EVERSOURCE

Operations Project Authorization Form

Approved at October 13, 2021 EPAC
Link to Meeting Minutes

Date Prepared: 10/07/2021	**Project Title: [redacted] Station Modernization**
Company: Eversource CT	**Project Number: CS00189**
Organization: Substation Design Engineering	**Class(es) of Plant: D SS**
Project Initiator: [redacted]	**Project Category: Stations - General**
Project Manager: [redacted]	**Project Type: Specific**
Project Sponsor: [redacted]	**Project Purpose: Install New Switchgear to Upgrade Facility**
Estimated in service date: 12/26/2023	**Capital Investment part of original Oper. Plan: Yes**
Eng./Constr. Resources Budgeted? Yes	**O&M Expenses part of original Oper. Plan: No**
Authorization Type: Full Funding	**Facility Type (check all that apply):**
Total Request: $35.803M	**☐ PTF ☐ non-PTF ☒ Distribution**

Financial Requirements:

Project Authorization
ERM: _____

FP&A: _____

Executive Summary

This project is seeking full funding of **$35.803**M M to [redacted]

[redacted]

This project was presented to the Eversource Solution Design Committee (SDC) on March 17, 2021 for the substation rehabilitation alternatives and the double-bus switchgear option was selected as the preferred option. A technical authorization form (TAF) was prepared for

conceptual engineering and authorized in PowerPlan for $1.6M on June 13, 2017. Charges for the project as of October 19, 2021 are $1.012M under work order (WO) numbers CS001891 and CS001892. The charges for WO CS001892 are being transferred to WO CS001891 and will be used for the charges of work up to the switchgear in-service date (ISD). A new work order number will be set up for the work post ISD which will include the feeder cutovers and equipment and foundation removal work. Work to date includes defining the project scope, walkdowns, preliminary engineering completion and the purchase of vendor switchgear drawings.

A constructability review was performed on August 18, 2020. A meeting was held on October 26,2021 with all participants to address any issues with the review. Notes were added regarding the fence construction. See Attachment C for the completed form.

An associated distribution project CD01132 - [redacted] Replace Cables was initiated in October 2018 to replace the feeder (egress) cables from the proposed switchgear. To date, there are no charges to this project. CD01132 had funding of $2.6M approved in PowerPlan on August 20, 2019.

[redacted] under the distribution project CD01132 - [redacted] Replace Cables. This associated project, [redacted] Coordination between these two (2) projects is ongoing. [redacted]

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Work Order CS001891 - Project Costs Summary

Note: Dollar values are in thousands

Line item Category	Prior Authorized	Actuals to Date	2021 to Go	2022	2023	2024	2025	Total
1. ROW / Easements / Land Acquisition		$0	$0	$0	$0			$0
2. Environmental Approvals / Permits		$0	$13	$32	$16			$61
3. Outreach		$1	$3	$18	$8			$31
4. Siting Approvals / Permits		$0	$18	$97	$40			$155
5. Engineering / Design		$148	$31	$284	$154			$617
6. Materials (Eversource purchased)		$592	$455	$3,852	$240			$5,138
7. Construction (incl matl's by contractors)		$9	$1,221	$3,563	$1,805			$6,599
8. Testing / Commissioning		$0	$2	$1,417	$1,578			$2,997
9. Project Mgmt Team		$5	$10	$65	$57			$138
10. Removals		$0	$0	$24	$35			$59
11. Other		$0	$0	$0	$0			$0
12. Risks		$0	$125	$1,445	$1,145			$2,715
SUBTOTAL DIRECTS W/ RISKS	**$1,600**	**$756**	**$1,880**	**$10,797**	**$5,078**			**$18,511**
13. Indirects/Overhead		$226	$1,148	$5,804	$3,888			$11,066
14. AFUDC		$30	$91	$595	$1,140			$1,857
PROJECT TOTAL – BASELINE BUDGET	**$1,600**	**$1,012**	**$3,119**	**$17,196**	**$10,106**			**$31,433**
15. Contingency		$0	$128	$523	$341			$991
		$0	$0	$0	$0			$0
TOTAL CAPITAL REQUEST	**$1,600**	**$1,012**	**$3,246**	**$17,719**	**$10,447**			**$32,425**
16. Reimbursables/Customer Contribution		$0	$0	$0	$0			$0
		$0	$0	$0	$0			$0
PROJECT TOTAL (LESS REIMBURSABLES)	**$1,600**	**$1,012**	**$3,246**	**$17,719**	**$10,447**			**$32,425**
O&M		**$0**	**$0**	**$0**	**$0**			**$0**
TOTAL REQUEST	**$1,600**	**$1,012**	**$3,246**	**$17,719**	**$10,447**			**$32,425**

Note: Explain unique payment provisions, if applicable: *Provide a detailed breakdown of Other costs here.*

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Work Order CS001891 - Risk Breakout Costs

Note: Dollar values are in thousands

Risk	Funded Amount
Soil Contamination is more severe than anticipated.	$900
Severe Weather Delays and Recall Times	$450
Design development changes are required.	$465
Underground obstructions, additional duct required, etc.	$400
Substation space constraints for new equipment	$150
Fence may delay or changed based on railroad	$350
Total Risk Allowance	**$2,715**

Work Order CS001891 - Breakout Costs

Note: Dollar values are in thousands

Line item Category	Prior Authorized	Actuals to Date	2021 to Go	2022	2023	2024	2025	Total
ST Labor		$49	$280	$1,749	$1,288			$3,366
OT Labor		$0	$0	$0	$0			$0
Outside Services Labor		$113	$943	$3,103	$2,274			$6,433
Materials*		$592	$517	$4,388	$272			$5,769
Removals		$0	$0	$24	$35			$59
Other		$2	$267	$2,056	$1,550			$3,875
Indirects		$226	$1,148	$5,804	$3,888			$11,066
AFUDC		$30	$91	$595	$1,140			$1,857
TOTAL CAPITAL REQUEST - W/O REIMBURSABLES	**$1,600**	**$1,012**	**$3,246**	**$17,719**	**$10,447**			**$32,425**

*All materials including Eversource purchased and outside service purchased. Note that outside service purchased material included in construction in project cost summary above.

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Work Order 2 (CS001892) - Project Costs Summary

Note: Dollar values are in thousands

Line item Category	Prior Authorized	Actuals to Date	2021 to Go	2022	2023	2024	2025	Total
1. ROW / Easements / Land Acquisition						$0	$0	$0
2. Environmental Approvals / Permits						$0	$0	$0
3. Outreach						$2	$1	$3
4. Siting Approvals / Permits						$10	$7	$18
5. Engineering / Design						$49	$31	$80
6. Materials (Eversource purchased)						$1	$1	$2
7. Construction (incl matl's by contractors)						$87	$73	$160
8. Testing / Commissioning						$70	$54	$124
9. Project Mgmt Team						$8	$4	$12
10. Removals						$787	$540	$1,327
11. Other						$0	$0	$0
12. Risks						$90	$55	$145
SUBTOTAL DIRECTS W/ RISKS	**$1,600**					**$1,104**	**$768**	**$1,871**
13. Indirects/Overhead						$791	$564	$1,355
14. AFUDC						$0	$0	$0
PROJECT TOTAL – BASELINE BUDGET	**$1,600**					**$1,895**	**$1,332**	**$3,226**
15. Contingency						$91	$62	$153
						$0	$0	$0
TOTAL CAPITAL REQUEST	**$1,600**					**$1,985**	**$1,394**	**$3,379**
16. Reimbursables/Customer Contribution						$0	$0	$0
						$0	$0	$0
PROJECT TOTAL (LESS REIMBURSABLES)	**$1,600**					**$1,985**	**$1,394**	**$3,379**
O&M						**$0**	**$0**	**$0**
TOTAL REQUEST	**$1,600**	**$0**				**$1,985**	**$1,394**	**$3,379**

Note: Explain unique payment provisions, if applicable: *Provide a detailed breakdown of Other costs here.*

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Work Order 2 (CS001892) - Risk Breakout Costs

Note: Dollar values are in thousands

Risk	Funded Amount
Severe Weather Delays and Recall Times	$145
Total Risk Allowance	**$145**

Work Order 2 (CS001892) - Breakout Costs

Note: Dollar values are in thousands

Line item Category	Prior Authorized	Actuals to Date	2021 to Go	2022	2023	2024	2025	Total
ST Labor						$137	$104	$241
OT Labor						$0	$0	$0
Outside Services Labor						$82	$63	$145
Materials*						$1	$1	$2
Removals						$787	$540	$1,327
Other						$188	$122	$310
Indirects						$791	$564	$1,355
AFUDC						$0	$0	$0
TOTAL CAPITAL REQUEST - W/O REIMBURSABLES	**$1,600**	**$0**				**$1,985**	**$1,394**	**$3,379**

*All materials including Eversource purchased and outside service purchased. Note that outside service purchased material included in construction in project cost summary above.

Future Financial Impacts:

Provide below the estimated future costs that will result from the project: N/A
Note: Dollar values are in thousands

Future Costs	Year 20__	Year 20__	Year 20__	Year 20__+	Total Future Project Costs
Capital	$ -	$ -	$ -	$ -	$ -
O&M	-	-	-	-	-
Other	-	-	-	-	-
TOTAL	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Describe the estimated future Capital, O&M, and/or Other costs noted above:

What functional area(s) will these future costs be funded in? N/A
A representative from the respective functional area is required to be included as a project approver.

Provide below the estimated future financial benefits that will result from the project:
Note: Dollar values are in thousands

Future Benefits	Year 20__	Year 20__	Year 20__	Year 20__+	Total Future Project Benefits
Capital	$ -	$ -	$ -	$ -	$ -
O&M	-	-	-	-	-
Other	-	-	-	-	-
TOTAL	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Describe the estimated future Capital, O&M, and/or Other benefits noted above:

What functional area(s) will these benefits be reflected in? N/A
A representative from the respective functional area is required to be included as a project approver.

Asset Retirement Obligation (ARO) and/ or Environmental Cleanup Costs (Environmental Liabilities):

Is there an ARO associated with this project? If yes, please provide details: Yes.

The old oil circuit breakers (OCBs) and switches will be removed once switchgear is carrying the feeders. Due to the age of the removed equipment, the removed equipment cannot be reused and will be scrapped.

Are there other environmental cleanup costs associated with this project? If yes, please provide details: Yes

Expected environmental cleanup costs have been included in the project estimate for the cleanup costs of the drainage, removal and disposal of the oil from the existing oil circuit breakers.

There is the potential for contamination in the substation yard and if excavating any soils from the yard is required, there may be further cleanup costs. These costs have been included in the estimate as risk allocation for the project.

Technical Justification:

Project Need Statement

The project addresses the needs of replacing aging equipment at the substation including the existing oil circuit breakers (OCBs), addressing current bus clearance issues, providing DSCADA and remote metering, and addressing existing overload conditions. These issues are detailed below. This rehabilitation project will be in accordance with the substation upgrade criteria of the Distribution System Planning Guide (DSPG 2020). See reference 3.

Aging Equipment: [redacted]

Clearance Issues: [redacted]

Transformer Capacity and Feeder Cable Overloads: [redacted] SPG 2020).

Bus Configuration: [redacted].

Station service transformers: [redacted]

[redacted]

Arc Flash Levels: [redacted]

DSCADA: Currently, [redacted]

Station Fencing: [redacted]

Project Objectives

[redacted]

Project Scope

[redacted]

Major Work/Materials:

- [redacted]
- [redacted]
- [redacted]

Table 1 - Existing Circuit Breaker List

[redacted]

ment, Age not available, assumed greater than age of Substation

Background / Justification

[redacted]

[redacted]

Business Process and / or Technical Improvements

[redacted]

Alternatives Considered with Cost Estimates

[redacted] was presented at the SDC meeting on March 17, 2021 for the substation rehabilitation alternatives and the [redacted] option was selected as the preferred option.

Alternative 1: [redacted] (Preferred solution)

Completely rebuild 13.8kV distribution end of the substation by installing new enclosed, [redacted]

[redacted]

The conceptual cost estimate for this alternative is $34.5M (+25% /- 50%). The estimate is a preliminary cost estimate without risks or contingency. This estimate includes a double bus configuration required to minimize the number of feeders removed if a bus fault occurs. The current planning grade estimate for the preferred alternative is $39.2M.

Alternative 2: [redacted]

[redacted]

Alternative 3: [redacted]

[redacted]

[redacted]

The conceptual cost estimate for this alternative is $33.4M (+25% /- 50%).

Alternative 4: [redacted]

[redacted]

No estimate was provided for this alternative.

Project Schedule

Milestone/Phase Name	Estimated Date
Partial Funding Approval	June 2017
SDC Presentation and Approval	March 2021
Preliminary Engineering Completion	August 2021
EPAC Approval	October 2021
Material Procurement	March 2022
Detailed Engineering Design	January 2022
Construction Start	March 2022
Testing/Commissioning	December 2023
In Service Date (ISD)	December 2023
Transfer of Feeders to Switchgear (by Distribution - CD01132) - Completion	May 2025
Completion of Old Equipment Removal	May 2025
Project Closeout	June 2025

See Attachment D for the P6 schedule.

Regulatory Approvals

The Siting Council will require a Notice of Exemption.

Risks and Risk Mitigation Plans

Risk	Mitigation
Soil Contamination is more severe than anticipated.	Test as early as possible to assess the soil conditions.
Severe Weather Delays and Recall Times	Involve all stakeholders of upcoming conditions and reschedule and provide OT as required if construction is delayed or outages cannot be performed during the scheduled times due to severe weather.
Design development changes are required.	Provide for redesign allowances.
Underground obstructions, additional duct required, etc.	Check for obstructions during design and construction as early as possible.
Substation space constraints for new equipment	Review vendor switchgear dimension and layouts and adjust accordingly.
Removals - inclement weather.	Rescheduling and OT as required
Fence requirements may be delayed, resulting in delayed design based on railroad requirements	Check with AMTRAK as early as possible to see if any special requirements are required.

Risk allocation is included in the estimate for the above risks.

Contingency

The project cost estimates include $1.144M contingency for any risks that are not yet known and do not yet have mitigation plans.

References

1. CS00189 - [redacted] Switchgear Modernization – SSF (2021-03-17 SDC meeting)
2. Substation Standards (SUB 023.2, 13.2kV)
3. Distribution System Planning Guide (DSPG 2020)
4. CS00189 - [redacted] Replace Bus with Switchgear Technical Authorization Form, dated May 16, 2016
5. CD01132 - [redacted] Repl Cables for SS work PAF, dated June 13, 2019

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

[redacted]

INSTRUCTIONS:
It is the responsibility of the initiator to contact the subject matter experts in the listed area disciplines to determine if the project considerations contained in this list are applicable to their project. They should fill out the checklist and determine a transition plan for the purpose of project execution. See the PAF Guide for additional instruction.

Project Checklist - Transmission & Substation Capital Project			
Project Name: [redacted] **Station Modernization**			**Project Number: CS00189**
Facility Type: ☐ BPS ☐ BES ☐ PTF ☐ non-PTF ☐ CIP ☒ Distribution			
PLANNING			
Is a NX-9 required?		No	
Is an ISO-NE PAC presentation required?		No	
ISO-NE Presentation Date (if completed):		N/A	
Cost in ISO-NE Presentation ($M) (if completed):		N/A	
Is a PPA required?		No	
Is a TCA Application Required?		No	
TCA Submittal Date (if submitted):		N/A	
Cost in TCA Submittal ($M) (if submitted):		N/A	
Enter ISO-NE RSP / Asset Condition ID, if assigned:		N/A	
PLANNING/PROTECTION & CONTROLS			
Are RAS/SPS/UVLs affected?		No	
OPERATIONS			
Outage Required?	☒ Primary Equipment (Power Transfer)	☒ Secondary Equipment (P&C only)	☐ Outage Not Required
Do SCLL Conditions Exist?		No	
Has an outage schedule been approved?		No	
Are Operations & Maintenance procedures/training required?		No	
STANDARDS			
Does the project include standard equipment and designs?		Yes	
SUBSTATION ENGINEERING			
Does this impact Revenue Metering		Yes	
Is preliminary short circuit/ breaker duty analysis required?		No	
Are there any changes to the baseline audible noise?		No	
Is there an impact to the existing ground grid?		Yes	
Is a Transient Over Voltage (TOV) analysis required?		No	

Project Checklist - Transmission & Substation Capital Project		
Project Name: [redacted] **Station Modernization**		**Project Number: CS00189**
P&C ENGINEERING		
OP-22 - Are PMUs and DDR required?	No	
If BPS, is an NPCC Directory #4 presentation required?	No	
Are ISO-NE OP-24 Appendix B updates necessary?	No	
TRANSMISSION LINE ENGINEERING		
Are there any changes that affect the baseline EMF?	No	
Are there any changes that affect the baseline EMI?	No	
SITING		
Is a Siting filing required? *(If yes, list in regulatory approvals section)*	Yes	
PERMITTING		
Is there any permitting required? *(If yes, list in regulatory approvals section)*	No	
SITING & CONSTRUCTION SERVICES (OUTREACH)		
What is the level of outreach expected?	Low	
INITIATOR		
Has a field constructability review been completed?	Yes	
INVESTMENT RECOVERY		
Does the project require development of an Investment Recovery plan?	No	
COST ESTIMATING		
What team/firm prepared the cost estimate?	Estimate was prepared by Eversource Engineering	
Name of the person who prepared the estimate:	[redacted]	
Was the estimate reviewed by Eversource Estimating?	Yes - Partial Review	

Cost Estimate Backup Details

Please refer to Attachments A1 and A2 for additional detailed cost estimate backup.

ESTIMATE SUMMARY

Project Title: [redacted] Station Modernization
Project Mgmt: [redacted]
Project Number: CS00189
WO & Task #: CS001891 & CS001892
Est. Revision # 01
Estimate Type - Station work

Estimate By: [redacted]
Date of Estimate: 11/19/21
ISD:12/26/2023
Estimate # C-21-78C1

Template Revision # 01 65c

ESTIMATE SUMMARY

Estimate Type: Planning

WBS	Description	TOTAL	% of Directs	% of Total	Priors	2021	2022	2023	2024	2025	2026
1	ROW / Easements / Land purchases	$0	0.0%	0.0%	$0	$0	$0	$0	$0	$0	$0
2	Environmental Approvals / Permits	$61,400	0.3%	0.2%	$0	$13,300	$31,900	$16,200	$0	$0	$0
3	Outreach	$30,500	0.2%	0.1%	$1,100	$3,400	$18,400	$7,600	$0	$0	$0
4	Siting Approvals / Permits	$154,700	0.8%	0.5%	$0	$18,000	$96,600	$40,100	$0	$0	$0
5	Engineering / Design	$617,300	3.3%	1.9%	$148,300	$31,200	$283,700	$154,100	$0	$0	$0
6	Materials (Eversource purchased)	$5,138,500	27.8%	15.8%	$592,100	$455,300	$3,851,600	$239,500	$0	$0	$0
7	Construction (Incl matl's by contractors)	$6,598,800	35.6%	20.4%	$9,300	$1,221,300	$3,563,400	$1,804,800	$0	$0	$0
8	Testing / Commissioning	$2,996,900	16.2%	9.2%	$0	$2,100	$1,417,000	$1,577,800	$0	$0	$0
9	PMT Project Mgmt Team	$138,100	0.7%	0.4%	$5,300	$10,100	$65,200	$57,500	$0	$0	$0
10	Removals	$59,500	0.3%	0.2%	$0	$0	$24,000	$35,500	$0	$0	$0
11	Other	$0	0.0%	0.0%	$0	$0	$0	$0	$0	$0	$0
12	Risks	$2,715,000	14.7%	8.4%	$0	$125,000	$1,445,000	$1,145,000	$0	$0	$0
	Project Directs Total w/Risks	**$18,510,700**	100.0%	57.1%	**$756,100**	**$1,879,700**	**$10,796,800**	**$5,078,100**	**$0**	**$0**	**$0**
13	Indirects/Overhead	$11,065,900		34.1%	$225,900	$1,147,800	$5,804,100	$3,888,100	$0	$0	$0
14	AFUDC	$1,856,600		5.7%	$30,200	$91,100	$595,000	$1,140,300	$0	$0	$0
	Project Total - Baseline Budget	**$31,433,200**		96.9%	**$1,012,200**	**$3,118,600**	**$17,195,900**	**$10,106,500**	**$0**	**$0**	**$0**
15	Contingency	$991,400		3.1%	$0	$127,500	$523,200	$340,700	$0	$0	$0
	Project Total - Funding Approval Level	**$32,424,600**		100.0%	**$1,012,200**	**$3,246,100**	**$17,719,100**	**$10,447,200**	**$0**	**$0**	**$0**
16	Reimbursables/Customer Contribution	$0			$0	$0	$0	$0	$0	$0	$0
	Project Total (less reimbursables)	**$32,424,600**			**$1,012,200**	**$3,246,100**	**$17,719,100**	**$10,447,200**	**$0**	**$0**	**$0**
		-									
	Amount of Escalation Included above	$820,500			$0	$0	$378,800	$441,700	$0	$0	$0
6	Total materials - Eversource	$5,138,500			$592,100	$455,300	$3,851,600	$239,500	$0	$0	$0
	Total materials - Contractor	$629,959			-$41	$62,100	$535,900	$32,000	$0	$0	$0
	Total materials	$5,768,459			$592,059	$517,400	$4,387,500	$271,500	$0	$0	$0

