EVERSOURCE

Supplement Authorization Form

Project Title: [redacted] **Smart Switch Program 2017**	**Project Number: CD00748**
Date Prepared: 04/10/2026	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** SMART SWITCHES PROGRAM
Initiating Organization: Distribution	**Project Type:** Specific
Project DDE: [redacted]	**Capital Investment part of 5-year plan?** Yes
Project Manager: [redacted]	**Emergency Related Request?** No
Project Sponsor: [redacted]	**Facility Type** (check all that apply)**:** ☐ PTF ☐ non-PTF ☒ Distribution ☐ N/A (General Plant)
Current Authorized Amount: $208.1K	**Approved In-Service Date:** 09/30/2017
Supplement Request: $75.5K	**Estimated In-Service Date: 12/31/18**
Total Capital Request: $283.5K	**Authorization Type:** Supplement Request
	Reason: Cost Overage

1. Project Background

Project CD00748 was implemented to improve system reliability and minimize outage frequency by installing sectionalizing devices along overhead distribution circuits. [redacted] All 3 new smart switches were completed in accordance with Distribution Design and system resiliency standards.

This supplemental authorization reflects increases in material and labor costs relative to the original 2016 estimate, which did not account for cost escalation over the course of the multi-year project (2016–2018).

Therefore, the supplemental request for this project is $75.5k and includes additional increase in materials and labor for a total capital request of $283.5K. All WOs are closed.

2. Supplement Justification Overview

The following are reasons for the budget being over the authorized amount:

a. Original estimate did not include increase in materials for subsequent years.

3. Supplement Cost Summary (Project Total)

Capital Costs	To Date Spend	Prior Authorized	Supplemental Request	Total Request
Internal Labor and Construction Equipment	28.4	23.8	3.1	26.9
Outside Services	4.0	9.7	-5.9	3.8
Materials	138.4	98.7	32.5	131.2
Removals	0.0	0.0	9.0	9.0
Risk and Contingency	5.6	0.0	5.6	5.6
Other	3.0	0.0	2.8	2.8
Subtotal	**179.3**	**132.2**	**47.1**	**179.3**

Indirect Capital Costs	To Date Spend	Prior Authorized	Supplemental Request	Total Request
Indirects/Overheads (including benefits)	100.7	75.1	25.6	100.7
Capitalized interest or AFUDC, if any	3.6	0.8	2.8	3.6
Subtotal	**104.3**	**75.9**	**28.4**	**104.3**
Total Capital Costs (Gross)	**283.5**	**208.1**	**75.5**	**283.5**
Less Total Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**
Project Costs (Net of Reimbursement)	**283.5**	**208.1**	**75.5**	**283.5**

4. New Total Request by Year (if applicable)

Note: If multi-year project, include actuals for current and years past, and then show forecasted spend for upcoming years.

Capital Costs	2016	2017	2018	TOTAL
Internal Labor & Equipment	1.8	24.9	0.2	26.9
Outside Services	0.3	3.5	0.0	3.8
Materials	8.9	121.6	0.7	131.2
Removals	0.6	8.1	0.3	9.0
Risk and Contingency	0.0	0.0	5.6	5.6
Other	0.2	2.6	0.0	2.8
SUBTOTAL Direct Cost	**11.8**	**160.7**	**6.8**	**179.3**
Indirects / Overheads	7.0	92.6	1.1	100.7
AFUDC	0.0	3.6	0.0	3.6
SUBTOTAL Indirect Cost	**7.1**	**96.1**	**1.1**	**104.3**
TOTAL Capital Request	**18.8**	**256.8**	**7.9**	**283.5**
Less Total Customer Contribution	0.0	0.0	0.0	**0.0**
TOTAL Project Cost	**18.8**	**256.8**	**7.9**	**283.5**

5. Lessons Learned

Technical Authorization Form

Date Prepared: 7/22/2016	Project Title: [redacted] Eversource CT Smart Switch Program
Company/ies: Eversource CT	Project ID Number: Multiple (see below for details)
Organization: Distribution Design	Class(es) of Plant: Distribution
Project Initiator: [redacted]	Project Category: Smart Switch Program
Project Owner/Manager: [redacted]	Project Type: *Specific*
Project Sponsor: [redacted]	Project Purpose: Decrease SAFI , CADI and SADI
Estimated in service date: 9/30/2017	If Transmission Project: *NA*

Project Need Statement:

This TAF covers the 2017 Smart Switch program. The smart switch program is 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. This program focuses on breaking up customer zones and lowering the average number of customers impacted by a backbone interruption.

