EVERSOURCE

Supplement Authorization Form

Project Title: [redacted] **New Service**	**Project Number:** CD01364
Date Prepared: 08/06/2024	**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)
Current Authorized Amount: $454.6K	**Approved In-Service Date:** 12/31/2024
Supplement Request: $358.8K	**Estimated In-Service Date:** 12/31/2024
Total Capital Request: $813.3K	**Authorization Type:** Supplement Request
	Reason: Cost Overage

1. Project Background

Supplemental funding is being requested for this project. The total capital request is $813.3K which is $358.8K (78%) more than the current authorized amount of $454.6K.

CD01364 was created as a request for a new customer who is constructing a new development at [redacted] The project consists of a 7-story building with 376 apartment units, 2 floors of enclosed parking, amenities including a pool, and a retail space on the ground floor. To serve this load the customer requests [redacted]

2. Supplement Justification Overview

This project's variance of $358.8K is due to having to use the internal test department, circuit de-energizations/re-energizations, cleaning a manhole, and extra material cost.

3. Supplement Justification Overview

The test department was required to be used for testing settings and commissioning the switchgears per the EM and Test department. When this job was first estimated this was not the case and therefore was not included in the full funding estimate. The labor and equipment needed for this portion of the variance is about **$100K**.

There were three days of circuit de-energization and re-energization. This required taking the circuit out and then putting it back as soon as possible to limit the outage on the feeder. This happened over three days. Originally it was only planned to deenergize/reenergize once. Having to do this multiple times added to the overall cost of the project. The outside services from this and the manhole cleaning came out to approximately **$30K** more than expected.

The material also cost more than anticipated compared to the full funding PAF. This project was completed as designed, with the exception of unaccounted for cable. This and the indirect costs plus contingency are the reason for the remaining **$200K** variance.

4. Supplement Cost Summary (Project Total)

Financial Evaluation ($000's)

Capital Costs	To Date Spend	Prior Authorized	Supplemental Request	Total Request
Internal Labor and Construction Equipment	133.3	32.5	100.8	133.3
Outside Services	30.4	2.2	28.2	30.4
Materials	297.6	235.6	62.0	297.6
Removals	20.9	44.9	-24.0	20.9
Risk and Contingency	0.0	0.0	15.5	15.5
Other	1.5	0.0	1.5	1.5
Subtotal	**483.7**	**315.2**	**184.0**	**499.2**

Indirect Capital Costs	To Date Spend	Prior Authorized	Supplemental Request	Total Request
Indirects/Overheads (including benefits)	300.9	139.3	161.6	300.9
Capitalized interest or AFUDC, if any	13.2	0.0	13.2	13.2
Subtotal	**314.1**	**139.3**	**174.8**	**314.1**
Total Capital Costs (Gross)	**797.8**	**454.5**	**358.8**	**813.3**
Less Total Customer Contribution	**-22.1**	**0.0**	**-22.1**	**-22.1**
Project Costs (Net of Reimbursement)	**775.7**	**454.5**	**336.7**	**791.2**

5. New Total Request by Year (if applicable)

Note: If multi-year project, include actuals for current and years past, and then show forecasted spend for upcoming years.

Capital Costs	2023	2024	TOTAL
Internal Labor & Equipment	0.9	132.5	133.4
Outside Services	0.0	30.4	30.4
Materials	3.9	293.8	297.7
Removals	0.2	20.7	20.9
Risk and Contingency	0.0	15.5	15.5
Other	0.0	1.4	1.4
SUBTOTAL Direct Cost	**5.0**	**494.2**	**499.2**
Indirects / Overheads	1.8	299.1	300.9
AFUDC	0.0	13.2	13.2
SUBTOTAL Indirect Cost	**1.8**	**312.3**	**314.1**
TOTAL Capital Request	**6.8**	**806.5**	**813.3**
Less Total Customer Contribution	-22.1	0.0	**-22.1**
TOTAL Project Cost	**-15.3**	**806.5**	**791.2**

6. Lessons Learned

EVERSOURCE

Supplement Authorization Form

Project Title [redacted] New Service	Project Number: CD01364
Date Prepared: 04/11/2023	**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: $455K	**Authorization Type:** Full Funding

7. Executive Summary

This project was presented and received initial approval in 2019 for $421K. Work orders have been written and full funding is now being requested for $455K. This represents an increase of $34K or 108% of the initial funding approval. The scope of the work remains the same.