NOTE: Risk / Con ingency is 12.9% of Project Total Costs (incl escal/indirects/AFUDC but excl reimb.)

Estimate Range

-25%	-	25%
$24,318,000	-	$40,531,000

0
0

gen from load box
risks add fence amtrak

COMMENTS:

[redacted]

Assumptions/Clarifications:
Indirect rates based on: 11 - CT Station work

Assumptions:
- Engineering to be completed by in-house resources, construction oversight internal resources.
- Test, construction (electrical & civil), test and commissioning to be accomplished by external resources.
- Estimate based on TPS description only, actual quantities may vary during detailed engineering.
- Material estimates based on previous work, vendor quotes, and RS Means.
- Labor estimates based on previous work, J. Bifulco S/S labor units, R.S. Means, and NECA labor units.
- All new equipment will be installed within the confines of the existing fenced yard.
- Additional risk allowances have been added for aggressive outage recall times.
- Estimate includes a 750K Risk for environmental issues (soil).
- Priors through October 2021 for WO#s CS001891 and CS001892.
- Removals work will be not included. Will be charged in work order TBD.

RISKS

Soil Contamination is more severe	$ 900,000
Severe Weather. Delays and Recall Times	$ 450,000
Design development	$ 465,000
Underground obstructions. additional duct required. etc.	$ 400,000
Substation space constraints for new equipment	$ 150,000
Fence may delay or changed based on railroad	$ 350,000

ESTIMATE SUMMARY

Project Title: [redacted] Station Modernization
Project Mgr/Lead: [redacted]
Project Number: CS00189
WO & Task #: TBD
Est. Revision # 00
Estimate Type - Station work

Estimate By: [redacted]
Date of Estimate: 10/19/21
ISD:06/19/2025
Estimate # C-21-78C2

Template Revision # 01.65c

ESTIMATE SUMMARY

Estimate Type: Planning

WBS	Description	TOTAL	% of Directs	% of Total	Priors	2021	2022	2023	2024	2025	2026
1	ROW / Easements / Land purchases	$0	0.0%	0.0%	$0	$0	$0	$0	$0	$0	$0
2	Environmental Approvals / Permits	$0	0.0%	0.0%	$0	$0	$0	$0	$0	$0	$0
3	Outreach	$3,400	0.2%	0.1%	$0	$0	$0	$0	$2,000	$1,400	$0
4	Siting Approvals / Permits	$17,800	1.0%	0.5%	$0	$0	$0	$0	$10,500	$7,300	$0
5	Engineering / Design	$79,900	4.3%	2.4%	$0	$0	$0	$0	$48,600	$31,300	$0
6	Materials (Eversource purchased)	$1,500	0.1%	0.0%	$0	$0	$0	$0	$800	$700	$0
7	Construction (incl matl's by contractors)	$160,300	8.6%	4.7%	$0	$0	$0	$0	$87,000	$73,300	$0
8	Testing / Commissioning	$124,400	6.6%	3.7%	$0	$0	$0	$0	$70,200	$54,200	$0
9	PMT Project Mgmt Team	$12,200	0.7%	0.4%	$0	$0	$0	$0	$7,800	$4,400	$0
10	Removals	$1,326,700	70.9%	39.3%	$0	$0	$0	$0	$786,600	$540,100	$0
11	Other	$0	0.0%	0.0%	$0	$0	$0	$0	$0	$0	$0
12	Risks	$145,000	7.7%	4.3%	$0	$0	$0	$0	$90,000	$55,000	$0
	Project Directs Total w/Risks	**$1,871,200**	100.0%	55.4%	**$0**	**$0**	**$0**	**$0**	**$1,103,500**	**$767,700**	**$0**
13	Indirects/Overhead	$1,354,800		40.1%	$0	$0	$0	$0	$791,000	$563,800	$0
14	AFUDC	$0		0.0%	$0	$0	$0	$0	$0	$0	$0
	Project Total - Baseline Budget	**$3,226,000**		95.5%	**$0**	**$0**	**$0**	**$0**	**$1,894,500**	**$1,331,500**	**$0**
15	Contingency	$152,500		4.5%	$0	$0	$0	$0	$90,600	$61,900	$0
	Project Total - Funding Approval Level	**$3,378,500**		100.0%	**$0**	**$0**	**$0**	**$0**	**$1,985,100**	**$1,393,400**	**$0**
16	Reimbursables/Customer Contribution	$0			$0	$0	$0	$0	$0	$0	$0
	Project Total (less reimbursables)	**$3,378,500**			**$0**	**$0**	**$0**	**$0**	**$1,985,100**	**$1,393,400**	**$0**
		-									
	Amount of Escalation included above	$295,500			$0	$0	$0	$0	$153,100	$142,400	$0
6	Total materials - Eversource	$1,500			$0	$0	$0	$0	$800	$700	$0
	Total materials - Contractor	$0			$0	$0	$0	$0	$0	$0	$0
	Total materials	$1,500			$0	$0	$0	$0	$800	$700	$0

NOTE: Risk / Contingency is 9.7% of Project Total Costs (incl escal/indirects/AFUDC but excl reimb.)

Estimate Range	**-25%**	-	**25%**
	$2,534,000	-	**$4,223,000**

COMMENTS:

[redacted]

Assumptions/Clarifications:
Indirect rates based on: 11 - CT Station work

Assumptions:
- Engineering to be completed by in-house resources, construction oversight internal resources.
- Test, construction (electrical & civil), test and commissioning to be accomplished by external resources.
- Estimate based on TPS description only, actual quantities may vary during detailed engineering.
- Material estimates based on previous work, vendor quotes, and RS Means.
- Labor estimates based on previous work, J. Bifulco S/S labor units, R.S. Means, and NECA labor units.
- All new equipment will be installed within the confines of the existing fenced yard.
- Additional risk allowances have been added for aggressive outage recall times.
- Estimate includes the cost of the load bank rental for the testing of the new Switchgear.
- Priors through October 2021.

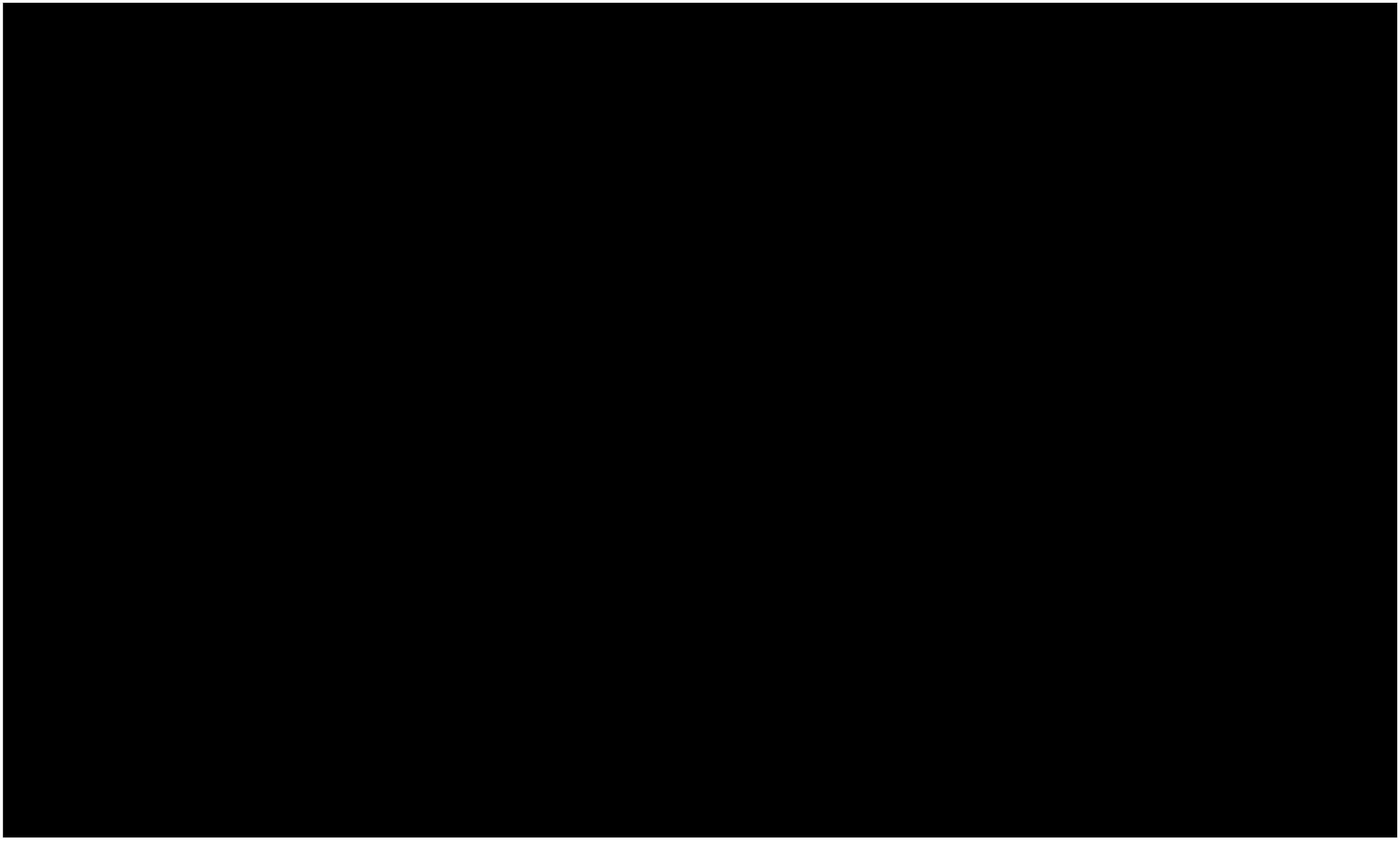
RISKS

0
Severe Weather Delays and Recall Times $ 145,000

[redacted]









