Date Prepared: 6/1/2017	Project Title: [redacted]
Company/Companies: EE-CT	Project ID Number: TAF-16-013-CT and CS001561
Organization: Strategy & Performance	Plant Class/(F.P.Type): Distribution
Project Initiator: [redacted]	Project Type: Specific / *Annual / Prelim Project / Parent*
Project Owner/Manager: [redacted]	Capital Investment Part of Original Operating Plan? Y / N
Project Sponsor: [redacted]	O&M Expenses Part of the Original Operating Plan? Y / N
Current Authorized Amount: $8,650K	Estimated in service date(s): 12/31/17
Supplement Request: $2,451K	Other:
Total Request: $11,100K	

Project Authorization Supplement Justification

This request is for supplemental funding in the amount of **$2,451K** for the [redacted]

The initial authorized budget for this project is $8,650K. [redacted]

This project was competitively bid by project category (civil construction, electrical, security/access control, testing and materials). The construction specifications and engineered drawings were updated to account for issues experienced on previous [redacted] The contractors with the most competitive bids were awarded the project. Details of the project cost increase changes are detailed below:

Capital Additions – Direct

The cost for construction services increased approximately **$3,230K**. The largest drivers of this cost are the results of a higher than estimated bid price from the competitive bid process, [redacted], and environmental services. The following is a breakdown of the construction services cost increases:

- Lowest cost construction contractor, Charter Oak, came in with a bid that is $2,323K above original estimate.
- [redacted] increase of $465K over original estimate.
- Environmental services for soil removal increased the forecast by $156K.
- Construction representative services and other miscellaneous costs increased 285K.

Costs for Eversource labor and expenses of **$125K** were not included in original budget estimate.

The material budget shows a savings of **($920K)**. This is a result of Cochrane being a lower cost bidder; however, it is important to note that the majority of these savings resulted in an increase cost to the construction budget.

There is a contingency addition in the amount of **$142K**.

The total sum for all Direct Capital Additions including Eversource labor is **$2,575K**.

Capital Additions - Indirect and AFUDC
The Capital Indirects were estimated at a rate of 15% and the actual rate came in at 1% decreasing the indirect cost (**$168K)**. AFUDC cost increased by **$44K.**

The total value of the supplemental request is **$2,451K**, which is the value of the increased funding authorization that the project seeks in the Supplemental Authorization Request. This supplemental approval will increase the total authorized funding for the project from $8,650K to **$11,100K**.

Project Authorization Supplement Cost Summary

Note: Dollar values are in thousands:

	Prior Authorized	Supplement Request	Total
Capital Additions - Direct	$ 7,165	$ 2,575	$ 9,740
Less Customer Contribution	-	-	-
Removals net of Salvage ____%	-	-	$ -
Total Direct Spending	$ 7,165	$ 2,575	$ 9,740
Capital Additions - Indirect	$ 1,482	$ (168)	$ 1,314
AFUDC	$ 2	$ 44	$ 46
Total Capital Request	$ 8,650	$ 2,451	$ 11,100
O&M	-	-	-
Total Request	**$ 8,650**	**$ 2,451**	**$ 11,100**

Note: Dollar values are in thousands:

Total Supplement Request by year view:

	Year 2017	Year 2018	Year 2019	Total
Capital Additions - Direct	$ 9,511	$ 229	$ -	$ 9,740
Less Customer Contribution	-	-	-	-
Removals net of Salvage ____%	-	-	-	-
Total Direct Spending	$ 9,511	$ 229	$ -	$ 9,740
Capital Additions - Indirect	$ 1,273	$ 42	$ -	$ 1,314.2
AFUDC	$ 46	$ -	$ -	$ 46.3
Total Capital Request	$ 10,829	$ 271	$ -	$ 11,100
O&M	-	-	-	-
Total Request	**$ 10,829**	**$ 271**	**$ -**	**$ 11,100**

"Confidential Critical Energy Infrastructure Information (CEII) and or Physical Security Information (PSI) Subject to Protective Order and/or Non-Disclosure Agreement. Do not copy or Provide to Unauthorized Persons."

