Technical Authorization Form

Date Prepared: June 6, 2016	Project Title: [redacted] – E-Mfg Switch Replacement
Company/ies: Eversource CT	Project ID Number: CS00222
Organization: Strategy & Performance	Class(es) of Plant: Distribution
Project Initiator: [redacted]	Project Category: Equipment Failure
Project Owner/Manager: [redacted]	Project Type: *Specific*
Project Sponsor: [redacted]	Project Purpose: Replace failing disconnect switches
Estimated in service date: 12/31/16	If Transmission Project: *NA*

Project Need Statement

Two bus isolation hook switches at [redacted]

Project Objectives

[redacted]

Project Scope

The proposed solution to address the above issues is to replace all E Manufacturing bus switches. This option will address the following [redacted]

[redacted]

Note: Each switch above is a set of three, single-phase, hook stick switches.

Background / Justification

[redacted]

Business Process and / or Technical Improvements:

Once this project is complete, isolating the bus will not pose safety or operational issues.

Cost Estimate and Assumptions

The estimated cost of replacement is $30k for each set of three single-phase switches. The estimate is based on the replacement of the indicated equipment, associated outage sequencing and actual costs incurred to replace similar switches.

Total Project Capital Cost: $360,000

Alternatives Considered with Cost Estimates

Due to the safety concerns and poor switch design, no alternatives to replacement were considered.

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Engineering Start	June 2016
Construction Start	October 2016
In-Service Date	December 2016

Regulatory Approvals

N/A

Risks and Risk Mitigation Plans

The main risk is the sequencing and outages required to perform the work, since many of the switches will require off-loading two distribution circuits. The work will not be done during the summer moratorium and the switching will be designed to minimize the disruption to the distribution system as much as possible.

References

Investigation of E-Manufacturing switch failure at [redacted] on April 25, 2016:



[redacted]

One-Line Diagrams, Attachments, and Images

1. Nomenclature diagram for [redacted]:

[redacted].pdf

2. A failed insulator from one of the E-Manufacturing switches at [redacted]:

