EVERSOURCE

Project Approval Form

Project Title: [redacted] Phase 2	**Project Number:** CD01297
Date Prepared: 04/19/2024	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** SPECIFIC PROJECTS-NEW SRVCE
Project Initiator: [redacted]	**Project Type:** Specific
Initiating Organization: Distribution	**Capital Investment part of original Op 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)
Required in service date: 12/31/2023	
Total Capital Request: $359K (15.3K reimbursable)	**Authorization Type:** Full Funding

1. Executive Summary

Full funding is being requested for this New Service project at a cost of $359K which is 232% of the partial funding approval of $154K. The scope change is due to difficulty encountered when trying to use [redacted] The contractors encountered blocked ducts when trying to install the cable to connect the feeder to the switchgear. Considerable time and resources were spent trying to find and repair the blocked ducts. Ultimately the decision was made to [redacted] as repairing the blocked ducts was becoming too costly and time consuming. A new duct bank for the [redacted] is to be installed under a different project. Settings are to be installed in the switchgear.

Project Location:

- Division – Western
- District – Stamford
- Town - Stamford

2. Project Cost Summary

Note: Dollar values are in thousands.

Financial Evaluation ($000's)

Capital Costs	2021 Actual	2022 Actual	2023 Actual	2024 Actual	2024 Estimate	Total
Internal Labor and Construction Equipment	0.1	40.9	12.8	13.0	0.5	67.2
Outside Services	0.0	16.0	5.0	5.1	0.2	26.3
Materials	0.1	73.6	23.0	23.5	0.9	121.0
Removals	0.0	5.7	1.8	1.8	0.4	9.8
Risk and Contingency	0.0	0.0	0.0	0.0	7.5	7.5
Other	0.0	0.3	0.1	0.1	0.0	0.5
Subtotal	**0.2**	**136.5**	**42.7**	**43.5**	**9.4**	**232.3**

Indirect Capital Costs	2021 Actual	2022 Actual	2023 Actual	2024 Actual	2024 Estimate	Total
Indirects/Overheads (including benefits)	0.5	50.9	19.2	48.6	3.4	122.6
Capitalized interest or AFUDC, if any	0.0	2.8	0.5	0.4	0.0	3.8
Subtotal	**0.5**	**53.7**	**19.7**	**49.0**	**3.4**	**126.3**
Total Capital Costs (Gross)	**0.7**	**190.2**	**62.4**	**92.5**	**12.8**	**358.6**
Less Total Customer Contribution	**-14.2**	**0.0**	**0.0**	**0.0**	**-1.1**	**-15.3**
Project Costs (Net of Reimbursement)	**-13.5**	**190.2**	**62.4**	**92.5**	**11.6**	**343.3**

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

An existing customer requested a new service for phase 2 of their residential development at [redacted] to this 5-story residential building with 186 apartment units. This includes 200,559 Sq. Ft of mixed-use residential building and a garage. Based on similar buildings and loading in this area, the demand for this site was estimated to be approximately [redacted]

b. Project Need

The project at [redacted] is the second phase of construction for a new residential development [redacted] provide electric power to its new residential, parking, and other services.

c. Project Scope

[redacted]

See below:

[redacted]

4. Alternatives Considered

[redacted]

Project Option Comparison

Design Criteria	Option		
[redacted]			
Authorization Type	Full	Full	
Capital Cost	$500K	$359K	
Expense Cost	$25K	$18K	
Total Cost	$525K	$377K	
Total Cost / MVA added	N/A	N/A	
Total Cost / CM Saved	N/A	N/A	
Total Cost / CI Saved	N/A	N/A	
Preferred option		X	

5. Project Schedule

Add any additional milestones that are pertinent to the project

Milestone/Phase Name	Estimated Date
Partial Approval	February 2020
100% Detailed Engineering Completion	December 2021
Fully Funded	March 2022
Construction Start	December 2022
In Service Date	December 2023

6. Regulatory Decisions

N/A

7. Codes and Standards

N/A

8. Risk and Contingencies

Contingencies:

Risk Mitigation:

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2023	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	2023	Medium	Design to minimize customer impact. Project Preplanning and customer/community outreach.
Internal construction resources not available to perform the work.	2023	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.	2023	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2023	Low	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2023	Low	If storm activity delays work, we may be forced to use external resources.

9. References

References
1. N/A

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

Attachment	Included in Submittal?
A. Cost Estimate	*YES*
B. System One-Lines	*YES*
C. Partial Funding PAF	*YES*
F. Other	*N/A*

Attachment A: Cost Estimate

Estimate

	Preliminary Estimate Summary	Construction (ACT) Estimate Summary	Variance	
Revision Number:	1	0		
Contingency:	20.00%	7.50%		
SubTotal:	$133,126	$241,302	$108,176	81%
Contingency Amount:	$26,625	$18,098	($8,527)	32%
Estimate:	$159,751	$259,400	$99,649	62%
Reimbursement:	$0	$0	$0	
Net Amount:	**$159,751**	**$259,400**	**$99,649**	**62%**
Description:				