The project was initially presented as follows:

A new customer will be constructing a new development at [redacted] The project consists of a 7-story residential building with 376 apartment units, 2 floors of enclosed parking, amenities with pool, and a retail space on the ground floor. To serve their load, the customer is requesting [redacted]

Location Information:

Division: Western
District: Stamford
City: Stamford

8. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	2023	2024	2025+	Total
Direct Capital Costs				
Internal Labor and Construction Equipment	32.5	0.0	0.0	32.5
Outside Services	2.2	0.0	0.0	2.2
Materials	235.6	0.0	0.0	235.6
Removals	13.2	0.0	0.0	13.2
Risk and Contingency	31.7	0.0	0.0	31.7
Other	0.0	0.0	0.0	0.0
Subtotal – Direct Costs	**315.3**	**0.0**	**0.0**	**315.3**
Indirect Capital Costs				
Indirect/Overheads (including benefits)	139.3	0.0	0.0	139.3
Capitalized interest or AFUDC, if any	0.0	0.0	0.0	0.0
Subtotal – Indirect Costs	**139.3**	**0.0**	**0.0**	**139.3**
Total Gross Capital Costs	**454.6**	**0.0**	**0.0**	**454.6**
Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**
Total Net Capital Project Costs	**454.6**	**0.0**	**0.0**	**454.6**

9. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

[redacted]The service scheme will supply the load for this 7-story residential development with 376 apartment units, 2 floors of enclosed parking,

amenities with pool, and a retail space on the ground floor. The demand for this site is estimated to be approximately 1.6 MW based on similar buildings and loading in this area.

b. Project Need

The [redacted] is a new development in the Stamford area. The customer is requesting [redacted] to provide electrical power to its new residential, parking, and other services.

This project will provide electric service to a 7-story residential development that is expected to be built at [redacted] The service type will [redacted]

c. Project Scope

- [redacted]
- [redacted]

Major Material:

- Three PME-5 Switchgears.
- Four 1000KVA Transformers

10. Alternatives Considered

Alternatives were considered (please describe below)

Eversource is obligated to provide new service to this customer in its service territory. The customer is in a [redacted] and one alternative could have been to provide the customer with a [redacted]e. However, no large new services are being added to the [redacted] at this time, and this customer is requesting [redacted]. [redacted]

11. Project Schedule

Add any additional milestones that are pertinent to the project

Milestone/Phase Name	Estimated Date
100% Detailed Engineering Completion	2019
Partial Approval	2022
Construction Started	2023
Fully Funded	2023
In Service Date	2023

12. Regulatory Decisions

13. Codes and Standards

14. Risk and Contingencies

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2023	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	2023	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach
Internal construction resources not available to perform the work.	2023	Medium	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.

Storm delays	2023	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2023	Low	Schedule work to minimize system abnormal time. Most of this work will require system to be abnormal for any extended period of time.

15. References

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

Attachment	Included in Submittal?
A. Cost Summary	*YES*
B. Oneline	*YES*
C. Load Sheet	*YES*
D. Geographic Map	*YES*
E. Partial Funding PAF	*YES*

Attachment A: Cost Summary:

Estimate

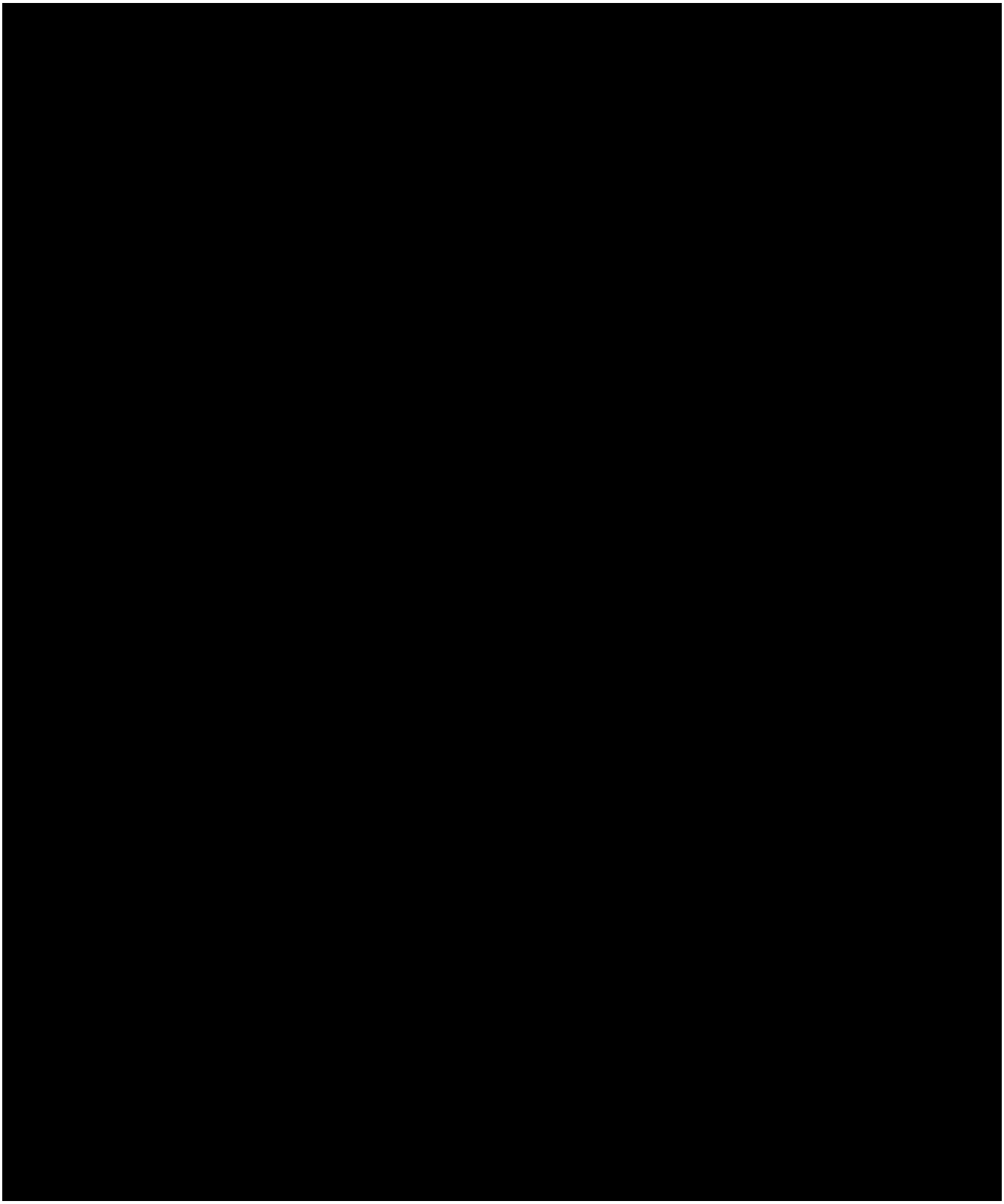
	Preliminary Estimate Summary
Revision Number:	0
Contingency:	24.00%
SubTotal:	$347,201
Contingency Amount:	$83,328
Estimate:	$430,529
Reimbursement:	$0
Net Amount:	**$430,529**

Description:

Item Description	CU	[redacted]	Amount
SWITCHING OH/DB/UG - SWITCHING Network	16-ALL15		$42,146.40
TRAFFIC OH/DB/UG - Traffic Control - Police Officer	16-ALL18		$10,000.00
UG CABLE DB/UG - 4/0 - 3-1/C (3ph) Cu	16-UG113B		$9,600.00
UG CABLE DB/UG - 350/500 - 3-1/C (3ph) Cu	16-UG114		$22,968.00
UG CABLE UG - Cable Removal - all cables	16-UG117		$1,000.00
UG CABLE UG - Transition Splice	16-UG120		$23,731.20
SWITCHGEAR DB/UG-Switchgear up to 25kV-Manual Type 3 or 5	16-UG124		$31,278.40
SWITCHGEAR DB/UG - Switchgear up to 25kV - Auto Type 5 (pair)	16-UG125		$140,080.00
XF DB/UG - Padmount XF - 3ph	16-UG131		$25,196.80
XF UG - Network XF XF Removal	16-UG134		$41,200.00

