EVERSOURCE

Project Approval Form

Project Title: [redacted]	Project Number: CD02260
Date Prepared: 02/01/2024	Company: Eversource CT
Organization: Distribution Engineering	Project Category: UG CABLE & EQUIPMNT REPLACEMNT
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: 12/31/2024	
Total Capital Request: $247.0K	Authorization Type: Full Funding

1. Executive Summary

[redacted]

[redacted]

[redacted]

The total capital cost of this proposal is $246,987 for both segments in 2024. This project cost will be allocated to the associate substation project CS00533 and has two in-service dates; the first in-service date is 4/30/2024 for the interim relocation and a second in-service date is 12/31/2024 for the permanent installation.

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Project Approval Form

- Division: Western
- District: Falls Village
- City: Salisbury, Sharon

Initial Funding Estimate vs. Bid Document:

The bid amount of $246,987 was 18% higher in cost as compared to the partial funding estimate amount of $210,000 for the [redacted]ct. The overall difference between partial funding estimate as compared to the bid document equates to an over expenditure of $36,987 with no change in scope. To summarize this difference between the partial funding estimate as compared to the bid document equates to the difference in the cost of labor for this project.

Project Cost Summary:

Note: Dollar values are in thousands.

Capital Costs	Year 2024	Year 2025	Year 2026+	Total
Direct Capital Costs				
Internal Labor and Construction Equipment	33.6	0.0	0.0	33.6
Outside Services	4.7	0.0	0.0	4.7
Materials	59.5	0.0	0.0	59.5
Removals	26.8	0.0	0.0	26.8
Risk and Contingency	22.5	0.0	0.0	22.5
Other	0.0	0.0	0.0	0.0
Subtotal – Direct Costs	147.0	0.0	0.0	147.0
Indirect Capital Costs				
Indirect/Overheads (including benefits)	100.0	0.0	0.0	100.0
Capitalized interest or AFUDC, if any	0.0	0.0	0.0	0.0
Subtotal – Indirect Costs	100.0	0.0	0.0	100.0
Total Gross Capital Costs (Gross)	**247.0**	0.0	0.0	**247.0**
Project Cost (Net of Reimbursement)	0	0.0	0.0	0
Total Gross Capital Costs (Net)	**247**	0.0	0.0	**247**

2. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

[redacted]

b. Project Need

[redacted]

c. Project Scope

[redacted]

[redacted]

Major Material:

200' – 750 MCM CU EPR 15 kV UG Cable
400' – 1000 MCM CU EPR 15 kV UG Cable
6 – Fault Indicators

3. Alternatives Considered:

The alternative to the preferred option is to utilize the existing circuit ties. [redacted]

Project Option Comparison

	Option
[redacted]	

[redacted]

Capital Cost	$247.0K	$0
Expense Cost	$7.7K	$0
Total Cost	$254.7K	$0
Total Cost / CM Saved	$13.15/CM	$0/CM
Total Cost / CI Saved	$77,181.82/CI	$0/CI
Preferred option	X	

Commented [TL1]: @Maule, David A The capital cost is $247K (summary table and Financial table above). Could you please update the Option table to reflect the applicable financial $? Thanks!

4. Project Schedule

Add any additional milestones that are pertinent to the project

Milestone/Phase Name	Estimated Date
Partial Approval	6/29/2023
100% Detailed Engineering Completion	12/28/2023
Fully Funded	1/18/2024
Construction Start	3/1/2024
In Service Date	12/31/2024

Commented [TL2]: IPS has In-service date 6/1/2024@Maule, David A

5. Regulatory Decisions

6. Codes and Standards

7. Risk and Contingencies :

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2024	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	2024	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach.
Internal construction resources not available to perform the work.	2024	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.	2024	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2024	Medium	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2024	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2024	Low	Schedule work to minimize system abnormal time. Install temporary bypasses/equipment if system will be abnormal for extended periods.
Technological risks involving integration of new technology	2024	Low	Before use of new technology ensure support of standards and manufacturer. Schedule project to accommodate for extra time or ensure new technology is not on the critical path.

Wetlands / Environmentally sensitive area	2024	Low	Use of mats and specialty equipment, only work during certain times of the year.