Project Objectives

This program's goal is the reduce the number of customer's exposed to an outage event. This program breaks up large customer zones by adding sectionalizing reclosers in various settings profiles to isolate outages. The program target is to decrease the customers in each zone to below 500. A zone broken up in half with a tie to another source added can improve the zone's reliability by 50%. Adding an additional device in a radial zone can improve the zone's reliability by 30%. Projects may include breaking up a very large customer zone with several devices and multiple ties.

Project Scope

The Smart Switch program is directly targeted at improving SADI and SAFI and thus improving the overall MBI metric. This program prioritizes on customer zones larger than 500 with existing outages. Circuit owners are allowed to use all three phase sectionalizing techniques utilizing reclosers to break up customer zones. All projects have been initially reviewed by a team of circuit owner leads, system resiliency, protection and controls, and distribution planning. Each project is reviewed for scope, cost, thermal limitations and possible coordination issues.

2017 project totals:

The program includes 37 projects (project numbers and segments are identified in the table below) and 89 device installations.

2017 Projects					
	Western	Central	Eastern		
# Projects	[redacted]				
# Devices					
				Total	$ 6,164,656.08

CIRCT_N	[redacted]	CustomersIn	[redacted]	AWC_NM	DVSN_NM	PRSN_LAST_NM	PRIOR_4_YR_All_EVENT_TO	Rank	Segment	ENG price	[redacted]	SD
[redacted]				Newtown	Western	[redacted]		58	CD00705-01	$ 210,745.44	[redacted]	017
				Stamford	Western			64	CD00712	$ 77,357.15		017
				Torrington	Western			88	CD00726	$ 475,008.00		017
				Waterbury	Western			76	CD00707	$ 442,957.14		017
				Waterbury	Western			70	CD00681	$ 253,057.22		017
				Waterbury	Western			72	CD00686	$ 121,494.21		017
				Waterbury	Western			45	CD00683	$ 133,144.26		017
				Western	MORIN			75*	CD00742	$ 399,157.00		017
				Waterbury	MORIN			66	CD00770	$ 71,299		017
				Waterbury	PABON			100	CD00749	$ 61,367		017
				New London	Eastern			63	CD00709	$ 208,187.08		017
				New London	Eastern			77	CD00679	$ 259,696.67		017
				New London	Eastern			66	CD00708	$ 193,124.50		017
				New London	Eastern			56	CD00698	$ 157,003.84		017
				Tolland	Eastern			17	CD00700	$ 194,357.60		017
				Tolland	Eastern			60*	CD00665-7	$ 127,649.28		017
				Danielson	Eastern			3	CD00748	$ 189,073		017
				New London	Eastern			41	CD00768	$ 158,151		017
				New London	Eastern			42	CD00760	$ 253,398		017
				New London	Eastern			48	CD00761	$ 137,929		017
				Danielson	Eastern			117	CD00775	$ 423,494		017
				Madison	Eastern			49	CD00772	$ 77,682		017
				Madison	Eastern			35	CD00771	$ 74,234		017
				East Hampton	Central			88	CD00782	$ 80,000		017
				Cheshire	Central			74	CD00684	$ 60,747.10		017
				Cheshire	Central			62	CD00685	$ 71,777.15		017
				East Hampton	Central			49	CD00687	$ 137,029.92		017
				East Hampton	Central			61	CD00691	$ 153,314.84		017
				Hartford	Central			42	CD00693	$ 324,678.63		017
				Hartford	Central			40	CD00711	$ 79,447.00		017
				Hartford	Central			52	CD00701	$ 293,979.20		017
				Simsbury	Central			79	CD00704	$ 131,438.02		017
				East Hampton	Central			37	CD00764	$ 132,678		017

Cost Estimate and Assumptions:

Projects are estimated using ENG estimating units in AIMs. 24% contingency is used.

Background / Justification

The smart switch program is an initiative that was approved as part of 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. This program provides a low cost per customer min saved and low O&M solution to directly targeting SAID and SAFI as a direct result to large blocks of customers being effected during an outage event.

Alternatives Considered with Cost Estimates:

Alternatives to each project can be found within each need statement. All projects were separately screen and reviewed within a Smart Switch review team which included. Protection and controls, Circuit Owner Leads, System Resiliency, and System Planning. Each project was screened for scope, cost, and design.

Project Schedule

Describe the project schedule and milestones. Include estimated start and end dates.

Milestone/Phase Name	Estimated Completion Date
Detail Design	8-31-2016
ACT Approval	9-15-2016
Construction	9-15-2017
Close-Out	9-30-2017

Regulatory Approvals

Risks and Risk Mitigation Plans

Risk is very limited with these projects. Per device installations there is only one or two poles required to be replaced. Long lead time materials are identified ahead of time. P&C FTE shortage is a concern but we are utilizing P6 to schedule the work early to meet deadlines.

References

One-Line Diagrams, Attachments, and Images;

See spam data base