EVERSOURCE

Project Approval Form

Project Title: [redacted]- Relocation of Right of Way	Project Number: CD01379
Date Prepared: 09/22/2025	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** RIGHT OF WAY LINES
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: 12/31/2022	**NWS Excludable:** ☒ Yes ☐ No
Total Capital Request: $5,895k	**Authorization Type:** Full Funding

1. Executive Summary

Full funding is being requested for this project at a cost of $5,895k, which is 90% of the $6,548k partial funding estimate. This project actuals falls within the 15% threshold relative to the partial funding request and is therefore being fully requested with no further changes. The variance is primarily due to lower than anticipated construction and labor charges. This work originally planned for use of a track vehicle and matting for ROW removals. These resources were not required, ultimately saving significant cost. Additionally, traffic costs were overestimated for the planned work. Due to this work being done in a rural area and partially off-road, traffic resources were not needed for much of the construction.

The original project was presented as follows:

[redacted]

[redacted] *Our proposal originates at the* [redacted]-

[redacted]

[redacted]

[redacted], *in project CD01379 offers the opportunity to take advantage of efficient use of our construction work force.*

The relocation of the existing ROW line of the [redacted] *at a cost of $8.35 M. The total cost of this project is $6,585,255. The first segment cost of this project is $4.548M with construction beginning 6/2021 and with an in-service date of 05/30/2022. The cost of the second, fourth and fifth segments of this project s $ 2.0M with in-service date 12/31/2022.*

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	2021 Actual	2022 Actual	2023 Actual	2024 Actual	Total
Internal Labor and Construction Equipment	14.5	18.2	0.2	0.0	32.8
Outside Services	1,055.8	1,322.4	11.4	0.0	2,389.6
Materials	355.4	445.1	3.9	0.0	804.3
Removals	176.3	220.8	1.9	0.0	399.0
Other	0.0	0.0	0.0	0.0	0.0
Risk and Contingency	0.7	0.9	0.0	0.0	1.6
Subtotal	1,602.7	2,007.4	17.4	0.0	3,627.4

Indirect Capital Costs	2021 Actual	2022 Actual	2023 Actual	2024 Actual	Total
Indirects/Overheads (including benefits)	1,294.8	870.1	-4.3	0.0	2,160.7
Capitalized interest or AFUDC, if any	23.8	79.3	3.8	0.0	107.0
Subtotal	1,318.6	949.4	-0.4	0.0	2,267.6

Total Capital Costs (Gross)	2,921.3	2,956.8	17.0	0.0	5,895.0
Less Total Customer Contribution	**0**	**0**	**0**	**0**	**0**
Project Costs (Net)	2,921.3	2,956.8	17.0	0.0	5,895.0

Explain unique payment provisions, if applicable:

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

A portion of the [redacted]

