EVERSOURCE

# Supplement Authorization Form

| | |
|---|---|
| **Project Title:** [redacted] **Smart Switch Project >1000 Customers** | **Project Number: CD01154** |
| **Date Prepared:** 04/29/2026 | **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: $265.8k** | **Approved In-Service Date:** 6/30/20 |
| **Supplement Request: $104.6k** | **Estimated In-Service Date:** 6/30/20 |
| **Total Capital Request: $370.5k** | **Authorization Type:** Supplement Request |
| | **Reason: Cost Overage** |

## 1. Project Background

The 2018 Smart Switch Ranking Program was created to identify large customer zones on the backbone that have had multiple interruptions or that exceed 1,000 customers at risk. The number of customers affected was weighted by using the following formula: 2018 outages x 100% + 2017 outages x 66% + 2016 outages x 33%. The weighted customers affected were then totalized and zones were ranked from worst performing to best performing. Based upon the ranking, projects are created to reduce the number of customers affected per zone. The [redacted], and is ranked #76. The 2020 Smart Switch Program goal is to reduce customer zones that are ranked #50 - #100.

This project will reduce a 1,035-customer zone into 4 smaller zones.

## 2. Supplement Justification Overview

This supplement is required due to the direct costs increasing due to labor and material.

## 3. Supplement Justification Detail

Internal labor was higher than estimated due to the installation of additional in-line switches which also increased material costs.

## 4. Supplement Cost Summary (Project Total)

| Line-item Category | To Date Spend Year(s) | Prior Authorized Year(s) | Variance (Supplemental Request) Year(s) | New Total Request (Add Prior Authorized and Variance) Year(s) |
|---|---|---|---|---|
| Internal Labor and Construction Equipment | 45.5 | 30.5 | 12.6 | 43.1 |
| Outside Services | 1.7 | 20.8 | -19.2 | 1.6 |
| Materials | 152.0 | 109.7 | 34.4 | 144.1 |
| Removals | 0.0 | 0.0 | 10.4 | 10.4 |
| Risk and Contingency | 7.3 | 0.0 | 7.3 | 7.3 |
| Other | 0.0 | 0.6 | -0.6 | 0.0 |
| **SUBTOTAL DIRECTS W/ RISKS** | **206.4** | **161.6** | **44.8** | **206.4** |
| Indirect / Overhead (including benefits) | 159.9 | 101.2 | 58.7 | 159.9 |
| AFUDC | 4.2 | 3.0 | 1.1 | 4.2 |
| **Subtotal – Indirect Costs** | **164.1** | **104.3** | **59.9** | **164.1** |
| **TOTAL CAPITAL REQUEST** | **370.5** | **265.8** | **104.6** | **370.5** |
| Reimbursables/Customer Contribution | **0.0** | **0.0** | **0.0** | **0.0** |
| **PROJECT TOTAL (LESS REIMBURSABLES)** | **370.5** | **265.8** | **104.6** | **370.5** |

## 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.

| Line-item Category | 2019 | 2020 | 2021 | Total |
|---|---|---|---|---|
| Internal Labor and Construction Equipment | 1.4 | 41.8 | -0.1 | 43.1 |
| Outside Services | 0.1 | 1.6 | 0.0 | 1.6 |
| Materials | 4.8 | 139.6 | -0.3 | 144.1 |
| Removals | 0.3 | 9.7 | 0.4 | 10.4 |
| Risk and Contingency | 0.0 | 0.0 | 7.3 | 7.3 |
| Other | 0.0 | 0.0 | 0.0 | 0.0 |
| **SUBTOTAL DIRECTS W/ RISKS** | **6.6** | **192.5** | **7.2** | **206.4** |
| Indirect / Overhead (including benefits) | 7.3 | 153.0 | -0.4 | 159.9 |
| AFUDC | 0.3 | 3.9 | 0.0 | 4.2 |
| **Subtotal – Indirect Costs** | **7.5** | **157.0** | **-0.4** | **164.1** |
| **TOTAL CAPITAL REQUEST** | **7.5** | **157.0** | **-0.4** | **164.1** |
| Reimbursables/Customer Contribution | 0.0 | 0.0 | 0.0 | **0.0** |
| **PROJECT TOTAL (LESS REIMBURSABLES)** | **7.5** | **157.0** | **-0.4** | **164.1** |

## 5. Lessons Learned

# Operations Project Authorization Form

| | |
|---|---|
| **Date Prepared: 8/31/2018** | **Project Title: [redacted] Smart Switch – >1000 customers risk** |
| **Company/ies: CT** | **Project ID Number: CD01154** |
| **Organization: Electric** | **Class(es) of Plant: Distribution** |
| **Project Initiator: [redacted]** | **Project Category: Smart Switch Program** |
| **Project Manager: [redacted]** | **Project Type: Specific** |
| **Project Sponsor: [redacted]** | **Project Purpose: Reduce Customer Zone Size** |
| **Estimated in service date: 6/30/2020** | **If Transmission Project: PTF? NA** |
| **Eng. /Constr. Resources Budgeted? No** | **Capital Investment Part of Original Operating Plan? Y** |
| **Authorization Type: Initial Funding** | **O&M Expenses Part of the Original Operating Plan? Y** |
| **Total Request: $276,476** | |

