Operations Project Authorization Form

Date Prepared: September 20, 2019	**Project Title: Conv [redacted]**
Company/ies: Eversource CT	**Project ID Number: CD01327**
Organization: Distribution	**Class(es) of Plant: Overhead**
Project Initiator: [redacted]	**Project Category: Specific Project New Service**
Project Manager: [redacted]	**Project Type: Specific**
Project Sponsor: [redacted]	**Project Purpose: Upgrade Capacity for New Load**
Estimated in service date: 12/31/2020	**If Transmission Project: PTF? N/A**
Eng. /Constr. Resources Budgeted? No	**Capital Investment Part of Original Operating Plan? N**
Authorization Type: Initial Funding	**O&M Expenses Part of the Original Operating Plan? N**
Total Request: $249,524	

Financial Requirements:

Project Authorization

ERM: _____

FP&A: _____

Executive Summary

The existing [redacted], located on [redacted]., [redacted], will be demolished and replaced with a new building. The service to the new school will be [redacted]

This project has been established to convert [redacted] [redacted], in order to have the adequate capacity to accept the load increase.

Project Costs Summary

Note: Dollar values are in thousands

	Prior Authorized	2020	2021	2022+	Totals
Capital Additions - Direct	$0	$165	$0	$0	$165
Less Customer Contribution	$0	$0	$0	$0	$0
Removals net of Salvage ___%	$0	$10	$0	$0	$10
Total - Direct Spending	$0	$174	$0	$0	$174
Capital Additions - Indirect	$0	$62	$0	$0	$62
Subtotal Request	$0	$236	$0	$0	$236
AFUDC	$0	$5	$0	$0	$5
Total Capital Request	$0	$241	$0	$0	$241
O&M	$0	$9	$0	$0	$9
Total Request	**$0**	**$250**	**$0**	**$0**	**$250**

Financial Evaluation

Note: Dollar values are in thousands

Direct Capital Costs	2020	2021	2022+	Total
Straight Time Labor	$11	$0	$0	$11
Overtime Labor	$1	$0	$0	$1
Outside Services	$95	$0	$0	$95
Materials	$69	$0	$0	$69
Other, including contingency amounts (describe)	($1)	$0	$0	($1)
Total Direct Costs	**$174**	**$0**	**$0**	**$174**

Indirect Capital Costs	2020	2021	2022+	Total
Indirects/Overheads (including benefits)	$62	$0	$0	$62
Capitalized interest or AFUDC, if any	$5	$0	$0	$5
Total Indirect Costs	**$66**	**$0**	**$0**	**$66**

Total Capital Costs	**$241**	**$0**	**$0**	**$241**
Less Total Customer Contribution	**$0**	**$0**	**$0**	**$0**
Total Capital Project Costs	**$241**	**$0**	**$0**	**$241**
Total O&M Project Costs	**$9**	**$0**	**$0**	**$9**

Note: Explain unique payment provisions, if applicable

Future Financial Impacts:

Provide below the estimated future costs that will result from the project:
Note: Dollar values are in thousands:

Future Costs	Year 20__	Year 20__	Year20__	Year 20__+	Total Future Project Costs
Capital	$ -	$ -	$ -	$ -	$ -
O&M	-	-	-	-	-
Other	-	-	-	-	-
TOTAL	$ -	$ -	$ -	$ -	$ -

Describe the estimated future Capital, O&M and/or Other costs noted above:

What functional area(s) will these future costs be funded in?_____
A representative from the respective functional area is required to be included as a project approver.

If this is other than a Reliability Project, please complete the section below:

Provide below the estimated financial benefits that will result from the project:
Note: Dollar values are in thousands:

Future Benefits	Year 20__	Year 20__	Year20__	Year 20__+	Total Future Project Benefits
Capital	$ -	$ -	$ -	$ -	$ -
O&M	-	-	-	-	-
Other	-	-	-	-	-
TOTAL	$ -	$ -	$ -	$ -	$ -

Describe the estimated future Capital, O&M and/or Other benefits noted above:

What functional area(s) will these benefits be reflected in?_____
A representative from the respective functional area is required to be included as a project approver.

Asset Retirement Obligation (ARO) and/ or Environmental Cleanup Costs (Environmental Liabilities):

Is there an ARO associated with this project? If yes, please provide details:

Are there other environmental cleanup costs associated with this project? If yes, please provide details:

Technical Justification:

Project Need Statement

This project proposes conversion of the [redacted]., [redacted] This conversion is needed in order for the [redacted] area to have the capacity to accept the load increase at the new [redacted].

[redacted]

Project Objectives

- [redacted]
- [redacted]

Project Scope

Segment 1 – Convert [redacted], Waterbury to 13.8kV

Itemized Work List

ID	Major Grid	Minor Grid	Description of Work to be Performed
1	[redacted]		
2			
3			
4			

Segment 2 – Install back-up step-down transformers

Itemized Work List

ID	Major Grid	Minor Grid	Description of Work to be Performed
1	[redacted]		
2			
3			

Background / Justification

The existing [redacted] Therefore, their replacement can take a considerable amount of time. Having a back-up supply provides for a considerable improvement in CAIDI for such events.