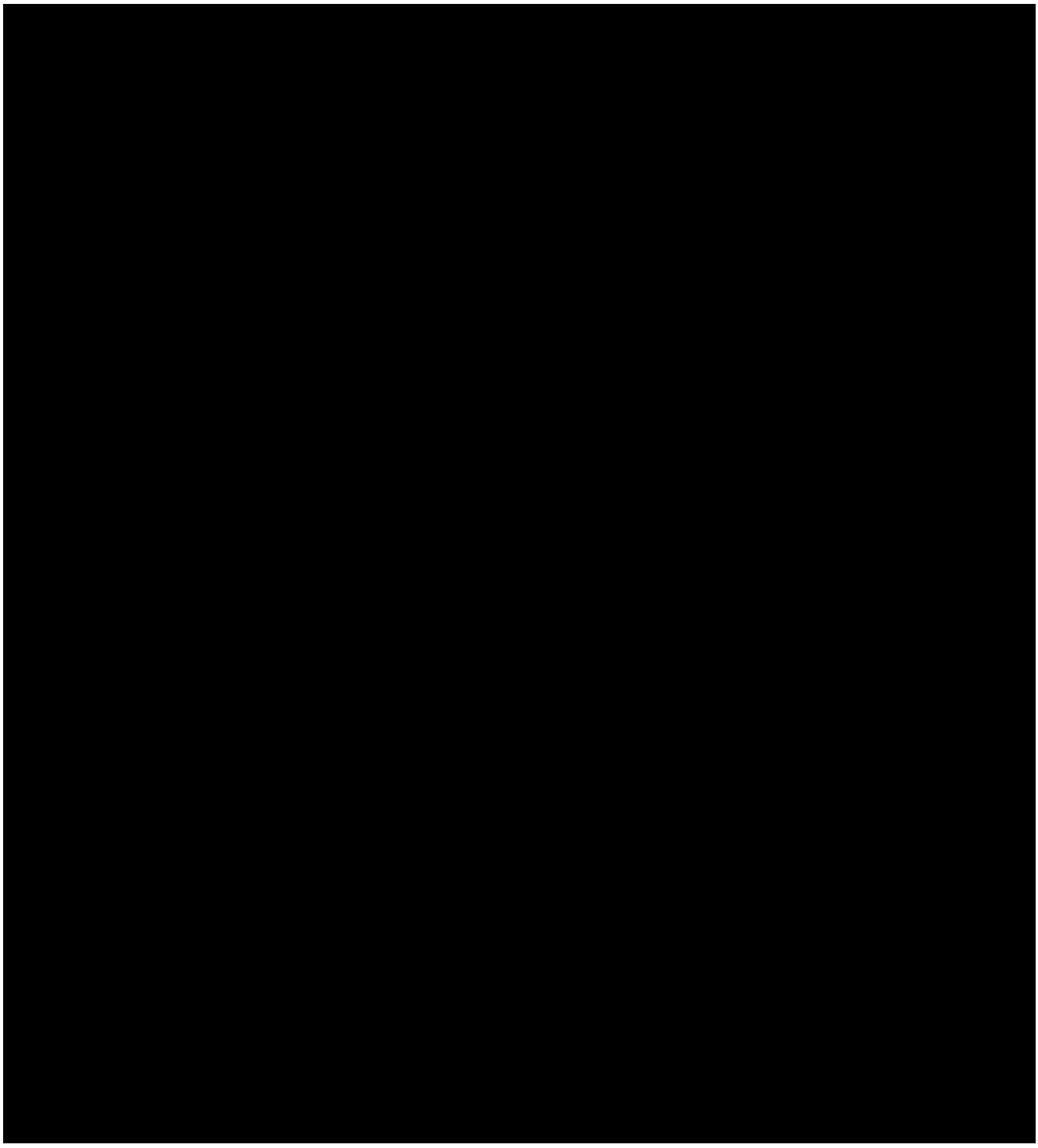
b. Project Need

[redacted]

[redacted]

c. Project Scope

[redacted]



Major Material:

93 – 50/2 Poles
8 – 55/1 Poles

23 – 40/2 Penta Poles
13,595' - 556 AAC Tree Wire
13,595' – 1/0 ACSR Neutral
13,595' – 750 MCM Aluminum Aerial Cable
7,290' – 1/0 ACSR Tree Wire
3,655' – 1/0 Neutral
3 – 15 kV NOVA Reclosers
3 – 438 Amp. Regulators
8 – 25kV 900 Amp. GOAB
2 – Tripsaver C/O's
73 – 100 Amp. C/O's
800' – 3" PVC Conduit
850' - #1 Al 25 kV EPR DB Cable
2 – 25 kVA Pad Xfmrs.

4. Alternatives Considered

NWS *(remove unselected option)*

If NWS is excludable, complete the NWS Exclusion Criteria table and remove NWS option from the Project Option Comparison table below:

If NWS is not excludable, include NWS in Project Option Comparison table and remove NWS Exclusion Criteria table below:

5. NWS Exclusion Criteria (select all that apply)

☐ Project cost < $250k	☐ New Service
☐ CDOT Relocation	☐ Generator interconnection project
☒ Maintenance, Asset condition or safety related*	

*Maintenance, Asset condition or safety related justification:

[redacted]

Please refer to Appendix D below for asset conditions within the ROW.

Design Criteria	Option	
	[redacted]	[redacted]
Eliminates Inaccessible Problem	X	
Eliminates Structures in Wetlands Area	X	

Addresses Safety Concerns of Antiquated Structures	X	X
Eliminates Long Duration Outages	X	
Eliminates Specialized Equipment	X	
Eliminates the need for permission by Railroad	X	
Provides additional Capacity to Circuit	X	
Provides alternate route for additional circuits	X	
Cost	$5.895M	$8.35M
Cost / CM Saved	$336.30/CM	$1066.42/CM
Cost / CI Saved	$27,615.18/CI	$89,240.65/CI
Preferred option	X	

6. Project Schedule

Add any additional milestones that are pertinent to the project

Milestone/Phase Name	Estimated Completion Date
Preliminary Approval	5/31/2020
Detailed Design	9/30/2020
Environmental Permits	12/31/2020
DOT Permits	1/31/2021
Settings Requested	5/31/2021
Construction Start Date	8/31/2021
Construction End Date	12/31/2021
ROW Removal Start Date	6/31/2022
ROW Removal End Date	12/31/2022

7. Regulatory Decisions

The [redacted] will require CDOT Permit. [redacted] it will be necessary to obtain permission from the railroad to work at the location of the lattice towers. It will also require permission from the [redacted] to grant us access to the towers even though an easement is in place.

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.	2022	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	2022	Medium	Design to minimize customer impact. Project Preplanning and customer/community outreach.
Internal construction resources not available to perform the work.	2022	High	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.	2022	High	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Internal engineering resources not	2022	High	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.

available to perform the work.			
Storm delays	2022	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2022	Low	Schedule work to minimize system abnormal time. Install temporary bypasses/equipment if system will be abnormal for extended periods.

9. References

References
1.
2.
3.
4.

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

Attachment	Included in Submittal?
A. Cost Estimate	Yes
B. Geographic Map	Yes
C. Project One-Line	Yes
D. [redacted] ROW Photos	Yes

A. Cost Estimate

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01379
[redacted] - Relocation of Right of Way

Work Classification

Category: Line
Type: SRRL
Type Desc: RIGHT OF WAY LINES
Work Type:

Ownership / Management

AWC: Falls Village
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

Preferred Options

2021

ID	Title	Status	Rev #	Contingency	Expenditure Amount	Net Estimate
1	Relocation of Existing Right of Way	Prelim	0	24%	$4,585,255	$4,585,255
				2021 Total:	$4,585,255	$4,585,255

2022

ID	Title	Status	Rev #	Contingency	Expenditure Amount	Net Estimate
2	Removal Existing Right of Way	Prelim	0	28%	$1,304,840	$1,304,840
4	Service Relocation to Underground @[redacted]	Prelim	0	28%	$85,932	$85,932
6	Three Phase Line Extension on[redacted]	Prelim	0	28%	$190,464	$190,464
7	Three Phase Extension on[redacted]@ P	Prelim	0	24%	$759,014	$759,014
				2022 Total:	$2,340,250	$2,340,250
				Total Project:	$6,925,505	$6,925,505

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Specific Project Proposal - Project #: CD01379

[redacted] Relocation of Right of Way

Project Option Summary

ID	Description	Segments	Preliminary Estimate	Construction Estimate	Variance	IEEE $/CMS	All (w/Storm)	Prfrd
O1	Preferred Options	1,2,4,6,7	$6,925,505	$0	100%	$267.59	$80.58	☑