Item Description	CU	$ / Per	Qty	Amount
SWITCHING OH/DB/UG - SWITCHING Network	16-ALL15	[redacted]		$14,048.80
TRAFFIC OH/DB/UG - Traffic Control - Police Officer	16-ALL18			$2,000.00
UG CABLE DB/UG - 4/0 - 3-1/C (3ph) Cu	16-UG113B			$38,400.00
UG CABLE DB/UG - 350/500 - 3-1/C (3ph) Cu	16-UG114			$34,800.00
SWITCHGEAR DB/UG-Switchgear up to 25kV-Manual Type 3 or 5	16-UG124			$31,278.40
XF DB/UG - Padmount XF - 3ph	16-UG131			$12,598.40

Attachment B: One-Line



Attachment C: Partial Funding PAF

Operations Project Authorization Form

Date Prepared: 01/14/2020	**Project Title:** [redacted] Phase 2
Company/ies: Eversource	**Project ID Number:** CD01297
Organization: Electric Distribution	**Class(es) of Plant:** Distribution
Project Initiator: [redacted]	**Project Category:** Line
Project Manager: [redacted]	**Project Type:** Spec Proj – New Service
Project Sponsor: [redacted]	**Project Purpose:** Provide Electric Service to new Customer
Estimated in service date: 12/31/2020	**If Transmission Project: PTF? N/A**
Eng. /Constr. Resources Budgeted?	**Capital Investment Part of Original Operating Plan?**
Authorization Type: Preliminary funding	**O&M Expenses Part of the Original Operating Plan?**
Total Request: $(160,000-14,965) = $145,035	

Financial Requirements:

Project Authorization

ERM: _____

FP&A: _____

Executive Summary

An existing customer will be constructing phase 2 of their residential building at [redacted]. The project will consist of approximately 200,559 square feet of mixed-use residential building and a garage. The residential building will consist of five stories with 186 rental residential units. These units will utilize electric dryers, electric heating, electric ranges, and central gas-fired hot water boiler. To serve their load, the customer is requesting [redacted] of project CD00269. [redacted]

Project Costs Summary

	Prior Authorized	2020	2021	2022+	Totals
Capital Additions - Direct	$0	$83,107	$0	$0	$83,107
Less Customer Contribution	$0	$0	$0	$0	$0
Removals net of Salvage ____%	$0	$3,708	$0	$0	$3,708
Total - Direct Spending	$0	$86,815	$0	$0	$86,815
Capital Additions - Indirect	$0	$64,928	$0	$0	$64,928
Subtotal Request	$0	$151,743	$0	$0	$151,743
AFUDC	$0	$2,496	$0	$0	$2,496
Total Capital Request	$0	$154,239	$0	$0	$154,239
O&M	$0	$5,761	$0	$0	$5,761
Total Request	$0	$160,000	$0	$0	$160,000

Financial Evaluation

Direct Capital Costs	2020	2021	2022+	Total
Straight Time Labor	$12,084	$0	$0	$12,084
Overtime Labor	$2,059	$0	$0	$2,059
Outside Services	$38,337	$0	$0	$38,337
Materials	$34,040	$0	$0	$34,040
Other, including contingency amounts (describe)	$295	$0	$0	$295
Total Direct Costs	**$86,815**	**$0**	**$0**	**$86,815**

Indirect Capital Costs	2020	2021	2022+	Total
Indirects/Overheads (including benefits)	$64,928	$0	$0	$64,928

Capitalized interest or AFUDC, if any	$2,405	$0	$0	$2,405
Total Indirect Costs	**$67,333**	**$0**	**$0**	**$67,333**
Total Capital Costs	**$154,148**	**$0**	**$0**	**$154,148**
Less Total Customer Contribution	**$14,965**	**$0**	**$0**	**$14,965**
Total Capital Project Costs	**$139,183**	**$0**	**$0**	**$139,183**
Total O&M Project Costs	**$5,852**	**$0**	**$0**	**$5,852**
Total Project Cost	**$ 145,035**	**$ -**	**$ -**	**$ 145,035**

Technical Justification:

Project Need Statement

The project at [redacted] is the second phase of construction for a new residential development in [redacted] to provide electric power to its new residential, parking and other services.

Project Objectives

[redacted]

Refer to map below

PDF [redacted] - [redacted] Phase 2.pdf

Major Material

- 750kVA Padmount XF - 3ph ---------- 2 (Stock Code: 535647)
- PME 5 ---------- 1
- 4/0 Al UG cable ----------800'
- 500 kcmil ----------500'

Background / Justification

An existing customer is requesting a new service for phase 2 of their residential development at [redacted] to this 5-story residential building with 186 apartment units. This includes 200,559 Sq. Ft of mixed-use residential building and a garage. Based on similar buildings and loading in this area, the demand for this site is estimated to be approximately [redacted]

Business Process and / or Technical Improvements:

[redacted]

Alternatives Considered with Cost Estimates

N/A

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Order Transformer	February 2020
Cable work	July 2020
Complete work	December 2020

Regulatory Approvals

N/A

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.
Internal construction 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. Most of this work will require system to be abnormal for any extended period of time.

References


Load Projections

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


[redacted] Phase 2.pdf


[redacted] oneline .pdf


Map.pdf

Cost Estimate Backup Details


CD01297_project_needs_statement.pdf