8. References

References
1. 1. CD00533 – [redacted] Upgrd-IFR
2.

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

Attachment	Included in Submittal?
A. Partial PAF Document	*YES*
B. Cost Estimate	*YES*
C. CD02260 [redacted] and Mobile Supply Substation Diagram	*NO*
D. Geographic Map	*NO*
E. CD02260 Preferred One-Line	*NO*
F. CD02260 Alternate One-Line	*NO*
G. Load Summary	*YES*

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Project Approval Form

A. Partial PAF Document:

Project Title: [redacted]	**Project Number: CD02260**
Date Prepared: 06/29/2023	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** UG CABLE & EQUIPMNT REPLACEMNT
Project Initiator: [redacted]	**Project Type:** Specific
Initiating Organization: Distribution	**Capital Investment part of original Op Plan: No**
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: 5/31/2024	
Total Capital Request: $209.6K	**Authorization Type:** Partial Funding

1. Executive Summary

[redacted]

The total cost of this proposal is $216,178 however, this project cost will be divided over a two-year period of time $90,652 for the third segment in 2023 and $125,526 for the fourth segment in 2024. This project cost will be allocated to the associate substation project CS00533 and has two in-service dates; the first in-service date is 11/30/2023 for the interim relocation and a second in-service date is 5/31/2024 for the permanent installation.

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	2023	2024	2025+	Total
Direct Capital Costs				
Internal Labor and Construction Equipment	4.5	6.3	0.0	10.8
Outside Services	21.5	29.8	0.0	51.4
Materials	20.5	28.3	0.0	48.8
Removals	14.8	20.5	0.0	35.3
Risk and Contingency	0.4	0.5	0.0	0.9
Other	0.0	0.0	0.0	0.0
Subtotal – Direct Costs	**61.7**	**85.5**	**0.0**	**147.2**
Indirect Capital Costs	**2023**	**2024**	**2025+**	**Total**
Indirect/Overheads (including benefits)	23.5	32.5	0.0	55.9
Capitalized interest or AFUDC, if any	2.7	3.8	0.0	6.5
Subtotal – Indirect Costs	**26.2**	**36.2**	**0.0**	**62.4**
Total Gross Capital Costs	**87.9**	**121.7**	**0.0**	**209.6**
Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**
Total Net Capital Project Costs	**87.9**	**121.7**	**0.0**	**209.6**

Explain unique payment provisions, if applicable:

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

[redacted]

[redacted]

b. Project Need

[redacted]

c. Project Scope

[redacted]

[redacted]

Major Material:

200' – 750 MCM CU EPR 15 kV UG Cable
400' – 1000 MCM CU EPR 15 kV UG Cable
6 – Fault Indicators

4. Alternatives Considered

Project Option Comparison

[redacted]

[redacted]

Capital Cost	$209.6	$0
Expense Cost	$6.4k	$0
Total Cost	$216K	$0
Total Cost / CM Saved	$58.84/CM	$0/CM
Total Cost / CI Saved	$851.10/CI	$0/CI
Preferred option	X	

5. Project Schedule

Add any additional milestones that are pertinent to the project

Milestone/Phase Name	Estimated Date
100% Engineering Completion	6/1/2023
Detailed Design	7/1/2023
Construction Start	9/30/2023
Testing/Commissioning	10/31/2023
In Service Date – Interim Service	11/30/2023
In Service Date – Permanent Service	5/31/2024

6. Risk and Contingencies

Contingencies:

Risk Mitigation:

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2024	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	2024	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach.
Internal construction resources not available to perform the work.	2024	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.	2024	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2024	Medium	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2024	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2024	Low	Schedule work to minimize system abnormal time. Install temporary bypasses/equipment if system will be abnormal for extended periods.

Technological risks involving integration of new technology	2024	Low	Before use of new technology ensure support of standards and manufacturer. Schedule project to accommodate for extra time or ensure new technology is not on the critical path.
Wetlands / Environmentally sensitive area	2024	Low	Use of mats and specialty equipment, only work during certain times of the year.