Segments

ID	Title	Preliminary Estimate	Construction Estimate	Variance	IEEE $/CMS	All (w/Storm)
1	Relocation of Existing Right of Way	$4,585,255			$840.52	$351.17
2	Removal Existing Right of Way	$1,304,840			$398.65	$166.55
3	Rebuild Pole Line in Existing Right of W	$8,354,709			$0.00	$0.00
4	Service Relocation to Underground @[redacted]	$85,932			$5.98	$1.52
5	Inst. Single Phase Pole Line in ROW	$382,102			$0.00	$0.00
6	Three Phase Line Extension on [redacted]	$190,464			$0.00	$0.00
7	Three Phase Extension on [redacted] @ P	$759,014			$124.62	$32.53

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Specific Project Proposal - Project #: CD01379

[redacted] - Relocation of Right of Way

Segment CD01379-01

General Information

Segment: 1 - Relocation of Existing Right of Way Status: Prelim Design Approved

Segment Type: RELOCATION - OH SPECIFIC Town: NORTH CANAAN Budget Year: 2021

Work Type: BB-Sctnlzng-Rclsrs+Recond+Rehab Trimming Required: ☑ In Service Date: 12/31/2021

Description: This segment addresses relocating the existing ROW [redacted]

[redacted]

[redacted]

Itemized Work List

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

Connecticut Light & Power
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Specific Project Proposal - Project #: CD01379

[redacted] - Relocation of Right of Way

Segment CD01379-01

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	24.00%
SubTotal:	$3,697,786
Contingency Amount:	$887,469
Estimate:	$4,585,255
Reimbursement:	$0
Net Amount:	**$4,585,255**

Description: ENG Estimate - Relocation of Line to [redacted]

Item Description	CU	$ / Per	Qty	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	16-ALL17	[redacted]		$17,548.00
OTHER OTHER Adder for Contractor Cost for Core Boring Pole Sets @ [redacted] pole	16-ALL14			$76,500.00
EQUIPMENT OH - Capacitor, any kVAR, any voltage [redacted] - 600 kVAR Cap. Bk.	16-OH52			$20,694.40
SECTIONALIZE OH - GOAB Switch [redacted] - 900 Amp. GOAB Disc. Sw. @ [redacted]	16-OH44			$164,531.20
OH WIRE OH - Neutral 1/0 Neutral @ [redacted]	16-OH31			$8,224.00
SECTIONALIZE OH - Cutouts or Arresters - 3ph [redacted] 100 k C/O's @ [redacted]	16-OH20			$2,315.20
OH WIRE OH - Reconductor Open Wire Secondary w/ Triplex 4/0 Qpx @ [redacted]	16-OH30			$3,200.00
EQUIPMENT OH - Regulators, 3-1ph - on RACK 438 Amp. Reg's on Rack @ [redacted]	16-OH48			$61,800.00
OH WIRE OH-Reconductor w/175 Mil Tree Wire-3ph- 556 kcmil 556 T. W. @ [redacted]	16-OH27			$478,792.00

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Specific Project Proposal - Project #: CD01379

[redacted] - Relocation of Right of Way

Segment		CD01379-01
OH WIRE OH-Reconductor w/175 Mil Tree Wire-3ph- 556 kcmil 556 T.W @ P# 2470 - 18[redacted]	16-OH27	$434,560.00
OH WIRE OH-Reconductor w/175 Mil Tree Wire-3ph- 556 kcmil 556 T.W. @ P# 69 - 73[redacted]	16-OH27	$41,904.00
OH WIRE OH - Line Extension - 3ph (556 kcmil) 556 T.W. Line Extension @[redacted]	16-OH34	$154,200.00
OH WIRE OH-Install Aerial Cable-existing poles (any gauge) 750 MCM Alum. Aerial Cable for nev[redacted]Ckt. on existing poles	16-OH36	$1,250,740.00
SECTIONALIZE OH-Vertical Disconnect Switches-600/900 amp 3-1ph 900 Amp. In-line Sw. @[redacted]	16-OH43	$20,566.40
TRAFFIC OH/DB/UG - Traffic Control - Police Officer Busy State Highway	16-ALL18	$90,000.00
OTHER OTHER Easement Costs & Permit Costs	16-ALL14	$15,000.00
TREE OH - Tree Trimming ETT Trimming @[redacted]	16-OH61	$85,000.00
SECTIONALIZE OH - Cutouts or Arresters - 3ph Inst 3 - 600 Amp. By-Pass Switch/Cutouts @ P# 858	16-OH20	$2,315.20
POLE OH - JUNCTION POLE - 3ph (CL&P custodian) Jct Pole[redacted]poles	16-OH14A	$81,832.80
SECTIONALIZE OH - Recloser - 3ph Midpoint Recloser[redacted]	16-OH38	$143,968.80
POLE OH - POLE - 3ph (CL&P custodian) Repl.[redacted]with 50/2 Poles	16-OH14	$32,732.00
POLE OH - POLE - 3ph (CL&P custodian) Repl.[redacted]with 50/2 Pole	16-OH14	$4,676.00

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Connecticut Light & Power
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Specific Project Proposal - Project #: CD01379