EVERSOURCE

Constructability Review Form: **M6-PM-2012 - Eversource**

Substation Constructability Review

Project Title: [redacted] Install Switchgear	☑ Prior Constructability Review Performed? ☐ Program Related Site Specific Review?
Project Numbers(s): CS00189	**Project Constructability Phase:** ☐ Conceptual Engineering Design ☒ Preliminary Engineering Design ☐ Detailed Engineering Design
Date(s) of Constructability Review: 09/14/2021 10/26/2021 (Added Post Walkdown notes. Revised to Prelim)	
Project Scope Statement: [redacted]	

Department Review/Walkdown Attendees*:

Required [X]	Attended [X]	Department	Name	Required [X]	Attended [X]	Department	Name
☐	☐	Project Management	[redacted]	☐	☐	S/S Engineering	[redacted]
☐	☐	Asset Management		☐	☐	P&C Engineering	
☐	☐	Constr. Management		☐	☐	Civil Engineering	
☐	☐	S/S Technical / LCE		☐	☐	Telecom	
☐	☐	S/S Operations**		☐	☐	Environmental	
☐	☑	Field Engineering				Real Estate	
☐	☐	Line Engineering		☐	☐	ROW T&D Rights & Survey	
☐	☐	Vegetation Management		☐	☐	Survey Engineering	
☐	☐	Siting		☐	☐	Cost Estimating	
☐	☐	Safety		☐	☐	Project Services (Outreach)	
☐	☐	SCADA		☐	☐	Material Procurement	

*** Sign-off in the table above for the Detailed Engineering Design Constructability Review indicates that all Action Items/Concerns from prior Constructability Reviews have been mitigated/resolved as documented in this form. Not every department is required to attend walkdowns for every project but should be consulted for project impact considerations**

** Internal Eversource Substation Operations must be included in the review even if external construction resources are planned

[Project Manager] certifies that this review was performed to completeness, that all applicable departments were informed of the project and have had opportunity to provide input to this review:

[redacted] 9/14/21

Name / Signature *Date*

EVERSOURCE

Constructability Review Form: **M6-PM-2012 - Eversource**

Substation Constructability Review

Documents available for use prior to Constructability Review					
[X]	**Document**	**[X]**	**Document**	**[X]**	**Document**
☒	Initial Scope -Birdseye site plan -General Arrangement	☒	Preliminary Drawings -Civil Site Drawing -Electrical Drawing -Section Drawings	☐	Prints in hand for marking up -Panel Front/Read View -Control Enclosure Layout -Floor / Wall Plans
☐	Detailed Scope Document	☒	Proposed Schedule	☐	Construction Sequence/Timeline
☒	Previous Notes / Comments / Observations	☐	Major Material / Equipment List	☐	Replace / Reuse of equipment

Action Items and Resolutions:

Item No.	Const. Review Action Item/Concern	Design Resolution/Mitigation:
1	** Switchgear to be ordered by Nov to meet construction schedule	Eng to order switchgear by Nov 30
2	[redacted]	work order written by Dist Eng
3		
4		
5		

	Key Review Item Description	N/A or No Concern	Review Notes, Concerns, or Additional Info Needed
A	**Engineering & Asset Management**		
1	**Scope of Work** - Is scope adequately developed and sufficiently detailed for intended deliverable? - Any complimentary projects or other adjacent obsolete equipment for inclusion? - Any overlapping projects that could impact work/outages? - Consider Physical Installation, P&C Scope, Civil Scope, Engineering studies, Design standard adherence - Any remote station impacts? - Engineering Estimates for Design and Technical Support? (EE and EOC) Total Project	☐	

EVERSOURCE

Constructability Review Form: **M6-PM-2012 - Eversource**

Substation Constructability Review

	Key Review Item Description	N/A or No Concern	Review Notes, Concerns, or Additional Info Needed
2	**Materials Identified/Ordered** -Any concerns with BOM/Major Materials? Review BOM lead times and project need dates -Specialty Major Materials: Identify Specialty Equipment & Materials potentials - temporary/replacement - long lead items? -Any Materials needed to facilitate construction access?	☐	Switchgear needs to ordered by November to meet construction start date
3	**Control House** - Review Unmapped equipment interferences, Control/Battery Enclosure Layout, HVAC System (if equipment added), space for new or modified equipment, AC / DC station breaker availability and service loading, Panel Space, Expansion, one-line and/or riser type panelboard drawings, other..	☐	No concerns
4	**Ratings & Dimensions** for Major Equipment. Any concerns upon field review? Equipment Rating One Line (and/or equipment thermal ratings tables) - Review for any errors in field	☐	No concerns
5	**Wall, Fence, Gate, and Foundation Considerations** -Any permanent / temporary alterations or relocations required? -Pre-Project Sound Measurements Needed? Sound Walls? -Take measurements for Foundation quantities, dimensions and concrete volumes -CIP Review/Ballistic needs. Any Physical Security Requirement Consideration? -Assess condition of existing yard equipment foundations and viability for reuse (if proposed) -Review station expansion areas (if needed) for structures, old foundations, etc. -Any Steel Structural Plan Considerations? -Any impacts to construction plan?	☐	Fence to be replaced ~~No concerns~~ [redacted] Include in estimate risk dollars as required.
6	**Below Grade / Enclosure Raceway** - If possible, evaluate existing raceway and review spacing requirements. Review for any subsurface investigation needs or potential below grade obstructions. GPR/test pits needed? Geotechnical Investigation - is soil boring or resistivity investigation needed?	☐	Need exploratory digging to check for interference of duct bank. Proposal received 9/30/21

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Constructability Review Form: **M6-PM-2012 - Eversource**

Substation Constructability Review

	Key Review Item Description	N/A or No Concern	Review Notes, Concerns, or Additional Info Needed
7	**Underground Obstructions** -Drawing review concerns? -Is preconstruction or test excavation needed? -Is reuse of underground control cables / Conduits /replace Non-Shielded Cable feasible (if applicable) -Are spare conduits available? Are they useable? -Review if any areas will need to be plated for increased load bearing for equipment access (i.e., large Xfmr, etc.)	☐	none
8	**Grounding Plan (Ground Grid)** - Will footprint impact layout or other equipment? Identify locations to improve grounding. Impacts to foundations and ground grid plans. Observations on wetlands or ability to perform tests	☐	no concerns
9	Nomenclature / Switching One-Line Diagram -Any obvious deviations from diagrams provided?	☐	No concerns
10	BPS Separation Requirements - Is this BPS Substation? Y/N (part of PAF) - Changes to pre-existing BPS standards?	☐	No concerns
11	IEC 61850 Substation Automation and Communication Requirements - Any Impacts/Retrofit needed?	☐	N/A
12	Any Upgrades to ES Standards - Is retrofit needed to bring up to ES standards? Can that be done?	☐	No concerns
B	**Construction**		
1	**Any safety hazards specific to the facility? i.e., Low Bus, Deterioration, etc.**	☐	switchgear to address low bus
2	**Prior known Site Specific Conditions** -Common or Obvious station Issues -Missing scope items that could impact costs?	☐	no concerns
3	**Identify/Consider Required Depts for Construction?** -Who is constructor: Internal vs External Resources -S/S Ops, GO, Test, Field Engineering, etc.	☐	internal construction & Test

EVERSOURCE

Constructability Review Form: **M6-PM-2012 - Eversource**

Substation Constructability Review

	Key Review Item Description	N/A or No Concern	Review Notes, Concerns, or Additional Info Needed
	-Specialty Contractors Required? -Required Oversite Needed - Estimated level of CR and LCE support needed		
4	**Site Plan, Access, and Temporary Construction Facilities:** -Confirm maintenance access for proposed new or replaced equipment -Verify clear footprint for yard equipment / Property Plan -General access to site, can areas outside substation be utilized? -Substation Entry Plan (driveway and drive path modifications) - Identification of Unique Requirements, i.e. (access bridges, station service, etc.) -Site Development Plan (grading and drainage) with Cut/Fill -Existing Rock Conditions? Potential Impacts (rock quantity)? -Any police details needed for deliveries, restricted hours, and/or need for extended hour approvals -Any Sanitary Civil Requirements? (Septic tanks, etc.) -Review turning radius for delivery trucks (if critical) -Any Substation Access and site/yard access Limitations? -Office Trailer Needs: Facilities, Utilities, Restroom, Container, Dumpster Space -Weather impacts to Site (Snow Placement) -Identify Material Laydown and Security -Where will new vs removed equipment go? -Construction permit for trailers outside substation fence?	☐	No concerns
5	Unique Equipment Considerations: Gas insulated substation, Gas insulated line, Gas insulated bus, Pass Breaker, Statcom, Sync Condenser		No concerns