7. References

References
1. CD00533 – [redacted] Upgrd-IFR
2. CD02260 – [redacted] – Temporary Feeder Relocation

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

Attachment	Included in Submittal?
A. Cost Estimate	*YES*
B. CD02260 [redacted] and Mobile Supply Substation Diagram	*NO*
C. Geographic Map	*NO*
D. CD02260 Preferred One-Line	*NO*
E. CD02260 Alternate One-Line	*NO*
F. Load Summary	*YES*

A.) Cost Estimate

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Specific Project Proposal - Project #: CD02260 [redacted]

Work Classification

Category: Line
Type: REL1
Type Desc: UG CABLE & EQUIPMNT REPLACEMNT
Work Type:

Ownership / Management

AWC: Falls Village
Statewide: No
Owner: [redacted]
Manager:

Project Information

Status: Draft
SPS #:
AIS Score:
Associated Projects:
Assignment ID:
Patrol Find ID:

Budget Summary - Preferred Option

Preferred Options

2023

ID	Title	Status	Rev #	Contingency	Expenditure Amount	Net Estimate
3	[redacted]	Prelim	0	20%	$90,652	$90,652
				2023 Total:	$90,652	$90,652

2024

ID	Title	Status	Rev #	Contingency	Expenditure Amount	Net Estimate
4	[redacted]	Prelim	0	24%	$125,526	$125,526
				2024 Total:	$125,526	$125,526
				Total Project:	$216,178	$216,178

Asset & Investment Management System 6/19/2023 Page 1 of 14

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD02260 [redacted]

Project Option Summary

ID	Description	Segments	Preliminary Estimate	Construction Estimate	Variance	IEEE $/CMS	All (w/Storm)	Prfrd
O1	Preferred Options	3,4	$216,178	$0	100%	$72.19	$58.84	☑

Segments

ID	Title	Preliminary Estimate	Construction Estimate	Variance	IEEE $/CMS	All (w/Storm)
1	Spare Segment	$0			$0.00	$0.00
2	Spare Segment	$0			$0.00	$0.00
3	[redacted]	$90,652			$19.92	$9.28
4		$125,526			$28.81	$13.10

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Project Approval Form

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD02260 [redacted]

Background / Scope

Issue:

[redacted]

Project Description:

[redacted]

Other Considerations:

Revision / ACT Comments:

If we don't do this project, what will happen?

[redacted]

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD02260 [redacted]

Environmental

Water Pollution: No Change Soil Contamination: No Change Natural Habitats: No Change

Alternatives considered based on Environmental Impact or Description of Aspects Oil Spill Risks Considered? ☐

Safety Concerns With This Project? ☐

Explain:

External Stakeholders

Customer Impact / Involvement

Cust. Impacted: [redacted]
Crit. Cust. Impacted:
Approx. Pole Count (NU):
Approx. Pole Count (Other):
Adjoining Property Owner Consent Required: ☐
Town Hearing Required: ☐
Other Utility Pole Custodian Area: ☐
Easement Required: ☐
State Highway Permit Required: ☐

Relocation / New Service

New Srvc. Contact:
Requestor Type:
Customer Type:
State Highway Project #:
Request Number:
Route #:

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Project Approval Form

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD02260 [redacted]

Design Alternative CD02260-01

General Information

Segment: 1 - Spare Segment
Status: Draft
Segment Type: LOAD/CAPACITY
Town: SALISBURY
Budget Year: 2023
Work Type: BB-Reconductoring
Trimming Required: ☐
In Service Date: 6/19/2023
Description:

Itemized Work List

ID	Major Grid	Minor Grid	Description of Work to be Performed

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Project Approval Form

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD02260 [redacted]

Design Alternative CD02260-01

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	24.00%
SubTotal:	$0
Contingency Amount:	$0
Estimate:	$0
Reimbursement:	$0
Net Amount:	$0

Description:

Item Description	CU	$ / Per	Qty	Amount

Associated / Impacted Devices

Status	Type / SysID	Street / Cross St	Structure / Town	Circuit	Map	Cust	Notes

Reliability Projection

Title:

Outage Start Date: 5/22/2019 Outage End Date: 5/22/2023 Years History: 4.00

[redacted]

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Project Approval Form

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD02260 [redacted]