[redacted] - Relocation of Right of Way

Segment		CD01379-01
POLE OH - POLE - 3ph (CL&P custodian) Repl [redacted] with 50/2 Poles	16-OH14	$56,112.00
POLE OH - POLE - 3ph (CL&P custodian) Repl [redacted] 18 with 50/2 Poles	16-OH14	$130,928.00
POLE OH - POLE - 3ph (CL&P custodian) Repl [redacted] with 50/2 Poles	16-OH14	$196,392.00
POLE OH - POLE - 3ph (CL&P custodian) Repl [redacted] with 50/2 Poles	16-OH14	$18,704.00
OH WIRE OH - Remove circuit wire (1 phase) Rmv Existing Single Phase [redacted]	16-OH37	$6,480.00
OH WIRE OH - Remove circuit wire (3 phase) Rmv Existing Three Phase [redacted]	16-OH37A	$9,280.00
OH WIRE OH - Remove circuit wire (1 phase) Rmv. Existing Single Phase [redacted]	16-OH37	$16,104.00
SECTIONALIZE OH - Remove Recloser (any) Rmv. Radial Recloser [redacted]	16-OH42	$5,656.00
SECTIONALIZE OH - Cutouts or Arresters - 3ph Xfmr. Bk. C/O's @ P# [redacted]	16-OH20	$23,152.00
SECTIONALIZE OH - Cutouts or Arresters - 1ph Xfmr. C/O's	16-OH19	$43,878.40

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Specific Project Proposal - Project #: CD01379

[redacted] - Relocation of Right of Way

Segment CD01379-01

Associated / Impacted Devices

Status	Type / SysID	Street / Cross St	Structure / Town	Circuit	Map	Cust	Notes
Existing	[redacted]	SALISBURY RD HONEY HILL RD	215 NORTH CANAAN	[redacted]		3	
Existing		PARK AVE HIGH ST	189 NORTH CANAAN			0	
Existing		MAIN ST RAILROAD ST	2540 NORTH CANAAN			356	
Existing		CHURCH ST MAIN ST	2587 NORTH CANAAN			173	
Existing		HIGH ST CHURCH TER	2213 NORTH CANAAN			167	
Existing		MAIN ST GRANITE AVE	2470 NORTH CANAAN			1011	
Existing		N ELM ST MAIN ST	799 NORTH CANAAN			86	
Existing		N ELM ST DAISY HILL RD	845 NORTH CANAAN			78	
Existing		E MAIN ST LIME KILN RD	 NORTH CANAAN			1164	

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Specific Project Proposal - Project #: CD01379

[redacted] - Relocation of Right of Way

Segment CD01379-01

Reliability Projection

Title:

Outage Start Date: 02/24/2016 Outage End Date: 02/24/2020 Years History: 4.00

[redacted]

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01379

[redacted] - Relocation of Right of Way

Segment CD01379-02

General Information

Segment: 2 - Removal Existing Right of Way | Status: Prelim Design Approved

Segment Type: OH - OBSOLESCENCE | Town: NORTH CANAAN | Budget Year: 2022

Work Type: BB-Rehab | Trimming Required: ☐ | In Service Date: 12/31/2022

Description: [redacted]

Itemized Work List

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

Connecticut Light & Power
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Specific Project Proposal - Project #: CD01379

[redacted] Relocation of Right of Way

Segment CD01379-02

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	28.00%
SubTotal:	$1,019,406
Contingency Amount:	$285,434
Estimate:	$1,304,840
Reimbursement:	$0
Net Amount:	**$1,304,840**
Description:	Eng Estimate for Backbone Removal in Right of Way

Item Description	CU	$ / Per	Qty	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	16-ALL17	[redacted]		$14,038.40
OTHER OTHER 30% Adder for Contractor Costs	16-ALL14			$364,017.00
OTHER OTHER Environmental Costs	16-ALL14			$15,000.00
OTHER OTHER Historically Removal Costs = [redacted] @ [redacted] mile	16-ALL14			$553,283.00
EQUIPMENT OH - Remove Capacitor, any kVAR Rmv 1200 kVAR Cap. Bk. @ [redacted]	16-OH54			$1,800.00
SECTIONALIZE OH - Remove Recloser (any) Rmv existing Tie Recloser @ [redacted]	16-OH42			$5,656.00
SECTIONALIZE OH - Remove Recloser (any) Rmv Midpoint Recloser [redacted]	16-OH42			$5,656.00
SECTIONALIZE OH - Remove Recloser (any) Rmv Radial Recloser [redacted]	16-OH42			$5,656.00
EQUIPMENT OH - Remove Capacitor, any kVAR Rmv. 1200 kVAR Cap. Bk. [redacted]	16-OH54			$1,800.00

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Connecticut Light & Power
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Specific Project Proposal - Project #: CD01379

[redacted] - Relocation of Right of Way

Segment CD01379-02

OTHER OTHER Rmv. 3 - 438 Amp. Regulators with Rack [redacted]	16-ALL14	[redacted]	$20,000.00
OTHER OTHER Rmv. existing 3 Phase Xfmr Bk. @ [redacted]	16-ALL14		$2,500.00
OTHER OTHER Track Vehicle to Rmv. 10 Lattuce Towers & Primary Removal [redacted]	16-ALL14		$30,000.00

Associated / Impacted Devices

Status	Type / SysID	Street / Cross St	Structure / Town	Circuit	Map	Cust	Notes
Existing	[redacted]	SALISBURY RD HONEY HILL RD	215 NORTH CANAAN	[redacted]		3	
Existing		PARK AVE HIGH ST	189 NORTH CANAAN			0	
Existing		HIGH ST CHURCH TER	2213 NORTH CANAAN			167	

Reliability Projection

Title:

Outage Start Date: 02/24/2016 Outage End Date: 02/24/2020 Years History: 4.00

[redacted]

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01379

[redacted]elocation of Right of Way

Segment CD01379-04

General Information

Segment: 4 - Service Relocation to Underground @ P# 1 Status: Prelim Design Approved

Segment Type: RELOCATION - OH SPECIFIC Town: SALISBURY Budget Year: 2022

Work Type: LT-Rehab+Recond Trimming Required: ☑ In Service Date: 12/31/2022

Description [redacted]