EVERSOURCE

Constructability Review Form: **M6-PM-2012 - Eversource**

Substation Constructability Review

	Key Review Item Description	N/A or No Concern	Review Notes, Concerns, or Additional Info Needed
6	**Outage & Energization Plan and Construction Sequence:** *Review electrical working clearances for equipment during construction, Detailed look at protection zone changes, Locked sequence or random outages, Outage durations minimized.* ***Considerations:*** -Approach Distances – Outage Requirements to maintain electrical clearances throughout proposed installation -Distribution Clearances -Clearance Holder Assignments -Drawings vs Field Conditions -Outage boundaries and interconnections -Phased approach needs for additional mobilizations -Verify outage sequence supports the planned construction sequence and timeline. (Lead Commissioning Engineer "LCE", Substation Operations, and Outage Planner input) -Any design alterations or considerations to Eliminate SCLL Conditions, Reduce Recall Time, Reduce Outage durations, Special Conditions -Additional outage requirements: Railroad Catenaries, Fiber outage, SCADA outage, Relay permissions -Seasonal or weather conditions impacts	☐	outages ok for current issued drawing' review in detail once IFC drawings are issued
7	**Equipment Testing & Acceptance** -Grounding plans / Resources? Will we need grounds hung? -Hi-pot testing and where will the equipment be set up?	☐	No concerns
8	Need for mobile generator and where connected (if needed)	☐	No concerns
9	Need for mobile battery and where connected (if needed)	☐	No concerns
10	OT work required or Notable Permit Conditions (special hours)?	☐	No concerns
11	Coordination of boundaries/seams (Identification of point of demarcation for connection to existing equipment and/or for coordination with other municipalities)	☐	No concerns

EVERSOURCE

Constructability Review Form: **M6-PM-2012 - Eversource**

Substation Constructability Review

	Key Review Item Description	N/A or No Concern	Review Notes, Concerns, or Additional Info Needed
C	**Environmental**		
1	Soil Pre-Characterization or Grab Sampling Completed/Planned	☐	soil sampling in progress
2	**Desktop investigation and EAD Review** -Required Permits -Stormwater Considerations -Dewatering requirements -Wetland and buffer review	☐	No permits required
3	Risk or presence of PCB's/Asbestos/Lead/SF6	☐	No concerns
4	Transformer Spill Containment Recommended?	☐	No concerns
5	Expanding Footprint / New Buildings or future Expansion Plans? (Enviro Impact)	☐	
6	Environmental oversight considerations? (Inspection type/Interval)	☐	
7	Environmental mitigations - Any matting or seasonal needs? Review D&M Plan with CR.	☐	no concerns
D	**Siting, Project Services, and ROW T&D Rights & Survey**		
1	**Any regulatory concerns or approvals needed?** - Any concerns noted that could be mitigated by scope/design alterations? - Likely to require visual screening? What considerations (feasibility or location)? -Zoning Relief and Permits required?	☐	Exempt mod to be requested once EPAC approved
2	Other siting considerations?	☐	none
3	**Neighbor/Abutter impacts:** - Any noise, visual impacts, or sensitive abutters - Any changes to lighting or additional lighting needed?	☐	No concerns
4	Review for roadway, gate access, trailers, equip height, noise, weekend/night work, or any potential public disturbance related to work	☐	No concerns
5	Installation within Eversource Rights - Is Rights and Restrictions Review required?	☐	No concerns

EVERSOURCE

Constructability Review Form: **M6-PM-2012 - Eversource**

Substation Constructability Review

	Key Review Item Description	N/A or No Concern	Review Notes, Concerns, or Additional Info Needed
6	Expanding Footprint / New Buildings / Fence line or future Expansion Plans?	☐	No concerns
7	Proposed Equipment on same property? - Any Encroachments	☐	no concerns
F	**Protection & Controls**		
1	Panel Graphic additions and/or Modifications	☐	No concerns
2	Space on existing panels for new equipment? (front & rear of panel fronts)	☐	No concerns
3	Panel fronts conform to drawings	☐	No concerns
4	Access to bring new panels into control enclosure	☐	No concerns
5	Nameplate list and location of nameplates	☐	No concerns
6	Verifies that relays and meters that will be an interconnected project work are as shown on the drawings.	☐	No concerns
7	Temporary protection, relays, control cable needed? How long will they be required?	☐	No concerns
8	Will relay setting changes be needed? Any additional outage requirements for changes?		No concerns
G	**Telecom Engineering**		
1	Review telecom equipment in existing control enclosure	☐	No concerns
2	Review path to get telecom circuits into the station and paths within the control house. Determine whether new underground duct or overhead tray work is needed.	☐	No concerns
3	Review current or proposed Telecom equipment power connections and validate with P&C any need for system 1 and system 2 separation.	☐	No concerns
4	Review current Telecom fiber diversity and validate with P&C any fiber diversity requirements.	☐	No concerns
5	Review and list any remote station impacts/updates	☐	No concerns
6	Confirm whether correct interface equipment is available (i.e.) for fiber termination or multiplexor termination	☐	No concerns

EVERSOURCE

Constructability Review Form: **M6-PM-2012 - Eversource**

Substation Constructability Review

	Key Review Item Description	N/A or No Concern	Review Notes, Concerns, or Additional Info Needed
7	Confirm whether existing communications cabinets are enough to support additional telecommunications equipment installed	☐	No concerns
8	Review space for any required additional communications cabinets which may be required to support additional telecommunications equipment installed	☐	No concerns
9	Review third party Telecommunications at substation and confirm whether additional capacity or Ground Potential Rise protection is required	☐	No concerns

Photos

(Ex. Equipment control cabinet, Breakers, MODs, CCVTs, PTs, Transformers)

Activity ID	Activity Name	Remaining Duration	Start	Finish	Predecessors	Successors	Total Float	Activity Flag	DEPT - DEPARTMEI	Project Lead	Activity Scheduler
CS001891 [redacted]	Replace Bus with SWGR(CS001891)	941	11-May-20 A	19-Jun-25			0			[redacted]	
INITIALIZATION AND SCOPE DEVELOPEMENT		245	14-Sep-21 A	10-Sep-22			696				
Project Initiation		113	14-Sep-21 A	04-Mar-22			828				
EPAC Full Funding		113	14-Sep-21 A	04-Mar-22			828				
DEF1602	Estimating Reviews Planning Grade Estimate (+/-25% Full Funding)	10	20-Sep-21	01-Oct-21*	DE1600	DSSE-960, A3370, DE2000, PAFF2000	-4	EST-FULL	ENG.BQA.E		
PAFF2100	Incorporate Internal Review Comments & Submit Full Funding PAF to EPAC for Review	5	28-Sep-21	04-Oct-21*	PAFF2000	PAFF2110	0	PAF Submit	ENG.AM.EN		
DE2000	Project Constructability Review Complete	11	14-Sep-21 A	04-Oct-21	PF1010, DEF1602	PAFF2110	-41	Construct	PROJ		
PAFF2110	EPAC Full Funding Meeting	0		13-Oct-21*	PAFF2100, DE2000	PAFF2200, PAFF2220	-47				
FF1000	EPAC Full Funding Approval	1	14-Oct-21	14-Oct-21	PAFF2200, DE1600	DSSE-240, DSSE-440, A3510, A3470, A3390, DSSE-500, DSSE-520, PAFF2210, A1240	-41	EPAC-F			
PAFF2000	Submit Full Funding PAF for Internal Review	10	04-Oct-21	18-Oct-21	DEF1602, DE1600	PAFF2100	-14		ENG.AM.E		
PAFF2200	Incorporate EPAC Full Funding PAF Review Comments	6	14-Oct-21	21-Oct-21	PAFF2110	FF1000, DE1800	-41		ENG.AM.EN		
DE1800	Review Detail Siting & Permitting (If Required)	1	22-Oct-21	22-Oct-21	PAFF2200	DE1700	145		SS.ELEC		
PAFF2120	Perform Risk Assessment (Enterprise Risk Management – ERM)	24	16-Sep-21 A	22-Oct-21	PE1720	PAFF2130	-70		PM		
PAFF2220	Prepare Draft Subsidiary Board Presentation	7	14-Oct-21	22-Oct-21	PE1720, PAFF2110	PAFF2210	-47	PAF Submit			
PAFF2130	Finalize Subsidiary Board Presentation	19	29-Oct-21	26-Nov-21	PAFF2120	PAFF2210	-70		PM		
DE1900	Conduct FINAL Detail Constructability Walk Down	1	09-Dec-21	09-Dec-21	DSSE-100, DSSE-200, DSSE-260, DSSE-400	DE1700	113		PM		
DE1700	Conduct Initial Risk Management & SCLL Review (Project Initiator & PM)	5	10-Dec-21	16-Dec-21	DE1800, DE1900	BT1202	113		PM		
PAFF2210	Subsidiary Board Approval	61	29-Nov-21	25-Feb-22	PAFF2130, FF1000, PAFF2220	A3460, SWG1110, DSSE-520, DSSE-510, DSSE-500, A3500, DSSE-440, FF1010	-70		PM		
FF1010	Full Funding PowerPlan Approval	5	28-Feb-22	04-Mar-22	PAFF2210		828	PPA-FF			