Design Alternative CD02260-02

General Information

Segment: 2 - Spare Segment | Status: Draft
Segment Type: LOAD/CAPACITY | Town: SALISBURY | Budget Year: 2023
Work Type: BB-Reconductoring | Trimming Required: ☐ | In Service Date: 6/19/2023
Description: I

Itemized Work List

ID	Major Grid	Minor Grid	Description of Work to be Performed

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Project Approval Form

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD02260

[redacted]

Design Alternative CD02260-02

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	20.00%
SubTotal:	$0
Contingency Amount:	$0
Estimate:	$0
Reimbursement:	$0
Net Amount:	$0

Description:

Item Description	CU	$ / Per	Qty	Amount

Associated / Impacted Devices

Status	Type / SysID	Street / Cross St	Structure / Town	Circuit	Map	Cust	Notes

Reliability Projection

Title:

Outage Start Date: 5/23/2019 Outage End Date: 5/23/2023 Years History: 4.00

[redacted]

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Project Approval Form

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD02260 [redacted]

Design Alternative CD02260-03

General Information

Segment: [redacted] Status: Prelim Design Submitted

Segment Type: LOAD/CAPACITY Town: SALISBURY Budget Year: 2023

Work Type: BB-Reconductoring Trimming Required: ☐ In Service Date: 11/30/2023

Description: [redacted]

Itemized Work List

ID	Major Grid	Minor Grid	Description of Work to be Performed

EVERSOURCE

Project Approval Form

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD02260 [redacted]

Design Alternative CD02260-03

Estimate

Preliminary Estimate Summary

Revision Number:	0
Contingency:	20.00%
SubTotal:	$75,543
Contingency Amount:	$15,109
Estimate:	$90,652
Reimbursement:	$0
Net Amount:	**$90,652**

Description: ENG Estimate for Feeder Relocation - 21J-1X and Mobile Supply

Item Description	CU	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	23-ALL17	$18,249.92
OTHER OTHER 30% Ajustment Adder	23-ALL14	$17,433.00
OTHER OTHER 6 - Fault Indicators	23-ALL14	$3,000.00
UG CABLE DB/UG - 750/1000 - 3-1/C (3ph) Cu Inst 200' - 750 MCM CU 15kV EPR UG Feeder Cable	23-UG114B	$24,960.00
OTHER OTHER Manhole Cleaning	23-ALL14	$1,500.00
UG CABLE UG - Cable Removal - all cables Rmv. 400' of existing feeder cable	23-UG117	$10,400.00

Associated / Impacted Devices

Status	Type / SysID	Street / Cross St	Structure / Town	Circuit	Map	Cust	Notes
Existing	[redacted]						
Existing							

Asset & Investment Management System

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Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD02260 [redacted]

Design Alternative CD02260-03

Reliability Projection

Title:

Outage Start Date: 6/19/2019 Outage End Date: 6/19/2023 Years History: 4.00

[redacted]

EVERSOURCE

Project Approval Form

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD02260 [redacted]

Design Alternative CD02260-04

General Information

Segment [redacted] Status: Prelim Design Submitted

Segment Type: LOAD/CAPACITY Town: SALISBURY Budget Year: 2024

Work Type: BB-Reconductoring Trimming Required: ☐ In Service Date: 5/31/2024

Description: [redacted]

Itemized Work List

ID	Major Grid	Minor Grid	Description of Work to be Performed

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Project Approval Form

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD02260 [redacted]

Design Alternative CD02260-04

Estimate

Preliminary Estimate Summary

Revision Number:	0
Contingency:	24.00%
SubTotal:	$101,231
Contingency Amount:	$24,295
Estimate:	$125,526
Reimbursement:	$0
Net Amount:	**$125,526**

Description: ENG Estimate for Permanent Feeder Cables

Item Description	CU	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	23-ALL17	$18,249.92
OTHER OTHER 30% Contractor Adder	23-ALL14	$23,361.00
OTHER OTHER 6 - Fault Indicators	23-ALL14	$3,000.00
UG CABLE DB/UG - 750/1000 - 3-1/C (3ph) Cu Inst 400' - 1000 MCM CU 15kV EPR UG Perm. Feeder Cable	23-UG114B	$49,920.00
OTHER OTHER Manhole Cleaning	23-ALL14	$1,500.00
UG CABLE UG - Cable Removal - all cables Rmv 200' of temp. cable	23-UG117	$5,200.00

