EVERSOURCE

Project Approval Form

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Project Title: New Service – Broad and Greyrock	**Project Number:** CD01762
Date Prepared: 09/11/2023	**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: $321.3K (CIAC - $17K)	**Authorization Type: Full Funding**

1. Executive Summary

Full Funding is being requested at a cost of $321.3K to provide new service to a customer in Stamford. This full funding cost is 113% of the partial funding of $284K. There is no scope change on the job so the additional cost could be attributed to a difference in material and overhead costs. The project involves providing [redacted] services to a new 300,000 square foot, 7 story building consisting of 228 residential apartment units.

To provide the service an existing service scheme consisting of a preferred-alterna[redacted]

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	Prior Actuals 2022	Estimated Future Spend	Total
Internal Labor and Construction Equipment	22.3	74.1	96.4
Outside Services	2.5	8.3	10.9
Materials	15.4	51.3	66.7
Removals	1.8	6.7	8.4
Risk and Contingency	0.0	18.2	18.2
Other	0.0	0.0	0.0
Subtotal	**42.0**	**158.6**	**200.6**

Indirect Capital Costs	Prior Actuals 2022	Estimated Future Spend	Total
Indirects/Overheads (including benefits)	37.0	80.8	117.8
Capitalized interest or AFUDC, if any	2.9	0.0	2.9
Subtotal	**39.8**	**80.8**	**120.7**
Total Capital Costs (Gross)	**81.9**	**239.5**	**321.3**
Less Total Customer Contribution	**0.0**	**-17.0**	**-17.0**
Project Costs (Net of Reimbursement)	**81.9**	**222.5**	**304.3**

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

The customer's site is located in an [redacted] The service scheme will supply the load for this 7-story building with 228 rental apartments, a 2-story garage, and a basement. Based on the EPRI load calculations, and comparing loads of similar buildings in this area, the estimated demand for this site is approximately [redacted]

b. Project Need

The new service at Broad Street and Greyrock Place is a new development in downtown Stamford. The customer is requesting [redacted]. This will provide service to a 7-story building with 228 rental apartment units, a 2-story garage, and a basement. [redacted]

c. Project Scope

[redacted]

The primary cables, switchgears and transformers will be connected at customer's property as shown in attachment A.

5. Alternatives Considered

One option in this project was to create [redacted] at the customer's site utilizing an automatic [redacted], and the total cost would have been $463.5K. Due to the space limitations at the customer's site, it was opted to feed the customer from an existing underutilized service scheme, but install the [redacted] It was also less costly to use the existing service scheme.

Project Option Comparison

Design Criteria	Option		
[redacted]			
Authorization Type	Full	Full	
Capital Cost	$284K	$440.2K	
Expense Cost	$5.8K	$23.3K	
Total Cost	$289.8K	$463.5K	
Preferred option	X		

6. Project Schedule

Add any additional milestones that are pertinent to the project

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

7. Regulatory Decisions

N/A

8. Codes and Standards

N/A

9. 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	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2023	Medium	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.

10. References

References
1. N/A
2.

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

Attachment	Included in Submittal?
A. 164P Oneline	*YES*
B. Cost Estimate	*YES*
C. Geographic Map	*YES*
D. Load Estimation	*YES*
E. Load Projection	*YES*
F. Partial Funding Paf	*YES*



Attachment B: Cost Estimate – Option 1

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01762
New Service - Broad and Greyrock

Design Alternative CD01762-01

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	24.00%
SubTotal:	$233,670
Contingency Amount:	$56,081
Estimate:	$289,750
Reimbursement:	$0
Net Amount:	$289,750
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
DB CABLE DB/UG - 4/0 - 3-1/C (3ph) Al	16-UG113		$100,800.00
UG CABLE UG - Transition Splice	16-UG120		$10,547.20
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		$18,897.60
OTHER OTHER MH Cleaning	16-ALL14		$20,000.00

Option 2:

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01762
New Service - Broad and Greyrock

Design Alternative CD01762-02

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	24.00%
SubTotal:	$373,750
Contingency Amount:	$89,700
Estimate:	$463,450
Reimbursement:	$0
Net Amount:	$463,450
Description:	

Item Description	CU	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
DB CABLE DB/UG - 4/0 - 3-1/C (3ph) Al	16-UG113	$100,800.00
UG CABLE UG - Transition Splice	16-UG120	$10,547.20
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	$18,897.60
OTHER OTHER MH Cleaning	16-ALL14	$20,000.00