CD01364_project_needs_statement.pdf

Attachment B: Oneline:



Attachment D: Geographic Map:



Attachment E: Partial Funding PAF:

Operations Project Authorization Form

Project Title: [redacted] **New Service**	**Project Number: CD01364**
Date Prepared: 10/04/2019	**Company:** Eversource CT
Organization: Electric Field Operations	**Class(es) of Plant:** D Line
Project Initiator: [redacted]	**Project Category:** SPECIFIC PROJECTS-NEW SRVCE
Project Manager: [redacted]	**Project Type:** Specific
Project Sponsor: [redacted]	**Capital Investment part of original Operating Plan:** Yes
Estimated in service date: 12/31/2023	**Emergency Related Request?** No
Eng./Constr. Resources Budgeted? Yes	**Facility Type** (check all that apply)**:** ☐ PTF ☐ non-PTF ☒ Distribution
Total Gross Capital Request: $421K	**Authorization Type:** Partial Funding

Executive Summary

A new customer will be constructing a new development at [redacted] The project consists of a 7-story residential building with 376 apartment units, 2 floors of enclosed parking, amenities with pool, and a retail space on the ground floor. To serve their load, the customer is requesting [redacted]

Project Costs Summary

Note: Dollar values are in thousands

Capital Costs	2022	2023	2024+	Total
Internal Labor and Construction Equipment	$35	$0	$0	$35
Outside Services	$119	$0	$0	$119
Materials	$97	$0	$0	$97
Removals	$15	$0	$0	$15

Risk and Contingency	($38)	$0	$0	($38)
Other	$0	$0	$0	$0
Subtotal	**$228**	**$0**	**$0**	**$228**

Indirect Capital Costs	**2022**	**2023**	**2024+**	**Total**
Indirects/Overheads (including benefits)	$185	$0	$0	$185
Capitalized interest or AFUDC, if any	$8	$0	$0	$8
Subtotal	**$193**	**$0**	**$0**	**$193**
Total Capital Costs (Gross)	**$421**	**$0**	**$0**	**$421**
Less Total Customer Contribution	**$0**	**$0**	**$0**	**$0**
Project Costs (Net)	**$421**	**$0**	**$0**	**$421**

Technical Justification:

Project Need, Objective and Justification:

The [redacted] project is a new development in the Stamford area. The customer is requesting [redacted] to provide electrical power to its new residential, parking, and other services.

This project will provide electric service to this 7-story residential development that is expected to be built at [redacted]

Project Scope:

- [redacted]
- [redacted]

The primary cables, switchgears and transformers will be connected as shown in the attachment below.



[redacted]_187 g.pdf

Major Material:

- Three PME-5 Switchgears.
- Four 1000KVA Transformers

Background:

This site is in an [redacted] The service scheme will supply the load for this 7-story residential development with 376 apartment units, 2 floors of enclosed parking, amenities with pool, and a retail space on the ground floor. The demand for this site is estimated to be approximately [redacted] based on similar buildings and loading in this area.

Alternatives Considered:

Alternatives were considered (please describe below)

Eversource is obligated to provide new service to this customer in its service territory. The customer is in a [redacted] and one alternative could have been to provide the customer with a [redacted]. However, no large new services are being added to the [redacted] at this time, and this customer is requesting [redacted]. [redacted]

Regulatory Approvals:

Are Regulatory body approvals needed for the project?

No

Project Schedule

Milestone/Phase Name	Estimated Date
100% Engineering Completion	2019
Construction Start	2023
Testing/Commissioning	2023
In Service Date	2023

Risks and Risk Mitigation Plans

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2023	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	2023	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach
Internal construction resources not available to perform the work.	2023	Medium	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.
Storm delays	2023	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2023	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

Facility Type	Area (ft^2)	Watts Per Square Foot	Estimated Load (Kw)
[redacted]			
		Total	1.6 MW → 70 A

Watt/SF based on EPRI Values[1]

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