Associated / Impacted Devices

Status	Type / SysID	Street / Cross St	Structure / Town	Circuit	Map	Cust	Notes
Existing	[redacted]						
Existing							

Asset & Investment Management System 6/19/2023 Page 13 of 14

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

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Project Approval Form

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD02260 [redacted]

Design Alternative CD02260-04

Reliability Projection

Title:

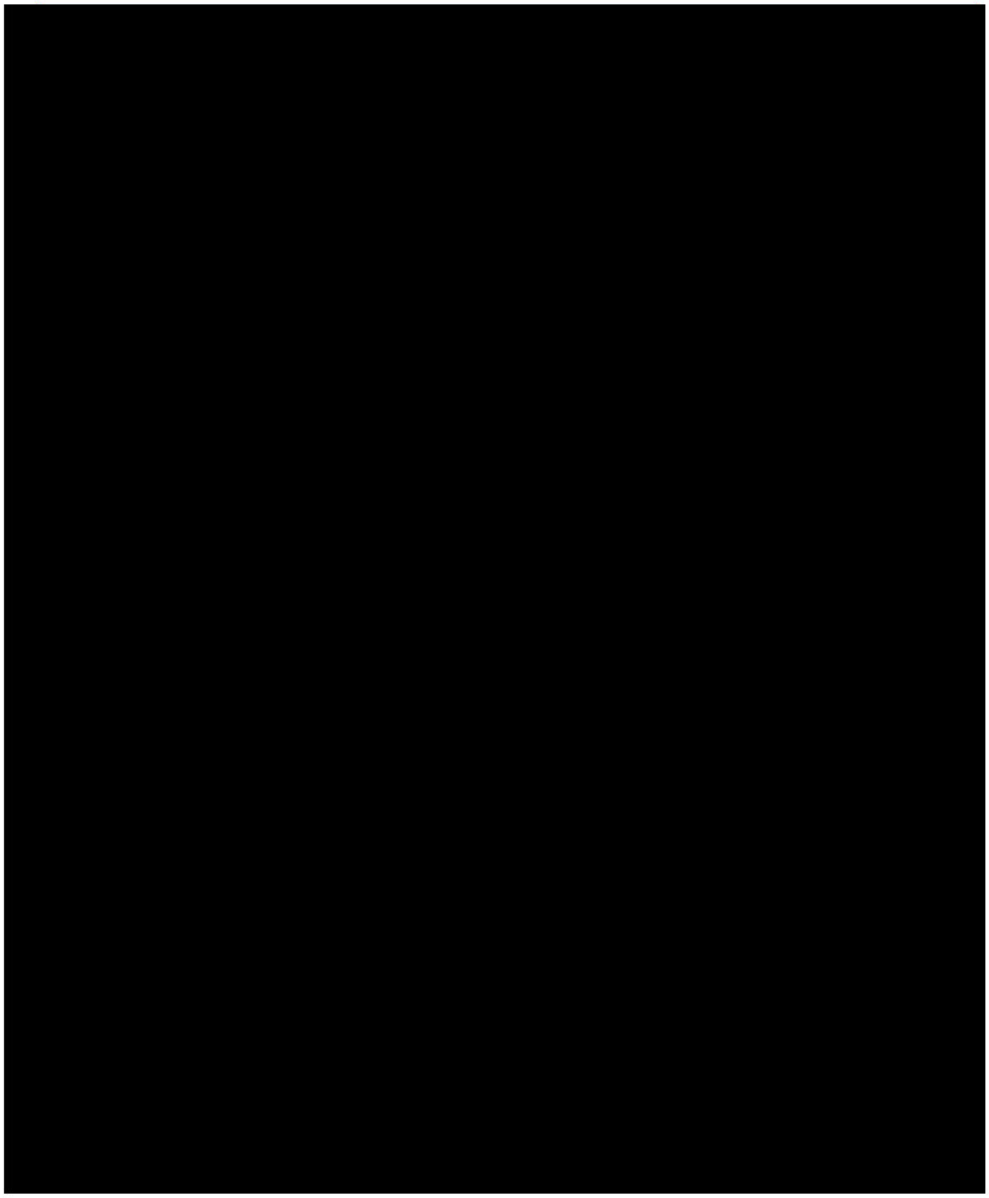
Outage Start Date: 6/19/2019 Outage End Date: 6/19/2023 Years History: 4.00

