Program was created to identify backbone zones that would impact over 500 customers. These zones were then ranked based on the number of customers impacted over the past three years as follows:
2018 outages X 100% + 2017 outages X 66% + 2016 outages X 33%.

Projects must be created to reduce the number of customers impacted in that zone to 500 or less.
When creating projects for the highest ranked zones, also reduce the number of customers impacted to 500 or less for any other backbone zone on the same circuit if it is ranked in the top 100 devices.

Appendix 2
Operations Project Authorization Form

While this project does not include customer zones greater than 500, the creation of an [redacted] will reduce unnecessary exposure and ultimately improve reliability for 1759 customers.

Business Process and / or Technical Improvements:

Projects within the Smart Switch Program will increase the number of SCADA controlled devices on the system. This upgrade allows for better system visibility, faster restoration, outage isolation and reconfiguration of the system during planned and unplanned switching events. Customer zones are reduced to under 500, where possible (ref. DSEM 02.301)

Alternatives Considered:

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

Alternatives were considered (please describe below)

Option 1: $234,000

[redacted]

Option 2: $159,000 (approved)

[redacted]

Options:	Option 1	Option 2
[redacted]		
Total Capital Cost	$ 234k	$ 159k
Approved:	No	Yes

Appendix 2
Operations Project Authorization Form

Regulatory Approvals:

Are Regulatory body approvals needed for the project?
No

If yes, provide detailed regulatory approvals

Project Schedule

Milestone/Phase Name	Estimated Date
Preliminary Approval	3/1/2022
Detailed Design	6/1/2022
Settings Requested	9/1/2022
Construction Start	1/31/2023
Construction End	5/31/2023

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; excavation; etc.)

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2023	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	2023	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach.
Internal construction resources not available to perform the work.	2023	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.	2023	Medium	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2023	Medium	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2023	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2023	Low	Schedule work to minimize system abnormal time. Install temporary bypasses/equipment if system will be abnormal for extended periods.
Technological risks involving integration of new technology	2023	High/Medium/Low	Before use of new technology ensure support of standards and manufacturer. Schedule project to accommodate for extra time or ensure new technology is not on the critical path.
Wetlands / Environmentally sensitive area	2023	High/Medium/Low	Use of mats and specialty equipment, only work during certain times of the year.

References

This project builds upon the work being performed under CD01225:

CD01225 24H6 SS 10_14_2021 ISD 2023.(

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

Project Map:

CD01916 Project Map.pdf

Appendix 2
Operations Project Authorization Form

Project One-Line:



CD01916 Project Oneline.pdf

Project Load Sheet:



CD01916 Load Sheet.pdf

Project Need Statement:



CD01916_project_needs_statement.pdf