Technical Authorization Form

Date Prepared: 06/07/2016	Project Title: [redacted]
Company/ies: Eversource CT	Project ID Number: TAF-16-013-CT and CS00156
Organization: Strategy & Performance	Class(es) of Plant: Transmission & Distribution
Project Initiator: [redacted]	Project Category: [redacted]
Project Owner/Manager: [redacted]	Project Type: Specific
Project Sponsor: [redacted]	Project Purpose: [redacted]
Estimated in service date: December 2017	If Transmission Project: N/A

Project Need Statement

[redacted]

[redacted]

Project Objectives

Enhanced Physical Security, System Reliability, Compliance

Project Scope

This TAF proposes the [redacted]

[redacted] Specific details would be specified by engineering (size, quantity, rating, etc.) as part of the project.

[redacted]

"Confidential Critical Energy Infrastructure Information (CEII) and or Physical Security Information (PSI) Subject to Protective Order and/or Non-Disclosure Agreement. Do not copy or Provide to Unauthorized Persons."

[redacted].

The scope of this project includes:

CS00156 - Distribution Owned Assets
[redacted]

16-013-CT - Transmission Owned Assets
[redacted]

Coordination between the Projects and Operations Departments is required to [redacted] efore December 31, 2017. It is expected that this project will require siting and permitting approvals and should be reviewed by Siting and Permitting. A plan has been established with the Connecticut Siting Council (CSC) with an associated petition already approved, for the [redacted]. The remaining approvals will likely require sub-petition filings under protected order. To support these approvals, before and after visual simulations should be developed to support discussions with the CSC.

Background / Justification

[redacted]

"Confidential Critical Energy Infrastructure Information (CEII) and or Physical Security Information (PSI) Subject to Protective Order and/or Non-Disclosure Agreement. Do not copy or Provide to Unauthorized Persons."

[redacted]

"Confidential Critical Energy Infrastructure Information (CEII) and or Physical Security Information (PSI) Subject to Protective Order and/or Non-Disclosure Agreement. Do not copy or Provide to Unauthorized Persons."

[redacted]

Business Process and / or Technical Improvements:

[redacted]

Cost Estimate and Assumptions

The cost of this project has Transmission and Distribution funded scope, outlined below:

The Distribution funded scope of work includes the [redacted] he cost of this work is estimated to be $8.65M, including material, labor, and overhead. This capital work will be funded by the CT Resiliency budget as a tracked capital expenditure.

The Transmission funded scope of work includes the [redacted] The cost of this work is estimated to be $0.75M, including material, labor, and overhead.

The total cost of the project is estimated to be $9.4M with a range of $7.1M to $14.1M (-25%-+50%).

"Confidential Critical Energy Infrastructure Information (CEII) and or Physical Security Information (PSI) Subject to Protective Order and/or Non-Disclosure Agreement. Do not copy or Provide to Unauthorized Persons."

Alternatives Considered with Cost Estimates

1. [redacted] – The total cost of this option is $0. [redacted] While there is no initial cost, [redacted]
2. [redacted]
3. [redacted] The total cost of this option is $500K per year. [redacted]
4. [redacted]. Cost Estimate: $9.6M
5. [redacted] Cost Estimate: $9.2M
6. [redacted] The cost effective approach is to [redacted]. Cost Estimate: $12.4M

[redacted] Cost Estimate: $8.8M

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Technical Authorization Form Approval	August 2016
CPA Approval	August 2016
Project Implementation	December 2017

Regulatory Approvals

This project is expected to require siting and/or permitting approvals, and should be reviewed in detail by Siting and Permitting.

Risks and Risk Mitigation Plans

N/A

References

G&E August 2013 STEP Meeting Presentation – [redacted].

Approvals

[redacted] Date
Director, Transmission Engineering

[redacted] Date
Director, Transmission Projects

CEII / NDA: All information related to physical security should be handled as: "Confidential Critical Energy Infrastructure Information (CEII) and or Physical Security Information (PSI) Subject to Protective Order and/or Non-Disclosure Agreement. Do not copy or Provide to Unauthorized Persons.", and labeled as such. Communication of this information to external organizations requires the appropriate Non-Disclosure Agreements (NDAs).