[redacted]

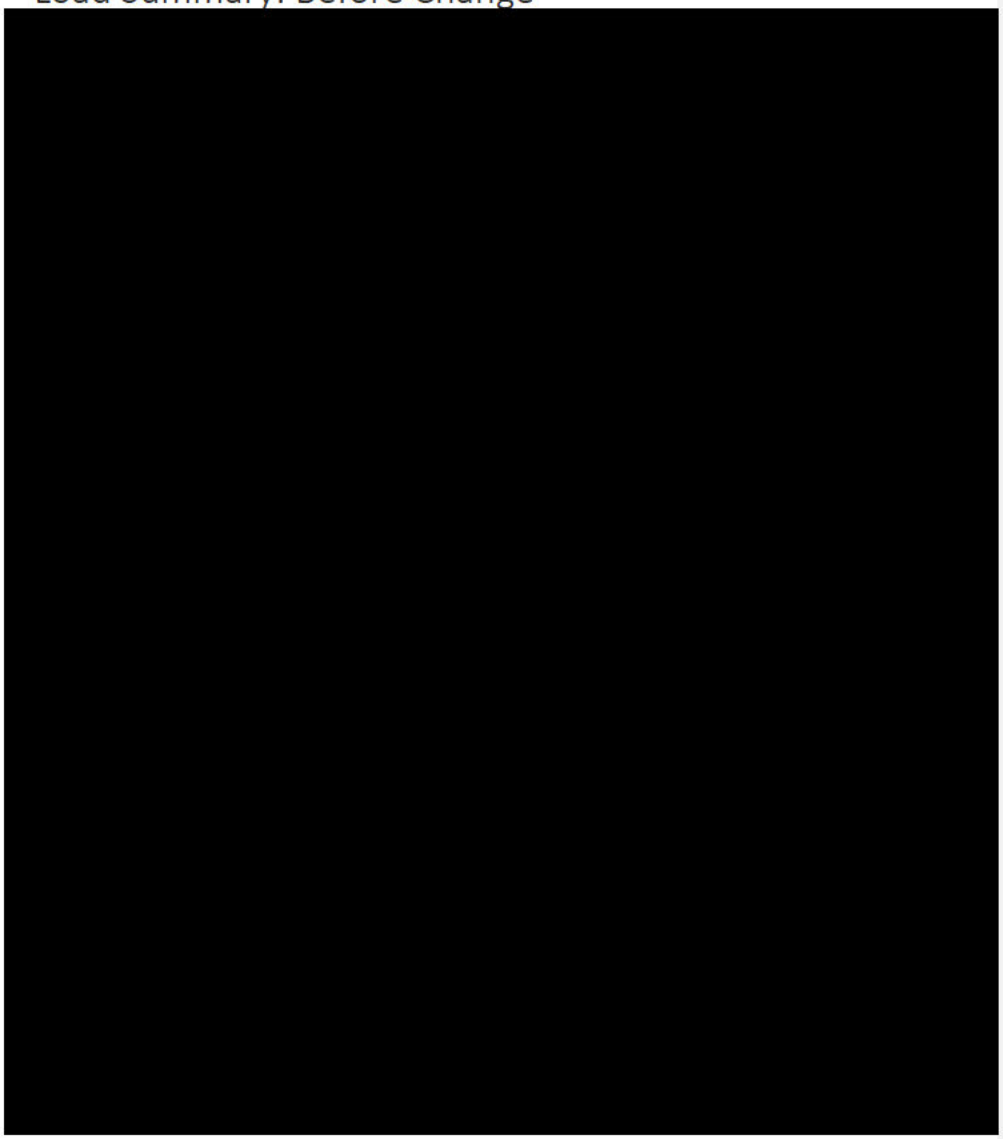
F.) Load Summary: Before Change

[redacted]

