Technical Authorization Form

Date Prepared: 03/24/2017	Project Title: [redacted] Replacement
Company: Eversource Ct	Project ID Number: CD00917
Organization: Distribution	Class(es) of Plant: Distribution
Project Initiator: [redacted]	Project Category: System Resiliency
Project Owner/Manager: [redacted]	Project Type: Specific
Project Sponsor: [redacted]	Project Purpose: part of regulatory tracked program?
Estimated in service date: 10/30/2017	If Transmission Project: *PTF / Non-PTF / NA*
Authorization Type: Concept. Eng, Eng	Authorization Amount: $14K

Project Need Statement *(Description of Issue)*
Replace the aerial cable with underground cable under I-395.

Project Objectives
The objective of this proposal is to replace the bridge cable with two single-phase UG cables, (one as backup), to eliminate any future reliability issues.

Project Scope
[redacted]

Background / Justification
[redacted]

Business Process and / or Technical Improvements:
This improvement will provide electrical hardening and improved reliability for 197 radial customers. Should the aerial cable fail they will be out for 6 to 8 hours until the cable is repaired.

Cost Estimate and Assumptions

Project Option Summary

ID	Description	Segments	Preliminary Estimate	Construction Estimate	Variance	IEEE $/CMS	All (w/Storm)	Prfrd
O2	[redacted]	1	$143,109	$0	100 %	$73.17	$73.17	☐

Segments

ID	Title	Preliminary Estimate	Construction Estimate	Variance	IEEE $/CMS	All (w/Storm)
1	UG Bridge Cable Replacement	$143,109			$73.10	$73.10

Alternatives Considered with Cost Estimates

Leave aerial cable and perform two (2) single phase pole shifts. Use temporary single phase primary in a conduit by the roadside to prevent customer outage. - $25K

Project Schedule

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

Milestone/Phase Name	Estimated Completion Date
Install poles and conduit	10/01/2017
Pull cable and terminate	10/30/2017

Regulatory Approvals

Risks and Risk Mitigation Plans

Describe the applicable risks and associated risk mitigation plans: e.g., construction, customer, reputational, schedule, financial, regulatory, environmental and IT risks. Indicate discussions with relevant subject matter experts.

Guidelines: Please consider the risks below as a basis for your project risk analysis. The table will have to be customized for your project. You will not need to include all of the risk events, only those that make sense for your project. Please work with planning on your risk assessment.

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation

Actual cost higher than estimated due to scope changes.	2017	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	2017	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach
Internal construction resources not available to perform the work.	2017	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.	2017	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2017	Low	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2017	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2017	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	2017	Low	Before use of new technology ensure support of standards and manufacture. Schedule project to accommodate for extra time or ensure new technology is not on the critical path.
Wetlands / Environmentally sensitive area	2017	Low	Use of mats and specialty equipment, only work during certain times of the year

References

One-Line Diagrams, Attachments, and Images

PROJECT CD00917

[redacted]

Detail Map O10-1, B1

[redacted]