Business Process and / or Technical Improvements:

- [redacted]
- [redacted]

Alternatives Considered with Cost Estimates

One alternative to the existing proposal is to just convert the [redacted]. The cost of this alternative is $215k. Although this alternative allows for the addition of the new [redacted] Therefore, this alternative was not chosen as the preferred alternative.

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Initial Funding Authorization	October 2019
Detail Design & Full Funding Authorization	June 2020
Construction Completion	December 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	Medium	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	2019	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.	2019	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2020	Low	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
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

None

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

1. **Project Maps**

CD01327 Project Maps_09-19-2019_M

2. **Project One-Lines**

CD01327 Project One-Lines_09-19-20

3. **Project Load Summary**

CD01327 Project Load Summary_09-2

4. **Cost Estimate Back-Up Details**

CD01327_project_needs_statement_EN

Work Classification

Category: Line

Type: NB1

Type Desc: SPECIFIC PROJECTS-NEW SRVCE

Work Type:

Ownership / Management

AWC: Cheshire

Statewide: No

Owner: [redacted]

Manager: [redacted]

Project Information

Status: Draft

Associated Projects:

SPS #:

Assignment ID:

AIS Score:

Patrol Find ID:

Budget Summary - Preferred Option

Convert [redacted] & Install Back-Up Steps

2020

ID	Title	Status	Rev #	Contingency	Expenditure Amount	Net Estimate
1	Convert [redacted] Wtby	Prelim	0	24%	$215,302	$215,302
2	Inst Back-Up Step Xfmrs	Prelim	0	24%	$34,222	$34,222
				2020 Total:	**$249,524**	**$249,524**
				Total Project:	**$249,524**	**$249,524**

Project Option Summary

ID	Description	Segments	Preliminary Estimate	Construction Estimate	Variance	IEEE $/CMS	All (w/Storm)	Prfrd
O1	Convert [redacted] only	1	$215,302	$0	100%	$0.00	$0.00	☐
O2	Convert [redacted] & Install Back-Up Steps	1,2	$249,524	$0	100%	$0.00	$0.00	☑

Segments

ID	Title	Preliminary Estimate	Construction Estimate	Variance	IEEE $/CMS	All (w/Storm)
1	Convert [redacted] Wtby	$215,302			$0.00	$0.00
2	Inst Back-Up Step Xfmrs	$34,222			$0.00	$0.00

Project Checklist – Transmission and Substation

INSTRUCTIONS:
It is the responsibility of the initiator to contact the area disciplines to determine if the project considerations contained in this list are applicable to their project. They should fill out the checklist and determine a transition plan for the purpose of project execution.

Checklist for Studies and Processes of a Transmission & Substation Capital Project						
Project Name :					**PAF No:**	
Facility Type: ☐ BPS	☐ BES	☐ PTF	☐ non-PTF	☐ CIP	☐ Distribution	
PLANNING						
Is a NX-9 required?					Choose an item	
Is an ISO-NE PAC presentation required?					Choose an item	
Is a PPA required?					Choose an item	
Is a TCA Application Required?					Choose an item	
PLANNING/PROTECTION & CONTROLS						
Are RAS/SPS/UVLs affected?					Choose an item	
OPERATIONS						
Outage Required?	☐ Primary Equipment (Power Transfer)	☐ Secondary Equipment (P&C only)	☐ Outage Not Required			
Do SCLL Conditions Exist?					Choose an item	
Has an outage schedule been approved?					Choose an item	
Are Operations & Maintenance procedures/training required?					Choose an item	
STANDARDS						
Does the project include standard equipment and designs?					Choose an item	
SUBSTATION ENGINEERING						
Does this impact Revenue Metering					Choose an item	
Is preliminary short circuit/ breaker duty analysis required?					Choose an item	
Are there any changes to the baseline audible noise?					Choose an item	
Is there an impact to the existing ground grid?					Choose an item	
Is a Transient Over Voltage (TOV) analysis required?					Choose an item	
P&C ENGINEERING						
OP-22 - Are PMUs and DDR required?					Choose an item	
If BPS, is an NPCC Directory #4 presentation required?					Choose an item	

Checklist for Studies and Processes of a Transmission & Substation Capital Project	
Project Name :	**PAF No:**
TRANSMISSION LINE ENGINEERING	
Are there any changes that affect the baseline EMF?	Choose an item
Are there any changes that affect the baseline EMI?	Choose an item
Is there an impact to the existing ground grid?	Choose an item
SITING	
Is a Siting filing required?	Choose an item
PERMITTING	
Is there any permitting required?	Choose an item
Siting & Construction Services (Outreach)	
What is the level of outreach expected?	Choose an item
INITIATOR	
Has a field constructability review been completed?	Choose an item