[redacted] - Replace Bus with SWGR(CS001891) 22-Sep-21 11:13

Activity ID	Activity Name	Remaining Duration	Start	Finish	Predecessors	Successors	Total Float	Activity Flag	DEPT - DEPARTMEI	Project Lead	Activity Scheduler
T-Minus Milestones		236	30-Sep-21	10-Sep-22			-71			Hynes	
T-Minus Milestones "A" Group		100	30-Sep-21	01-Mar-22			0			Hynes	
AT0805C	A-T-08.05.Civil IFC - Civil (BG) w/BOM	0		30-Sep-21	DSSE-120	AT00	151	BG-IFC	SS.CIVL	[redacted]	
AT2605	A-T-26.05 - Preliminary Design / Engineering Completed	0		08-Oct-21	A3380, DSSE-110	AT00	94	ENG-PREL	SS.ELEC		
AT0801	A-T-08.01 ALL PERMITS RECEIVED	0		04-Nov-21	A1180, A1190, A1210, A1200, A3610	AT00	116		PM		
AT1811	A-T-18.11 - Detail Design/Engineering Completed	0		08-Nov-21	DSSE-205	AT00	74	ENG-DTL	SS.ELEC		
AT2404	A-T-24.04 DETERMINE / ASSIGN LCE (LEAD COMMISSIONING ENGINEER)	0		15-Nov-21	LCE200	AT00	105		PM		
AT0805P	A-T-08.05.P&C IFC - P&C w/BOM	0		10-Dec-21	DSSE-220	AT00	80	P&C-IFC	P&C.P&C		
AT0805E	A-T-08.05.Elect IFC - Electrical (AG) w/Final BOM	0		17-Dec-21	DSSE-240	AT00	73	AG-IFC	SS.ELEC		
AT13xx	A-T-13.xx ALL FIRM TOA APPLICATIONS DUE TO LCC (for DISTRIBUTION Transformer INSTALLATION)	0		17-Dec-21*	A1280	AT00	12		CONS		
AT0805	A-T-08.05 - Final Engineering Issued for Construction W/BOM	0		17-Dec-21	DSSE-220, DSSE-240, DSSE-120	AT00	47	ENG-IFC	SS.ELEC		
AT0409	A-T-04.09 ALL FIRM TOA APPLICATIONS DUE TO LCC (for DISTRIBUTION Non-transformer equipment)	0		27-Dec-21*	A1250	AT00	7		CONS		
AT1201	A-T-12.01 SCADA Date (Tab) Sheets/Signal List Sent to LCC	0		19-Jan-22	DSSE-990	AT00	40	SCADA	P&C.P&C		
AT0813	A-T-08.13 SITING PETITION AND APPLICATION FILED	0		24-Jan-22	A3660	AT00	35		PM		
AT00	A-T-00 - START OF CONSTRUCTION - WO#	0	01-Mar-22*		AT0805C, AT2404, AT1201, AT0801, AT0813, AT0805E, AT0409, AT0805P, AT13xx, AT3001, AT2605, AT1811	CSM, A1130, A1150, A1140, A1120, TOA-Const	0	SOC	CONS		
T-Minus Milestones "B" Group		257	27-Dec-21	10-Sep-22			-102				
BT1801	B-T-18.01 ALL FIRM TOA APPLICATIONS DUE TO LCC (for Switchgear TEST ENERGIZATION)	0		27-Dec-21*	A1280, A1290, A1250	BT00	33		CONS		
BT1301	B-T-13.01 COMMISSIONING PLAN COMPLETE	0		20-Jan-22	LCE500	BT00	131		PM		
BT0404	B-T-04.04 ALL FINAL RELAY PROTECTIVE SETTING ISSUED	0		25-Mar-22	DSSE-440	BT00	67		P&C.P&C		
BT0203	B-T-02.03 CAN COMPLETE (CONSTRUCTION AUTHORIZATION NOTICE)	0		08-Apr-22	A1170	BT00	53		PM		
BT1202	B-T-12.02 P/C DESCRIPTION / DRAFT OPERATING INSTRUCTIONS ISSUED	0		29-Apr-22	DSSE-470, DSSE-920, DSSE-930, DSSE-460, DE1700	BT00	32		P&C.P&C		
BT00	B-T-00 - START OF CONSTRUCTION - WO#	0	01-Jun-22*		BT1801, TOA-Const, BT0404, BT0203, BT1202, BT1301, BT0401	TOA-Test	0		CONS		
BT0401	B-T-04.01 ALL MATERIAL RECEIVED, STAGED, INVENTORIED, REVIEWED	0		10-Sep-22	DSSE-1010, DSSE-550, DSSE-560, SWG580	BT00	-102		CONS		
ENVIRONMENTAL APPROVALS AND PERMITS		138	11-May-20 A	08-Apr-22			36				
PREPARE COMPLIANCE MATRICES - REGULATORY & COMMITMENTS		138	11-May-20 A	08-Apr-22			36				
PREPARE COMPLIANCE MATRICES - REGULATORY & COMMITMENTS		138	11-May-20 A	08-Apr-22			36				

[redacted] Replace Bus with SWGR(CS001891) 22-Sep-21 11:13

Activity ID	Activity Name	Remaining Duration	Start	Finish	Predecessors	Successors	Total Float	Activity Flag	DEPT - DEPARTMEI	Project Lead	Activity Scheduler
A3620	Prepare Preliminary Draft CSC Petition	2	14-Oct-21	15-Oct-21	A1240	A3630	24		PM	[redacted]	
A3630	Mandatory Commenter Review of Preliminary Draft CSC Petition	2	18-Oct-21	19-Oct-21	A3620	A3640	24		PM		
A3640	Prepare Final CSC Petition / Submit Petition to CSC for Review	3	20-Oct-21	22-Oct-21	A3630	A3650	24		PM		
A3650	CSC Petition Review	60	25-Oct-21	21-Jan-22	A3640	A3660	24		PM		
A3660	CSC Petition Approval (Tie to T-8)	1	24-Jan-22	24-Jan-22	A3650	AT0813	24		PM		
A1240	Determine Requirment for CSC (CT Siting Council submissions/approvals)	76	14-Oct-21	03-Feb-22	DSSE-260, PE1600, FF1000	A3620	24		PM		
A1230	Prepared Compliance Matrices - Regulatory	138	11-May-20 A	08-Apr-22	PE1600	A1170	36	REG	PM		
A1220	Prepared Compliance Matrices - Non-Reqgulatory (Commitments)	138	11-May-20 A	08-Apr-22	PE1600	A1170	36	COM	PM		
SITING APPROVALS AND PERMITS		33	06-Jul-21 A	04-Nov-21			76				
SITING APPROVALS AND PERMITS		33	06-Jul-21 A	04-Nov-21			76				
SITING APPROVALS AND PERMITS		33	06-Jul-21 A	04-Nov-21			76				
A3570	Permitting - Siting Team Review Scope to Determine Siting Requirements (e.g. zoning)	17	06-Jul-21 A	13-Oct-21	A3560	A3590	76				
A3590	Permitting - If transformer changes substation footprint, conduct zoning review	5	14-Oct-21	20-Oct-21	A3570	A3600	76				
A3600	Permitting - Meet with Building Inspector	10	21-Oct-21	03-Nov-21	A3590	A3610	76				
A3610	Permitting - Obtain Special Use Permit	1	04-Nov-21	04-Nov-21	A3600	AT0801	76				
ENGINEERING & DESIGN		153	07-Jun-21 A	29-Apr-22			415				
Civil Engineering		9	07-Jun-21 A	30-Sep-21			100				
Civil Engineering		9	07-Jun-21 A	30-Sep-21			100				
DSSE-110	Civil Package to Design	5	07-Jun-21 A	24-Sep-21	DSSE-100, SWG1150	DSSE-120, DSSE-500, DSSE-500, AT2605	104		SS.CIVL		
DSSE-120	Civil Package IFC	9	03-Sep-21 A	30-Sep-21	DSSE-110	A1250, AT0805C, A1170, A1290, A1280, AT0805, NX9A-NC31, A3390, A3430	55	ES-IFC	SS.CIVL		
Electrical Engineering		138	12-Oct-21	29-Apr-22			21				
Electrical Engineering		138	12-Oct-21	29-Apr-22			21				
DSSE-205	Detail Electrical Design Package Drafting	20	12-Oct-21	08-Nov-21	DSSE-200	DSSE-520, DSSE-210, LCE100, AT1811, DSSE-520, DSSE-540, DSSE-530	4	ES-DTL	SS.ELEC		
DSSE-200	Detail Electrical Design Package Design to Drafting	40	12-Oct-21	08-Dec-21	A3380, PF1000	DSSE-205, DE1900	4		SS.ELEC		
DSSE-210	Final (100%) Electrical Design Package IFR	20	09-Nov-21	08-Dec-21	DSSE-205	DSSE-230, DSSE-240, DSSE-220	4	ES-100%	SS.ELEC		
DSSE-230	Electrical Engineering - BOM Complete	2	09-Dec-21	10-Dec-21	DSSE-210	DSSE-240	4		SS.ELEC		

Activity ID	Activity Name	Remaining Duration	Start	Finish	Predecessors	Successors	Total Float	Activity Flag	DEPT - DEPARTMEI	Project Lead	Activity Scheduler
DSSE-240	Electrical Engineering - Electrical Package IFC (Physical & Electrical)	5	13-Dec-21	17-Dec-21	FF1000, DSSE-230, DSSE-210, PF1000	A1280, A1250, DSSE-990, DSSE-480, A1170, AT0805E, A1290, AT0805, NX9A-NC31	4	ES-IFC	SS.ELEC	[redacted]	
DSSE-920	Operating Instructions - SSED Review Draft Convex OI	5	25-Apr-22	29-Apr-22	DSSE-440, DSSE-450	BT1202	21		P&C.P&C		
DSSE-460	Operating Instructions - SSED Review Draft Distribution O	5	25-Apr-22	29-Apr-22	DSSE-440, DSSE-450	BT1202	21		P&C.P&C		
P&C Engineering		153	20-Sep-21	29-Apr-22			415				
P&C Engineering		153	20-Sep-21	29-Apr-22			415				
DSSE-410	Drafting Prepare & Issue Back to P&C	10	20-Sep-21	01-Oct-21	DSSE-400	A3380	4		SS.ELEC		
A3380	Issue P&C Package Design	5	04-Oct-21	08-Oct-21	DSSE-410	DSSE-200, DSSE-510, DSSE-440, NX9A-EM44, AT2605, NX9A-NC69, DSSE-510	4	ES-PRELIM	P&C.P&C		
DSSE-220	SDS Complete (~= P&C IFC)	2	09-Dec-21	10-Dec-21	DSSE-210	DSSE-990, AT0805, AT0805P, NX9A-NC31	32		P&C.P&C		
DSSE-480	P&C INITIATE CASCADE FORMS (Apenndix A) for Construction	20	20-Dec-21	19-Jan-22	DSSE-240	CFM	486		P&C.P&C		
DSSE-990	P&C INITIATE SCADA Data Sheets	20	20-Dec-21	19-Jan-22	DSSE-240, DSSE-220	AT1201	27		P&C.P&C		
DSSE-450	Operating Instructions - Prepare and Issue Draft Distribution OI to Engineering	20	28-Mar-22	22-Apr-22	DSSE-440	DSSE-470, DSSE-930, DSSE-460, DSSE-920	21				
DSSE-470	Operating Instructions - P&C Review Draft Distribution OI	5	25-Apr-22	29-Apr-22	DSSE-450, DSSE-440	BT1202	21		P&C.P&C		
DSSE-930	Operating Instructions - P&C Review Draft Convex OI	5	25-Apr-22	29-Apr-22	DSSE-450, DSSE-440	BT1202	21		P&C.P&C		
Relay Settings		20	28-Feb-22	25-Mar-22			21				
DSSE-440	Relay Settings - Prepare and Issue Relay Settings IFC	20	28-Feb-22	25-Mar-22	FF1000, A3380, PAFF2210	BT0404, DSSE-460, DSSE-920, DSSE-450, DSSE-470, DSSE-930	21	ES-RSET	P&C.P&C		
MATERIAL PROCUREMENT		137	28-Feb-22	10-Sep-22			-71				
MATERIAL FOR P&C		34	28-Feb-22	14-Apr-22			32				
MATERIAL FOR P&C		34	28-Feb-22	14-Apr-22			32				
DSSE-510	MATERIAL - P&C - Prepare & Issue DR	5	28-Feb-22	04-Mar-22	A3380, PAFF2210	DSSE-980	33	DR-RM	P&C.P&C		
DSSE-980	MATERIAL - P&C - Procurement Issue PO	10	05-Mar-22	14-Mar-22	DSSE-510	DSSE-1000	47		PURC		
DSSE-1000	MATERIAL - P&C - Material Vendor Delivery Leadtime	30	15-Mar-22	13-Apr-22	DSSE-980	DSSE-1010	47		PURC		
DSSE-1010	MATERIAL - P&C - Confirm Material Delivery to Site	1	14-Apr-22	14-Apr-22	DSSE-1000	BT0401	47	M-DELIV	PURC		
MATERIAL FOR ELECTRICAL		34	28-Feb-22	14-Apr-22			32				
MATERIAL FOR ELECTRICAL		34	28-Feb-22	14-Apr-22			32				
DSSE-520	MATERIAL - Electrical - Prepare & Issue DR	5	28-Feb-22	04-Mar-22	DSSE-205, FF1000, PAFF2210	DSSE-1020, DSSE-590	33	DR-RM	SS.ELEC		
DSSE-590	Electrical (AG) Material Ordered	0		04-Mar-22	DSSE-520	DSSE-1020	33	DR-AGMAT	SS.ELEC		
DSSE-1020	MATERIAL - Electrical - Procurement Issue PO	10	05-Mar-22	14-Mar-22	DSSE-520, DSSE-590	DSSE-1030	47		PURC		
DSSE-1030	MATERIAL - Electrical - Material Vendor Delivery Leadtime	30	15-Mar-22	13-Apr-22	DSSE-1020	DSSE-550	47		PURC		

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DSSE-550	MATERIAL - Electrical - Confirm Material Delivery to Site	1	14-Apr-22	14-Apr-22	DSSE-1030	BT0401	47	M-DELIV	PURC	[redacted]	
MATERIAL FOR CIVIL		34	28-Feb-22	14-Apr-22			32				
MATERIAL FOR CIVIL		34	28-Feb-22	14-Apr-22			32				
DSSE-500	MATERIAL - CIVIL - Prepare & Issue DR	5	28-Feb-22	04-Mar-22	DSSE-110, FF1000, PAFF2210	DSSE-1040, DSSE-600	33	DR-RM	SS.CIVL		
DSSE-600	Civil (BG) Material Ordered	0		04-Mar-22	DSSE-500	DSSE-1040	33	DR-BGMAT	SS.CIVL		
DSSE-1040	MATERIAL - CIVIL - Procurement Issue PO	10	05-Mar-22	14-Mar-22	DSSE-500, DSSE-600	DSSE-1050	47		PURC		
DSSE-1050	MATERIAL - CIVIL - Material Vendor Delivery Leadtime	30	15-Mar-22	13-Apr-22	DSSE-1040	DSSE-560	47		PURC		
DSSE-560	MATERIAL - CIVIL -Confirm Material Delivery to Site	1	14-Apr-22	14-Apr-22	DSSE-1050	BT0401	47	M-DELIV	PURC		
MATERIAL FOR SWITCHGEAR		137	28-Feb-22	10-Sep-22			-71				
MATERIAL FOR SWITCHGEAR		137	28-Feb-22	10-Sep-22			-71				
SWG1190	SWITCHGEAR Material Ordered	0		04-Mar-22	SWG1110	SWG1120	-70	DR-AGMAT	SS.ELEC		
SWG1110	MATERIAL - SWITCHGEAR - Prepare & Issue DR	5	28-Feb-22	04-Mar-22	SWG1220, PAFF2210	SWG1120, SWG1190	-70	DR-MM	SS.ELEC		
SWG1120	MATERIAL - SWITCHGEAR - Procurement Issue PO	5	07-Mar-22	11-Mar-22	SWG1110, SWG1190	SWG1090	-70		PURC		
SWG1090	MATERIAL - SWITCHGEAR - Material Vendor Delivery Leadtime	182	12-Mar-22	09-Sep-22	SWG1120	SWG580	-102		PURC		
SWG580	MATERIAL - SWITCHGEAR - Confirm Material Delivery to Site	1	10-Sep-22	10-Sep-22	SWG1090	BT0401	-102	M-DELIV	PURC		
CONSTRUCTION		569	01-Oct-21	10-Jan-24			333				
CONSTRUCTION SERVICES SELECTION		119	01-Oct-21	25-Mar-22			36				
CONSTRUCTION SERVICES - BID PROCESS CIVIL		119	01-Oct-21	25-Mar-22			36				
A3430	CONST.SERVICES - BID - Eversource provide Spec / RFP	15	01-Oct-21	22-Oct-21	A3550, DSSE-120	A3440	75		PURC		
A3440	CONST.SERVICES - BID - Contractors Evaluate RFP and Provide Proposal	15	25-Oct-21	15-Nov-21	A3430	A3450	75				
A3450	CONST.SERVICES - BID - Eversource reviews contractor proposals	15	16-Nov-21	07-Dec-21	A3440	A3455	75				
A3455	CONST.SERVICES - BID - Eversource prepare and Issue DR for Contractor	15	08-Dec-21	29-Dec-21	A3450	A3460	75				
A3460	CONST.SERVICES - BID - Contract is Awarded - PO Issued	20	28-Feb-22	25-Mar-22	PAFF2210, A3455	A1170	36		PURC		
CONSTRUCTION - CIVIL		5	01-Mar-22	07-Mar-22			454				
CONSTRUCTION - CIVIL		5	01-Mar-22	07-Mar-22			454				
A1120	Construction - Civil	5	01-Mar-22	07-Mar-22	AT00	CFM, DSSE-900	454		CONS		
CONSTRUCTION - ELECTRICAL		5	01-Mar-22	07-Mar-22			454				
CONSTRUCTION - ELECTRICAL		5	01-Mar-22	07-Mar-22			454				
A1130	Construction - Electrical	5	01-Mar-22	07-Mar-22	AT00	CFM	454		CONS		

[redacted] Replace Bus with SWGR(CS001891) 22-Sep-21 11:13

Activity ID	Activity Name	Remaining Duration	Start	Finish	Predecessors	Successors	Total Float	Activity Flag	DEPT - DEPARTMEI	Project Lead	Activity Scheduler
CONSTRUCTION - P&C		5	01-Mar-22	07-Mar-22			454			[redacted]	
CONSTRUCTION - P&C		5	01-Mar-22	07-Mar-22			454				
A1140	Construction - P&C Implement Relay Settings	5	01-Mar-22	07-Mar-22	AT00	CFM	454		CONS		
CONSTRUCTION - COMMUNICATIONS		5	01-Mar-22	07-Mar-22			454				
CONSTRUCTION - COMMUNICATIONS		5	01-Mar-22	07-Mar-22			454				
A1150	Construction - Field Communications	5	01-Mar-22	07-Mar-22	AT00	CFM	454		CONS		
CONSTRUCTION - CONST.REP TASKS		521	13-Dec-21	10-Jan-24			333				
CONSTRUCTION - CONST.REP TASKS		521	13-Dec-21	10-Jan-24			333				
A1280	Construction Rep SUBMIT OUTAGE REQUESTS for SWITCHGEAR INSTALLATION (13 weeks before outage)	5	13-Dec-21	17-Dec-21	DSSE-240, DSSE-120	AT13xx, BT1801	7		CONS		
A1290	Construction Rep SUBMIT OUTAGE REQUESTS for SWITCHGEAR TEST ENERGIZATION (18 weeks before outage)	5	20-Dec-21	27-Dec-21	DSSE-120, DSSE-240	BT1801	22		CONS		
A1250	Construction Rep SUBMIT OUTAGE REQUESTS for NON-transformer equipment (4 weeks before outage)	10	13-Dec-21	27-Dec-21	DSSE-120, DSSE-240	AT0409, BT1801	4		CONS		
A1260	Construction Rep Finalize CASCADE Forms (within 14 days folloiwng ISD)	10	27-Dec-23	10-Jan-24	CFM	A1030	333		CONS		
CONSTRUCTION RESOURCE TRACKING		459	01-Mar-22	26-Dec-23			0				
CONSTRUCTION RESOURCE TRACKING		459	01-Mar-22	26-Dec-23			0				
A1070	RESOURCE ONLY ACTIVITY - CONSTRUCTION - SWITCH OUT	1	02-Mar-22	02-Mar-22	TOA-Const	CFM	457		CONS		
A1080	RESOURCE ONLY ACTIVITY - CONSTRUCTION - SWITCH IN	1	14-Jun-22	14-Jun-22	TOA-Const	CFM	384		CONS		
ConRep-S	RESOURCE ONLY ACTIVITY - CONSTRUCTION - CONSTRUCTION REP	459	01-Mar-22	26-Dec-23	CSM	CFM	0		CONS		
CONSTelec	RESOURCE ONLY ACTIVITY - CONSTRUCTION - ELECTRICIAN	459	01-Mar-22	26-Dec-23	CSM	CFM	0		CONS		
CONSTRUCTION OUTAGES		571	01-Mar-22	26-Dec-23			3				
CONSTRUCTION OUTAGES		571	01-Mar-22	26-Dec-23			3				
CSM	Construction Start Milestone	0	01-Mar-22		AT00	CONSTelec, TOA-Const, ConRep-S	-12	CRH	CONS		
TOA-Const	OUTAGE / General Construction Work	90	02-Mar-22	14-Jun-22	CSM, AT00	A1080, A1070, BT00	-12	OUT	CONS		
CFM	Construction Finish Milestone	0		26-Dec-23	LCE620, A1120, A1070, TOA-Test, ConRep-S, A1130, A1150, A1080, DSSE-480, CONSTelec	A1260, ISD, A1270, DSSE-900, DSSE-1100, A1110, A1040, A1030, A1020, NX9FINAL50	0		CONS		
ISD	EQUIPMENT IN SERVICE DATE (requires FOOB constraint)	0		26-Dec-23*	CFM, LCE610, LCE700	LCE800	3	ISD			
TEST OUTAGES		394	01-Jun-22	26-Dec-23			0				
TEST OUTAGES		394	01-Jun-22	26-Dec-23			0				
TOA-Test	OUTAGE / Test Transformer	394	01-Jun-22	26-Dec-23	BT00	CFM	0		TEST		
CONSTRUCTION CLOSEOUT		2	27-Dec-23	28-Dec-23			330				

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CONSTRUCTION CLOSEOUT		2	27-Dec-23	28-Dec-23			330			[redacted]	
DSSE-900	Prepare Civil Field Mark Ups (Tie after Last Civil Construction Activity)	2	27-Dec-23	28-Dec-23	CFM, A1120	DSSE-860	330		CONS		
TEST AND COMMISSION		79	09-Nov-21	07-Mar-22			457				
LCE PLANNING		48	09-Nov-21	20-Jan-22			91				
LCE PLANNING		48	09-Nov-21	20-Jan-22			91				
LCE100	PM to Request Lead Commissioning Engineer GO/NO-GO {Preliminary or Detail design is often the predecessor}	2	09-Nov-21	10-Nov-21	DSSE-205	LCE200	70		PM		
LCE200	Assign Lead Commissioning Engineer	2	12-Nov-21	15-Nov-21	LCE100	AT2404, LCE310, LCE320	70		SUBTECH		
LCE400	Develop Test and Commissioning Plan	21	18-Nov-21	17-Dec-21	LCE310, LCE320	LCE500	91	V-COMPLN	TEST		
LCE500	LCE Review and Approve Vendor's Test and Commissioning Plan	21	20-Dec-21	20-Jan-22	LCE400	LCE610, BT1301, LCE620	91	ES-COMPLN	SUBTECH.L		
TEST ACTIVITIES		75	16-Nov-21	07-Mar-22			457				
TEST ACTIVITIES		75	16-Nov-21	07-Mar-22			457				
LCE310	Mobilize LCE Prior to Construction	2	16-Nov-21	17-Nov-21	LCE200, A3500, A3540	LCE400	134		SUBTECH		
LCE320	Mobilize Testing Vendor Prior to Construction	2	16-Nov-21	17-Nov-21	LCE200, A3500, A3540	LCE400	134		TEST		
LCE610	LCE Oversee Execution of Test and Commissioning Plan	30	21-Jan-22	04-Mar-22	LCE500	ISD	458		SUBTECH		
LCE620	Execute Test and Commissioning Plan	30	21-Jan-22	04-Mar-22	LCE500	CFM, LCE700	455		TEST		
LCE700	LCE Ensure Test Group Prepare Electrical Field Mark Ups	1	07-Mar-22	07-Mar-22	LCE620	ISD	457		SUBTECH		
PROJECT CLOSE OUT		931	04-Oct-21	19-Jun-25			0				
PROJECT CLOSE OUT		5	27-Dec-23	03-Jan-24			324				
PROJECT CLOSE OUT		5	27-Dec-23	03-Jan-24			324				
DSSE-1100	Complete TD-707 Turnover Document / Forward to SOC & Mailing List	5	27-Dec-23	03-Jan-24	CFM	DSSE-950, DSSE-860, DSSE-820, DSSE-1130	324		CONS		
Civil As-Builts		41	04-Jan-24	04-Mar-24			327				
Civil As-Builts		41	04-Jan-24	04-Mar-24			327				
DSSE-860	Eversource Engineering Verifies Civil Mark Up As-Built Drawing Package	10	04-Jan-24	18-Jan-24	DSSE-900, DSSE-1100	DSSE-970	327		SS.CIVL		
DSSE-970	Eversource Engineering Updates Civil As-Built Drawing Package	3	19-Jan-24	23-Jan-24	DSSE-860	DSSE-870	327		SS.CIVL		
DSSE-870	ES Create Transmittal, Approve Final As-Built Package, and EDC Files and Issue Drawings to Field	8	24-Jan-24	02-Feb-24	DSSE-970	DSSE-880, DSSE-1120	327	ES-ASB	SS.CIVL		
DSSE-880	PM to Document Civil As-Built Drawings Complete	1	05-Feb-24	05-Feb-24	DSSE-870	FINISH	346		PM		
DSSE-1120	Complete TD-176 CIVIL Design Prep & Issue As-Built Dw	20	05-Feb-24	04-Mar-24	DSSE-870	FINISH	327		SS.CIVL		
Electrical As-Builts		44	04-Jan-24	07-Mar-24			324				
Electrical As-Builts		44	04-Jan-24	07-Mar-24			324				
DSSE-1130	Eversource Engineering Obtains Hard Copy As-Builts from the Field	3	04-Jan-24	08-Jan-24	DSSE-1100	DSSE-820	324		SS.ELEC		

[redacted] - Replace Bus with SWGR(CS001891) 22-Sep-21 11:13

Activity ID	Activity Name	Remaining Duration	Start	Finish	Predecessors	Successors	Total Float	Activity Flag	DEPT - DEPARTMEI	Project Lead	Activity Scheduler
DSSE-820	Eversource Engineering Verifies Quality of Electrical Mark Up As-Built Drawing Package	10	09-Jan-24	23-Jan-24	DSSE-1100, DSSE-1130	DSSE-940	324		SS.ELEC	[redacted]	
DSSE-940	Eversource Engineering Updates Electrical As-Built Drawing Package	3	24-Jan-24	26-Jan-24	DSSE-820	DSSE-830	324		SS.ELEC		
DSSE-830	ES Create Transmittal, Approve Final As-Built Package, and EDC Files and Issue Drawings to Field	8	29-Jan-24	07-Feb-24	DSSE-960, DSSE-940, DSSE-950, LCE900	DSSE-840, DSSE-1110	324	ES-ASB	SS.ELEC		
DSSE-840	PM to Document Electrical As-Built Drawings Complete	1	08-Feb-24	08-Feb-24	DSSE-830	FINISH	343		PM		
DSSE-1110	Complete TD-176 Electrical Design Prep & Issue As-Built Dwgs	20	08-Feb-24	07-Mar-24	DSSE-830	FINISH	324		SS.ELEC		
P&C As-Builts		568	04-Oct-21	10-Jan-24			335				
P&C As-Builts		568	04-Oct-21	10-Jan-24			335				
DSSE-960	P&C Submits Relay Setting As-Builts	5	04-Oct-21	08-Oct-21	DEF1602	DSSE-830	898		P&C.P&C		
DSSE-950	P&C Submits SDS As-Builts	5	04-Jan-24	10-Jan-24	DSSE-1100	DSSE-830	335		P&C.P&C		
Test Closout		11	27-Dec-23	11-Jan-24			334				
Test Closout		11	27-Dec-23	11-Jan-24			334				
LCE800	LCE Ensures Marked up Prints Ready for Pick-up	1	27-Dec-23	27-Dec-23	ISD	LCE900	334		SUBTECH		
LCE900	LCE Review Test Data and Issue Commissioning Report	10	28-Dec-23	11-Jan-24	LCE800	DSSE-830	334		SUBTECH		
SITE RESTORATION CLOSEOUT		10	27-Dec-23	10-Jan-24			363				
SITE RESTORATION CLOSEOUT		10	27-Dec-23	10-Jan-24			363				
A1110	Restore / Remediate Site	10	27-Dec-23	10-Jan-24	CFM	FINISH	363		CONS		
MATERIAL, EQUIPMENT, COST, AND ASSET MANAGEMENT CLOSEOUT		40	27-Dec-23	23-Feb-24			333				
MATERIAL, EQUIPMENT, COST, AND ASSET MANAGEMENT CLOSEOUT		40	27-Dec-23	23-Feb-24			333				
A1020	Cost Analyst Prepares FINAL Units of Property	30	27-Dec-23	08-Feb-24	CFM	FINISH	343				
A1030	Asset Management Complete Asset Update(s) in CASCADE	30	11-Jan-24	23-Feb-24	CFM, A1260	FINISH	333		ENG.AM.CO		
PROJECT MANAGEMENT CLOSEOUT		373	27-Dec-23	19-Jun-25			0				
PROJECT MANAGEMENT CLOSEOUT		373	27-Dec-23	19-Jun-25			0				
A1040	PM Prepares Closeout Documentation, Lessons Learned Meeting, etc.	93	27-Dec-23	08-May-24	CFM	FINISH	0		PM		
A1270	Prepare TD-707 Document	93	27-Dec-23	08-May-24	CFM	FINISH	0		PM		
FINISH	Project / Work Order Complete (FINAL SCHEDULE TASK/MILESTONE)	0		19-Jun-25	DSSE-880, DSSE-1110, A1030, A1270, A1110, A1040, DSSE-1120, DSSE-840, A1020		0		PM		
OVERHEAD / INDIRECTS		10	28-Mar-22	08-Apr-22			36				
PROJECT MANAGEMENT		10	28-Mar-22	08-Apr-22			36				
PROJECT MANAGEMENT		10	28-Mar-22	08-Apr-22			36				
A1170	Prepare CAN (Construction Authorization Notice)	10	28-Mar-22	08-Apr-22	A1230, DSSE-120, DSSE-240, A1220, A3420, A3460	BT0203	36		PM		