[redacted]

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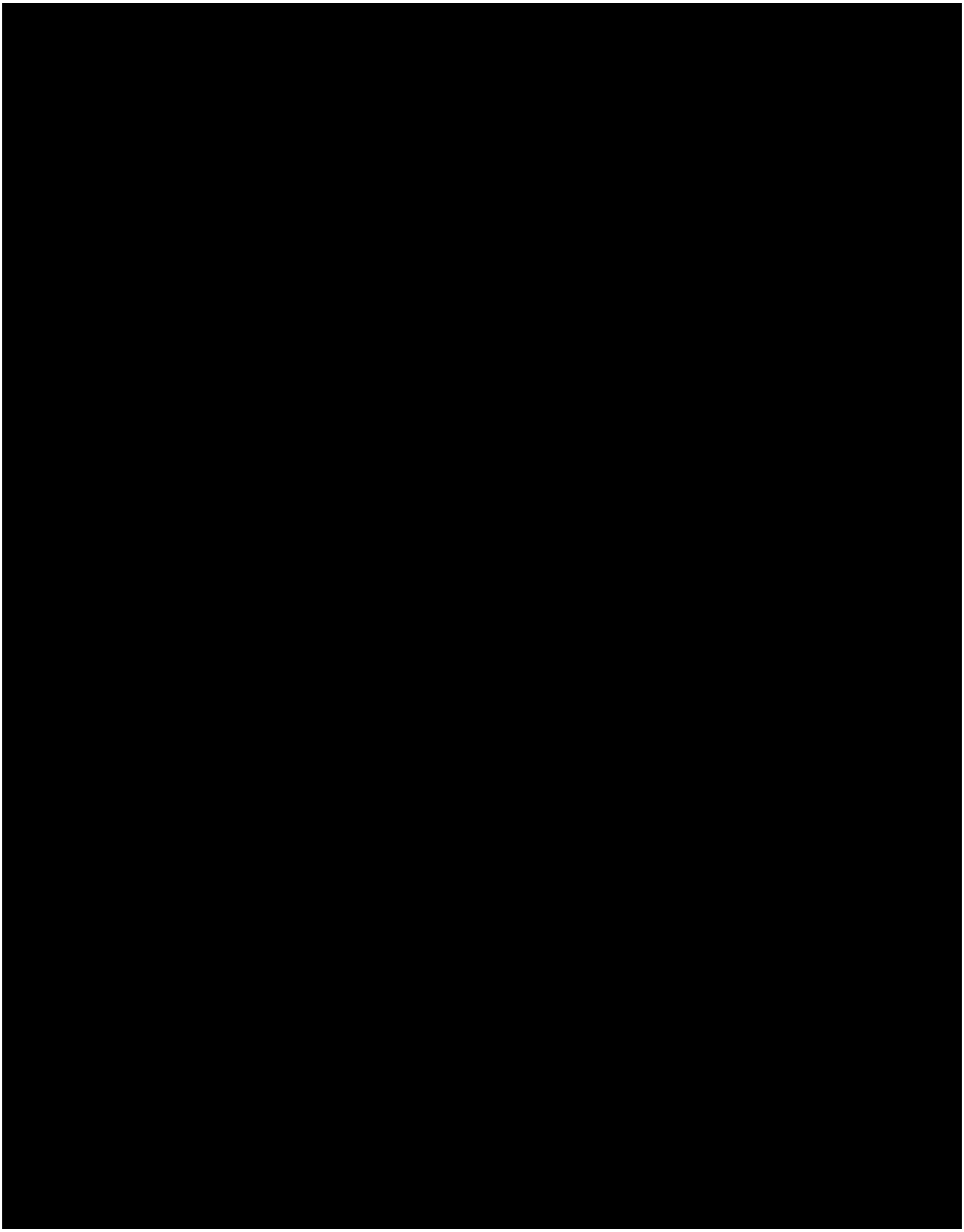

Refer to Distribution Capital Project Approval Process
JA-AM-2001-B, Rev.1

Attachment D: Load Estimation

Broad and Greyrock Load Estimation

		Square			
[redacted]					