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CS00156

[redacted]

Work Classification

Category: [redacted]
Type: RC3
Type Desc: [redacted]
Work Type: Other Work

Ownership / Management

AWC: Cheshire
Statewide: No
Owner: [redacted]
Manager: [redacted]

Project Information

Status: Prelim Design Approved
SPS #:
AIS Score:
Associated Projects:
Assignment ID:
Patrol Find ID:

Budget Summary - Preferred Option

[redacted]

2017

ID	Title	Status	Rev #	Contingency	Expenditure Amount	Net Estimate
1	[redacted]	Prelim	0	0 %	$8,650,000	$8,650,000
				2017 Total:	**$8,650,000**	**$8,650,000**
				Total Project:	**$8,650,000**	**$8,650,000**

Specific Project Proposal - Project #: CS00156

[redacted]

Project ption Sum ary

ID	Description	Segments	Preliminary Estimate	Construction Estimate	Variance	IEEE $/CMS	All (w/Storm)	Prfrd
O1	[redacted]	[redacted]	$8,650,000	$0	100	$0.00	$0.00	☑

Segments

ID	Title	Prel m nary Esti ate	Constr ction Estimate	Variance	IE E $/CMS	All w St rm)
1	[redacted]	$8,650,000			$0.00	$0.00

Background / Scope

Issue:

[redacted]

Project Description:

[redacted]

[redacted]. Specific details would be specified by engineering (size, quantity, rating, etc.) as part of the project. [redacted]

[redacted]

The scope of this project includes:

CS00156 - Distribution Owned Assets

[redacted]

[redacted]

16-013-CT - Transmission Owned Assets

[redacted]

[redacted] before December 31, 2017. It is expected that this project will require siting and permitting approvals and should be reviewed by Siting and Permitting. A plan has been established with the Connecticut Siting Council (CSC) with an associated petition already approved, for the P[redacted]. The remaining approvals will likely require sub-petition filings under protected order. To support these approvals, before and after visual simulations should be developed to support discussions with the CSC.

Background / Justification

[redacted]

[redacted]

- [redacted]

- [redacted]

[redacted]

[redacted]

[redacted]

- [redacted]

- [redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Business Process and / or Technical Improvements:

[redacted]

Cost Estimate and Assumptions

The cost of this project has Transmission and Distribution funded scope, outlined below:

The Distribution funded scope of work includes the [redacted] The cost of this work is estimated to be $8.65M, including material, labor, and overhead. This capital work will be funded by the CT Resiliency budget as a tracked capital expenditure.

The Transmission funded scope of work includes the [redacted]. The cost of this work is estimated to be $0.75M, including material, labor, and overhead.

The total cost of the project is estimated to be $9.4M with a range of $7.1M to $14.1M (-25%-+50%).

Alternatives Considered with Cost Estimates

1. [redacted] The total cost of this option is $0. [redacted]

[redacted]

2. [redacted] The total cost of this option is $500K per year.

3. [redacted] Cost Estimate: $9.6M

4. [redacted] Cost Estimate: $9.2M

5. [redacted] The cost effective approach is to [redacted]. Cost Estimate: $12.4M

6. [redacted] Cost Estimate: $8.8M

Other Considerations:

Revision / ACT Comments:

If we don't do this project, what will happen?

Environmental

Water Pollution: No Change Soil Contamination: No Ch nge Natural Habitats: No Cha ge

Alternatives considered based on Environmental Impact or Description of Aspects Oil Spill Risks Considered? ☑

Safety Concerns With This Project? ☐

Explain:

External Stakeholders

C stomer Impact / Involve ent

Cust. Impacted:
Crit. Cust. Impacted:
Adjoining Property Owner Consent Required: ☐
Other Utility Pole Custodian Area: ☐
State Highway Permit Required: ☐

Approx. Pole Count (NU):
Approx. Pole Count (Other):
Town Hearing Required: ☐
Easement Required: ☐

Relocation / New Service

New Srvc. Contact:
Customer Type:
Request Number:

Requestor Type:
State Highway Project #:
Route #:

Specific Project Proposal - Project #: CS00156 [redacted]

Segment CS00156-01

General Information

Segment: [redacted]
Status: Prelim Design Approved
Segment Type: OTHER
Town: [redacted]
Budget Year: 2017
Work Type: Other
Trimming Required: ☐
In Service Date: 12/31/2017
Description: [redacted]

Itemized Work List

ID	Major Grid	Minor Grid	Description of Work to be Performed
1	[redacted]	[redacted]	[redacted]

Segment CS00156-01

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	0.00 %
SubTotal:	$8,650,000
Contingency Amount:	$0
Estimate:	$8,650,000
Reimbursement:	$0
Net Amount:	**$8,650,000**
Description:	[redacted]

Item Description	CU	$ / Per	Qty	Amount
OTHER	16-ALL14	[redacted]		$8,650,000.00
OTHER				

Associated / Impacted Devices

Status	Type / SysID	Street / Cross St	Structure / Town	Circuit	Map	Cust	Notes