Itemized Work List

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

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01379

[redacted] - Relocation of Right of Way

Segment CD01379-04

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	28.00%
SubTotal:	$67,134
Contingency Amount:	$18,798
Estimate:	$85,932
Reimbursement:	$0
Net Amount:	**$85,932**
Description:	ENG Estimate for Service Relocation to Underground @ P# 1278

Item Description	CU	$ / Per	Qty	Amount
DB CABLE DB/UG - #1 - 1/C (1ph) Al	16-UG111	[redacted]		$12,240.00
UG CABLE DB - Splice Box	16-UG154			$3,513.60
XF DB/UG - Padmount XF - 1ph 2 - Pad Xfmrs.	16-UG130			$6,294.40
CONDUIT DB - Conduit Installation 3" PVC	16-UG152			$35,840.00
POLE DB/UG - Riser - 1ph Primary Riser at P# 1278 to [redacted]	16-UG145			$7,370.40
POLE OH - POLE - 1ph (Telephone custodian) Repl. [redacted] with 40/2	16-OH11			$1,876.00

Associated / Impacted Devices

Status	Type / SysID	Street / Cross St	Structure / Town	Circuit	Map	Cust	Notes
Existing	[redacted]	SALISBURY RD HONEY HILL RD	225 NORTH CANAAN	[redacted]		159	
Existing		SALISBURY RD HONEY HILL RD	17 NORTH CANAAN			2	

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01379

[redacted] - Relocation of Right of Way

Segment CD01379-04

Reliability Projection

Title:

Outage Start Date: 02/21/2016 Outage End Date: 02/21/2020 Years History: 4.00

[redacted]

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01379

[redacted] Relocation of Right of Way

Segment CD01379-06

General Information

Segment: 6 - Three Phase Line Extension on High Stree
Status: Prelim Design Approved

Segment Type: LOAD/CAPACITY
Town: NORTH CANAAN
Budget Year: 2022

Work Type: BB-Rehab+Recond
Trimming Required: ☑
In Service Date: 12/31/2022

Description: [redacted]

Itemized Work List

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

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01379

[redacted] - Relocation of Right of Way

Segment CD01379-06

Estimate

Preliminary Estimate Summary

Revision Number:	0
Contingency:	28.00%
SubTotal:	$148,800
Contingency Amount:	$41,664
Estimate:	$190,464
Reimbursement:	$0
Net Amount:	**$190,464**

Description: ENG Estimate for Line Extension on[redacted]

Item Description	CU	$ / Per	Qty	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	16-ALL17	[redacted]		$3,509.60
TRAFFIC OH/DB/UG - Traffic Control - Flagger	16-ALL19			$4,000.00
TREE OH - Tree Trimming	16-OH61			$3,000.00
TREE OH - Trimming for Taller Pole	16-OH64			$4,500.00
POLE OH - JUNCTION POLE - 3ph (CL&P custodian) [redacted] JCT Poles @[redacted]	16-OH14A			$23,380.80
SECTIONALIZE OH - Cutouts or Arresters - 3ph [redacted] - 600 Amp. Soid Cutouts @[redacted]	16-OH20			$2,315.20
POLE OH - POLE - 3ph (CL&P custodian) 50% of Total Poles 45/2	16-OH14			$18,704.00
OH WIRE OH - Reconductor w/ 175 Mil Tree Wire - 3ph -1/0 Inst. 1265' of 1/0 Tree Wire at[redacted]	16-OH26a			$77,924.00
OH WIRE OH - Neutral Inst. 160' of 1/0- ACSR Neutral @[redacted]	16-OH31			$1,024.00

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Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01379

[redacted] Relocation of Right of Way

Segment CD01379-06

SECTIONALIZE OH - Cutouts or Arresters - 1ph Xfmr C/O's @ [redacted]	16-OH19	[redacted]	$4,113.60
XF OH - OH XF - 1ph Xfmr. @ [redacted]	16-OH45		$6,328.80

Associated / Impacted Devices

Status	Type / SysID	Street / Cross St	Structure / Town	Circuit	Map	Cust	Notes
Existing	[redacted]	SALISBURY RD HIGH ST	49 NORTH CANAAN	[redacted]		41	

Reliability Projection

Title:

Outage Start Date: 05/29/2016 Outage End Date: 05/29/2020 Years History: 4.00

[redacted]

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01379

[redacted] Relocation of Right of Way

Design Alternative CD01379-07

General Information

Segment: 7 - Three Phase Extension on [redacted] @ P Status: Prelim Design Submitted

Segment Type: LOAD/CAPACITY Town: NORTH CANAAN Budget Year: 2022

Work Type: LT-Rehab+Recond Trimming Required: ☑ In Service Date: 12/31/2022

Description: [redacted]

Itemized Work List

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

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Specific Project Proposal - Project #: CD01379

[redacted] Relocation of Right of Way

Design Alternative CD01379-07

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	24.00%
SubTotal:	$612,108
Contingency Amount:	$146,906
Estimate:	$759,014
Reimbursement:	$0
Net Amount:	**$759,014**
Description:	ENG Estimate fo[redacted] Three Phase Extension on [redacted] and Single phase in ROW

Item Description	CU	$ / Per	Qty	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	16-ALL17	[redacted]		$14,038.40
TRAFFIC OH/DB/UG - Traffic Control - Flagger	16-ALL19			$4,000.00
POLE OH - JUNCTION POLE - 3ph (CL&P custodian)	16-OH14A			$11,690.40
SECTIONALIZE OH - Cutouts or Arresters - 3ph	16-OH20			$6,945.60
OH WIRE OH - Ampact Connectors - 1ph (2 Ampacts)	16-OH21			$13,712.00
OH WIRE OH - Ampact Connectors - 3ph (6 Ampacts)	16-OH22			$8,652.00
OH WIRE OH - Neutral	16-OH31			$19,264.00
XF OH - OH XF - 1ph	16-OH45			$14,767.20