**Executive Summary:**

The 2018 Smart Switch Ranking Program was created to identify large customer zones on the backbone that have had multiple interruptions or that exceed 1,000 customers at risk. The number of customers affected was weighted by using the following formula: 2018 outages X 100% + 2017 outages X 66% + 2016 outages X 33%. The weighted customers affected was then totalized and zones ranked from worst performing to best performing. Based upon the ranking, projects are created to reduce the number of customers affected per zone. Zone 30R9-2 has 1,035 customers at risk, experienced 2 outages, and is ranked #76 . By 2020 smart switch Program goal is to reduce customer zones that are ranked #50 - #100.

[redacted]

**Technical Justification:**

**Project Need Statement**

[redacted]

**Project Objectives**

[redacted]

**Project Scope**

[redacted]

**Background / Justification:**

Resolve circuit zones with 1,000 or more customers.

**Estimate**

| | Prior Authorized | 20__ | 20__ | 20__+ | Totals |
|---|---|---|---|---|---|
| Capital Additions - Direct | $0 | $31,569 | $126,275 | $0 | $157,844 |
| Less Customer Contribution | $0 | $0 | $0 | $0 | $0 |
| Removals net of Salvage ____% | $0 | $748 | $2,992 | $0 | $3,739 |
| Total - Direct Spending | $0 | $32,317 | $129,267 | $0 | $161,583 |
| Capital Additions - Indirect | $0 | $20,245 | $80,979 | $0 | $101,224 |
| Subtotal Request | $0 | $52,561 | $210,246 | $0 | $262,807 |
| AFUDC | $0 | $631 | $2,522 | $0 | $3,153 |
| Total Capital Request | $0 | $53,192 | $212,768 | $0 | $265,960 |
| O&M | $0 | $2,103 | $8,413 | $0 | $10,516 |
| Total Request | $0 | $55,295 | $221,181 | $0 | $276,476 |

| Direct Capital Costs | Year 1 | Year 2 | Year 3+ | Total |
|---|---|---|---|---|
| Straight Time Labor | $4,789 | $19,158 | $0 | $23,947 |
| Overtime Labor | $1,301 | $5,205 | $0 | $6,506 |
| Outside Services | $4,159 | $16,635 | $0 | $20,793 |
| Materials | $21,939 | $87,757 | $0 | $109,696 |
| Other, including contingency amounts (describe) | $128 | $512 | $0 | $641 |
| **Total Direct Costs** | **$32,317** | **$129,267** | **$0** | **$161,583** |

| Indirect Capital Costs | Year 1 | Year 2 | Year 3+ | Total |
|---|---|---|---|---|
| Indirects/Overheads (including benefits) | $20,245 | $80,979 | $0 | $101,224 |

| | | | | |
|---|---|---|---|---|
| Capitalized interest or AFUDC, if any | $606 | $2,425 | $0 | $3,031 |
| **Total Indirect Costs** | **$20,851** | **$83,404** | **$0** | **$104,255** |
| | | | | |
| **Total Capital Costs** | **$53,168** | **$212,671** | **$0** | **$265,838** |
| | | | | |
| Less Total Customer Contribution | **$0** | **$0** | **$0** | **$0** |
| | | | | |
| **Total Capital Project Costs** | **$53,168** | **$212,671** | **$0** | **$265,838** |
| | | | | |
| **Total O&M Project Costs** | **$2,128** | **$8,510** | **$0** | **$10,638** |
| | | | | |
| **Total Project Cost** | **$ 55,295** | **$ 221,181** | **$ -** | **$ 276,476** |

**Business Process and / or Technical Improvements**:

Reduce zone size to improve reliability.

**Alternatives Considered with Cost Estimates**
No alternatives

**Project Schedule**

| Milestone/Phase Name | Estimated Completion Date |
|---|---|
| Prelininary Engineering Approval | September 2018 |
| Detail Design | November 2019 |
| Order Material | January 2020 |
| 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 | 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 | 2020 | Low | Design to minimize customer impact. Project Preplanning and customer/community outreach |
| Internal construction resources not available to perform the work. | 2020 | Low | 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. Install temporary bypasses/equipment if system will be abnormal for extended periods |

**References**

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



Visio-[redacted] Before and After - ONELINE



CD01154 Load Summary Before and

**Cost Estimate Backup Details**



CD01154 - PAF Calculator.xlsm



CD01154_project_needs_statement rev1