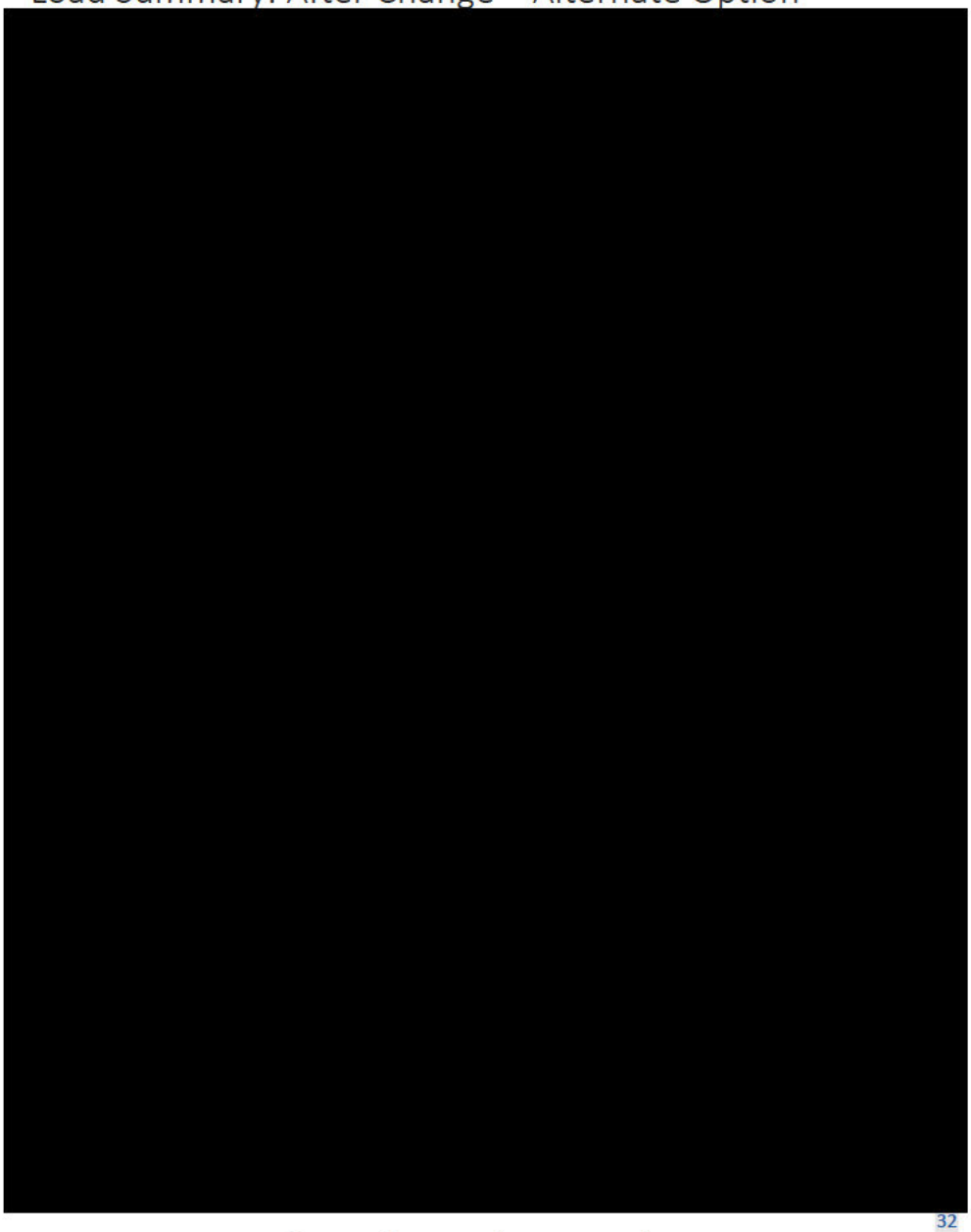
Load Summary: After Change – Preferred Option



Load Summary: Before Change



Load Summary: After Change – Alternate Option



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