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[redacted] Relocation of Right of Way

Design Alternative		CD01379-07
XF OH - OH XF's - bank of 3-1ph	16-OH46	$5,019.20
TREE OH - Trimming for Taller Pole	16-OH64	$14,500.00
OH WIRE OH-Reconductor w/175 Mil Tree Wire-1ph (any gauge) [redacted]Ph. - 1/0 ACSR Tree Wire @ [redacted]	16-OH25	$72,240.00
OH WIRE OH - Reconductor w/ 175 Mil Tree Wire - 3ph -1/0 [redacted] 1/0 ACSR Tree Wire @ [redacted]	16-OH26a	$67,760.00
POLE OH - POLE - 3ph (CL&P custodian) [redacted] 45/1 CCA Poles [redacted] 45/1 Penta Poles [redacted] 40/1 Penta Poles	16-OH14	$65,464.00
SECTIONALIZE OH - Cutouts or Arresters - 1ph [redacted]Xfmr. C/O's [redacted]C/O's @ Taps [redacted] 100K Tripsaver C/O @ P# [redacted]	16-OH19	$13,712.00
OTHER OTHER Contractor Adder @ 30%	16-ALL14	$165,965.00
OTHER OTHER Cost of Track Vehicle to Repl [redacted] Penta Poles @ [redacted] ea	16-ALL14	$87,000.00
OTHER OTHER Cost to Core Bore Pole Holes @ [redacted] ea	16-ALL14	$21,750.00
POLE OH - POLE - 1ph (Telephone custodian) P# 763 - 619	16-OH11	$5,628.00

Associated / Impacted Devices

Status	Type / SysID	Street / Cross St	Structure / Town	Circuit	Map	Cust	Notes
Existing	[redacted]	SALISBURY RD BOND ST	36 NORTH CANAAN	[redacted]		19	
Existing		HIGH ST CHURCH TER	2213 NORTH CANAAN			167	

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[redacted] Relocation of Right of Way

Design Alternative CD01379-07

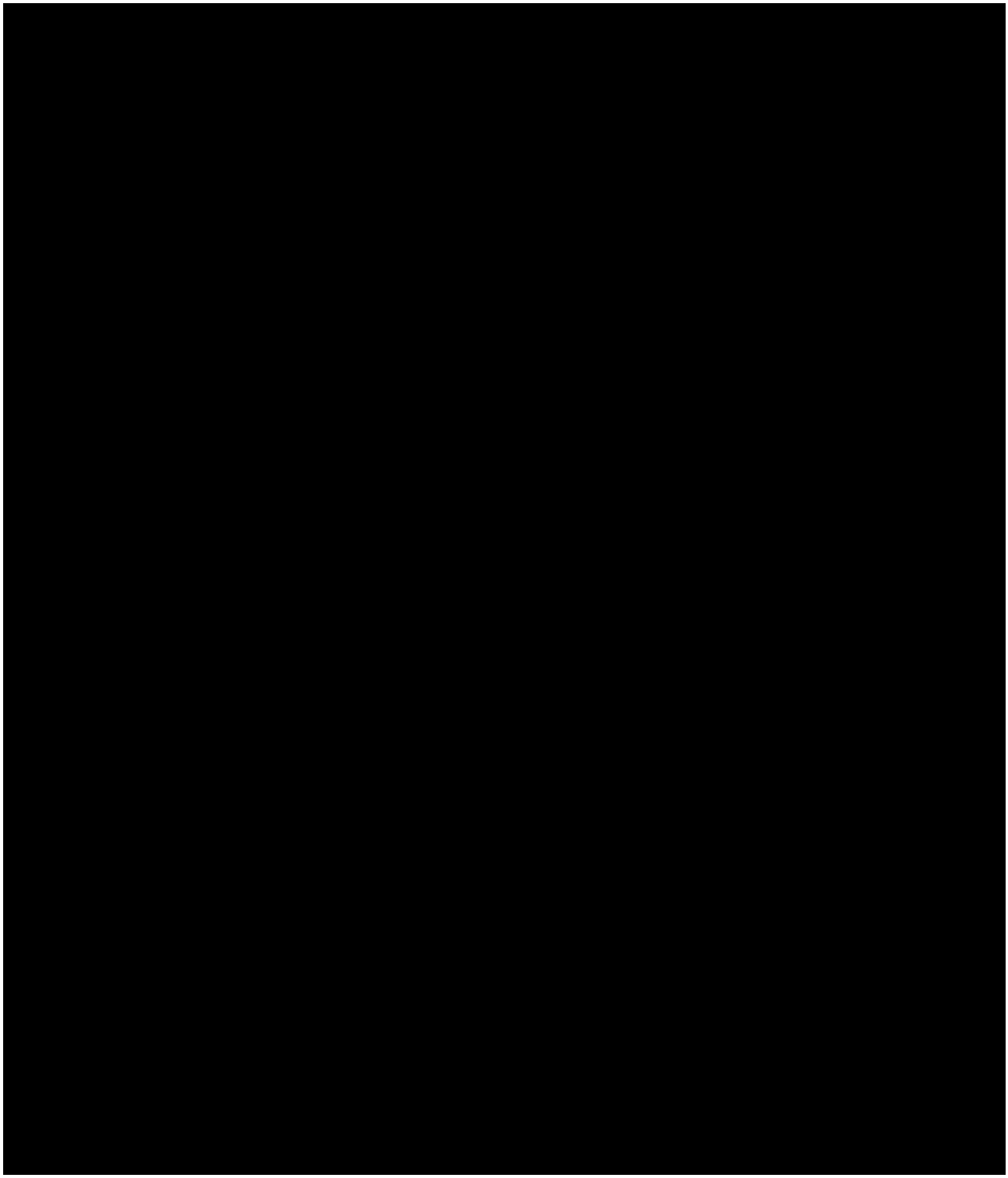
Reliability Projection

Title:

Outage Start Date: 10/25/2017 Outage End Date: 10/25/2021 Years History: 4.00

[redacted]

B. Geographic Map

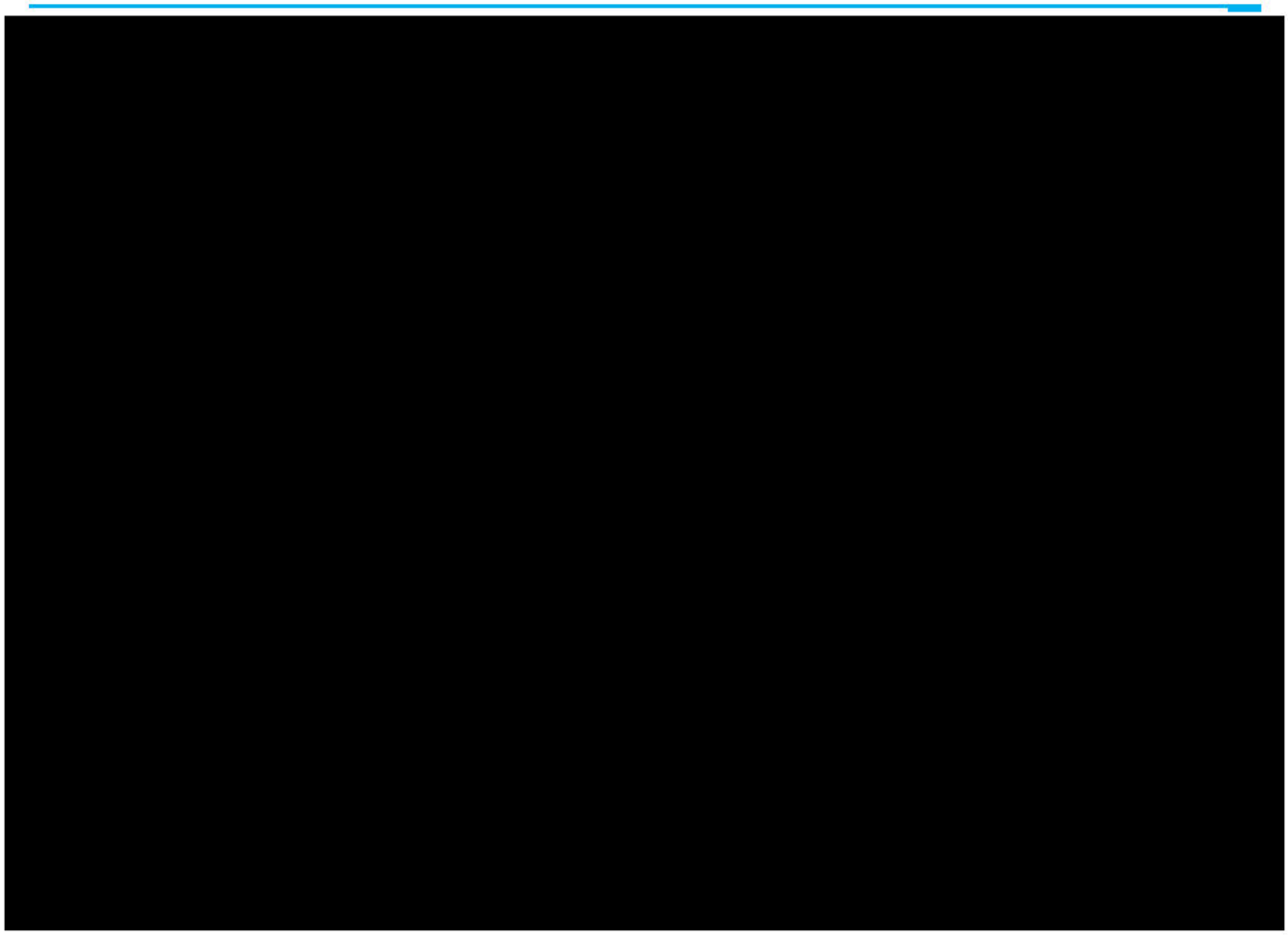


C. Project One-Line









D. [redacted] ROW Photos























Operations Project Authorization Form

Date Prepared: 4/15/2021	**Project Title: [redacted] - Relocation of Right of Way**
Company: Eversource CT	**Project ID Number: CD01379**
Organization: Distribution Electric	**Class of Plant: Distribution**
Project Initiator: [redacted]	**Project Category: Line**
Project Manager: [redacted]	**Project Type: Right of Way Lines**
Project Sponsor: [redacted]	**Project Purpose: Relocation**
Estimated in service date: 12/31/2021, 12/31/2022	**If Transmission Project: PTF? N/A**
Eng. /Constr. Resources Budgeted? No	**Capital Investment Part of Original Operating Plan?**
Authorization Type: Preliminary Funding	**O&M Expenses Part of the Original Operating Plan?**
Total Request: $6,548,593	

Financial Requirements:

Project Authorization
ERM: _____

FP&A: _____

Executive Summary:

[redacted]

[redacted]

The associated CD01536 [redacted]

supply [redacted] and [redacted] for [redacted] or [redacted].

[redacted]

[redacted]), in project CD01379 offers the opportunity to take advantage of efficient use of our construction work force.