Attachment E: Load Projection

EXISTING - LOAD PROJECTIONS									
Circuit	**Bus**	**Load (Amps)**	**Load Transfer**	**Normal**			**Emergency**		
		13.2KV		**Rating**	**% of**	**Limiting Factor**	**Rating**	**% of**	**Limiting Factor**
[redacted]									

Project Approval Form

[redacted]

Project Approval Form

[redacted]

Refer to Distribution Capital Project Approval Process
JA-AM-2001-B, Rev.1

Operations Project Authorization Form

Project Title: New Service - Broad and Greyrock	**Project Number: CD01762**
Date Prepared: 02/17/2022	**Company:** Eversource CT
Organization: EFO	**Class(es) of Plant:** D Line
Project Initiator: [redacted]	**Project Category:** Specific Projects-New Service
Project Manager: [redacted]	**Project Type:** Specific
Project Sponsor: [redacted]	**Capital Investment part of original Operating Plan:** No
Estimated in service date: 12/31/2022	**Emergency Related Request?** No
Eng./Constr. Resources Budgeted? No	**Facility Type** (check all that apply)**:** ☐ PTF ☐ non-PTF ☒ Distribution
Total Gross Capital Request: 284K (CIAC $10K)	**Authorization Type:** Initial Funding

Executive Summary

This project is requesting $294K to provide service to a new customer that will be in downtown Stamford. The new service project will consist of a 7-story building with 228 rental apartments units, 2-story garage, and basement. The overall square footage of the development is approximately 300,000. To serve their load, the customer is requesting [redacted] his project seeks to provide electric service to this new customer by [redacted]

The customer contribution towards this project is $10,000 based on NB-5 policy. The NB-12 policy was not used because the customer's revenue will exceed the cost of the project.

Project Costs Summary

Note: Dollar values are in thousands

Capital Costs	2022	2023	2024+	Total
Internal Labor and Construction Equipment	$24	$0	$0	$24
Outside Services	$80	$0	$0	$80
Materials	$65	$0	$0	$65
Removals	$10	$0	$0	$10
Risk and Contingency	($26)	$0	$0	($26)
Other	$0	$0	$0	$0
Subtotal	**$154**	**$0**	**$0**	**$154**

Indirect Capital Costs	2022	2023	2024+	Total
Indirects/Overheads (including benefits)	$125	$0	$0	$125
Capitalized interest or AFUDC, if any	$5	$0	$0	$5
Subtotal	**$130**	**$0**	**$0**	**$130**
Total Capital Costs (Gross)	**$284**	**$0**	**$0**	**$284**
Less Total Customer Contribution	**($10)**	**$0**	**$0**	**($10)**

Project Costs (Net)	**$274**	**$0**	**$0**	**$274**

Technical Justification:

Project Need, Objective and Justification

The new service at Broad Street and Greyrock Place is a new development in downtown Stamford. The customer is requesting [redacted]
This will provide service to a 7-story building with 228 rental apartment units, a 2-story garage, and a basement. [redacted]

Project Scope

[redacted]

The primary cables, switchgears and transformers will be connected at customer's property as shown in the attachment below.

Broad and Greyrock 164P.pdf

Background

This site is located in an [redacted]. The service scheme will supply the load for this 7-story building with 228 rental apartments, a 2-story garage, and a basement. Based on the EPRI load calculations, and comparing loads of similar buildings in this area, the estimated demand for this site is approximately [redacted]

Alternatives Considered:

Were alternative solutions considered/applicable? Include any cost/benefit analysis.

Alternatives were considered (please describe below)

[redacted]

The estimated cost of this option is approximately $464K.

Regulatory Approvals:

Are Regulatory body approvals needed for the project?

No

If yes, provide detailed regulatory approvals

Project Schedule

Milestone/Phase Name	Estimated Date
100% Engineering Completion	March 2022
Construction Start	June 2022
Testing/Commissioning	November 2022
In Service Date	December 2022

Risks and Risk Mitigation Plans

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2022	Medium	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.	2022	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost if necessary.
Materials shortage or long lead times	2022	High	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2022	Medium	If storm activity delays work, we may be forced to use external resources.

System abnormal configuration	2022	Medium	Schedule work to minimize system abnormal time. Install temporary bypasses/equipment if system will be abnormal for extended periods

References


Load Letter.pdf


Load Estimation.xlsx


load Projections.xlsx


CD01762_project_needs_statement.pdf

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


Broad and Greyrock map.pdf


Broad and Greyrock 164P.pdf