The [redacted] at a cost of $8.35 M. The total cost of this project is $6,585,255. The first segment cost of this project is $4.5M with construction beginning 6/2021 and with an in-service date of 05/30/2022. The cost of the second, fourth and fifth segments of this project s $ 2.0M with in-service date 12/31/2022.

Project Costs Summary:
Note: Dollar values are in thousands

	Prior Authorized	2021	2022	2023+	Totals
Capital Additions - Direct	$0	$1,184,855	$2,300,012	$0	$3,484,866
Less Customer Contribution	$0	$0	$0	$0	$0
Removals net of Salvage ___%	$0	$277,102	$537,904	$0	$815,007
Total - Direct Spending	$0	$1,461,957	$2,837,916	$0	$4,299,873
Capital Additions - Indirect	$0	$646,208	$1,254,404	$0	$1,900,613
Subtotal Request	$0	$2,108,165	$4,092,320	$0	$6,200,486
AFUDC	$0	$41,968	$81,468	$0	$123,437
Total Capital Request	$0	$2,150,134	$4,173,789	$0	$6,323,922
O&M	$0	$76,388	$148,283	$0	$224,671
Total Request	$0	$2,226,522	$4,322,071	$0	$6,548,593

Financial Evaluations:

Direct Capital Costs	2021	2022	2023+	Total
Straight Time Labor	$40,474	$78,568	$0	$119,042
Overtime Labor	$8,449	$16,400	$0	$24,849
Outside Services	$1,205,948	$2,340,958	$0	$3,546,905
Materials	$204,492	$396,955	$0	$601,446
Other, including contingency amounts (describe)	$2,594	$5,036	$0	$7,630
Total Direct Costs	**$1,461,957**	**$2,837,916**	**$0**	**$4,299,873**

Indirect Capital Costs	Year 1	Year 2	Year 3+	Total
Indirects/Overheads (including benefits)	$646,208	$1,254,404	$0	$1,900,613
Capitalized interest or AFUDC, if any	$40,501	$78,619	$0	$119,120
Total Indirect Costs	**$1,414,196**	**$605,538**	**$0**	**$2,019,733**
Total Capital Costs	**$2,148,666**	**$4,170,940**	**$0**	**$6,319,606**
Less Total Customer Contribution	**$0**	**$0**	**$0**	**$0**
Total Capital Project Costs	**$2,148,666**	**$4,170,940**	**$0**	**$6,319,606**
Total O&M Project Costs	**$77,856**	**$151,132**	**$0**	**$228,987**
Total Project Cost	**$2,226,522**	**$4,322,071**	**$ -**	**$6,548,593**

Technical Justification:

Project Need Statement

A portion of the [redacted]

The origin of the pole line varies, some structures are as old as 1928 and with the majority of the structures dated during the 50's - 60's with few exceptions. [redacted]

Project Objectives

In addition, [redacted]

Project Scope

Our first proposal originates at the existing [redacted]

[redacted]

[redacted]

We would need permission of the homeowner to implement this proposal and would provide the installation at no cost to the customer. If we do not obtain the customers permission regarding this relocation then, we will be obligated to maintain service from an overhead supply from the existing right of way.

[redacted]

Major Material:

93 – 50/2 Poles
8 – 55/1 Poles
23 – 40/2 Penta Poles
13,595' - 556 AAC Tree Wire
13,595' – 1/0 ACSR Neutral
13,595' – 750 MCM Aluminum Aerial Cable
7,290' – 1/0 ACSR Tree Wire
3,655' – 1/0 Neutral
3 – 15 kV NOVA Reclosers
3 – 438 Amp. Regulators
8 – 25kV 900 Amp. GOAB
2 – Tripsaver C/O's
73 – 100 Amp. C/O's
800' – 3" PVC Conduit
850' - #1 Al 25 kV EPR DB Cable
2 – 25 kVA Pad Xfmrs.

Background / Justification:

A portion of the [redacted]

Business Process and / or Technical Improvements:

[redacted]

Alternative Considered with Cost Estimates:

[redacted]

[redacted] at a cost of $ 8.35 M.

Project Option Comparison

Design Criteria	Option	
	1 – Relocation of ROW to Roadside Location	2 – Rebuild in existing ROW Location
Eliminates Inaccessible Problem	X	
Eliminates Structures in Wetlands Area	X	
Addresses Safety Concerns of Antiquated Structures	X	X
Eliminates Long Duration Outages	X	
Eliminates Specialized Equipment	X	
Eliminates the need for permission by Railroad	X	
Provides additional Capacity to Circuit	X	
Provides alternate route for additional circuits	X	
Cost	$4.58M	$8.35M
Cost / CM Saved	$351.17/CM	$1066.42/CM
Cost / CI Saved	$30,609.18/CI	$89,240.65/CI
Preferred option	X	

Project Schedule:

Milestone/Phase Name	Estimated Completion Date
Preliminary Approval	5/31/2020
Detailed Design	9/30/2020
Environmental Permits	12/31/2020
DOT Permits	1/31/2021

Milestone/Phase Name	Estimated Completion Date
Settings Requested	5/31/2021
Construction Start Date	8/31/2021
Construction End Date	12/31/2021
ROW Removal Start Date	6/31/2022
ROW Removal End Date	12/31/2022

Regulatory Approvals:

The [redacted]) will require CDOT Permit. [redacted], it will be necessary to obtain permission from the railroad to work at the location of the lattice towers. It will also require permission from the [redacted] to grant us access to the towers even though an easement is in place.

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.
Customer Permission / Siting Council / Municipal approvals	2022	Medium	Design to minimize customer impact. Project Preplanning and customer/community outreach
Internal construction resources not available to perform the work.	2022	High	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.	2022	High	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.

Storm delays	2022	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2022	Low	Schedule work to minimize system abnormal time. Most of this work will require system to be abnormal for any extended period of time.

Attachments:

