EVERSOURCE

Operations Project Authorization Form

Approved at May 26, 2021 EPAC

Link to Meeting Minutes

Date Prepared: 05/14/2021	**Project Title:** [redacted]
Company: Eversource CT	**Project Number: T SS: 404932, D SS: CS00166**
Organization: System Planning	**Class(es) of Plant: T SS and D SS**
Project Initiator: [redacted]	**Project Category:** [redacted] **- Other**
Project Manager: [redacted]	**Project Type: Specific**
Project Sponsor: [redacted]	**Project Purpose: Reliability**
Estimated in service date: December 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: $39,885K (T: $14,609, D1: $17,841K, D2: $7,435K)	**☐ PTF ☒ non-PTF ☒ Distribution**

Financial Requirements:

Project Authorization

ERM: _____

FP&A: _____

Executive Summary

This project is seeking Full Funding of $39,885K ($14,609K – Transmission (40493201), $17,841K – Distribution Phase 1 (CS001661), $7,435K – Distribution Phase 2 (CS001662)) to support material procurement, construction, and test services for transmission and distribution [redacted]

[redacted]

This project is being proposed to address reliability, aging infrastructure, power quality, voltage, and distribution load serving issues documented in an area study performed by Distribution Engineering in 2015 (Refer to Attachment B [redacted] This project was reviewed and approved by the Solution Design Committee on November 13, 2019.

Partial Funding Authorization:

Distribution (CS00166): The partial funding request of $2,630K was approved in PowerPlan on March 5, 2020. The project has incurred $441K to date on completion of the following activities:

- 100% IFC Drawings
  - [redacted]
- Major Materials procurement (drawings only: [redacted]
- Coordination with Distribution OH Team for [redacted]
- [redacted]
- Environmental Permit Determinations and appropriate document development (Natural Diversity Data Base (NDDB) and Stormwater Pollution Control Plan (SWPCP))
- Siting & Permitting Determinations and appropriate document development (Petition)
- Electrical/Civil and Testing Support RFPs

Transmission (404932): Partial funding of $1,256K was approved in in PowerPlan on February 27, 2020. The project has incurred $1,196K to date on completion of the following activities:

- 100% IFC Drawings
  - [redacted]
- Drawings of Major Materials [redacted]
- Electrical/Civil and Testing Support RFPs
- Environmental Permit Determinations and appropriate document development (NDDB and SWPCP)
- Siting & Permitting Determinations and appropriate document development (Petition)

Full Funding Authorization:

The Full Funding estimates were created based on completion of following items:

- Major contracts (Electrical/Civil construction and Testing Support) pricing based on 100% IFC drawings
- Major material quotes and detailed BOMs
- Detailed constructability review walkdowns (Attachment C)
- Coordination with other stakeholders (Distribution OH Project Team)
- [redacted] (Attachment D)
- Coordination with UCONN on additional laydown area requirement (Attachment E)

A summary of the project cost breakdown is as follows:

Work Order	Estimate Value
40493201	$14,609K
CS001661 (Phase 1)	$17,841K
CS001662 (Phase 2)	$7,435K
Total	**$39,885K**

- 40493201 (Phase 1 Construction): [redacted]
- CS001661 (Phase 1 Construction): [redacted]
- Refer to “Project Scope” section of this document for additional detail.

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Project Costs Summary: Transmission (40493201)

Note: Dollar values are in thousands

Line item Category	Prior Authorized	Actuals to Date	2021 to Go	2022	2023	2024	2025	2026	Total
1. ROW / Easements / Land Acquisition									
2. Environmental Approvals / Permits		$23	$12	$58					$93
3. Outreach		$4	$7	$23					$34
4. Siting Approvals / Permits		$3	$138	$471					$611
5. Engineering / Design	$652	$615	$196	$178					$989
6. Materials (Eversource purchased)	$135	$61	$659	$1,024					$1,744
7. Construction (incl matl's by contractors)		$56	$573	$2,960					$3,589
8. Testing / Commissioning		$1	$200	$1,487					$1,688
9. Project Mgmt Team	$175	$126	$150	$273					$549
10. Removals			$41	$42					$83
11. Other									
12. Risks			$140	$360					$500
SUBTOTAL DIRECTS W/ RISKS	$962	$890	$2,116	$6,874					$9,880
13. Indirects/Overhead	$255	$296	$752	$2,654					$3,702
14. AFUDC	$40	$9	$118	$440					$567
PROJECT TOTAL – BASELINE BUDGET		$1,195	$2,986	$9,968					$14,149
15. Contingency			$111	$349					$460
TOTAL CAPITAL REQUEST		$1,195	$3,097	$10,316					$14,609
16. Reimbursables/Customer Contribution									
PROJECT TOTAL (LESS REIMBURSABLES)		$1,195	$3,097	$10,316					$14,609
O&M									
TOTAL REQUEST	$1,256	$1,195	$3,097	$10,316					$14,609

Note: Explain unique payment provisions, if applicable: *Provide a detailed breakdown of Other costs here. Risk allocation of $500K is for the following:*

Potential UG Obstructions is in allowances to construction vendor	$ 50,000
Severe Weather, Delays, OT	$ 350,000
Design development	$ 100,000

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Breakout Costs: Transmission (40493201)

Note: Dollar values are in thousands

Line item Category	Prior Authorized	Actuals to Date	2021 to Go	2022	2023	2024	2025	2026	Total
ST Labor		$168	$120	$123					$412
OT Labor									
Outside Services Labor	$826	$661	$1,060	$5,181					$6,902
Materials*	$135	$61	$750	$1,161					$1,971
Removals			$41	$42					$83
Other			$257	$715					$972
Indirects	$255	$296	$752	$2,654					$3,702
AFUDC	$40	$9	$118	$440					$567
TOTAL CAPITAL REQUEST - W/O REIMBURSABLES	$1,256	$1,195	$3,097	$10,316					$14,609

*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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Project Costs Summary: Distribution Phase 1 (CS001661)

Note: Dollar values are in thousands

Line item Category	Prior Authorized*	Actuals to Date	2021 to Go	2022	2023	2024	2025	2026	Total
1. ROW / Easements / Land Acquisition									
2. Environmental Approvals / Permits		$2	$5						$6
3. Outreach			$8	$14					$22
4. Siting Approvals / Permits		$5	$22	$38					$65
5. Engineering / Design	$1,450	$54	$189	$197					$439
6. Materials (Eversource purchased)	$475	$238	$1,732	$2,638					$4,608
7. Construction (incl matl's by contractors)			$1,778	$2,745					$4,524
8. Testing / Commissioning			$258	$1,311					$1,569
9. Project Mgmt Team		$5	$88	$138					$230
10. Removals			$27	$42					$68
11. Other									
12. Risks			$222	$475					$697
SUBTOTAL DIRECTS W/ RISKS	$1925	$303	$4,328	$7,598					$12,228
13. Indirects/Overhead	$629	$113	$1,874	$3,230					$5,217
14. AFUDC	$76	$1							$1
PROJECT TOTAL – BASELINE BUDGET	$2,630	$417	$6,201	$10,828					$17,446
15. Contingency			$158	$236					$394
TOTAL CAPITAL REQUEST	$2,630	$417	$6,360	$11,064					$17,841
16. Reimbursables/Customer Contribution									
PROJECT TOTAL (LESS REIMBURSABLES)	$2,630	$417	$6,360	$11,064					$17,841
O&M									
TOTAL REQUEST	$2,630	$417	$6,360	$11,064					$17,841

*Prior Authorized was for CS00166 Distribution Project Phase 1 (CS001661) and Phase 2 (CS001662) combined; therefore, no separate cost breakdown is available for these two work orders. All CS00166 costs are shown in Distribution Phase 1 (CS001661) cost tables.

Note: Explain unique payment provisions, if applicable: *Provide a detailed breakdown of Other costs here. Risk allocation of $697K is for the following:*

Potential UG Obstructions is in allowances to construction vendor	$	50,000
Severe Weather, Delays, OT	$	400,000
Design development	$	75,000

Additional removal costs	$ 100,000
Unforeseen environmental disposal	$ 72,000

Breakout Costs: Distribution Phase 1 (CS001661)

Note: Dollar values are in thousands

Line item Category	Prior Authorized**	Actuals to Date	2021 to Go	2022	2023	2024	2025	2026	Total
ST Labor		$65	$104	$70					$239
OT Labor									
Outside Services Labor	$1,450		$2,197	$4,309					$6,506
Materials*	$475	$238	$1,772	$2,699					$4,710
Removals			$27	$42					$68
Other			$385	$715					$1,100
Indirects	$629	$113	$1,874	$3,230					$5,217
AFUDC	$76	$1							$1
TOTAL CAPITAL REQUEST - W/O REIMBURSABLES	$2,630	$417	$6,360	$11,064					$17,841

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

**Prior Authorized was for CS00166 Distribution Project Phase 1 (CS001661) and Phase 2 (CS001662) combined; therefore, no separate cost breakdown is available for these two work orders. All CS00166 costs are shown in Distribution Phase 1 (CS001661) cost tables.

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Project Costs Summary: Distribution Phase 2 (CS001662)

Note: Dollar values are in thousands

Line item Category	Prior Authorized*	Actuals to Date	2021 to Go	2022	2023	2024	2025	2026	Total
1. ROW / Easements / Land Acquisition									
2. Environmental Approvals / Permits				$12	$24				$36
3. Outreach				$0	$9				$9
4. Siting Approvals / Permits				$1	$24				$25
5. Engineering / Design		$7		$102	$65				$174
6. Materials (Eversource purchased)					$1,841				$1,841
7. Construction (incl matl's by contractors)					$1,483				$1,483
8. Testing / Commissioning				$39	$835				$874
9. Project Mgmt Team		$2	$3	$17	$90				$111
10. Removals				$24	$100				$125
11. Other									
12. Risks			$10	$410					$420
SUBTOTAL DIRECTS W/ RISKS		$9	$13	$605	$4,471				$5,097
13. Indirects/Overhead		$15	$6	$193	$1,922				$2,137
14. AFUDC		$0							$0
PROJECT TOTAL – BASELINE BUDGET		$24	$19	$798	$6,393				$7,234
15. Contingency				$3	$197				$201
TOTAL CAPITAL REQUEST		$24	$19	$801	$6,591				$7,435
16. Reimbursables/Customer Contribution									
PROJECT TOTAL (LESS REIMBURSABLES)		$24	$19	$801	$6,591				$7,435
O&M									
TOTAL REQUEST		$24	$19	$801	$6,591				$7,435

*Prior Authorized was for CS00166 Distribution Project Phase 1 (CS001661) and Phase 2 (CS001662) combined; therefore, no separate cost breakdown is available for these two work orders. All CS00166 costs are shown in Distribution Phase 1 (CS001661) cost tables.

Note: Explain unique payment provisions, if applicable: *Provide a detailed breakdown of Other costs here. Risk allocation of $420K is for the following:*

Potential UG Obstructions	$ 50,000
Severe Weather, Delays, OT	$ 200,000

Design development	$ 55,000
Additional removal costs	$ 40,000
Additional bus, supports, and pathways	$ 50,000
Unforeseen environmental disposal	$ 25,000

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Breakout Costs: Distribution Phase 2 (CS001662)

Note: Dollar values are in thousands

Line item Category	Prior Authorized**	Actuals to Date	2021 to Go	2022	2023	2024	2025	2026	Total
ST Labor		$9	$3	$38	$51				$101
OT Labor									
Outside Services Labor				$130	$2,383				$2,513
Materials*					$1,935				$1,935
Removals				$24	$100				$125
Other			$10	$415	$200				$625
Indirects		$15	$6	$193	$1,922				$2,137
AFUDC		$0							$0
TOTAL CAPITAL REQUEST - W/O REIMBURSABLES		$24	$19	$801	$6,591				$7,435

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

**Prior Authorized was for CS00166 Distribution Project Phase 1 (CS001661) and Phase 2 (CS001662) combined; therefore, no separate cost breakdown is available for these two work orders. All CS00166 costs are shown in Distribution Phase 1 (CS001661) cost tables.

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Project Costs Summary: Transmission and Distribution Combined

Note: Dollar values are in thousands

Line item Category	Prior Authorized	Actuals to Date	2021 to Go	2022	2023	2024	2025	2026	Total
1. ROW / Easements / Land Acquisition									
2. Environmental Approvals / Permits		$24	$17	$70	$24				$135
3. Outreach		$4	$15	$37	$9				$65
4. Siting Approvals / Permits		$8	$160	$510	$24				$701
5. Engineering / Design	$2,102	$675	$384	$476	$65				$1,602
6. Materials (Eversource purchased)	$610	$299	$2,392	$3,661	$1,841				$8,192
7. Construction (incl matl's by contractors)		$56	$2,351	$5,705	$1,483				$9,596
8. Testing / Commissioning		$1	$457	$2,837	$835				$4,131
9. Project Mgmt Team	$175	$133	$241	$427	$90				$891
10. Removals			$68	$108	$100				$276
11. Other									
12. Risks			$372	$1,245					$1,617
SUBTOTAL DIRECTS W/ RISKS	$,2887	$1,201	$6,456	$15,077	$4,471				$27,206
13. Indirects/Overhead	$884	$425	$2,632	$6,077	$1,922				$11,055
14. AFUDC	$115	$11	$118	$440					$568
PROJECT TOTAL – BASELINE BUDGET	$3,886	$1,637	$9,206	$21,593	$6,393				$38,829
15. Contingency			$269	$588	$197				$1,055
TOTAL CAPITAL REQUEST	$3,886	$1,637	$9,475	$22,182	$6,591				$39,884
16. Reimbursables/Customer Contribution									
PROJECT TOTAL (LESS REIMBURSABLES)	$3,886	$1,637	$9,475	$22,182	$6,591				$39,884
O&M									
TOTAL REQUEST	$3,886	$1,637	$9,475	$22,182	$6,591				$39,884

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

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Breakout Costs: Transmission and Distribution Combined

Note: Dollar values are in thousands

Line item Category	Prior Authorized	Actuals to Date	2021 to Go	2022	2023	2024	2025	2026	Total
ST Labor		$242	$226	$232	$51				$751
OT Labor									
Outside Services Labor	$2,277	$661	$3,257	$9,620	$2,383				$15,921
Materials*	$610	$299	$2,522	$3,860	$1,935				$8,615
Removals			$68	$108	$100				$276
Other			$653	$1,845	$200				$2,697
Indirects	$884	$425	$2,632	$6,077	$1,922				$11,055
AFUDC	$115	$11	$118	$440					$568
TOTAL CAPITAL REQUEST - W/O REIMBURSABLES	$3,886	$1,637	$9,475	$22,182	$6,591				$39,884

*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: Not Applicable

What functional area(s) will these future costs be funded in? Not Applicable
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: Not Applicable

What functional area(s) will these benefits be reflected in? Not Applicable
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: Not Applicable

Are there other environmental cleanup costs associated with this project? If yes, please provide details: Soil samples have been completed and no evidence of contamination was identified. There is a potential for asbestos-containing materials and equipment containing polychlorinated biphenyls that will need proper removal and disposal.

Technical Justification:

Project Need Statement

Distribution Needs:

This project is being proposed to address reliability, aging infrastructure, power quality, voltage, and distribution load serving issues documented in an area study performed by Distribution Engineering in 2015 (Refer to Attachment B [redacted]

[redacted]

[redacted]

[redacted]

This project will [redacted]

Transmission Needs:

[redacted]

Project Objectives

Distribution Objectives:

The main objectives of this project are to [redacted]

[redacted]

Transmission Objectives:

The main objective of this project is to address the [redacted]:

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

Project Scope

[redacted]

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[redacted]

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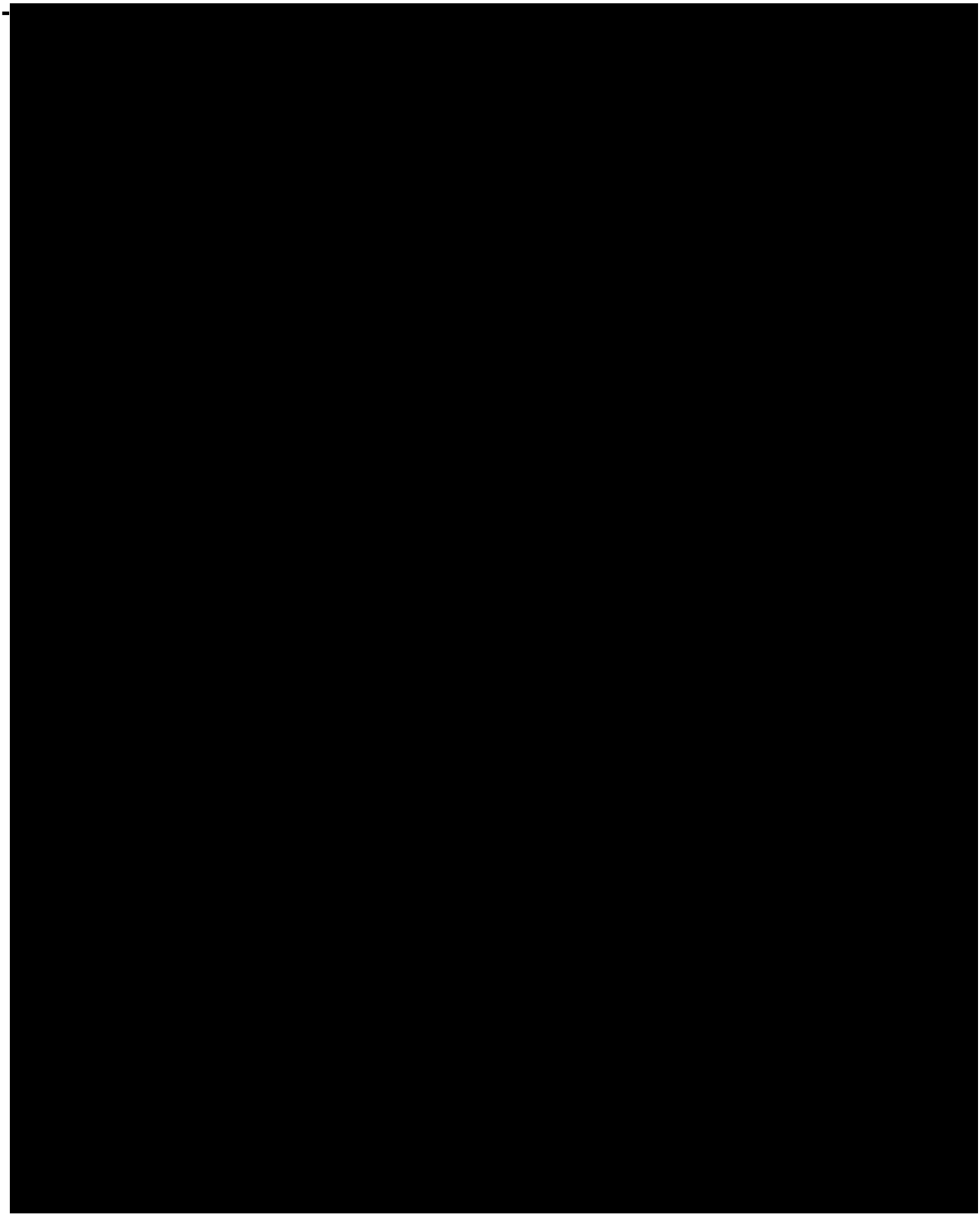


[redacted]

V. Other Site Considerations

A. Real Estate/Siting & Permitting Considerations (i.e. acquisitions, offset encroachment, ROW impacts):

[redacted] ill take place on Eversource property.

B. Environmental
   a. Soil Contamination: Soil samples have been completed. No evidence of contamination was found.
   b. Wetlands impact: The planned area of expansion is outside of the designated wetland area. The small portion of the wetland will be utilized for the laydown area which will be matted in accordance with Best Management Practice (BMP) requirements.

C. Audible Noise Level Changes/Considerations:
   a. A sound study was completed to determine sound levels based on proposed configuration and equipment. The study showed to meet applicable local standards at the property line.

D. T-Line Considerations:
   a. The [redacted]

V. Protection & Controls Scope of Work

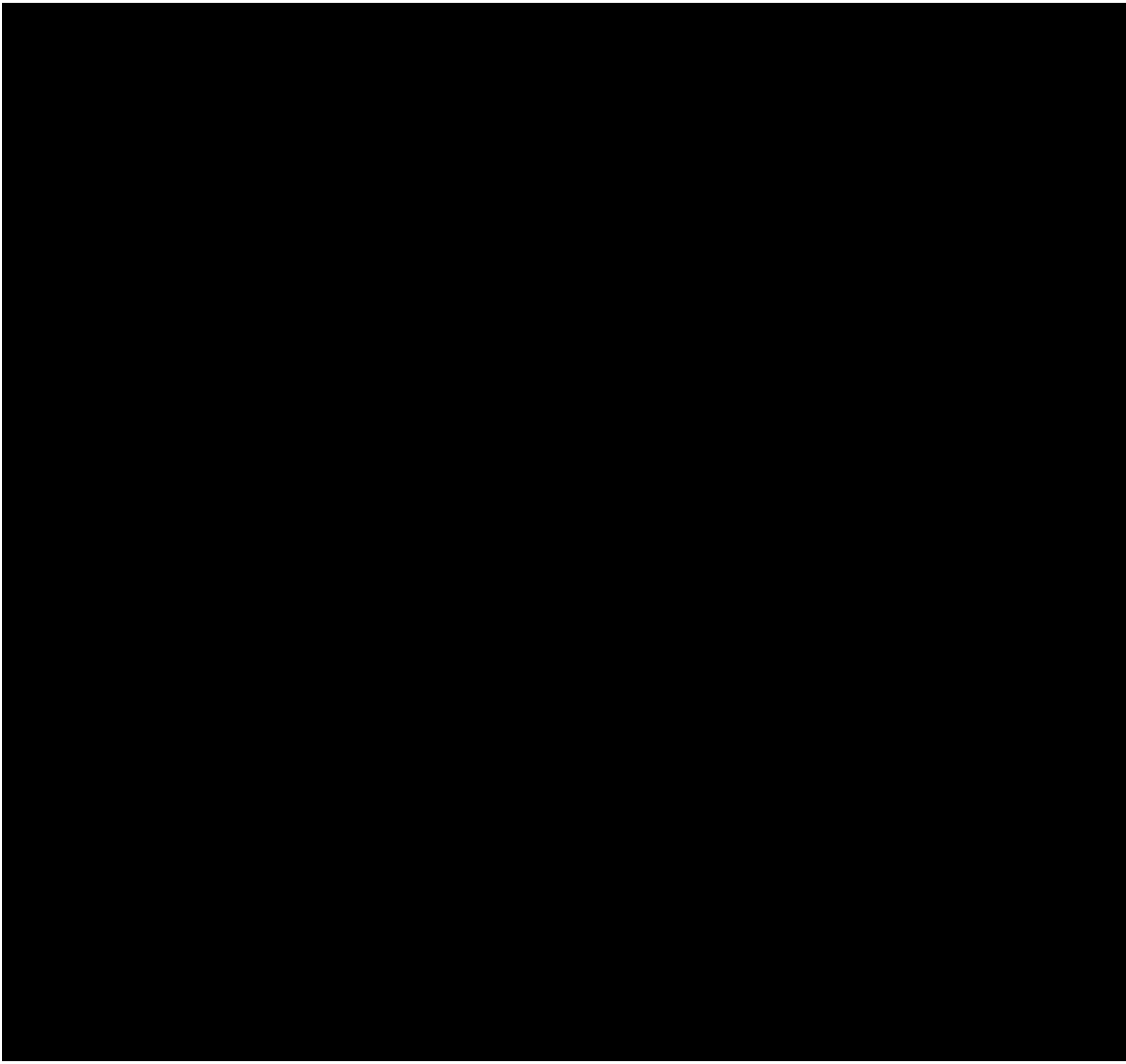
A. *Transmission Description of Work: 40493201*

Protection & Control Transmission Scope consists of the following:

a. [redacted]

[redacted]

[redacted]



VII. Work Performed by Others

a. Programming and configuration of Bitronics meters and SEL meters.
b. Site survey, environmental survey, soil contamination testing, and geotechnical testing were completed by combination of Eversource and Eversource approved contractors.





Business Process and / or Technical Improvements

This project will [redacted]

Alternatives Considered with Cost Estimates

This project was presented to the Solution Design Committee on November 13, 2019 and the chosen Transmission and Distribution alternatives were approved.

Distribution Alternatives:

- [redacted]
- [redacted]

  Planning grade cost estimate for this alternative is $25.3M

Conceptual grade cost estimate for this alternative is $26.1M with Transmission Alternative 2.

- [redacted]

Transmission Alternatives:

- [redacted]

[redacted]



Planning grade cost estimate for this alternative is $14.6M.

- [redacted]



Conceptual grade cost estimate for [redacted] is $7.7M.

- [redacted]

Conceptual grade cost estimate for this alternative is $4.0M.

The table below show each distribution and transmission alternative described above along with their associated costs.

Alternative Solution Summary Table

Key factors	[redacted]
Description Summary	
Constructability Requirement	
Permitting Requirement	
System Performance	
Future Expansion	
Estimated Cost reported in $M at -25/+50 %	
Preferred solution (Yes/No)	

Key factors	[redacted]		
Description Summary			
Constructability Requirement			
Permitting Requirement			
System Performance			
Future Expansion			
Estimated Cost reported in $M at -25/+50 %	$27.2 (Conceptual) ($22.1 Distribution and $5.1 Transmission)	$33.3 ($25.6 Distribution and $7.7 Transmission)	$26.1 ($22.1 Distribution and $4.0 Transmission)
Preferred solution (Yes/No)	[redacted]		

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Partial Funding Presentation to EPAC and Approval - Completed	February 2020
Partial Funding Approved in PowerPlan - Completed	March 2020
Initiate work orders - Completed	March 2020
Issue PO for Equipment drawings (Transformers, Switchgear, etc.) - Completed	March 2020
Receive equipment approval drawings from Manufacturers - Completed	August 2020
Resolve comments on approval drawings and receive updated schematics from Manufacturer - Completed	November 2020
Preliminary Engineering (Civil design and Preliminary Elec. Design Phase 1 and Phase 2) - Completed	January 2021
Constructability review, site walkdown - Completed	March 2021
Update PAF and estimate for full funding presentation to EPAC - Completed	May 2021
Detailed Engineering (IFC Design Phase 1 and Phase 2) - Completed	April 2021
EPAC presentation for full funding	May 2021
Resolve EPAC comments and start PowerPlan approval routing	May 2021
Risk Workshop with Enterprise Risk Management	June 2021
Subsidiary Board Presentation and Approval	July 2021
PowerPlan authorization complete	July 2021
Siting Approval	September 2021
Environmental Permit Approval	July 2021
Order materials and issue major equipment POs for release to Manufacturer (transformers, switchgear, breakers, circuit switchers, control house, relay panels, 115kV cable, etc.)	August 2021
Civil Construction Start (Phase 1: [redacted]	October 2021
Delivery of Relay & Control Enclosure & panels (~5 months after release to Manufacturer)	February 2022
Delivery of [redacted] (~8 months after release to Manufacturer)	April 2022
Phase 1 outages commence	September 2022
In-service (Phase 1) [redacted]	December 2022
[redacted]	December 2022
[redacted]	May 2023
[redacted]	June 2023
[redacted]	August 2023
[redacted]	August 2023
[redacted]	December 2023

See Attachment H for the P6 Schedule.

Regulatory Approvals

[redacted]



See Attachment K for an aerial view of the

Risks and Risk Mitigation Plans

The project has identified the following list of Risks and associated mitigation plans. The project will be required to conduct a Risk Assessment workshop with Enterprise Risk Management (ERM); this is scheduled to be completed on June 9, 2021. The results of the workshop will be documented in the Subsidiary Board Presentation.

The risks identified in the table below are specific risks that the project may realize during the execution of the project; however, the risk amounts are included as part of the general risk categories outlined in the cost summary section. The below list of specific risks will be used in the ERM workshop ahead of Subsidiary Board Presentation.

Risk Description	Risk Horizon	Risk Mitigation
Encounter unexpected obstructions (rock/ledge/duct banks/conduit) during underground construction causing increased construction costs	2021 - 2023	Structure the Electrical/Civil contract to incorporate allowances for unexpected obstructions using unit pricing from bid (Rock Removal - CY; Duct bank removal - LF

Risk Description	Risk Horizon	Risk Mitigation
Given the location, dewatering onsite may be required due to unforeseen environmental conditions that prove more costly than forecasted.	August 2021 - June 2022; Jan 2023 - June 2023	Obtain monthly rental cost from electrical-civil contractor during RFP process.
[redacted]	2021 - 2022	[redacted]
[redacted]	2022 - 2023	[redacted]
[redacted]	2021-2022	[redacted]
Construction is susceptible to weather delays, causing scheduling delays that may impact ISO-NE/SOC approved equipment outage dates. This may also lead to additional costs for overtime and due to severe weather delays.	2021 - 2023	Develop a construction schedule recovery plan based on contractor's unit costs to support the outage schedule.
Delay in major material deliveries (switchgear, transformers, R&CE, relay and control panels) impacting target scope of work planned in service date	2022-2023	Maintain continuous communication with major material suppliers and negotiate pricing for anticipated schedule delays with construction/testing contractors, and develop schedule recovery plan to maintain planned ISD
Removal and off-site disposal of contaminated soil and asbestos/PCB containing materials exceeds anticipated cost due to unforeseen environmental issues	2021-2023	Incorporate allowances for off-site disposal of contaminated soil and asbestos based on pre-characterization data from accessible locations
Additional on-site construction and commissioning management and monitoring due to complex cut-overs	2022-2023	Evaluate the need for additional resources after development of commissioning plans
Deviations to the original plan/schedule resulting in requiring additional coordination with the local entities (Uconn, Town of Mansfield) for major materials deliveries and the duration of construction phase.	2022-2023	Develop a strategy in coordination with the local entities while maintaining continuous communication.

Risk Description	Risk Horizon	Risk Mitigation
Continuous/additional restoration of project access paths and laydown areas during construction due to external elements (weather)	2021 - 2023	Construction contractor would provide additional restoration beyond contracted amount to maintain a safe and constructable work environment
[redacted]	2022-2023	[redacted]
Delayed construction start resulting in increased construction/testing costs to meet Phase 1 target in-service date	2021-2022	Develop a schedule recovery plan in coordination with the contractors to stay on course with the target in-service date

References

- ES SUB 013
- ES SUB 014
- ES SUB 015
- ES SYSPLAN 010

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





Figure 1: [redacted]



Figure 2: [redacted]



Figure 3: [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]	**Project Number: T: 404932, D:CS00166**	
Facility Type: ☐ BPS ☒ BES ☐ PTF ☒ non-PTF ☐ CIP ☒ Distribution		
PLANNING		
Is a NX-9 required?	Yes	
Is an ISO-NE PAC presentation required?	No	
ISO-NE Presentation Date (if completed):	Enter Date	
Cost in ISO-NE Presentation ($M) (if completed):	Enter Cost ($M)	
Is a PPA required?	Yes	
Is a TCA Application Required?	No	
TCA Submittal Date (if submitted):	Enter Date	
Cost in TCA Submittal ($M) (if submitted):	Enter Cost ($M)	
Enter ISO-NE RSP / Asset Condition ID, if assigned:	Enter ISO-NE ID	
PLANNING/PROTECTION & CONTROLS		
Are RAS/SPS/UVLs affected?	No	
OPERATIONS		
Outage Required?	[redacted]	☐ Outage Not Required
Do SCLL Conditions Exist?	Yes	
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	No	
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]	**Project Number: T: 404932, D: CS00166**
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)*	Yes
SITING & CONSTRUCTION SERVICES (OUTREACH)	
What is the level of outreach expected?	High
INITIATOR	
Has a field constructability review been completed?	Yes
INVESTMENT RECOVERY	
Does the project require development of an Investment Recovery plan?	Yes
COST ESTIMATING	
What team/firm prepared the cost estimate?	Estimate was prepared by the Eversource Estimating Team
Name of the person who prepared the estimate:	[redacted]
Was the estimate reviewed by Eversource Estimating?	Yes - Full Review

Cost Estimate Backup Details

Please see Attachment A for the detailed cost estimate backup files.

ESTIMATE SUMMARY

Project Title: [redacted]
Project Mgr/Lead: [redacted]
Project Number:404932/CS00166
WO & Task #:40493201
Est. Revision # 00
Estimate Type - [redacted]

Estimate By: [redacted]
Date of Estimate: 4/30/2020
ISD:12/31/2022
Estimate # C-21-270A

Template Revision # 01.61

ESTIMATE SUMMARY

Estimate Type: Planning

WBS	Description	TOTAL	% of Directs	% of Total	Priors	2021	2022	2023	2024	2025	2026
1	ROW / Easements / Land purchases										
2	Environmental Approvals / Permits	$92,700	0.9%	0.6%	$22,900	$12,000	$57,800				
3	Outreach	$33,900	0.3%	0.2%	$4,400	$6,700	$22,800				
4	Siting Approvals / Permits	$611,400	6.2%	4.2%	$2,800	$137,700	$470,900				
5	Engineering / Design	$988,500	10.0%	6.8%	$615,100	$195,800	$177,600				
6	Materials (Eversource purchased)	$1,743,700	17.6%	11.9%	$60,800	$659,400	$1,023,500				
7	Construction (incl matl's by contractors)	$3,589,300	36.3%	24.6%	$56,200	$573,200	$2,959,900				
8	Testing / Commissioning	$1,688,000	17.1%	11.6%	$1,500	$199,700	$1,486,800				
9	PMT Project Mgmt Team	$549,300	5.6%	3.8%	$126,400	$150,400	$272,500				
10	Removals	$83,400	0.8%	0.6%		$41,100	$42,300				
11	Other										
12	Risks	$500,000	5.1%	3.4%		$140,000	$360,000				
	Project Directs Total w/Risks	**$9,880,200**	100.0%	67.6%	**$890,100**	**$2,116,000**	**$6,874,100**				
13	Indirects/Overhead	$3,701,700		25.3%	$296,200	$751,800	$2,653,700				
14	AFUDC	$566,600		3.9%	$9,300	$117,700	$439,600				
	Project Total - Baseline Budget	**$14,148,500**		96.9%	**$1,195,600**	**$2,985,500**	**$9,967,400**				
15	Contingency	$460,000		3.1%		$111,200	$348,800				
	Project Total - Funding Approval Level	**$14,608,500**		100.0%	**$1,195,600**	**$3,096,700**	**$10,316,200**				
16	Reimbursables/Customer Contribution										
	Project Total (less reimbursables)	**$14,608,500**			**$1,195,600**	**$3,096,700**	**$10,316,200**				
		-									
	Amount of Escalation included above	$250,800					$250,800				
6	Total materials - Eversource	$1,743,700			$60,800	$659,400	$1,023,500				
	Total materials - Contractor	$227,473			-$27	$90,200	$137,300				
	Total materials	$1,971,173			$60,773	$749,600	$1,160,800				
	NOTE: Risk / Contingency is 7% of Project Total Costs (incl escal/indirects/AFUDC but excl reimb.)										

Estimate Range	**-25%**	-	**25%**	
	$10,956,000	-	**$18,261,000**	

COMMENTS:

Project Scope:

[redacted]

Assumptions/Clarifications;
Indirect rates based on; 1T - CT , [redacted]

[redacted]
Underground obstructions are anticipated.
Soil contamination is to be handled by others.
No rental required for laydown area
Enginering internal construction external. Susbstation expansion PMT is split between (3) workorders.
[redacted] is based on layout drawing 17801-33008 Rev AR dated 3/2021.
No remote input-output (RIO) equipment is required per project team.
No digital fault recorder or cabinet as per project team
Soil Disposal - Contaminated (20%), Non-contaminated 80%)
Additional Hand Digging Labor (50%)
Encounter rock or foundations in trench (15%)

RISKS

Potential UG Obstructions is in allowances to construction vendor	$	50,000
Severe Weather, Delays, OT	$	350,000
Design development	$	100,000

Project Number:404932/CS00166
Date of Estimate: 4/30/2020
Est. Revision # 00
Template Revision # 01.61

CSTXX-CONSTRUCTION	R		Prior actuals to date Mhrs	Prior actuals to date DOLLARS	2021 Mhrs	2021 DOLLARS	2022 Mhrs	2022 DOLLARS	2023 Mhrs	2023 DOLLARS	2024 Mhrs	2024 DOLLARS	2025 Mhrs	2025 DOLLARS	2026 Mhrs	2026 DOLLARS	TOTAL Mhrs	TOTAL DOLLARS
							1		2		3		4		5			
Electrical Construction	LT																	
General Construction	LT			$15,451														$15,451
SCADA / Automation	LT						120	$6,551									120	$6,551
Telecom - Field	LT						80	$4,367									80	$4,367
Construction Reps (internal)	LT																	
Support Switch/Tag	LT				32	$1,696	48	$2,620									80	$4,316
Other (specify)	LT																	
Other (specify)	LT																	
Other (specify)	LT																	
LT Total				$15,451	32	$1,696	248	$13,538									280	$30,685
Employee Expenses	AE	5%				$85		$677										$762
Construction Purchased Material	AM	1%				$4,527		$26,423										$30,950
Outside Construction Vendor	AQ			$33,538	1,975	$452,704	11,191	$2,642,281									13,166	$3,128,523
Sales tax on Constr. Vendor																		
Vehicles (now in indirects section)	AV																	
Inspection services (Outside Vendor)	AQ																	
Construction Rep (Outside vendor)	AQ			$7,221	198	$28,512	1,120	$166,118									1,318	$201,851
Rents and Leases	BR																	
CSTXX Subtotal				$56,210		$487,524		$2,849,037										$3,392,771
Escalation						$ -		$ -		$ -		$ -		$ -		$ -		$ -
	P1																	
CSTXX Total				$56,210	2,205	$487,524	12,559	$2,849,037									14,764	$3,392,771
ENRXX-TG ENGINEERING/DESIGN																		
Project Services/Drafting	LT				80	$4,240	120	$6,551									200	$10,791
T- Line Engineering/Design	LT																	
D- Street Engineering/Design	LT																	
Civil Engineering/Design	LT				480	$25,440	240	$13,102									720	$38,542
Substation (T) Engineering/Design	LT			$99,605	400	$21,200	400	$21,836									800	$142,641
Substation (D) Engineering/Design	LT																	
Protection & Controls Engineering	LT				480	$25,440	120	$6,551									600	$31,991
Survey Engineering	LT																	
SCADA / Automation Engineering	LT				120	$6,360											120	$6,360
Telecom Engineering	LT				120	$6,360											120	$6,360
Other - specify	LT																	
Other - specify	LT																	
LT Total				$99,605	1,680	$89,040	880	$48,040									2,560	$236,685
Employee Expenses	AE	5%				$4,452		$2,402										$6,854
Contractor Engineering - T-Lines	AQ																	
Contractor Engineering - D-Street	AQ																	
Contractor Engineering - T -Station	AQ			$515,509	400	$60,800	800	$125,248									1,200	$701,557
Contractor Engineering - D-Station	AQ																	
Contractor Engineering - P&C	AQ																	
Contractor Engineering - Survey	AQ				45	$5,535	15	$1,900									60	$7,435
Contractor Engineering - SCADA / Automatic	AQ				240	$36,000											240	$36,000
Contractor Engineering - Telecom	AQ																	
Contractor Engineering - Specify	AQ																	
Contractor Engineering - Specify	AQ																	
Contractor Engineering - Specify	AQ																	
Vehicles (now in indirects section)	AV																	
ENRXX Subtotal			-	$615,114	2,365	$195,827	1,695	$177,590	-		-		-		-		4,060	$988,531
Escalation																		
	P1																	
ENRXX Total			-	$615,114	2,365	$195,827	1,695	$177,590	-		-		-		-		4,060	$988,531
LNDXX-TG LAND																		
Real Estate	LT																	
Employee Expenses	AE	5%																
Purchase Land	AM																	
Vehicles (now in indirects section)	AV																	
Fees and Payments	BF																	
LNDXX Subtotal			-		-		-		-		-		-		-		-	
Escalation																		
	P1																	
LNDXX Total			-		-		-		-		-		-		-		-	
MATXX-TG MATERIAL																		
Eversource	AM			$60,773		$626,905		$954,463										$1,642,140
Outside Services	AM					$90,197		$137,325										$227,521
	AM																	
Freight																		
Sales Tax Eversouce/outside services		4%				$28,000		$42,630										$70,630
Other																		
MATXX Subtotal				$60,773		$745,102		$1,134,417										$1,940,292
Escalation																		
	P1																	
MATXX Total				$60,773		$745,102		$1,134,417										$1,940,292
PSMXX-PROJECT MANAGER & SUPPORT																		
Project Management (PM)	LT			$41,510	160	$8,480	520	$28,387									680	$78,377
Project Planning/Cost (IP)	LT																	
Contracts/Purchasing (C/P)	LT				40	$2,120											40	$2,120
System Planning	LT																	
Environmental	LT			$4,317	36	$2,283	12	$784									48	$7,384
SCS - Traditional	LT			$3,369		$2,671		$9,131										$15,171
Legal	LT																	
Estimating	LT				60	$3,180											60	$3,180
Siting - Certificate of Site & Faciltiy	LT			$2,755		$6,900		$23,587										$33,242
Asset Management	LT				60	$3,180											60	$3,180
Other -	LT																	
Other -	LT																	
Other -	LT																	
Other -	LT																	
LT Total				$51,951	356	$28,814	532	$61,889									888	$142,654
Employee Expenses	AE	5%				$1,441		$3,094										$4,535
Project Support Vendor - PM	AQ			$84,867	880	$132,000	1,560	$241,020	-	-	-	-					2,440	$457,887
Project Support Vendor - IP	AQ				-		-		-	-	-	-					-	
Project Support Vendor - C/P	AQ				-		-		-	-	-	-					-	
Project Support Vendor - System Planning	AQ				-		-		-	-	-	-					-	
Project Support Vendor - Enviromental	AQ			$18,560	72	$9,763	408	$56,985	-	-	-	-					480	$85,308
Project Support Vendor - SCS - Traditional	AQ			$1,042	-	$4,010	-	$13,699	-	-	-	-					-	$18,751
Project Support Vendor - Legal	AQ				-		-		-	-	-	-					-	
Project Support Vendor - Estimating	AQ				-		-		-	-	-	-					-	
Project Support Vendor - Siting - Certificate o	AQ				-	$130,800	-	$447,329	-	-	-	-					-	$578,129
Project Support Vendor - Asset Management	AQ				-		-		-	-	-	-					-	
Project Support Vendor - Other	AQ				-		-		-	-	-	-					-	
Project Support Vendor - Other	AQ				-		-		-	-	-	-					-	
Project Support Vendor - Other	AQ				-		-		-	-	-	-					-	
Project Support Vendor - Other	AQ				-		-		-	-	-	-					-	
Vehicles (now in indirects section)	AV																	
Property or CWIP tax large proj. allowance	BR																	
	BR																	
Fees and Payments - Enviromental	BF																	
Fees and Payments - Siting	BF																	
Fees and Payments - Other	BF																	
PSMXX Subtotal			-	$156,420	1,308	$306,828	2,500	$824,016	-		-		-		-		3,808	$1,287,264
Escalation																		
	P1																	
PSMXX Total			-	$156,420	1,308	$306,828	2,500	$824,016	-		-		-		-		3,808	$1,287,264
REMXX-TG REMOVAL																		
Engineering/Design	LT																	
Internal Construction	LT																	
LT Total																		
Employee Expenses	AE	15%																
Outside Services	AO																	
Contractor Labor	AQ					$41,078	247	$42,310									247	$83,387
Vehicles (now in indirects section)	AV																	
Rents and Leases	BR																	
REMXX Subtotal			-		-	$41,078	247	$42,310	-		-		-		-		247	$83,387
Escalation																		
	P1																	
REMXX Total			-		-	$41,078	247	$42,310	-		-		-		-		247	$83,387
TSTXX-TG TEST																		
Test / Field Engr. Labor (In House)	LT			$1,484														$1,484
Lead Commissioning Engr. (LCE) (internal)	AQ																	
Employee Expense	AE	10%																
Test / Field Engr. Labor (contractor)	AQ				640	$133,120	4,627	$991,288									5,267	$1,124,408
Lead Commissioning Engr. (LCE) (contactor)	AQ				320	$66,560	2,313	$495,537									2,633	$562,097
Vehicles (now in indirects section)	AV																	
TSTXX Subtotal				$1,484		$199,680		$1,486,825										$1,687,989
Escalation																		
	P1																	
TSTXX Total				$1,484	960	$199,680	6,940	$1,486,825									7,900	$1,687,989
SUBTOTAL PROJECT DIRECT COST			**-**	**$890,001**	**6,838**	**$1,976,038**	**23,941**	**$6,514,195**	**-**		**-**		**-**		**-**		**30,779**	**$9,380,234**
Risk																		
Risk						$140,000		$360,000										$500,000
Risk Total						$140,000		$360,000										$500,000
TOTAL PROJECT DIRECT COST			**-**	**$890,001**	**6,838**	**$2,116,038**	**23,941**	**$6,874,195**	**-**		**-**		**-**		**-**		**30,779**	**$9,880,234**
INDIRECTS																		
Non-Productive Time Allocation (ZB)	58	15.1%		$28,240		$17,992		$18,581										$64,813
Payroll Benefits Allocation (ZE) incl NPT	59	44.0%		$707		$859		$6,854										$8,420
Gen SVC CO Overhead (ZF) incl NPT	60	75.0%		$140,932		$101,693		$94,854										$337,479
E&S Allocations (ZI)	61	45.0%		$120,296		$603,439		$2,460,362										$3,184,097
AS&E Allocations (ZJ)	62	0.7%		$3,945		$18,900		$63,782										$86,627
Stores Expense Allocation (ZC)	62																	
Lobby Stock																		
MDEC																		
Vehicles		7.5%		$2,067		$8,966		$9,260										$20,293
	63																	
Indirects Subtotal				$296,187		$751,849		$2,653,693										$3,701,729
TOTAL PROJECT COST - Direct & Indirect (excl AFUDC)				**$1,186,188**		**$2,867,887**		**$9,527,888**										**$13,581,963**
AFUDC																		
AFUDC (ZK)				$9,278		$117,666	0	$439,616	0		0		0		0		0	$566,560
In Service Dollars																		
Cumulative IS$																		
AFUDC Subtotal				$9,278		$117,666		$439,616										$566,560
TOTAL PROJECT COST - Baseline Budget				**$1,195,466**		**$2,985,553**		**$9,967,504**										**$14,148,523**
Contingecy																		
Contingency						$111,161		$348,839										$460,000
Other																		
Contingency SubTotal						**$111,161**		**$348,839**										**$460,000**
TOTAL PROJECT COST - Approved Funding				$1,195,466		**$3,096,714**		**$10,316,343**										**$14,608,523**
Reimbursables / Customer Contribution																		
Reimbursables / Customer Contr bution (enter as negative)	59																	
TOTAL PROJECT COST				**$1,195,466**		**$3,096,714**		**$10,316,343**										**$14,608,523**

ESTIMATE SUMMARY

Project Title: [redacted] phase 1
Project Mgr/Lead: [redacted]
Project Number: 404932
WO & Task #: CS001661
Est. Revision # 00
Estimate Type - [redacted]

Estimate By: [redacted]
Date of Estimate: 5/11/2021
ISD:12/31/2022
Estimate # C-21-270D1

Template Revision # 01.61

ESTIMATE SUMMARY

Estimate Type: Planning

WBS	Description	TOTAL	% of Directs	% of Total	Priors	2021	2022	2023	2024	2025	2026
1	ROW / Easements / Land purchases										
2	Environmental Approvals / Permits	$6,100	0.0%	0.0%	$1,600	$4,500					
3	Outreach	$21,900	0.2%	0.1%		$8,000	$13,900				
4	Siting Approvals / Permits	$65,200	0.5%	0.4%	$4,900	$21,900	$38,400				
5	Engineering / Design	$439,500	3.6%	2.5%	$53,500	$188,700	$197,300				
6	Materials (Eversource purchased)	$4,607,800	37.7%	25.8%	$238,100	$1,732,100	$2,637,600				
7	Construction (incl matl's by contractors)	$4,523,500	37.0%	25.4%		$1,778,100	$2,745,400				
8	Testing / Commissioning	$1,568,800	12.8%	8.8%		$257,700	$1,311,100				
9	PMT Project Mgmt Team	$230,100	1.9%	1.3%	$4,600	$87,900	$137,600				
10	Removals	$68,400	0.6%	0.4%		$26,900	$41,500				
11	Other										
12	Risks	$697,000	5.7%	3.9%		$222,000	$475,000				
	Project Directs Total w/Risks	**$12,228,300**	100.0%	68.5%	**$302,700**	**$4,327,800**	**$7,597,800**				
13	Indirects/Overhead	$5,216,900		29.2%	$113,200	$1,873,600	$3,230,100				
14	AFUDC	$1,400		0.0%	$1,400						
	Project Total - Baseline Budget	**$17,446,600**		97.8%	**$417,300**	**$6,201,400**	**$10,827,900**				
15	Contingency	$394,500		2.2%		$158,200	$236,300				
	Project Total - Funding Approval Level	**$17,841,100**		100.0%	**$417,300**	**$6,359,600**	**$11,064,200**				
16	Reimbursables/Customer Contribution										
	Project Total (less reimbursables)	**$17,841,100**			**$417,300**	**$6,359,600**	**$11,064,200**				
	-										
	Amount of Escalation included above	$263,200					$263,200				
6	Total materials - Eversource	$4,607,800			$238,100	$1,732,100	$2,637,600				
	Total materials - Contractor	$101,761			-$39	$40,400	$61,400				
	Total materials	$4,709,561			$238,061	$1,772,500	$2,699,000				
	NOTE: Risk / Contingency is 6.5% of Project Total Costs (incl escal/indirects/AFUDC but excl reimb.)										

Estimate Range	**-25%**	-	**25%**	
	$13,381,000	-	**$22,301,000**	

COMMENTS:

Project Scope:

[redacted]

Assumptions/Clarifications;
Indirect rates based on; 11 - CT , [redacted]

PMT time is split between (3) workorder numbers on this project.
[redacted]
Underground obstructions and additional pathways are anticipated and funds to mitigate the impact are placed in allowance items.
Soil contamination is to be handled by others
No rental costs required for laydown area.
Enginering internal construction external.
The [redacted] is based on Layout drawing 17801-33008 Rev AN dated 3/2021.
No remote input-output (RIO) equipment is required per project team.
Soil Disposal - Contaminated (20%), Non-contaminated 80%)
Additional Hand Digging Labor (50%)
Encounter rock or foundations in trench (15%)

RISKS

Potential UG Obstructions is in allowances to construction vendor	$	50,000
Severe Weather, Delays, OT	$	400,000
Design development	$	75,000
Additional removal costs	$	100,000
unforseen environmental disposal	$	72,000

Project Number: 404932
Date of Estimate: 5/11/2021
Est. Revision # 00
Template Revision # 01.61

CSTXX-CONSTRUCTION	R		Prior actuals to date Mhrs	Prior actuals to date DOLLARS	2021 Mhrs	2021 DOLLARS	2022 Mhrs	2022 DOLLARS	2023 Mhrs	2023 DOLLARS	2024 Mhrs	2024 DOLLARS	2025 Mhrs	2025 DOLLARS	2026 Mhrs	2026 DOLLARS	TOTAL Mhrs	TOTAL DOLLARS
							1		2		3		4		5			
Electrical Construction	LT																	
General Construction	LT																	
SCADA / Automation	LT																	
Telecom - Field	LT																	
Construction Reps (internal)	LT																	
Support Switch/Tag	LT				32	$1,696	32	$1,747									64	$3,443
Other (specify)	LT																	
Other (specify)	LT																	
Other (specify)	LT																	
LT Total					32	$1,696	32	$1,747									64	$3,443
Employee Expenses	AE	5%				$85		$88										$173
Construction Purchased Material	AM	1%				$16,467		$25,441										$41,908
Outside Construction Vendor	AQ				6,050	$1,646,693	9,075	$2,544,140									15,126	$4,190,833
Sales tax on Constr. Vendor																		
Vehicles (now in indirects section)	AV																	
Inspection services (Outside Vendor)	AQ																	
Construction Rep (Outside vendor)	AQ				620	$89,280	930	$137,938									1,550	$227,218
Rents and Leases	BR																	
CSTXX Subtotal						$1,754,221		$2,709,354										$4,463,575
Escalation						$ -		$ -		$ -		$ -		$ -		$ -		$ -
	P1																	
CSTXX Total					6,702	$1,754,221	10,037	$2,709,354									16,740	$4,463,575
ENRXX-TG ENGINEERING/DESIGN																		
Project Services/Drafting	LT				100	$5,300	80	$4,367									180	$9,667
T- Line Engineering/Design	LT																	
D- Street Engineering/Design	LT																	
Civil Engineering/Design	LT				240	$12,720	240	$13,102									480	$25,822
Substation (T) Engineering/Design	LT																	
Substation (D) Engineering/Design	LT			$49,169	960	$50,880	480	$26,203									1,440	$126,252
Protection & Controls Engineering	LT				120	$6,360	80	$4,367									200	$10,727
Survey Engineering	LT																	
SCADA / Automation Engineering	LT				80	$4,240	32	$1,747									112	$5,987
Telecom Engineering	LT				40	$2,120	24	$1,310									64	$3,430
Other - specify	LT			$4,374														$4,374
Other - specify	LT																	
LT Total				$53,543	1,540	$81,620	936	$51,096									2,476	$186,259
Employee Expenses	AE	5%				$4,081		$2,554										$6,635
Contractor Engineering - T-Lines	AQ																	
Contractor Engineering - D-Street	AQ																	
Contractor Engineering - T -Station	AQ																	
Contractor Engineering - D-Station	AQ																	
Contractor Engineering - P&C	AQ				320	$48,960	480	$75,643									800	$124,603
Contractor Engineering - Survey	AQ																	
Contractor Engineering - SCADA / Automatic	AQ				240	$36,000	320	$49,440									560	$85,440
Contractor Engineering - Telecom	AQ				120	$18,000	120	$18,540									240	$36,540
Contractor Engineering - Specify	AQ																	
Contractor Engineering - Specify	AQ																	
Contractor Engineering - Specify	AQ																	
Vehicles (now in indirects section)	AV																	
ENRXX Subtotal			-	$53,543	2,220	$188,661	1,856	$197,273	-		-		-		-		4,076	$439,477
Escalation																		
	P1																	
ENRXX Total			-	$53,543	2,220	$188,661	1,856	$197,273	-		-		-		-		4,076	$439,477
LNDXX-TG LAND																		
Real Estate	LT																	
Employee Expenses	AE	5%																
Purchase Land	AM																	
Vehicles (now in indirects section)	AV																	
Fees and Payments	BF																	
LNDXX Subtotal			-		-		-		-		-		-		-		-	
Escalation																		
	P1																	
LNDXX Total			-		-		-		-		-		-		-		-	
MATXX-TG MATERIAL																		
Eversource	AM			$238,061		$1,649,739		$2,511,728										$4,399,528
Outside Services	AM					$40,384		$61,485										$101,870
	AM																	
Freight																		
Sales Tax Eversouce/outside services		4%				$65,900		$100,384										$166,284
Other																		
MATXX Subtotal				$238,061		$1,756,024		$2,673,597										$4,667,682
Escalation																		
	P1																	
MATXX Total				$238,061		$1,756,024		$2,673,597										$4,667,682
PSMXX-PROJECT MANAGER & SUPPORT																		
Project Management (PM)	LT			$4,584	120	$6,360	264	$14,412									384	$25,356
Project Planning/Cost (IP)	LT				40	$2,120											40	$2,120
Contracts/Purchasing (C/P)	LT				40	$2,120											40	$2,120
System Planning	LT																	
Environmental	LT			$1,559	40	$4,520											40	$6,079
SCS - Notification	LT					$398		$697										$1,095
Legal	LT																	
Estimating	LT				40	$2,120											40	$2,120
Siting - Local Zoning	LT			$4,898		$1,100		$1,957										$7,955
Asset Management	LT				40	$2,120											40	$2,120
Other -	LT																	
Other -	LT																	
Other -	LT																	
Other -	LT																	
LT Total				$11,041	320	$20,858	264	$17,066									584	$48,965
Employee Expenses	AE	5%				$1,043		$853										$1,896
Project Support Vendor - PM	AQ				480	$72,000	792	$122,364	-	-	-	-					1,272	$194,364
Project Support Vendor - IP	AQ				-		-		-	-	-	-					-	
Project Support Vendor - C/P	AQ				-		-		-	-	-	-					-	
Project Support Vendor - System Planning	AQ				-		-		-	-	-	-					-	
Project Support Vendor - Enviromental	AQ				-		-		-	-	-	-					-	
Project Support Vendor - SCS - Notification	AQ				-	$7,570	-	$13,246	-	-	-	-					-	$20,816
Project Support Vendor - Legal	AQ				-		-		-	-	-	-					-	
Project Support Vendor - Estimating	AQ				-		-		-	-	-	-					-	
Project Support Vendor - Siting - Local Zonin	AQ				-	$20,800	-	$36,462	-	-	-	-					-	$57,262
Project Support Vendor - Asset Management	AQ				-		-		-	-	-	-					-	
Project Support Vendor - Other	AQ				-		-		-	-	-	-					-	
Project Support Vendor - Other	AQ				-		-		-	-	-	-					-	
Project Support Vendor - Other	AQ				-		-		-	-	-	-					-	
Project Support Vendor - Other	AQ				-		-		-	-	-	-					-	
Vehicles (now in indirects section)	AV																	
Property or CWIP tax large proj. allowance	BR																	
	BR																	
Fees and Payments - Enviromental	BF																	
Fees and Payments - Siting	BF																	
Fees and Payments - Other	BF																	
PSMXX Subtotal			-	$11,041	800	$122,271	1,056	$189,991	-		-		-		-		1,856	$323,303
Escalation																		
	P1																	
PSMXX Total			-	$11,041	800	$122,271	1,056	$189,991	-		-		-		-		1,856	$323,303
REMXX-TG REMOVAL																		
Engineering/Design	LT																	
Internal Construction	LT																	
LT Total																		
Employee Expenses	AE	15%																
Outside Services	AO																	
Contractor Labor	AQ					$26,888	257	$41,542									257	$68,430
Vehicles (now in indirects section)	AV																	
Rents and Leases	BR																	
REMXX Subtotal			-		-	$26,888	257	$41,542	-		-		-		-		257	$68,430
Escalation																		
	P1																	
REMXX Total			-		-	$26,888	257	$41,542	-		-		-		-		257	$68,430
TSTXX-TG TEST																		
Test / Field Engr. Labor (In House)	LT																	
Lead Commissioning Engr. (LCE) (internal)	AQ																	
Employee Expense	AE	10%																
Test / Field Engr. Labor (contractor)	AQ				826	$171,808	4,080	$874,099									4,906	$1,045,907
Lead Commissioning Engr. (LCE) (contactor)	AQ				413	$85,904	2,040	$437,050									2,453	$522,954
Vehicles (now in indirects section)	AV																	
TSTXX Subtotal						$257,712		$1,311,149										$1,568,861
Escalation																		
	P1																	
TSTXX Total					1,239	$257,712	6,120	$1,311,149									7,359	$1,568,861
SUBTOTAL PROJECT DIRECT COST			-	**$302,645**	**10,961**	**$4,105,777**	**19,327**	**$7,122,906**	-		-		-		-		**30,288**	**$11,531,328**
Risk																		
Risk						$222,000		$475,000										$697,000
Risk Total						$222,000		$475,000										$697,000
TOTAL PROJECT DIRECT COST			-	**$302,645**	**10,961**	**$4,327,777**	**19,327**	**$7,597,906**	-		-		-		-		**30,288**	**$12,228,328**
INDIRECTS																		
Non-Productive Time Allocation (ZB)	58	15.1%		$9,207		$15,678		$10,521										$35,406
Payroll Benefits Allocation (ZE) incl NPT	59	44.0%				$859		$885										$1,744
Gen SVC CO Overhead (ZF) incl NPT	60	75.0%		$46,244		$88,426		$58,815										$193,485
E&S Allocations (ZI)	61	55.0%		$48,695		$1,338,172		$2,469,827										$3,856,694
AS&E Allocations (ZJ)	62	1.3%		$4,937		$69,361		$121,280										$195,578
Stores Expense Allocation (ZC)	62	8.0%				$131,979		$203,908										$335,887
Lobby Stock																		
MDEC		5.0%		$3,355		$199,931		$345,246										$548,532
Vehicles		28.0%		$732		$29,169		$19,574										$49,475
	63																	
Indirects Subtotal				$113,170		$1,873,575		$3,230,056										$5,216,801
TOTAL PROJECT COST - Direct & Indirect (excl AFUDC)				**$415,815**		**$6,201,352**		**$10,827,962**										**$17,445,129**
AFUDC																		
AFUDC (ZK)				$1,356														$1,356
In Service Dollars																		
Cumulative IS$																		
AFUDC Subtotal				$1,356														$1,356
TOTAL PROJECT COST - Baseline Budget				**$417,171**		**$6,201,352**		**$10,827,962**										**$17,446,485**
Contingecy																		
Contingency						$158,158		$236,280										$394,438
Other																		
Contingency SubTotal						**$158,158**		**$236,280**										**$394,438**
TOTAL PROJECT COST - Approved Funding				$417,171		**$6,359,510**		**$11,064,242**										**$17,840,923**
Reimbursables / Customer Contribution																		
Reimbursables / Customer Contr bution (enter as negative)																		
	59																	
TOTAL PROJECT COST				**$417,171**		**$6,359,510**		**$11,064,242**										**$17,840,923**

ESTIMATE SUMMARY

Project Title: [redacted] Phase 2
Project Mgr/Lead: [redacted]
Project Number: 404932
WO & Task #: CS001662
Est. Revision # 00
Estimate Type - [redacted]

Estimate By: [redacted]
Date of Estimate: 5/11/2021
ISD:12/31/2023
Estimate # C-21-270D2

Template Revision # 01.61

ESTIMATE SUMMARY

Estimate Type: Planning

WBS	Description	TOTAL	% of Directs	% of Total	Priors	2021	2022	2023	2024	2025	2026
1	ROW / Easements / Land purchases										
2	Environmental Approvals / Permits	$36,100	0.7%	0.5%			$12,400	$23,700			
3	Outreach	$9,100	0.2%	0.1%			$300	$8,800			
4	Siting Approvals / Permits	$24,900	0.5%	0.3%			$800	$24,100			
5	Engineering / Design	$173,700	3.4%	2.3%	$6,700		$101,600	$65,400			
6	Materials (Eversource purchased)	$1,840,600	36.1%	24.8%				$1,840,600			
7	Construction (incl matl's by contractors)	$1,483,000	29.1%	19.9%				$1,483,000			
8	Testing / Commissioning	$874,000	17.1%	11.8%			$38,600	$835,400			
9	PMT Project Mgmt Team	$111,300	2.2%	1.5%	$2,000	$2,700	$16,600	$90,000			
10	Removals	$124,600	2.4%	1.7%			$24,300	$100,300			
11	Other										
12	Risks	$420,000	8.2%	5.6%		$10,000	$410,000				
	Project Directs Total w/Risks	**$5,097,300**	100.0%	68.6%	**$8,700**	**$12,700**	**$604,600**	**$4,471,300**			
13	Indirects/Overhead	$2,136,800		28.7%	$15,300	$6,500	$193,300	$1,921,700			
14	AFUDC	$100		0.0%	$100						
	Project Total - Baseline Budget	**$7,234,200**		97.3%	**$24,100**	**$19,200**	**$797,900**	**$6,393,000**			
15	Contingency	$200,500		2.7%			$3,000	$197,500			
	Project Total - Funding Approval Level	**$7,434,700**		100.0%	**$24,100**	**$19,200**	**$800,900**	**$6,590,500**			
16	Reimbursables/Customer Contribution										
	Project Total (less reimbursables)	**$7,434,700**			**$24,100**	**$19,200**	**$800,900**	**$6,590,500**			
		-									
	Amount of Escalation included above	$324,400					$11,300	$313,100			
6	Total materials - Eversource	$1,840,600						$1,840,600			
	Total materials - Contractor	$94,000						$94,000			
	Total materials	$1,934,600						$1,934,600			
	NOTE: Risk / Contingency is 9.1% of Project Total Costs (incl escal/indirects/AFUDC but excl reimb.)										

Estimate Range	**-25%**	-	**25%**	
	$5,576,000	-	**$9,293,000**	

COMMENTS:

Project Scope:

[redacted]

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

PMT time is split between (3) workorder numbers on this project.
[redacted]
Underground obstructions are anticipated and funds to mitigate the impact are placed in risk item.
Soil contamination is to be handled by others
No rental costs required for laydown area
Enginering internal construction external.
No remote input-output (RIO) equipment is required per project team.
Soil Disposal - Contaminated (20%), Non-contaminated 80%)
Additional Hand Digging Labor (50%)
Encounter rock or foundations in trench (15%)
Prior costs charged to Work Order #CS001662 are included.

RISKS

Potential UG Obstructions	$	50,000
Severe Weather, Delays, OT	$	200,000
Design development	$	55,000
Additional removal costs	$	40,000
Additional bus, supports, and pathways	$	50,000
unforseen environmental disposal	$	25,000

Project Number: 404932
Date of Estimate: 5/11/2021
Est. Revision # 00
Template Revision # 01.61

CSTXX-CONSTRUCTION	R		Prior actuals to date Mhrs	Prior actuals to date DOLLARS	2021 Mhrs	2021 DOLLARS	1 2022 Mhrs	1 2022 DOLLARS	2 2023 Mhrs	2 2023 DOLLARS	3 2024 Mhrs	3 2024 DOLLARS	4 2025 Mhrs	4 2025 DOLLARS	5 2026 Mhrs	5 2026 DOLLARS	TOTAL Mhrs	TOTAL DOLLARS
Electrical Construction	LT																	
General Construction	LT																	
SCADA / Automation	LT																	
Telecom - Field	LT																	
Construction Reps (internal)	LT																	
Support Switch/Tag	LT								32	$1,799							32	$1,799
Other (specify)	LT																	
Other (specify)	LT																	
Other (specify)	LT																	
LT Total									32	$1,799							32	$1,799
Employee Expenses	AE	5%								$90								$90
Construction Purchased Material	AM	1%								$12,924								$12,924
Outside Construction Vendor	AQ								6,228	$1,292,371							6,228	$1,292,371
Sales tax on Constr. Vendor																		
Vehicles (now in indirects section)	AV																	
Inspection services (Outside Vendor)	AQ																	
Construction Rep (Outside vendor)	AQ								620	$94,717							620	$94,717
Rents and Leases	BR																	
CSTXX Subtotal										$1,401,901								$1,401,901
Escalation						$ -		$ -		$ -		$ -		$ -		$ -		$ -
	P1																	
CSTXX Total									6,880	$1,401,901							6,880	$1,401,901
ENRXX-TG ENGINEERING/DESIGN																		
Project Services/Drafting	LT						24	$1,310	48	$2,699							72	$4,009
T- Line Engineering/Design	LT																	
D- Street Engineering/Design	LT																	
Civil Engineering/Design	LT						60	$3,275	60	$3,374							120	$6,649
Substation (T) Engineering/Design	LT																	
Substation (D) Engineering/Design	LT			$6,666			240	$13,102	120	$6,747							360	$26,515
Protection & Controls Engineering	LT						40	$2,184	60	$3,374							100	$5,558
Survey Engineering	LT																	
SCADA / Automation Engineering	LT						24	$1,310	48	$2,699							72	$4,009
Telecom Engineering	LT						24	$1,310	8	$450							32	$1,760
Other - specify	LT																	
Other - specify	LT																	
LT Total				$6,666			412	$22,491	344	$19,343							756	$48,500
Employee Expenses	AE	5%						$1,125		$968								$2,093
Contractor Engineering - T-Lines	AQ																	
Contractor Engineering - D-Street	AQ																	
Contractor Engineering - T -Station	AQ																	
Contractor Engineering - D-Station	AQ																	
Contractor Engineering - P&C	AQ						240	$37,822	180	$29,217							420	$67,039
Contractor Engineering - Survey	AQ																	
Contractor Engineering - SCADA / Automatic	AQ						180	$27,810	60	$9,548							240	$37,358
Contractor Engineering - Telecom	AQ						80	$12,360	40	$6,365							120	$18,725
Contractor Engineering - Specify	AQ																	
Contractor Engineering - Specify	AQ																	
Contractor Engineering - Specify	AQ																	
Vehicles (now in indirects section)	AV																	
ENRXX Subtotal			-	$6,666	-		912	$101,608	624	$65,441	-		-		-		1,536	$173,715
Escalation																		
	P1																	
ENRXX Total			-	$6,666	-		912	$101,608	624	$65,441	-		-		-		1,536	$173,715
LNDXX-TG LAND																		
Real Estate	LT																	
Employee Expenses	AE	5%																
Purchase Land	AM																	
Vehicles (now in indirects section)	AV																	
Fees and Payments	BF																	
LNDXX Subtotal			-		-		-		-		-		-		-		-	
Escalation																		
	P1																	
LNDXX Total			-		-		-		-		-		-		-		-	
MATXX-TG MATERIAL																		
Eversource	AM									$1,755,513								$1,755,513
Outside Services	AM									$94,061								$94,061
	AM																	
Freight																		
Sales Tax Eversouce/outside services		4%								$72,116								$72,116
Other																		
MATXX Subtotal										$1,921,689								$1,921,689
Escalation																		
	P1																	
MATXX Total										$1,921,689								$1,921,689
PSMXX-PROJECT MANAGER & SUPPORT																		
Project Management (PM)	LT			$1,987			40	$2,184	80	$4,498							120	$8,669
Project Planning/Cost (IP)	LT																	
Contracts/Purchasing (C/P)	LT						24	$1,310									24	$1,310
System Planning	LT																	
Environmental	LT						106	$12,384	198	$23,689							304	$36,073
SCS - Notification	LT							$16		$438								$454
Legal	LT																	
Estimating	LT				24	$1,272											24	$1,272
Siting - Local Zoning	LT									$1,167								$1,167
Asset Management	LT				24	$1,272											24	$1,272
Other -	LT																	
Other -	LT																	
Other -	LT																	
Other -	LT																	
LT Total				$1,987	48	$2,544	170	$15,894	278	$29,792							496	$50,217
Employee Expenses	AE	5%				$127		$795		$1,490								$2,412
Project Support Vendor - PM	AQ				-		80	$12,360	528	$84,023	-		-		-		608	$96,383
Project Support Vendor - IP	AQ				-		-		-		-		-		-		-	
Project Support Vendor - C/P	AQ				-		-		-		-		-		-		-	
Project Support Vendor - System Planning	AQ				-		-		-		-		-		-		-	
Project Support Vendor - Enviromental	AQ				-		-		-		-		-		-		-	
Project Support Vendor - SCS - Notification	AQ				-		-	$309	-	$8,328	-		-		-		-	$8,637
Project Support Vendor - Legal	AQ				-		-		-		-		-		-		-	
Project Support Vendor - Estimating	AQ				-		-		-		-		-		-		-	
Project Support Vendor - Siting - Local Zonin	AQ				-		-	$824	-	$22,915	-		-		-		-	$23,739
Project Support Vendor - Asset Management	AQ				-		-		-		-		-		-		-	
Project Support Vendor - Other	AQ				-		-		-		-		-		-		-	
Project Support Vendor - Other	AQ				-		-		-		-		-		-		-	
Project Support Vendor - Other	AQ				-		-		-		-		-		-		-	
Project Support Vendor - Other	AQ				-		-		-		-		-		-		-	
Vehicles (now in indirects section)	AV																	
Property or CWIP tax large proj. allowance	BR																	
	BR																	
Fees and Payments - Enviromental	BF																	
Fees and Payments - Siting	BF																	
Fees and Payments - Other	BF																	
PSMXX Subtotal			-	$1,987	48	$2,671	250	$30,182	806	$146,548	-		-		-		1,104	$181,388
Escalation																		
	P1																	
PSMXX Total			-	$1,987	48	$2,671	250	$30,182	806	$146,548	-		-		-		1,104	$181,388
REMXX-TG REMOVAL																		
Engineering/Design	LT																	
Internal Construction	LT																	
LT Total																		
Employee Expenses	AE	15%																
Outside Services	AO																	
Contractor Labor	AQ						145	$24,337	580	$100,270							725	$124,607
Vehicles (now in indirects section)	AV																	
Rents and Leases	BR																	
REMXX Subtotal			-		-		145	$24,337	580	$100,270	-		-		-		725	$124,607
Escalation																		
	P1																	
REMXX Total			-		-		145	$24,337	580	$100,270	-		-		-		725	$124,607
TSTXX-TG TEST																		
Test / Field Engr. Labor (In House)	LT																	
Lead Commissioning Engr. (LCE) (internal)	AQ																	
Employee Expense	AE	10%																
Test / Field Engr. Labor (contractor)	AQ						120	$25,709	2,524	$556,964							2,644	$582,673
Lead Commissioning Engr. (LCE) (contactor)	AQ						60	$12,854	1,262	$278,482							1,322	$291,336
Vehicles (now in indirects section)	AV																	
TSTXX Subtotal								$38,563		$835,446								$874,009
Escalation																		
	P1																	
TSTXX Total							180	$38,563	3,786	$835,446							3,966	$874,009
SUBTOTAL PROJECT DIRECT COST			-	**$8,653**	**48**	**$2,671**	**1,487**	**$194,690**	**12,675**	**$4,471,295**	-		-		-		**14,211**	**$4,677,310**
Risk																		
Risk						$10,000		$410,000										$420,000
Risk Total						$10,000		$410,000										$420,000
TOTAL PROJECT DIRECT COST			-	**$8,653**	**48**	**$12,671**	**1,487**	**$604,690**	**12,675**	**$4,471,295**	-		-		-		**14,211**	**$5,097,310**
INDIRECTS																		
Non-Productive Time Allocation (ZB)	58	15.1%		$1,394		$383		$5,777		$7,666								$15,220
Payroll Benefits Allocation (ZE) incl NPT	59	44.0%								$911								$911
Gen SVC CO Overhead (ZF) incl NPT	60	75.0%		$6,967		$2,195		$33,122		$42,397								$84,681
E&S Allocations (ZI)	61	55.0%		$5,972		$2,817		$127,418		$1,421,811								$1,558,018
AS&E Allocations (ZJ)	62	1.3%		$302		$101		$4,512		$75,016								$79,931
Stores Expense Allocation (ZC)	62	8.0%								$144,623								$144,623
Lobby Stock																		
MDEC		5.0%		$619		$262		$11,679		$215,032								$227,592
Vehicles		28.0%		$83		$712		$10,748		$14,262								$25,805
	63																	
Indirects Subtotal				$15,337		$6,470		$193,256		$1,921,718								$2,136,781
TOTAL PROJECT COST - Direct & Indirect (excl AFUDC)				**$23,990**		**$19,141**		**$797,946**		**$6,393,013**								**$7,234,091**
AFUDC																		
AFUDC (ZK)				$64														$64
In Service Dollars																		
Cumulative IS$																		
AFUDC Subtotal				$64														$64
TOTAL PROJECT COST - Baseline Budget				**$24,054**		**$19,141**		**$797,946**		**$6,393,013**								**$7,234,155**
Contingecy																		
Contingency								$3,047		$197,497								$200,544
Other																		
Contingency SubTotal								**$3,047**		**$197,497**								**$200,544**
TOTAL PROJECT COST - Approved Funding				$24,054		**$19,141**		**$800,993**		**$6,590,510**								**$7,434,698**
Reimbursables / Customer Contribution																		
Reimbursables / Customer Contr bution (enter as negative)	59																	
TOTAL PROJECT COST				**$24,054**		**$19,141**		**$800,993**		**$6,590,510**								**$7,434,698**

[redacted]

Completed by [redacted] - 1/28/2015

This study exams the [redacted]

- [redacted]
- [redacted]

[redacted].

[redacted]

[redacted]

ISSUES:

[redacted]

[redacted]

[redacted]

Please see the charts below for [redacted].

[redacted]

CONSIDERATIONS:

- [redacted]

The most cost effective solutions were investigated further and are being presented below. The first six options presented range in between $4.2M-$8.6M each. This is for the distribution line work only. The seventh option is a hybrid of Options 1 and 6 and costs $13.5M for the distribution work and an additional $7M for the substation work at Mansfield 12J. [redacted].

Option 8 is being presented as an alternative to the [redacted] This option is a hybrid of Options 1, 5 and 6 and costs approximately $21M for the distribution work and an additional $14M for the [redacted], for a total of $35M. [redacted] was estimated at $198M.

The first set of options (1-3) involve [redacted]

Only Options 7 and 8 will [redacted] Option 7 will [redacted]. Option 8 [redacted]

PROPOSED OPTIONS:

Option 1 -

Option 1

Note: The preliminary estimate does not include the cost of a

Option 2 -

Option 2 [redacted]

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

[redacted]

<u>Option 3</u> - [redacted]

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

Option 3 [redacted]

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

[redacted].

<u>Option 4</u> - [redacted]

[redacted]

- Install 2,000 ft. of 500 AL 23 kV aerial cable on Rt. 190 to connect the reconfigured 15M3 circuit from the ROW to the existing 151-60R on Rt. 190 *(Segment 13)*

Option 4 [redacted]

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

Note: The preliminary estimate includes an estimated cost of a $7M for a [redacted]

Option 5 - [redacted]

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

Option 5 [redacted]

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

Note: The preliminary estimate includes an estimated cost of $7M for a [redacted]

Option 6 - [redacted]

- [redacted]

- [redacted]

Option 6 [redacted]

- [redacted]

Note: The preliminary estimate includes an estimated cost of $7M for a new [redacted]

Option 7 – A [redacted]

- [redacted]

- [redacted]

Option 7 [redacted]

Note: The preliminary estimate does not include the cost of a [redacted] but does include an estimated cost of $7M for a [redacted]

<u>Option 8</u> – [redacted]

- [redacted]

Option 8 [redacted]

- [redacted]

Note: The preliminary estimate does not include the cost of a [redacted] It does include an estimated cost of $100K for [redacted] and $14M for [redacted]

BENEFIT ANALYSIS:

OPTION(S)	COST ($M)	27.6 kV LOAD RELIEF	COST PER MVA ($M)	STRANDED CUSTOMERS (1)
Existing	0.000	[redacted]	[redacted]	[redacted]
Option 1	8.596			
Option 2	4.846			
Option 3	4.242			
Option 4	12.635			
Option 5	12.523			
Option 6	12.149			
Option 7	20.268			
Option 8	34.468			

[redacted]

(2) Option 8 [redacted]

CONCLUSIONS:

[redacted]

[redacted]

Short Term Plan

[redacted], either Option 1, 2, or 3 would be the most economical in the short term.

Option 1 would be the preferred short term option given that it [redacted]

Long Term Plan

In order to [redacted]

[redacted]

[redacted]

With the cost of the [redacted] at nearly $200M, this option at a cost of approximately $35M is a viable cost effective alternative that can be achieved in a multi-step, multi-year process.

EVERSOURCE

Constructability Review Form: **Substation**

Project Title: [redacted]	☒	Prior Constructability Review Performed?
	☐	Program Related Site Specific Review?
Project Numbers(s): 40493201 (Transmission), CS001661 (Distribution Phase 1), CS001662 (Distribution Phase 2)	**Project Constructability Phase:**	
Date(s) of Constructability Review: 03/02/2021	☐ Conceptual Engineering Design	
03/09/2021	☐ Preliminary Engineering Design	
	☒ Detailed Engineering Design	

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		☐	☐	T&D ROW	
☐	☐	Vegetation Management		☐	☐	Survey Engineering	
☐	☐	Siting		☐	☐	Cost Estimating	
☐	☐	Safety		☒	☒	Outreach (SCS)	
☐	☐	SCADA		☐	☐	Material Procurement	
☒	☒	Distribution Engineering					

*** 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

EVERSOURCE

Constructability Review Form: **Substation**

[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] 3/26/2021

Name / Signature *Date*

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	[redacted]	[redacted]
2	[redacted]	[redacted]
3		
4		
5		

EVERSOURCE

Constructability Review Form: **Substation**

	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	☐	[redacted]

EVERSOURCE

Constructability Review Form: **Substation**

	Key Review Item Description	N/A or No Concern	Review Notes, Concerns, or Additional Info Needed
			[redacted]
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?	☐	

EVERSOURCE

Constructability Review Form: **Substation**

	Key Review Item Description	N/A or No Concern	Review Notes, Concerns, or Additional Info Needed
			[redacted]
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..	☐	
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	☐	
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?	☐	

EVERSOURCE

Constructability Review Form: **Substation**

	Key Review Item Description	N/A or No Concern	Review Notes, Concerns, or Additional Info Needed
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?	☐	[redacted]
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.)	☐	
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	☐	
9	Nomenclature / Switching One-Line Diagram -Any obvious deviations from diagrams provided?	☐	
10	BPS Separation Requirements - Is this BPS Substation? Y/N (part of PAF) - Changes to pre-existing BPS standards?	☐	
11	IEC 61850 Substation Automation and Communication Requirements - Any Impacts/Retrofit needed?	☐	

EVERSOURCE

Constructability Review Form: **Substation**

	Key Review Item Description	N/A or No Concern	Review Notes, Concerns, or Additional Info Needed
12	Any Upgrades to ES Standards - Is retrofit needed to bring up to ES standards? Can that be done?	☐	[redacted]
B	**Construction**		
1	**Any safety hazards specific to the facility? i.e. Low Bus, Deterioration, etc.**	☐	[redacted]
2	**Prior known Site Specific Conditions** -Common or Obvious station Issues -Missing scope items that could impact costs?	☐	
3	**Identify/Consider Required Depts for Construction?** -Who is constructor: Internal vs External Resources -S/S Ops, GO, Test, Field Engineering, etc -Specialty Contractors Required? -Required Oversite Needed - Estimated level of CR and LCE support needed	☐	External elec/civil contractor and Testing Contractor

EVERSOURCE

Constructability Review Form: **Substation**

	Key Review Item Description	N/A or No Concern	Review Notes, Concerns, or Additional Info 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?	☐	1. Any major maintenance replacement by Nov-Dec 2022 2. Footprint – ok 3. Access – laydown yes 4. No drivepath modifications required 5. No rock conditions/dev. Plan 6. Police details for major material delivery accounted for in the construction specification 7. Sanitary tie-in included 8. Confirm large enough gate for large material/turn radius deliveries 9. No SS access limitations 10. Coordinating laydown need with UCONN and associated space for items listed 11. Snow placement – contractor to liveload if necessary 12. 3X will go to investment recovery 13. Contractor to obtain water/sewer permit Permit, temporary power to the construction trailers 14. Contractor to supply matting in the wet land. The area to be used for laydown.
5	Unique Equipment Considerations: Gas insulated substation, Gas insulated line, Gas insulated bus, Pass Breaker, Statcom, Sync Condenser		N/A

EVERSOURCE

Constructability Review Form: **Substation**

	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	☐	[redacted]
7	**Equipment Testing & Acceptance** -Grounding plans / Resources? Will we need grounds hung? -Hi-pot testing and where will the equipment be set up?	☐	[redacted]
8	Need for mobile generator and where connected (if needed)	☐	[redacted]
9	Need for mobile battery and where connected (if needed)	☐	[redacted]
10	OT work required or Notable Permit Conditions (special hours)?	☐	[redacted]
11	Coordination of boundaries/seams (Identification of point of demarcation for connection to existing equipment and/or for coordination with other municipalities)	☐	[redacted]

EVERSOURCE

Constructability Review Form: **Substation**

	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	☐	Completed previously for [redacted]. Environmental to confirm no soil samples/testing required from outside of the [redacted]
2	**Desktop investigation and EAD Review** -Required Permits -Stormwater Considerations -Dewatering requirements -Wetland and buffer review	☐	1. SWPCP – [redacted] to work with vendor: 30 day prep time; 60 day burn time a. Will include tentative laydown, matting (SW), etc. b. [redacted]
3	Risk or presence of PCB's/Asbestos/Lead/SF6	☐	Potential PCBs/asbestos for removals
4	Transformer Spill Containment Recommended?	☐	Yes, the engineering design drawings includes the spill containment area.
5	Expanding Footprint / New Buildings or future Expansion Plans? (Enviro Impact)	☐	1. No soil test typically needed for expansion area (undisturbed) 2. Confirm need, and complete prior to mobilization if needed
6	Environmental oversight considerations? (Inspection type/Interval)	☐	Yes – weekly/biweekly – coordinate with [redacted]
7	Environmental mitigations - Any matting or seasonal needs? Review D&M Plan with CR.	☐	[redacted]
D	**Siting, S&CS, and T&D Real Estate**		
1	**Any regulatory concerns or approvals needed?** - Consider scope/design alterations to mitigate concerns - Consider Visual screening considerations (feasibility or location) -Zoning Relief and Permits required	☐	Privacy screening on all laydown fences
2	**Neighbor/Abutter impacts:** - Any noise, visual impacts, or sensitive abutters - Any changes to lighting or additional lighting needed?	☐	N/A
3	Review for roadway, gate access, trailers, equip height, noise, weekend/night work, or any potential public disturbance related to work	☐	N/A
4	Installation within Eversource Rights - Is Rights and Restrictions Review required?	☐	N/A

EVERSOURCE

Constructability Review Form: **Substation**

	Key Review Item Description	N/A or No Concern	Review Notes, Concerns, or Additional Info Needed
5	Expanding Footprint / New Buildings or future Expansion Plans?	☐	N/A
6	Proposed Equipment on same property? - Any Encroachments	☐	May need temp easement for retaining wall installation.
F	**Protection & Controls**		
1	Panel Graphic additions and/or Modifications	☐	Yes
2	Space on existing panels for new equipment? (front & rear of panel fronts)	☐	Yes
3	Panel fronts conform to drawings	☐	Yes
4	Access to bring new panels into control enclosure	☐	Yes
5	Nameplate list and location of nameplates	☐	Yes
6	Verifies that relays and meters that will be an interconnected project work are as shown on the drawings.	☐	[redacted]
7	Temporary protection, relays, control cable needed? How long will they be required?	☐	[redacted]
8	Will relay setting changes be needed? Any additional outage requirements for changes?		[redacted]
G	**Telecom Engineering**		
1	Review telecom equipment in existing control enclosure	☐	Yes
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.	☐	Yes
3	Review current or proposed Telecom equipment power connections and validate with P&C any need for system 1 and system 2 separation.	☐	Yes
4	Review current Telecom fiber diversity and validate with P&C any fiber diversity requirements.	☐	Not required
5	Review and list any remote station impacts/updates	☐	Not required
6	Confirm whether correct interface equipment is available (i.e.) for fiber termination or multiplexor termination	☐	Not required

EVERSOURCE

Constructability Review Form: **Substation**

	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	☐	Yes
8	Review space for any required additional communications cabinets which may be required to support additional telecommunications equipment installed	☐	Yes
9	Review third party Telecommunications at substation and confirm whether additional capacity or Ground Potential Rise protection is required	☐	Not required

Photos

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



EVERSOURCE

Constructability Review Form: **Substation**

[redacted]

[redacted]

[redacted]

EVERSOURCE

Constructability Review Form: **Substation**

[redacted]

EVERSOURCE

Constructability Review Form: **Substation**






Vegetation Removal to be completed on [redacted] in coordination with UConn.

[redacted]

Requested laydown area [redacted] in coordination with UConn.

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Constructability Review Form: **Substation**

[redacted]

Requested laydown area [redacted] in coordination with UConn.



Areas of existing matting and vegetation to be removed and replaced to support laydown expansion



Additional laydown to be utilized for contractor per coordination with UConn.

EVERSOURCE

Constructability Review Form: **Substation**



(Continued) Additional laydown to be utilized for contractor per coordination with UConn.

[redacted]

Today's Date:	2/25/2021
T-18 Date:	7/1/2021
T-90 Date:	5/26/2021

-CHANGE-
-NEW-

Project	Work Order #	TOA Work Request #	TOA Status	Planned Start	Planned End	Equipment Required to be OOS	Work to be Performed	Tagging Points	Tag Type	Stations	# of Days	T-Milestone Week	Recall Time

[redacted]

[redacted]

Today's Date:	2/25/2021
T-18 Date:	7/1/2021
T-90 Date:	5/26/2021

-CHANGE-
-NEW-

Project	Work Order #	TOA Work Request #	TOA Status	Planned Start	Planned End	Equipment Required	Work to be Performed	Tagging Points	Tag Type	Stations	# of Days	T-Milestone	Recall
[redacted]													

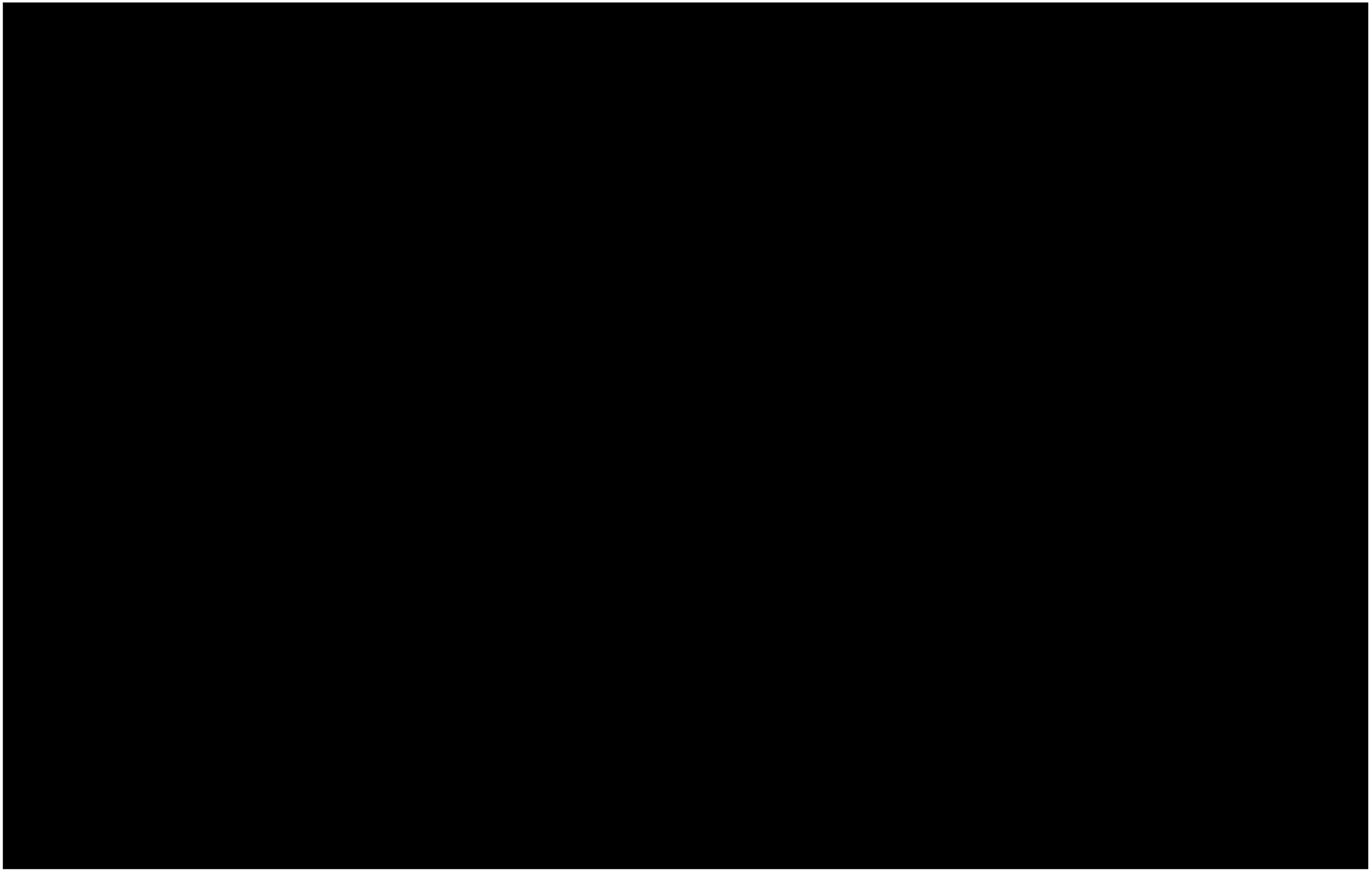
[redacted]

Today's Date:	2/25/2021
T-18 Date:	7/1/2021
T-90 Date:	5/26/2021

-CHANGE-
-NEW-

Project	Work Order #	TOA Work Request #	TOA Status	Planned Start	Planned End	Equipment Required to be OOS	Work to be Performed	Tagging Points	Tag Type	Stations	# of Days	T-Milestone Week	Recall Time
[redacted]													





[redacted]

[redacted] - [redacted] [redacted] 18-May-21 03 PM

Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
[redacted] Install New 4X Transformers	SP				489	02-Dec-19 12 AM A	27-Apr-23 04 PM
INITIALIZATION AND SCOPE DEVELOPEMEI	SP				328	02-Dec-19 12 AM A	06-Sep-22 08 AM
CS001661	SP	START	SCHEDULE START MILESTONE	[redacted]	0	02-Dec-19 12 AM A	
Initial Funding	SP				0	06-Dec-19 12 AM A	04-May-20 04 PM A
CS001661	SP	PI1200	Project Initiator Develop Intitial Funding Request		0	06-Dec-19 12 AM A	06-Dec-19 12 AM A
CS001661	SP	PI1300	Initial Funding Request Approved @ EPAC		0	06-Dec-19 12 AM A	06-Dec-19 12 AM A
CS001661	SP	PI1000	Submit Initial Funding Request		0		06-Dec-19 12 AM A
CS001661	SP	PI1610	Power Plan Approval Create WO#		0	06-Dec-19 12 AM A	06-Dec-19 04 PM A
CS001661	SP	PI1400	Assign Project Manager Request Resources for Project Team		0	06-Dec-19 12 AM A	06-Dec-19 04 PM A
CS001661	SP	PI1500	Assign Scheduler		0	04-May-20 08 AM A	04-May-20 08 AM A
CS001661	SP	PI1600	Assign Cost Analyst		0	04-May-20 08 AM A	04-May-20 04 PM A
SDC Approval	SP				0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
CS001661	SP	CE1100	ES Develop Electrical [redacted] Conceptual Engineering Design in Accordance with Deliverables Checklist		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
CS001661	SP	CE1700	Review Conceptual Siting, Real Estate,SCS, & Permitting (If Required)		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
CS001661	SP	SSF1000	Develop Soultions Selection Form (SSF)		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
CS001661	SP	CE1400	ES Engineering Develop P&C Conceptual Engineering Design in Accordance with Deliverables Checklist		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
CS001661	SP	CGE1000	Develop Conceptual Grade Estimate (-25%+50% SDC)		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
CS001661	SP	CE1000	ES Engineering Develop Civil [redacted] Conceptual Engineering Design in Accordance with Deliverables Checklist		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
CS001661	SP	CE1500	ES Engineering Develop Communications Conceptual Engineering Design in Accordance with Deliverables Checklist		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
CS001661	SP	SDC1000	Solution Design Committee(SDC) Approval		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
CS001661	SP	CE1710	Conduct Conceptual Constructability Walk Down		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
CS001661	SP	CE1600	Conduct Project Team Kickoff Meeting Verify SDC Need		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
Project Initiation	SP				53	05-Mar-20 12 AM A	30-Jul-21 04 PM
EPAC Partial Funding	SP				0	05-Mar-20 12 AM A	05-Mar-20 04 PM A
CS001661	SP	PF1000	EPAC Partial Funding Approval		0	05-Mar-20 08 AM A	05-Mar-20 04 PM A
CS001661	SP	ATCGE1010	Develop At Least Conceptual Grade Estimate (-25%+50% Partial Funding)		0	05-Mar-20 08 AM A	05-Mar-20 04 PM A
CS001661	SP	PE1600	Review Preliminary Siting & Permitting (If Required)		0	05-Mar-20 08 AM A	05-Mar-20 04 PM A
CS001661	SP	PE1700	Conduct Preliminary Constructability Walk Down		0	05-Mar-20 12 AM A	05-Mar-20 04 PM A
CS001661	SP	PAFP1000	Submit Partial Funding PAF for Internal Review		0	05-Mar-20 08 AM A	05-Mar-20 04 PM A
CS001661	SP	PAFP1100	Incorporate Internal Review Comments & Submit Partial Funding PAF to EPAC for Review		0	05-Mar-20 08 AM A	05-Mar-20 04 PM A
CS001661	SP	PAFP1200	Incorporate EPAC Partial Funding PAF Review Comments		0	05-Mar-20 08 AM A	05-Mar-20 04 PM A
CS001661	SP	PE1710	Create Engineering Scope Document		0	05-Mar-20 08 AM A	05-Mar-20 04 PM A
CS001661	SP	PE1720	Engineering Scope Document Complete		0		05-Mar-20 04 PM A
EPAC Full Funding	SP				53	30-Nov-20 08 AM A	30-Jul-21 04 PM
CS001661	SP	PAFF2110	Prepare Draft Subsidiary Board Presentation		0	30-Nov-20 08 AM A	30-Nov-20 04 PM A
CS001661	SP	PAFF2120	Perform Risk Assessment (Enterprise Risk Management – ERM)		0	30-Nov-20 08 AM A	03-Feb-21 04 PM A

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Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
CS001661	SP	DE1900	Conduct FINAL Detail Constructability Walk Down	[redacted]	0	08-Feb-21 08 AM A	08-Feb-21 04 PM A
CS001661	SP	PAFF2130	Finalize Subsidiary Board Presentation		0	04-Feb-21 08 AM A	10-Feb-21 04 PM A
CS001661	SP	DE2000	Project Constructability Review Complete		0	09-Feb-21 08 AM A	12-Feb-21 04 PM A
CS001661	SP	DE1800	Review Detail Siting & Permitting (If Required)		0	05-Apr-21 08 AM A	09-Apr-21 04 PM A
CS001661	SP	DE1700	Conduct Initial Risk Management & SCLL Review (Project Initiator & PM)		0	12-Apr-21 08 AM A	12-Apr-21 04 PM A
CS001661	SP	DE2010	Develop P&C Engineering Checklist to Support (+/-25% Full Funding)		0	16-Feb-21 08 AM A	23-Apr-21 04 PM A
CS001661	SP	DE2020	Develop Electrical Engineering Checklist to Support (+/-25% Full Funding)		0	16-Feb-21 08 AM A	23-Apr-21 04 PM A
CS001661	SP	DE1600	Create Planning Grade Estimate (+/-25% Full Funding)		0	16-Feb-21 08 AM A	12-May-21 04 PM A
CS001661	SP	PAFF2000	Submit Full Funding PAF for Internal Review		0	12-May-21 08 AM A	17-May-21 08 AM
CS001661	SP	PAFF2100	Incorporate Internal Review Comments & Submit Full Funding PAF to EPAC for Review		0	21-May-21 08 AM A	17-May-21 08 AM*
CS001661	SP	PAFF2200	Incorporate EPAC Full Funding PAF Review Comments		4	17-May-21 08 AM	20-May-21 04 PM
CS001661	SP	FF1000	EPAC Full Funding Approval		1	26-May-21 08 AM*	26-May-21 04 PM
CS001661	SP	FF1010	Finalize Subsidiary Board Presentation		5	07-Jun-21 08 AM*	11-Jun-21 04 PM
CS001661	SP	FF1020	Subsidiary Board Approval		34	14-Jun-21 08 AM	30-Jul-21 04 PM
T-Minus Milestones	SP				477	05-Mar-20 12 AM A	06-Sep-22 08 AM
T-Minus Milestones "A" Group	SP				269	05-Mar-20 12 AM A	25-Apr-22 04 PM
CS001661	SP	AT3001	Eng. Project Scoping Document Issued (Scope Lockdown)		0		05-Mar-20 12 AM A
CS001661	SP	AT0804	A-T-08.04 ALL PERMITS RECEIVED		0		12-Mar-21 04 PM A
CS001661	SP	AT1811	70% Design/Engineering Completed		0		17-Mar-21 12 AM A
CS001661	SP	AT0805E	IFC - Electrical (AG) w/Final BOM		0		31-Mar-21 04 PM A
CS001661	SP	AT2605	30% P&C Design / Engineering Completed		0		19-Apr-21 08 AM A
CS001661	SP	AT0805C	IFC - Civil (BG) w/BOM		0		22-Apr-21 08 AM A
CS001661	SP	AT0805PC	P&C IFC - P&C w/BOM		0		30-Jul-21 04 PM
CS001661	SP	AT2404	A-T-24.04 DETERMINE / ASSIGN LCE (LEAD COMMISSIONING ENGINE		0		05-Aug-21 04 PM*
CS001661	SP	AT1201	SCADA Date (Tab) Sheets/Signal List Sent to LCC		0		01-Sep-21 04 PM
CS001661	SP	AT0813	A-T-08.13 SITING PETITION AND APPLICATION FILED		0		24-Sep-21 04 PM*
CS001661	SP	AT00	T-00 - START OF CONSTRUCTION - WO#		0	04-Oct-21 08 AM*	
CS001661	SP	AT00.1	[redacted]		0	04-Oct-21 08 AM*	
CS001661	SP	AT0203	A-T-02.03 CAN COMPLETE (CONSTRUCTION AUTHORIZATION NOTICE		0		04-Oct-21 04 PM*
CS001661	SP	AT1202	P/C DESCRIPTION / DRAFT OPERATING INSTRUCTIONS ISSUED		0		05-Nov-21 04 PM
CS001661	SP	AT0301	T-03 NX9 THERMAL RATINGS TO LCC AND CONVEX		0		09-Nov-21 04 PM*
CS001661	SP	AT1805	T-18 - NX9 Preliminary Ratings to LCC for New Equipment (transformers are considered 'NEW EQUIPMENT')		0		09-Nov-21 04 PM*
CS001661	SP	AT1301	COMMISSIONING PLAN COMPLETE		0		23-Nov-21 04 PM
CS001661	SP	AT0404	[redacted]		0		05-Mar-22 04 PM
CS001661	SP	AT0401	A-T-04.01 ALL MATERIAL RECEIVED, STAGED, INVENTORIED, REVIEW		0		16-Apr-22 04 PM*
CS001661	SP	AT0409	A-T-04.09 ALL FIRM TOA APPLICATIONS DUE TO LCC (for DISTRIBUTION Non-transformer equipment)		0		25-Apr-22 04 PM*
T-Minus Milestones "B" Group (Non-Outage)	SP				140	17-May-21 08 AM	04-Oct-21 08 AM
CS001661	SP	BT203	B-T-02.03 CAN COMPLETE (CONSTRUCTION AUTHORIZATION NOTICE) - Electrical Start		0		17-May-21 08 AM*

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Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
CS001661	SP	BT00	T-00 - START OF CONSTRUCTION - WO# [redacted] ELECTRICAL Non-Outage (CS00166)	[redacted]	0	04-Oct-21 08 AM*	
T-Minus Milestones "C" Group for Transformer Test- Ph	SP				477	17-May-21 08 AM	06-Sep-22 08 AM
CS001661	SP	CT203	C-T-02.03 CAN COMPLETE (CONSTRUCTION AUTHORIZATION NOTICE) - Electrical Start		0		17-May-21 08 AM*
CS001661	SP	CT1811	CT-18 ALL FIRM TOA APPLICATIONS DUE TO LCC (for DISTRIBUTION Transformer TEST ENERGIZATION)		0		25-Apr-22 04 PM*
CS001661	SP	CT00	C-T-00 - START OF CONSTRUCTION - CS00166 Phase 1		0	06-Sep-22 08 AM*	
ENVIRONMENTAL APPROVALS AND PERMI	SP				92	05-Mar-20 04 PM A	24-Sep-21 04 PM
PREPARE COMPLIANCE MATRICES - REGULATORY	SP				92	05-Mar-20 04 PM A	24-Sep-21 04 PM
CS001661	SP	1100	Incorporate Comments to Property Abutter Petition Letter		0	23-Nov-20 08 AM A	23-Nov-20 04 PM A
CS001661	SP	1101	Receive Scope, Arrangement Drwg, Equip List (to support CSC Petition)		0	23-Nov-20 08 AM A	23-Nov-20 04 PM A
CS001661	SP	1102	Outreach to Property Owners		0	23-Nov-20 08 AM A	23-Nov-20 04 PM A
CS001661	SP	1103	Obtain Cultural Resources Approval		0	23-Nov-20 08 AM A	23-Nov-20 04 PM A
CS001661	SP	1104	Prepare Preliminary Draft CSC Petition		0	14-Dec-20 08 AM A	16-Apr-21 04 PM A
CS001661	SP	1105	Prepare Property Abutter Petition Letter		0	10-May-21 08 AM A	10-May-21 04 PM A
CS001661	SP	1106	Mandatory Commenter Review of Preliminary Draft CSC Petition		2	19-Apr-21 08 AM A	18-May-21 04 PM
CS001661	SP	1107	Prepare Final CSC Petition / Submit Petition to CSC for Review		5	19-May-21 08 AM	25-May-21 04 PM
CS001661	SP	A1230	Prepared Compliance Matrices - Regulatory		87	05-Mar-20 04 PM A	17-Sep-21 04 PM
CS001661	SP	A1220	Prepared Compliance Matrices - Non-Reqgulatory (Commitments)		87	05-Mar-20 04 PM A	17-Sep-21 04 PM
CS001661	SP	1109	CSC Petition Approval (Tie to T-8)		1	24-Sep-21 08 AM	24-Sep-21 04 PM
CS001661	SP	1108	CSC Petition Review		119	29-May-21 08 AM*	24-Sep-21 04 PM
APPROVALS - FEDERAL	SP				0	08-Mar-21 08 AM A	12-Mar-21 04 PM A
CS001661	SP	A1180	Determine Requirment for and Prepare Permitting Docments - FEDERAL (CT) TBD		0	08-Mar-21 08 AM A	12-Mar-21 04 PM A
APPROVALS - STATE	SP				0	08-Mar-21 08 AM A	12-Mar-21 04 PM A
CS001661	SP	A1190	Determine Requirment for and Prepare Permitting Docments - STATE TBD		0	08-Mar-21 08 AM A	12-Mar-21 04 PM A
APPROVALS - REGIONAL	SP				0	08-Mar-21 08 AM A	12-Mar-21 04 PM A
CS001661	SP	A1200	Determine Requirment for and Prepare Permitting Docments - REGIONAL (CT) TBD		0	08-Mar-21 08 AM A	12-Mar-21 04 PM A
APPROVALS - LOCAL	SP				0	08-Mar-21 08 AM A	12-Mar-21 04 PM A
CS001661	SP	A1210	Determine Requirment for and Prepare Permitting Docments - LOCAL TBD		0	08-Mar-21 08 AM A	12-Mar-21 04 PM A
ENGINEERING & DESIGN	SP				489	07-Feb-20 08 AM A	27-Apr-23 04 PM
Engineering Services Staffing	SP				0	07-Feb-20 08 AM A	19-Feb-21 04 PM A
CS001661	SP	A3370	Decision Required Regarding Engineering Staffing (ES, COC, BID)-EOC for Civil Only		0	07-Feb-20 08 AM A	16-Nov-20 12 AM A
Bid Process	SP				0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
CS001661	SP	TMP1280	(N/R per SP 7/31/20)Contractor Selection (Bid) - Engineering - Bid Review / Score Bids/ Negotiations		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
CS001661	SP	TMP1300	(N/R per SP 7/31/20)Contractor Selection (Bid) - Engineering - Notice to Proceed		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A

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Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
CS001661	SP	TMP1190	(N/R per SP 7/31/20) Contractor Selection (Bid) - Engineering- Prepare / Issue RFP for Engineering Contractor	[redacted]	0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
CS001661	SP	TMP1210	(N/R per SP 7/31/20)Contractor Selection (Bid) - Engineering - Issue RFP Out to Bid to Engineering Contractor		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
CS001661	SP	TMP1230	(N/R per SP 7/31/20)Contractor Selection (Bid) - Engineering - Hold Pre-Bid Meeting for Engineering Contractor		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
CS001661	SP	TMP1310	(N/R per SP 7/31/20) Contractor Selection (Bid) - Engineering - Bid Period		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
CS001661	SP	TMP1320	(N/R per SP 7/31/20)Contractor Selection (Bid) - Engineering - Award Contractor		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
CS001661	SP	TMP1330	(N/R per SP 7/31/20)Contractor Selection (Bid) - Engineering - Issue DR		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
CS001661	SP	TMP1340	(N/R per SP 7/31/20)Contractor Selection (Bid) - Engineering - Issue PO		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
EOC - Engineer of Choice Process	SP				0	07-Dec-20 08 AM A	19-Feb-21 04 PM A
CS001661	SP	TMP1140	Engineering of Choice (EOC) - Provide RFP to Single Vendor		0	07-Dec-20 08 AM A	07-Dec-20 04 PM A
CS001661	SP	TMP1150	Engineering of Choice (EOC) - Vendor Responds with Proposal		0	08-Dec-20 08 AM A	14-Dec-20 04 PM A
CS001661	SP	TMP1180	Engineering of Choice (EOC) - EOC Committee Reviews at Monthly Meeting & Approves		0	15-Dec-20 08 AM A	15-Dec-20 04 PM A
CS001661	SP	TMP1200	Engineering of Choice (EOC) - DR Prepared by Project Engineer & Project Controls		0	15-Dec-20 08 AM A	23-Dec-20 04 PM A
CS001661	SP	TMP1220	Engineering of Choice (EOC) - PO Issued for Vendor -Preliminary Design Effort		0	16-Feb-21 08 AM A	17-Feb-21 04 PM A
CS001661	SP	TMP1240	Vendor Kick-Off Meeting		0	18-Feb-21 08 AM A	19-Feb-21 04 PM A
CS001661	SP	TMP1250	ES Supplies Final GEOTech Info to Vendor		0	15-Jan-21 08 AM A	19-Feb-21 04 PM A
Civil Engineering	SP				0	10-Aug-20 08 AM A	22-Apr-21 04 PM A
Civil Engineering 100%	SP				0	22-Feb-21 08 AM A	16-Mar-21 04 PM A
CS001661	SP	DSSE-1340	Vendor Incorporates Detail Comments and Issues 100% Civil Package to ES		0	22-Feb-21 08 AM A	01-Mar-21 04 PM A
CS001661	SP	DSSE-1350	ES Reviews and Comments 100% Civil Package		0	02-Mar-21 08 AM A	16-Mar-21 04 PM A
Civil Engineering IFC	SP				0	04-Mar-21 08 AM A	22-Apr-21 04 PM A
CS001661	SP	DSSE-1290	Vendor Incorporates 100% Design Comments Submits IFC Civil Package to ES w/BOM		0	04-Mar-21 08 AM A	08-Apr-21 04 PM A
CS001661	SP	DSSE-1320	ES Reviews IFC Civil Package		0	12-Apr-21 08 AM A	14-Apr-21 04 PM A
CS001661	SP	DSSE-1300	ES Issues Civil Package IFC w/BOM		0	15-Apr-21 08 AM A	22-Apr-21 04 PM A
Civil Engineering Detailed	SP				0	08-Feb-21 08 AM A	19-Feb-21 04 PM A
CS001661	SP	DSSE-1210	Vendor Incorporates Preliminary Comments and Issues Detailed Civil Package to ES		0	08-Feb-21 08 AM A	12-Feb-21 04 PM A
CS001661	SP	DSSE-1240	ES Reviews and Comments Detailed Civil Package		0	15-Feb-21 08 AM A	19-Feb-21 04 PM A
Civil Engineering Preliminary	SP				0	10-Aug-20 08 AM A	03-Feb-21 04 PM A
CS001661	SP	DSSE-1270	Design Package to Civil		0	10-Aug-20 08 AM A	01-Oct-20 04 PM A
CS001661	SP	DSSE-1250	Vendor Submits Preliminary Civil Package to ES		0	12-Jan-21 08 AM A	01-Feb-21 04 PM A
CS001661	SP	DSSE-1280	ES Reviews and Comments Preliminary Civil Package		0	01-Feb-21 08 AM A	03-Feb-21 04 PM A
Electrical Engineering	SP				93	18-Jun-20 08 AM A	05-Nov-21 04 PM
CS001661	SP	DSSE-260	Submit Plan/Profile to Siting & Permitting for Filing w/Regulator Authority (Should this be tied to the IFC)		0	20-Oct-20 08 AM A	12-Feb-21 04 PM A
CS001661	SP	DSSE-200	Detail (70%) Electrical Design Package Design		0	15-Feb-21 08 AM A	01-Mar-21 04 PM A

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Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
CS001661	SP	DSSE-205	Detail (70%) Electrical Design Package Drafting	[redacted]	0	02-Mar-21 08 AM A	19-Mar-21 04 PM A
CS001661	SP	DSSE-210	Final (100%) Electrical Design Package IFR		0	22-Mar-21 08 AM A	31-Mar-21 04 PM A
CS001661	SP	DSSE-230	Electrical Engineering - BOM Complete		0	29-Mar-21 08 AM A	31-Mar-21 04 PM A
CS001661	SP	DSSE-240	Electrical Engineering - Electrical Package IFC (Physical & Electrical)		0	29-Mar-21 08 AM A	31-Mar-21 04 PM A
CS001661	SP	DSSE-460	Operating Instructions - SSED Review Draft Distribution OI		5	01-Nov-21 08 AM	05-Nov-21 04 PM
CS001661	SP	DSSE-920	Operating Instructions - SSED Review Draft Convex OI		5	01-Nov-21 08 AM	05-Nov-21 04 PM
Transformer- Vendor Drawings with Schematics	SP				0	27-Jul-20 08 AM A	12-Feb-21 04 PM A
CS001661	SP	DSSE-1150	ES Reviews & Comments Transformer Drawings & Schematics 4X		0	27-Oct-20 08 AM A	08-Jan-21 04 PM A
CS001661	SP	DSSE-1140	Vendor Submits Transformer Drawings & Schematics 4X (?????? Logic is incorrect????)		0	27-Jul-20 08 AM A	12-Feb-21 04 PM A
CS001661	SP	DSSE-1160	Vendor Submits Firm Transformer Drawings & Schematics 4X		0	27-Oct-20 08 AM A	12-Feb-21 04 PM A
Switch Gear - Vendor Drawings with Schematics	SP				0	18-Jun-20 08 AM A	01-Oct-20 04 PM A
CS001661	SP	1120	Vendor Submits Switch Gear Drawings & Schematics Switchgear		0	18-Jun-20 08 AM A	14-Aug-20 04 PM A
CS001661	SP	1121	ES Reviews & Comments Switch Gear Drawings & Schematics Switchgear		0	17-Aug-20 08 AM A	31-Aug-20 04 PM A
CS001661	SP	1122	Vendor Submits Firm Switch Gear Drawings & Schematics Switchgear		0	10-Sep-20 08 AM A	01-Oct-20 04 PM A
Circuit Switcher - Vendor Drawings with Schematics	SP				10	27-Oct-20 08 AM A	09-Jul-21 04 PM
CS001661	SP	1123	N/R Vendor Submits Circuit Switcher Drawings & Schematics Circuit Switcher		0	27-Oct-20 08 AM A	31-Mar-21 04 PM A
CS001661	SP	1124	N/R ES Reviews & Comments Circuit Switcher Drawings & Schematics Circuit Switcher		0	31-Mar-21 08 AM A	31-Mar-21 04 PM A
CS001661	SP	1125	Vendor Submits Firm Circuit Switcher Drawings & Schematics Circuit Switcher		10	25-Jun-21 08 AM	09-Jul-21 04 PM
Distribution Thermal Ratings NX-9 (Transformer Repl	SP				436	02-Oct-20 08 AM A	27-Apr-23 04 PM
Thermal Ratings - Substation - Preliminary Thermal Da	SP				27	02-Oct-20 08 AM A	09-Nov-21 04 PM
CS001661	SP	NX9A-NC159	LTRC Reviews and Makes "GO / NO-GO" Decision for 1-Line Nomenclature - GO!		0	05-Oct-20 08 AM A	05-Oct-20 04 PM A
CS001661	SP	NX9A-NC169	LTRC Submits 1-Line Nomenclature to TRC		0	09-Nov-20 08 AM A	13-Nov-20 04 PM A
CS001661	SP	NX9A-NC69	PE Updates 1-Line Nomenclature Dwgs & Complete PE Checklist M7-EN-3006.2 - e-mail link to project team & CONVEX		0	02-Oct-20 08 AM A	16-Nov-20 04 PM A
CS001661	SP	NX9A-NC59	LTRC Reviews and Makes "GO / NO-GO" Decision for Thermal Ratings - GO!		0	26-Feb-21 08 AM A	26-Feb-21 04 PM A
CS001661	SP	NX9A-NC99	LTRC Requests P&C Checklist		0	08-Mar-21 08 AM A	12-Mar-21 04 PM A
CS001661	SP	NX9A-NC79	P&C Develops and Provides LTRC with P&C Checklist (M7-EN-3006.1)		5	01-Oct-21 08 AM	07-Oct-21 04 PM
CS001661	SP	NX9A-NC139	LTRC Reviews and Sends Thermal Rating Data for TRC Review		5	08-Oct-21 08 AM*	15-Oct-21 04 PM
CS001661	SP	NX9A-NC129	TRC Reviews and Approves Thermal Rating Data		5	18-Oct-21 08 AM	22-Oct-21 04 PM
CS001661	SP	NX9A-NC119	LTRC Sends Thermal Rating Data for Approval & Submit to NURS		5	25-Oct-21 08 AM*	29-Oct-21 04 PM
CS001661	SP	NX9A-NC109	Scheduler @ NURS email "Submitted for PP Review" - Updates NURS with DOE		1	01-Nov-21 08 AM	01-Nov-21 04 PM
CS001661	SP	NX9A-NC89	TRC Review and Submit NX-9 Data to LCC + ISO-NE for S/S Thermal Ratin		5	02-Nov-21 08 AM	08-Nov-21 04 PM
CS001661	SP	NX9A-NC149	Scheduler @ NURS email "Submitted for DOE Monitoring" - Updates T-18, EquipDOE, Revs DOE per M7-EN-3006		1	09-Nov-21 08 AM	09-Nov-21 04 PM
Thermal Ratings - Substation - Verify Thermal Data	SP				70	05-Apr-21 08 AM A	09-Nov-21 04 PM
CS001661	SP	NX9A-NC33	LTRC Reviews and Makes "GO / NO-GO" Decision - GO!		0	05-Apr-21 08 AM A	09-Apr-21 04 PM A
CS001661	SP	NX9A-NC35	LTRC Requests P&C Checklist		0	26-Apr-21 08 AM A	10-May-21 04 PM A

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Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
CS001661	SP	NX9A-NC31	PE to Verify Thermal Data Review PE Checklist (M7-EN-3006.2)	[redacted]	5	02-Aug-21 08 AM*	06-Aug-21 04 PM
CS001661	SP	NX9A-NC37	P&C Develops and Provides LTRC with P&C Checklist (M7-EN-3006.1)		5	01-Oct-21 08 AM	07-Oct-21 04 PM
CS001661	SP	NX9A-NC39	LTRC Reviews and Sends Thermal Rating Data for TRC Review		5	08-Oct-21 08 AM	15-Oct-21 04 PM
CS001661	SP	NX9A-NC41	TRC Reviews and Approves Thermal Rating Data		5	18-Oct-21 08 AM	22-Oct-21 04 PM
CS001661	SP	NX9A-NC43	LTRC Sends Thermal Rating Data for Approval & Submit to NURS		5	25-Oct-21 08 AM	29-Oct-21 04 PM
CS001661	SP	NX9A-NC45	Scheduler @ NURS email "Submitted for PP Review" - Updates NURS with DOE		1	01-Nov-21 08 AM	01-Nov-21 04 PM
CS001661	SP	NX9A-NC47	TRC Review and Submit NX-9 Data to LCC + ISO-NE for S/S Thermal Ratin		5	02-Nov-21 08 AM	08-Nov-21 04 PM
CS001661	SP	NX9A-NC49	Scheduler @ NURS email "Submitted for DOE Monitoring" - Updates T-3, EquipDOE, Revs DOE per M7-EN-3006		1	09-Nov-21 08 AM	09-Nov-21 04 PM
Thermal Ratings - Substation - NX-9 Pre NX9-DOE	SP				1	28-Dec-22 08 AM	28-Dec-22 04 PM
CS001661	SP	NX9500	Scheduler - Send Email for 48Hrs Notification before DOE.		1	28-Dec-22 08 AM*	28-Dec-22 04 PM
Thermal Ratings - Substation - NX-9 Post NX9-DOE/ISD	SP				8	18-Apr-23 08 AM	27-Apr-23 04 PM
CS001661	SP	NX9FINAL50	Review + Affirm Accuracy of NX-9 for ISO Submission (Tie after Equip DOE or CFM/ISD)		3	18-Apr-23 08 AM	20-Apr-23 04 PM
CS001661	SP	NX9FINAL60	[If Required] Receive + Issue Final Affirmed NX-9 Data to NURS		5	21-Apr-23 08 AM	27-Apr-23 04 PM
Thermal Ratings - Non NX-9 Thermal Ratings	SP				20	01-Oct-21 08 AM	29-Oct-21 04 PM
CS001661	SP	NX9A-EM44	P&C Develops and Provides LTRC with P&C Checklist & Thermal Ratings D		5	01-Oct-21 08 AM*	07-Oct-21 04 PM
CS001661	SP	NX9A-EM54	LTRC Prepares and Sends Thermal Rating Data for TRC Review		5	08-Oct-21 08 AM	15-Oct-21 04 PM
CS001661	SP	NX9A-EM64	TRC Reviews and Approves Thermal Rating Data		5	18-Oct-21 08 AM	22-Oct-21 04 PM
CS001661	SP	NX9A-EM74	LTRC Files Capability Sheets		5	25-Oct-21 08 AM	29-Oct-21 04 PM
P&C Engineering	SP				121	22-Jul-20 08 AM A	05-Nov-21 04 PM
CS001661	SP	DSSE-400	Prepare & Issue P&C Design Package to Drafting		0	22-Jul-20 08 AM A	23-Oct-20 04 PM A
CS001661	SP	DSSE-410	Drafting Prepare & Issue Back to P&C		0	26-Oct-20 08 AM A	28-Oct-20 04 PM A
CS001661	SP	A3380	Issue P&C Package Design		0	19-Apr-21 08 AM A	23-Apr-21 12 AM A
CS001661	SP	DSSE-480	PE INITIATE CASCADE FORMS (Apenndix A) for Construction		20	17-May-21 08 AM*	14-Jun-21 04 PM
CS001661	SP	DSSE-220	SDS Complete (~= P&C IFC)		25	25-Jun-21 08 AM*	30-Jul-21 04 PM
CS001661	SP	DSSE-990	P&C INITIATE SCADA Data Sheets		23	02-Aug-21 08 AM	01-Sep-21 04 PM
CS001661	SP	DSSE-450	Operating Instructions - Prepare and Issue Draft Distribution OI to Engineering		20	01-Oct-21 08 AM	29-Oct-21 04 PM
CS001661	SP	DSSE-470	Operating Instructions - P&C Review Draft Distribution OI		5	01-Nov-21 08 AM	05-Nov-21 04 PM
CS001661	SP	DSSE-930	Operating Instructions - P&C Review Draft Convex OI		5	01-Nov-21 08 AM	05-Nov-21 04 PM
Relay Settings	SP				43	02-Aug-21 08 AM	30-Sep-21 04 PM
CS001661	SP	DSSE-1330	ES Prepare Relay Settings		23	02-Aug-21 08 AM*	01-Sep-21 04 PM
CS001661	SP	DSSE-440	Peer Review & Issue Relay Settings IFC		20	02-Sep-21 08 AM	30-Sep-21 04 PM
MATERIAL PROCUREMENT	SP				355	12-Jun-20 08 AM A	31-Dec-22 04 PM
MATERIAL FOR P&C	SP				98	06-Oct-21 08 AM	01-Mar-22 04 PM
CS001661	SP	DSSE-510	MATERIAL - P&C - Prepare & Issue DR		5	06-Oct-21 08 AM	13-Oct-21 04 PM
CS001661	SP	DSSE-980	MATERIAL - P&C - Procurement Issue PO		10	14-Oct-21 08 AM	23-Oct-21 04 PM
CS001661	SP	DSSE-1000	MATERIAL - P&C - Material Vendor Delivery Leadtime		29	31-Jan-22 08 AM*	28-Feb-22 04 PM
CS001661	SP	DSSE-1010	MATERIAL - P&C - Material Handler Confirm Material Delivery to Site		1	01-Mar-22 08 AM	01-Mar-22 04 PM
MATERIAL FOR ELECTRICAL	SP				33	02-Aug-21 08 AM	16-Sep-21 04 PM

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Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
CS001661	SP	DSSE-520	MATERIAL - Electrical - Prepare & Issue DR	[redacted]	5	02-Aug-21 08 AM*	06-Aug-21 04 PM
CS001661	SP	DSSE-590	Electrical (AG) Material Ordered		0		06-Aug-21 04 PM
CS001661	SP	DSSE-1020	MATERIAL - ELectrical - Procurement Issue PO		10	07-Aug-21 08 AM	16-Aug-21 04 PM
CS001661	SP	DSSE-1030	MATERIAL - ELectrical - Material Vendor Delivery Leadtime		30	17-Aug-21 08 AM	15-Sep-21 04 PM
CS001661	SP	DSSE-550	MATERIAL - Electrical - Material Handler Confirm Material Delivery to Site		1	16-Sep-21 08 AM	16-Sep-21 04 PM
MATERIAL FOR CIVIL	SP				29	02-Aug-21 08 AM	11-Sep-21 04 PM
CS001661	SP	DSSE-500	MATERIAL - CIVIL - Prepare & Issue DR		5	02-Aug-21 08 AM	06-Aug-21 04 PM
CS001661	SP	DSSE-600	Civil (BG) Material Ordered		0		06-Aug-21 04 PM
CS001661	SP	DSSE-1040	MATERIAL - CIVIL - Procurement Issue PO		5	07-Aug-21 08 AM	11-Aug-21 04 PM
CS001661	SP	DSSE-1050	MATERIAL - CIVIL - Material Vendor Delivery Leadtime		30	12-Aug-21 08 AM	10-Sep-21 04 PM
CS001661	SP	DSSE-560	MATERIAL - CIVIL - Material Handler Confirm Material Delivery to Site		1	11-Sep-21 08 AM	11-Sep-21 04 PM
MATERIAL FOR TRANSFORMER	SP				177	08-Sep-20 08 AM A	16-Apr-22 04 PM
CS001661	SP	DSSE-1170	N/R (per CK 9/14/20) MATERIAL - Transformer - Prepare & Issue LNTP for Vendor Dwgs. & Schematics		0	08-Sep-20 08 AM A	14-Sep-20 04 PM A
CS001661	SP	1126	N/R (per CK 9/14/20) MATERIAL - Transformer - Prep& Issue DR For Approval Drawing		0	08-Sep-20 08 AM A	14-Sep-20 04 PM A
CS001661	SP	1127	N/R (per CK 9/14/20) MATERIAL - Transformer - Procurement Issue PO For Approval Drawing		0	08-Sep-20 08 AM A	14-Sep-20 04 PM A
CS001661	SP	DSSE-530	MATERIAL - Transformer - Prepare & Issue DR		5	02-Aug-21 08 AM*	06-Aug-21 04 PM
CS001661	SP	DSSE-1180	Transformer Material Ordered		0		06-Aug-21 04 PM
CS001661	SP	DSSE-1060	MATERIAL - Transformer - Procurement Issue PO		10	07-Aug-21 08 AM	16-Aug-21 04 PM
CS001661	SP	DSSE-1070	MATERIAL - Transformer 4X - Material Vendor Delivery Leadtime		242	17-Aug-21 08 AM	15-Apr-22 04 PM
CS001661	SP	DSSE-570	MATERIAL - Transformer - Material Handler Confirm Material Delivery to Site		1	16-Apr-22 08 AM	16-Apr-22 04 PM
MATERIAL FOR SWITCHGEAR	SP				169	12-Jun-20 08 AM A	05-Apr-22 04 PM
CS001661	SP	1128	MATERIAL - Switchgear - Prepare & Issue DR For Approval Drawing (Need Pred to be added for Eng to provide Scope/Spec)		0	12-Jun-20 08 AM A	12-Jun-20 04 PM A
CS001661	SP	1129	MATERIAL - Switchgear - Procurement Issue PO For Approval Drawing		0	18-Jun-20 12 AM A	18-Jun-20 12 AM A
CS001661	SP	DSSE-540	MATERIAL - Switchgear- Prepare & Issue DR		5	02-Aug-21 08 AM*	06-Aug-21 04 PM
CS001661	SP	DSSE-1190	Switchgear Material Ordered		0		06-Aug-21 04 PM
CS001661	SP	DSSE-1080	MATERIAL - Switchgear - Procurement Issue PO		10	07-Aug-21 08 AM	16-Aug-21 04 PM
CS001661	SP	DSSE-1090	MATERIAL - Switchgear - Material Vendor Delivery Leadtime		231	17-Aug-21 08 AM	04-Apr-22 04 PM
CS001661	SP	DSSE-580	MATERIAL - Switchgear - Material Handler Confirm Material Delivery to Site		1	05-Apr-22 08 AM	05-Apr-22 04 PM
MATERIAL FOR CIRCUIT SWITCHER	SP				147	12-Oct-20 08 AM A	05-Mar-22 04 PM
CS001661	SP	1130	N/R (per CK 12-10-20) MATERIAL - Circuit Switcher - Prepare & Issue DR For App Drawing		0	13-Oct-20 08 AM A	19-Oct-20 04 PM A
CS001661	SP	1131	N/R (per CK 12-10-20) MATERIAL - Circuit Switcher - Procurement Issue PO For Approval Drawing		0	12-Oct-20 08 AM A	21-Oct-20 04 PM A
CS001661	SP	1115	MATERIAL - Circuit Switcher- Prepare & Issue DR		5	02-Aug-21 08 AM*	06-Aug-21 04 PM
CS001661	SP	1119	Circuit Switcher Material Ordered		0		06-Aug-21 04 PM
CS001661	SP	1117	MATERIAL - Circuit Switcher - Procurement Issue PO		10	07-Aug-21 08 AM	16-Aug-21 04 PM
CS001661	SP	1118	MATERIAL - Circuit Switcher - Material Vendor Delivery Leadtime		200	17-Aug-21 08 AM	04-Mar-22 04 PM

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Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
CS001661	SP	1116	MATERIAL - Circuit Switcher - Material Handler Confirm Material Delivery to Site	[redacted]	1	05-Mar-22 08 AM	05-Mar-22 04 PM
OTHER MATERIALS(CIVIL, ELECTRICAL, P&C)	SP				355	02-Aug-21 08 AM	31-Dec-22 04 PM
CS001661	SP	1141	MATERIAL - Other Materials- Prepare & Issue DR		10	02-Aug-21 08 AM	13-Aug-21 04 PM
CS001661	SP	1169	Other Materials Ordered		0		13-Aug-21 04 PM
CS001661	SP	1149	MATERIAL - Other Materials - Procurement Issue PO		5	16-Aug-21 08 AM	20-Aug-21 04 PM
CS001661	SP	1159	MATERIAL - Other Materials - Material Vendor Delivery Leadtime		197	21-Aug-21 08 AM	05-Mar-22 04 PM
CS001661	SP	1139	MATERIAL - Other Materials - Material Handler Confirm Material Delivery to Site		1	31-Dec-22 08 AM	31-Dec-22 04 PM*
CONSTRUCTION	SP				365	01-Feb-21 08 AM A	17-Jan-23 04 PM
CONSTRUCTION SERVICES SELECTION	SP				5	01-Feb-21 08 AM A	06-Aug-21 04 PM
CONSTRUCTION SERVICES - BID PROCESS Civil	SP				5	01-Feb-21 08 AM A	06-Aug-21 04 PM
CS001661	SP	A3430	CONST.SERVICES - BID - Eversource provide Spec / RFP - Civil		0	01-Feb-21 08 AM A	15-Mar-21 04 PM A
CS001661	SP	A3440	CONST.SERVICES - BID - Contractors Evaluate RFP and Provide Proposal - Civil		0	15-Mar-21 08 AM A	26-Apr-21 04 PM A
CS001661	SP	A3450	CONST.SERVICES - BID - Eversource reviews contractor proposals - Civil		0	27-Apr-21 08 AM A	07-May-21 04 PM A
CS001661	SP	A3460	CONST.SERVICES - BID - Contract is Awarded - PO Issued - Civil		5	02-Aug-21 08 AM	06-Aug-21 04 PM
CONSTRUCTION SERVICES - BID PROCESS Electric	SP				5	01-Feb-21 08 AM A	06-Aug-21 04 PM
CS001661	SP	1111	CONST.SERVICES - BID - Eversource provide Spec / RFP - Electrical		0	01-Feb-21 08 AM A	15-Mar-21 04 PM A
CS001661	SP	1112	CONST.SERVICES - BID - Contractors Evaluate RFP and Provide Proposal - Electrical		0	15-Mar-21 08 AM A	26-Apr-21 04 PM A
CS001661	SP	1113	CONST.SERVICES - BID - Eversource reviews contractor proposals - Electrical		0	27-Apr-21 08 AM A	07-May-21 04 PM A
CS001661	SP	1114	CONST.SERVICES - BID - Contract is Awarded - PO Issued - Electrical		5	02-Aug-21 08 AM	06-Aug-21 04 PM
CONSTRUCTION - CIVIL	SP				5	04-Oct-21 08 AM	08-Oct-21 04 PM
CS001661	SP	A1120	Construction - Civil		5	04-Oct-21 08 AM	08-Oct-21 04 PM
CONSTRUCTION - ELECTRICAL	SP				309	04-Oct-21 08 AM	28-Dec-22 04 PM
CS001661	SP	A1130	Construction - Electrical Non Outage		226	04-Oct-21 08 AM	26-Aug-22 04 PM
CS001661	SP	A3550	Construction - Electrical - Phase 1		78	06-Sep-22 08 AM	28-Dec-22 04 PM
CONSTRUCTION - P&C	SP				9	06-Sep-22 08 AM	16-Sep-22 04 PM
CS001661	SP	A1140	Construction - P&C Implement Relay Settings		9	06-Sep-22 08 AM	16-Sep-22 04 PM
CONSTRUCTION - COMMUNICATIONS	SP				9	06-Sep-22 08 AM	16-Sep-22 04 PM
CS001661	SP	A1150	Construction - Field Communications		9	06-Sep-22 08 AM	16-Sep-22 04 PM
CONSTRUCTION - CONST.REP TASKS	SP				187	19-Apr-22 08 AM	17-Jan-23 04 PM
CS001661	SP	A1280	Construction Rep SUBMIT OUTAGE REQUESTS for TRANSFORMER INSTALLATION (13 weeks before outage)		5	19-Apr-22 08 AM*	25-Apr-22 04 PM
CS001661	SP	A1290	Construction Rep SUBMIT OUTAGE REQUESTS for TRANSFORMER TEST ENERGIZATION (18 weeks before outage)		5	19-Apr-22 08 AM	25-Apr-22 04 PM
CS001661	SP	A1250	Construction Rep SUBMIT OUTAGE REQUESTS for NON-transformer equipment (4 weeks before outage)		5	19-Apr-22 08 AM	25-Apr-22 04 PM
CS001661	SP	A1260	Construction Rep Finalize CASCADE Forms (within 14 days folloiwng ISD)		10	03-Jan-23 08 AM	17-Jan-23 04 PM
CONSTRUCTION RESOURCE TRACKING	SP				311	04-Oct-21 08 AM	30-Dec-22 04 PM

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Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
CS001661	SP	A1070	RESOURCE ONLY ACTIVITY - CONSTRUCTION - SWITCH OUT	[redacted]	1	04-Oct-21 08 AM	04-Oct-21 04 PM
CS001661	SP	A1080	RESOURCE ONLY ACTIVITY - CONSTRUCTION - SWITCH IN		1	15-Sep-22 08 AM	15-Sep-22 04 PM
CS001661	SP	ConRep-S	RESOURCE ONLY ACTIVITY - CONSTRUCTION - CONSTRUCTION REP		311	04-Oct-21 08 AM	30-Dec-22 04 PM
CS001661	SP	CONSTelec	RESOURCE ONLY ACTIVITY - CONSTRUCTION - ELECTRICIAN		311	04-Oct-21 08 AM	30-Dec-22 04 PM
CONSTRUCTION OUTAGES	SP				389	04-Oct-21 08 AM	30-Dec-22 04 PM
CS001661	SP	CSM	Construction Start Milestone - Civil		0	04-Oct-21 08 AM	
CS001661	SP	TOA-Const	OUTAGE / General Construction Work		298	04-Oct-21 08 AM	15-Sep-22 04 PM
CS001661	SP	CFM	Construction Finish Milestone - Phase 1		0		30-Dec-22 04 PM
CS001661	SP	DOE	DATE OF ENERGIZATION		0		30-Dec-22 04 PM*
TEST OUTAGES	SP				5	16-Sep-22 08 AM	22-Sep-22 04 PM
CS001661	SP	TOA-Test	OUTAGE / Test Transformer		5	16-Sep-22 08 AM	22-Sep-22 04 PM
CONSTRUCTION CLOSEOUT	SP				2	03-Jan-23 08 AM	04-Jan-23 04 PM
CS001661	SP	DSSE-900	Prepare Civil Field Mark Ups (Tie after Last Civil Construction Activity)		2	03-Jan-23 08 AM	04-Jan-23 04 PM
TEST AND COMMISSION	SP				110	01-Mar-21 08 AM A	10-Jan-22 04 PM
TEST - SERVICES STAFFING DECISION	SP				35	01-Mar-21 08 AM A	20-Sep-21 04 PM
TEST SERVICES - CONTRACTOR OF CHOICE	SP				35	02-Aug-21 08 AM	20-Sep-21 04 PM
CS001661	SP	A3470	TEST SERVICES - COC - Eversource Provides Spec / RFQ to COC		5	02-Aug-21 08 AM	06-Aug-21 04 PM
CS001661	SP	A3480	TEST SERVICES - COC - COC Evaluates Spec and Provides Quote		10	09-Aug-21 08 AM	20-Aug-21 04 PM
CS001661	SP	A3490	TEST SERVICES - COC - Eversource Reviews Quote from COC		10	23-Aug-21 08 AM	03-Sep-21 04 PM
CS001661	SP	A3500	TEST SERVICES - COC - Eversource Awards Contract - PO Issued		10	07-Sep-21 08 AM	20-Sep-21 04 PM
TEST SERVICES - BID PROCESS	SP				5	01-Mar-21 08 AM A	06-Aug-21 04 PM
CS001661	SP	A3510	TEST SERVICES - BID - Eversource provide Spec / RFP		0	01-Mar-21 08 AM A	31-Mar-21 04 PM A
CS001661	SP	A3520	TEST SERVICES - BID - Contractors Evaluate RFP and Provide Proposal		0	01-Apr-21 08 AM A	21-Apr-21 04 PM A
CS001661	SP	A3530	TEST SERVICES - BID - Eversource reviews contractor proposals		0	22-Apr-21 08 AM A	05-May-21 04 PM A
CS001661	SP	A3540	TEST SERVICES - BID - Eversource awards contract - PO Issued		5	02-Aug-21 08 AM	06-Aug-21 04 PM
LCE PLANNING	SP				79	02-Aug-21 08 AM	23-Nov-21 04 PM
CS001661	SP	LCE100	PM to Request Lead Commissioning Engineer GO/NO-GO		2	02-Aug-21 08 AM*	03-Aug-21 04 PM
CS001661	SP	LCE200	Assign Lead Commissioning Engineer		2	04-Aug-21 08 AM*	05-Aug-21 04 PM
CS001661	SP	LCE400	Develop Test and Commissioning Plan		21	23-Sep-21 08 AM	22-Oct-21 04 PM
CS001661	SP	LCE500	LCE Review and Approve Vendor's Test and Commissioning Plan		21	25-Oct-21 08 AM	23-Nov-21 04 PM
TEST ACTIVITIES	SP				75	21-Sep-21 08 AM	10-Jan-22 04 PM
CS001661	SP	LCE320	Mobilize Testing Vendor Prior to Construction		2	21-Sep-21 08 AM*	22-Sep-21 04 PM
CS001661	SP	LCE310	Mobilize LCE Prior to Construction		2	21-Sep-21 08 AM	22-Sep-21 04 PM
CS001661	SP	LCE610	LCE Oversee Execution of Test and Commissioning Plan		30	24-Nov-21 08 AM	07-Jan-22 04 PM
CS001661	SP	LCE620	Execute Test and Commissioning Plan		30	24-Nov-21 08 AM	07-Jan-22 04 PM
CS001661	SP	LCE700	LCE Ensure Test Group Prepare Electrical Field Mark Ups		1	10-Jan-22 08 AM	10-Jan-22 04 PM
PROJECT CLOSE OUT	SP				81	26-Feb-21 08 AM A	27-Apr-23 04 PM
CS001661	SP	DSSE-1100	Complete TD-707 Turnover Document / Forward to SOC & Mailing List		5	03-Jan-23 08 AM	09-Jan-23 04 PM
Civil As-Builts	SP				22	26-Feb-21 08 AM A	09-Feb-23 04 PM
CS001661	SP	DSSE-1120	N/R(per CK 2/26/21) Complete TD-176 CIVIL Design Prep & Issue As-Built Dwgs		0	26-Feb-21 08 AM A	26-Feb-21 04 PM A

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Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
CS001661	SP	DSSE-860	Eversource Engineering Verifies Civil Mark Up As-Built Drawing Package	[redacted]	10	10-Jan-23 08 AM	24-Jan-23 04 PM
CS001661	SP	DSSE-970	Eversource Engineering Updates Civil As-Built Drawing Package		3	25-Jan-23 08 AM	27-Jan-23 04 PM
CS001661	SP	DSSE-870	ES Create Transmittal, Approve Final As-Built Package, and EDC Files and Issue Drawings to Field		8	30-Jan-23 08 AM	08-Feb-23 04 PM
CS001661	SP	DSSE-880	PM to Document Civil As-Built Drawings Complete		1	09-Feb-23 08 AM	09-Feb-23 04 PM
Electrical As-Builts	SP				25	26-Feb-21 08 AM A	14-Feb-23 04 PM
CS001661	SP	DSSE-1110	N/R(per CK 2/26/21) Complete TD-176 ELECTRICAL Design Prep & Issue As-Built Dwgs		0	26-Feb-21 08 AM A	26-Feb-21 04 PM A
CS001661	SP	DSSE-1130	Eversource Engineering Obtains Hard Copy As-Builts from the Field		3	10-Jan-23 08 AM	12-Jan-23 04 PM
CS001661	SP	DSSE-820	Eversource Engineering Verifies Quality of Electrical Mark Up As-Built Drawing Package		10	13-Jan-23 08 AM	27-Jan-23 04 PM
CS001661	SP	DSSE-940	Eversource Engineering Updates Electrical As-Built Drawing Package		3	30-Jan-23 08 AM	01-Feb-23 04 PM
CS001661	SP	DSSE-830	ES Create Transmittal, Approve Final As-Built Package, and EDC Files and Issue Drawings to Field		8	02-Feb-23 08 AM	13-Feb-23 04 PM
CS001661	SP	DSSE-840	PM to Document Electrical As-Built Drawings Complete		1	14-Feb-23 08 AM	14-Feb-23 04 PM
P&C As-Builts	SP				5	20-Jan-23 08 AM	26-Jan-23 04 PM
CS001661	SP	DSSE-950	P&C Submits SDS As-Builts		5	20-Jan-23 08 AM	26-Jan-23 04 PM
CS001661	SP	DSSE-960	P&C Submits Relay Setting As-Builts		5	20-Jan-23 08 AM	26-Jan-23 04 PM
Test Closout	SP				12	03-Jan-23 08 AM	19-Jan-23 04 PM
CS001661	SP	LCE800	LCE Ensures Marked up Prints Ready for Pick-up		2	03-Jan-23 08 AM	04-Jan-23 04 PM
CS001661	SP	LCE900	LCE Review Test Data and Issue Commissioning Report		10	05-Jan-23 08 AM	19-Jan-23 04 PM
SITE RESTORATION CLOSEOUT	SP				81	03-Jan-23 08 AM	27-Apr-23 04 PM
CS001661	SP	A1110	Restore / Remediate Site		81	03-Jan-23 08 AM	27-Apr-23 04 PM
MATERIAL, EQUIPMENT, COST, AND ASSET MANA(	SP				40	03-Jan-23 08 AM	01-Mar-23 04 PM
CS001661	SP	A1020	Cost Analyst Prepares FINAL Units of Property		30	03-Jan-23 08 AM	14-Feb-23 04 PM
CS001661	SP	A1030	Asset Management Complete Asset Update(s) in CASCADE		30	18-Jan-23 08 AM	01-Mar-23 04 PM
PROJECT MANAGEMENT CLOSEOUT	SP				81	03-Jan-23 08 AM	27-Apr-23 04 PM
CS001661	SP	A1040	PM Prepares Closeout Documentation, Lessons Learned Meeting, etc.		30	03-Jan-23 08 AM	14-Feb-23 04 PM
CS001661	SP	A1270	Prepare TD-707 Document		30	03-Jan-23 08 AM	14-Feb-23 04 PM
CS001661	SP	FINISH	Project / Work Order Complete (FINAL SCHEDULE TASK/MILESTONE)		0		27-Apr-23 04 PM
OVERHEAD / INDIRECTS	SP				11	20-Sep-21 08 AM	04-Oct-21 04 PM
PROJECT MANAGEMENT	SP				11	20-Sep-21 08 AM	04-Oct-21 04 PM
CS001661	SP	A1170	Prepare CAN (Construction Authorization Notice) AT0		11	20-Sep-21 08 AM	04-Oct-21 04 PM
CS001661	SP	1110	Prepare CAN (Construction Authorization Notice) BT0		11	20-Sep-21 08 AM	04-Oct-21 04 PM

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Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
Mansfield 12J - Replace 12J-3X transformer	SP				610	02-Dec-19 12 AM A	19-Oct-23 04 PM
INITIALIZATION AND SCOPE DEVELOPEMEI	SP				531	02-Dec-19 12 AM A	27-Jun-23 04 PM
CS001662	SP	START	SCHEDULE START MILESTONE		0	02-Dec-19 12 AM A	
Initial Funding	SP				0	06-Dec-19 12 AM A	04-May-20 04 PM A
CS001662	SP	PI1200	Project Initiator Develop Intitial Funding Request		0	06-Dec-19 12 AM A	06-Dec-19 12 AM A
CS001662	SP	PI1300	Initial Funding Request Approved @ EPAC		0	06-Dec-19 12 AM A	06-Dec-19 12 AM A
CS001662	SP	PI1000	Submit Initial Funding Request		0		06-Dec-19 12 AM A
CS001662	SP	PI1610	Power Plan Approval Create WO#		0	06-Dec-19 12 AM A	06-Dec-19 04 PM A
CS001662	SP	PI1400	Assign Project Manager Request Resources for Project Team		0	06-Dec-19 12 AM A	06-Dec-19 04 PM A
CS001662	SP	PI1500	Assign Scheduler		0	04-May-20 08 AM A	04-May-20 08 AM A
CS001662	SP	PI1600	Assign Cost Analyst		0	04-May-20 08 AM A	04-May-20 04 PM A
SDC Approval	SP				0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
CS001662	SP	CE1100	ES Develop Electrical Substation Conceptual Engineering Design in Accordance with Deliverables Checklist		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
CS001662	SP	CE1700	Review Conceptual Siting, Real Estate,SCS, & Permitting (If Required)		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
CS001662	SP	SSF1000	Develop Soultions Selection Form (SSF)		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
CS001662	SP	CE1400	ES Engineering Develop P&C Conceptual Engineering Design in Accordance with Deliverables Checklist		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
CS001662	SP	CGE1000	Develop Conceptual Grade Estimate (-25%+50% SDC)		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
CS001662	SP	CE1000	ES Engineering Develop Civil Substation Conceptual Engineering Design in Accordance with Deliverables Checklist		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
CS001662	SP	CE1500	ES Engineering Develop Communications Conceptual Engineering Design in Accordance with Deliverables Checklist		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
CS001662	SP	SDC1000	Solution Design Committee(SDC) Approval		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
CS001662	SP	CE1710	Conduct Conceptual Constructability Walk Down		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
CS001662	SP	CE1600	Conduct Project Team Kickoff Meeting Verify SDC Need		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
Project Initiation	SP				57	05-Mar-20 12 AM A	05-Aug-21 04 PM
EPAC Partial Funding	SP				0	05-Mar-20 12 AM A	05-Mar-20 04 PM A
CS001662	SP	PF1000	EPAC Partial Funding Approval		0	05-Mar-20 08 AM A	05-Mar-20 04 PM A
CS001662	SP	ATCGE1010	Develop At Least Conceptual Grade Estimate (-25%+50% Partial Funding)		0	05-Mar-20 08 AM A	05-Mar-20 04 PM A
CS001662	SP	PE1600	Review Preliminary Siting & Permitting (If Required)		0	05-Mar-20 08 AM A	05-Mar-20 04 PM A
CS001662	SP	PE1700	Conduct Preliminary Constructability Walk Down		0	05-Mar-20 12 AM A	05-Mar-20 04 PM A
CS001662	SP	PAFP1000	Submit Partial Funding PAF for Internal Review		0	05-Mar-20 08 AM A	05-Mar-20 04 PM A
CS001662	SP	PAFP1100	Incorporate Internal Review Comments & Submit Partial Funding PAF to EPAC for Review		0	05-Mar-20 08 AM A	05-Mar-20 04 PM A
CS001662	SP	PAFP1200	Incorporate EPAC Partial Funding PAF Review Comments		0	05-Mar-20 08 AM A	05-Mar-20 04 PM A
CS001662	SP	PE1710	Create Engineering Scope Document		0	05-Mar-20 08 AM A	05-Mar-20 04 PM A
CS001662	SP	PE1720	Engineering Scope Document Complete		0		05-Mar-20 04 PM A
EPAC Full Funding	SP				57	30-Nov-20 08 AM A	05-Aug-21 04 PM
CS001662	SP	PAFF2110	Prepare Draft Subsidiary Board Presentation		0	30-Nov-20 08 AM A	30-Nov-20 04 PM A
CS001662	SP	PAFF2120	Perform Risk Assessment (Enterprise Risk Management – ERM)		0	30-Nov-20 08 AM A	03-Feb-21 04 PM A

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Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
CS001662	SP	PAFF2130	Finalize Subsidiary Board Presentation	[redacted]	0	04-Feb-21 08 AM A	04-Feb-21 08 AM A
CS001662	SP	DE1900	Conduct FINAL Detail Constructability Walk Down		0	16-Feb-21 08 AM A	16-Feb-21 04 PM A
CS001662	SP	DE2000	Project Constructability Review Complete		0	17-Feb-21 08 AM A	22-Feb-21 04 PM A
CS001662	SP	DE1700	Conduct Initial Risk Management & SCLL Review (Project Initiator & PM)		0	01-Mar-21 08 AM A	04-Mar-21 04 PM A
CS001662	SP	DE1800	Review Detail Siting & Permitting (If Required)		0	01-Apr-21 08 AM A	01-Apr-21 04 PM A
CS001662	SP	DE1600	Create Planning Grade Estimate (+/-25% Full Funding)		0	23-Feb-21 08 AM A	05-Apr-21 04 PM A
CS001662	SP	PAFF2000	Submit Full Funding PAF for Internal Review		0	06-Apr-21 08 AM A	19-Apr-21 04 PM A
CS001662	SP	PAFF2100	Incorporate Internal Review Comments & Submit Full Funding PAF to EPAC for Review		3	20-Apr-21 08 AM A	19-May-21 04 PM
CS001662	SP	PAFF2200	Incorporate EPAC Full Funding PAF Review Comments		8	20-May-21 08 AM	01-Jun-21 04 PM
CS001662	SP	FF1000	EPAC Full Funding Approval		1	02-Jun-21 08 AM*	02-Jun-21 04 PM
CS001662	SP	FF1010	Subsidiary Board Approval		45	03-Jun-21 08 AM	05-Aug-21 04 PM
T-Minus Milestones	SP				772	05-Mar-20 12 AM A	27-Jun-23 04 PM
T-Minus Milestones "A" Group	SP				772	05-Mar-20 12 AM A	27-Jun-23 04 PM
CS001662	SP	AT3001	Eng. Project Scoping Document Issued (Scope Lockdown)		0		05-Mar-20 12 AM A
CS001662	SP	AT0804	A-T-08.04 ALL PERMITS RECEIVED		0		12-Mar-21 04 PM A
CS001662	SP	AT2605	30% Design / Engineering Completed		0		19-Apr-21 08 AM A
CS001662	SP	AT0805C	IFC - Civil (BG) w/BOM		0		22-Apr-21 08 AM A
CS001662	SP	AT0805E	IFC - Electrical (AG) w/Final BOM		0		17-May-21 08 AM
CS001662	SP	AT1811	70% Design/Engineering Completed		0		17-May-21 08 AM
CS001662	SP	AT2404	A-T-24.04 DETERMINE / ASSIGN LCE (LEAD COMMISSIONING ENGINE		0		07-Jul-21 04 PM
CS001662	SP	AT0813	A-T-08.13 SITING PETITION AND APPLICATION FILED		0		24-Sep-21 04 PM*
CS001662	SP	AT0805PC	P&C IFC - P&C w/BOM		0		29-Sep-21 04 PM
CS001662	SP	AT0805E.1	Electrical IFC		0		29-Sep-21 04 PM
CS001662	SP	AT00	T-00 - START OF CONSTRUCTION - WO#		0	04-Oct-21 08 AM*	
CS001662	SP	AT00.1	A-T-00 - Start Manfield 12J - Replace 12J-3X Transformer and Remove 27.6kV Equipment CIVIL (CS001662)		0	04-Oct-21 08 AM*	
CS001662	SP	AT0203	A-T-02.03 CAN COMPLETE (CONSTRUCTION AUTHORIZATION NOTICE		0		04-Oct-21 04 PM*
CS001662	SP	AT1202	P/C DESCRIPTION / DRAFT OPERATING INSTRUCTIONS ISSUED		0		08-Oct-21 04 PM
CS001662	SP	AT1805	T-18 - NX9 Preliminary Ratings to LCC for New Equipment (transformers are considered 'NEW EQUIPMENT')		0		13-Oct-21 04 PM*
CS001662	SP	AT0301	T-03 NX9 THERMAL RATINGS TO LCC AND CONVEX		0		01-Dec-21 04 PM*
CS001662	SP	AT1301	COMMISSIONING PLAN COMPLETE		0		16-Dec-21 04 PM
CS001662	SP	AT1201	SCADA Date (Tab) Sheets/Signal List Sent to LCC		0		29-Dec-21 04 PM
CS001662	SP	AT0409	A-T-04.09 ALL FIRM TOA APPLICATIONS DUE TO LCC (for DISTRIBUTION Non-transformer equipment)		0		25-Apr-22 04 PM*
CS001662	SP	AT0401	A-T-04.01 ALL MATERIAL RECEIVED, STAGED, INVENTORIED, REVIEW		0		24-Jan-23 04 PM*
CS001662	SP	AT0404	ALL FINAL RELAY PROTECTIVE SETTING ISSUED		0		27-Jun-23 04 PM
T-Minus Milestones "B" Group (Non-Outage)	SP				0	04-Oct-21 08 AM	04-Oct-21 08 AM
CS001662	SP	BT00	T-00 - START OF CONSTRUCTION - WO# [redacted]		0	04-Oct-21 08 AM*	
T-Minus Milestones "C" Group for Transformer Test- Ph	SP				336	04-Oct-21 04 PM	06-Sep-22 08 AM

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Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
CS001662	SP	CT203	C-T-02.03 CAN COMPLETE (CONSTRUCTION AUTHORIZATION NOTICE) - Electrical Start	[redacted]	0		04-Oct-21 04 PM*
CS001662	SP	CT1801	CT-18 ALL FIRM TOA APPLICATIONS DUE TO LCC (for DISTRIBUTION Transformer TEST ENERGIZATION)		0		25-Apr-22 04 PM*
CS001662	SP	CT00	C-T-00 - START OF CONSTRUCTION - CS00166 Phase 1		0	06-Sep-22 08 AM*	
T-Minus Milestones "D" Group for Transformer Test- Ph	SP				545	04-Oct-21 04 PM	03-Apr-23 08 AM
CS001662	SP	DT0203	D-T-02.03 CAN COMPLETE (CONSTRUCTION AUTHORIZATION NOTICE) - Electrical Start		0		04-Oct-21 04 PM*
CS001662	SP	DT1801	DT-18 ALL FIRM TOA APPLICATIONS DUE TO LCC (for DISTRIBUTION Transformer TEST ENERGIZATION)		0		25-Apr-22 04 PM*
CS001662	SP	DT00	D-T-00 - START OF CONSTRUCTION - CS00166 Phase 2		0	03-Apr-23 08 AM*	
ENVIRONMENTAL APPROVALS AND PERMIT	SP				92	05-Mar-20 08 AM A	24-Sep-21 04 PM
PREPARE COMPLIANCE MATRICES - REGULATORY	SP				92	05-Mar-20 08 AM A	24-Sep-21 04 PM
CS001662	SP	1100	Incorporate Comments to Property Abutter Petition Letter		0	23-Nov-20 08 AM A	23-Nov-20 04 PM A
CS001662	SP	1101	Receive Scope, Arrangement Drwg, Equip List (to support CSC Petition)		0	23-Nov-20 08 AM A	23-Nov-20 04 PM A
CS001662	SP	1103	Obtain Cultural Resources Approval		0	23-Nov-20 08 AM A	23-Nov-20 04 PM A
CS001662	SP	1102	Outreach to Property Owners		0	30-Nov-20 08 AM A	30-Nov-20 04 PM A
CS001662	SP	1104	Prepare Preliminary Draft CSC Petition		0	14-Dec-20 08 AM A	16-Apr-21 04 PM A
CS001662	SP	1106	Mandatory Commenter Review of Preliminary Draft CSC Petition		2	19-Apr-21 08 AM A	18-May-21 04 PM
CS001662	SP	1105	Prepare Property Abutter Petition Letter		6	17-May-21 08 AM	24-May-21 04 PM
CS001662	SP	1107	Prepare Final CSC Petition / Submit Petition to CSC for Review		4	19-May-21 08 AM	24-May-21 04 PM
CS001662	SP	A1230	Prepared Compliance Matrices - Regulatory		87	05-Mar-20 08 AM A	17-Sep-21 04 PM
CS001662	SP	A1220	Prepared Compliance Matrices - Non-Reqgulatory (Commitments)		87	05-Mar-20 08 AM A	17-Sep-21 04 PM
CS001662	SP	1109	CSC Petition Approval (Tie to T-8)		1	24-Sep-21 08 AM	24-Sep-21 04 PM
CS001662	SP	1108	CSC Petition Review		119	29-May-21 08 AM*	24-Sep-21 04 PM
APPROVALS - FEDERAL	SP				0	08-Mar-21 08 AM A	12-Mar-21 04 PM A
CS001662	SP	A1180	Determine Requirment for and Prepare Permitting Docments - FEDERAL (CT) TBD		0	08-Mar-21 08 AM A	12-Mar-21 04 PM A
APPROVALS - STATE	SP				0	08-Mar-21 08 AM A	12-Mar-21 04 PM A
CS001662	SP	A1190	Determine Requirment for and Prepare Permitting Docments - STATE TBD		0	08-Mar-21 08 AM A	12-Mar-21 04 PM A
APPROVALS - REGIONAL	SP				0	08-Mar-21 08 AM A	12-Mar-21 04 PM A
CS001662	SP	A1200	Determine Requirment for and Prepare Permitting Docments - REGIONAL (CT) TBD		0	08-Mar-21 08 AM A	12-Mar-21 04 PM A
APPROVALS - LOCAL	SP				0	08-Mar-21 08 AM A	12-Mar-21 04 PM A
CS001662	SP	A1210	Determine Requirment for and Prepare Permitting Docments - LOCAL TBD		0	08-Mar-21 08 AM A	12-Mar-21 04 PM A
ENGINEERING & DESIGN	SP				610	07-Feb-20 08 AM A	19-Oct-23 04 PM
Engineering Services Staffing	SP				0	07-Feb-20 08 AM A	31-Jul-20 04 PM A
CS001662	SP	A3370	Decision Required Regarding Engineering Staffing (ES, COC, BID)		0	07-Feb-20 08 AM A	07-Feb-20 04 PM A
Bid Process	SP				0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
CS001662	SP	TMP1280	(N/R per SP 7/31/20)Contractor Selection (Bid) - Engineering - Bid Review / Score Bids/ Negotiations		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A

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Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
CS001662	SP	TMP1300	(N/R per SP 7/31/20)Contractor Selection (Bid) - Engineering - Notice to Proceed	[redacted]	0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
CS001662	SP	TMP1190	(N/R per SP 7/31/20) Contractor Selection (Bid) - Engineering- Prepare / Issue RFP for Engineering Contractor		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
CS001662	SP	TMP1210	(N/R per SP 7/31/20)Contractor Selection (Bid) - Engineering - Issue RFP Out to Bid to Engineering Contractor		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
CS001662	SP	TMP1230	(N/R per SP 7/31/20)Contractor Selection (Bid) - Engineering - Hold Pre-Bid Meeting for Engineering Contractor		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
CS001662	SP	TMP1310	(N/R per SP 7/31/20) Contractor Selection (Bid) - Engineering - Bid Period		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
CS001662	SP	TMP1320	(N/R per SP 7/31/20)Contractor Selection (Bid) - Engineering - Award Contractor		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
CS001662	SP	TMP1330	(N/R per SP 7/31/20)Contractor Selection (Bid) - Engineering - Issue DR		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
CS001662	SP	TMP1340	(N/R per SP 7/31/20)Contractor Selection (Bid) - Engineering - Issue PO		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
EOC - Engineer of Choice Process	SP				0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
CS001662	SP	TMP1180	(N/R per SP 7/31/20)Engineering of Choice (EOC) - EOC Committee Reviews at Monthly Meeting & Approves (?)		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
CS001662	SP	TMP1140	(N/R per SP 7/31/20)Engineering of Choice (EOC) - Provide RFP to Single Vendor		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
CS001662	SP	TMP1200	(N/R per SP 7/31/20)Engineering of Choice (EOC) - DR Prepared by Project Engineer & Project Controls		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
CS001662	SP	TMP1220	(N/R per SP 7/31/20)Engineering of Choice (EOC) - PO Issued for Vendor -30% Design Effort		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
CS001662	SP	TMP1150	(N/R per SP 7/31/20)Engineering of Choice (EOC) - Vendor Responds with Proposal		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
Civil Engineering	SP				0	10-Aug-20 08 AM A	22-Apr-21 12 AM A
Civil Engineering	SP				0	10-Aug-20 08 AM A	22-Apr-21 12 AM A
Civil Engineering 100%	SP				0	22-Feb-21 08 AM A	08-Mar-21 04 PM A
CS001662	SP	DSSE-1340	Vendor Incorporates Detail Comments and Issues 100% Civil Package to ES		0	22-Feb-21 08 AM A	01-Mar-21 04 PM A
CS001662	SP	DSSE-1350	ES Reviews and Comments 100% Civil Package		0	02-Mar-21 08 AM A	08-Mar-21 04 PM A
Civil Engineering IFC	SP				0	04-Mar-21 08 AM A	22-Apr-21 12 AM A
CS001662	SP	DSSE-1290	Vendor Incorporates 100% Design Comments Submits IFC Civil Package to ES w/BOM		0	04-Mar-21 08 AM A	16-Apr-21 12 AM A
CS001662	SP	DSSE-1320	ES Reviews IFC Civil Package		0	19-Apr-21 12 AM A	21-Apr-21 12 AM A
CS001662	SP	DSSE-1300	ES Issues Civil Package IFC w/BOM		0	22-Apr-21 12 AM A	22-Apr-21 12 AM A
Civil Engineering Detailed	SP				0	08-Feb-21 08 AM A	19-Feb-21 04 PM A
CS001662	SP	DSSE-1210	Vendor Incorporates Preliminary Comments and Issues Detailed Civil Package to ES		0	08-Feb-21 08 AM A	12-Feb-21 04 PM A
CS001662	SP	DSSE-1240	ES Reviews and Comments Detailed Civil Package		0	15-Feb-21 08 AM A	19-Feb-21 04 PM A
Civil Engineering Preliminary	SP				0	10-Aug-20 08 AM A	03-Feb-21 04 PM A
CS001662	SP	DSSE-1270	Design Package to Civil		0	10-Aug-20 08 AM A	01-Oct-20 04 PM A
CS001662	SP	DSSE-1250	Vendor Submits Preliminary Civil Package to ES		0	12-Jan-21 08 AM A	01-Feb-21 04 PM A
CS001662	SP	DSSE-1280	ES Reviews and Comments Preliminary Civil Package		0	01-Feb-21 08 AM A	03-Feb-21 04 PM A
Electrical Engineering	SP				5	27-Jul-20 08 AM A	08-Oct-21 04 PM

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Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
CS001662	SP	DSSE-260	Submit Plan/Profile to Siting & Permitting for Filing w/Regulator Authority (Should this be tied to the IFC)	[redacted]	0	27-Oct-20 08 AM A	12-Feb-21 04 PM A
CS001662	SP	DSSE-200	Detail (70%) Electrical Design Package Design		0	12-Feb-21 08 AM A	05-Mar-21 04 PM A
CS001662	SP	DSSE-205	Detail (70%) Electrical Design Package Drafting		0	08-Mar-21 08 AM A	22-Mar-21 04 PM A
CS001662	SP	DSSE-210	Final (100%) Electrical Design Package IFR		0	23-Mar-21 08 AM A	26-Mar-21 04 PM A
CS001662	SP	DSSE-230	Electrical Engineering - BOM Complete		0	29-Mar-21 08 AM A	31-Mar-21 04 PM A
CS001662	SP	DSSE-240	Electrical Engineering - Electrical Package IFC (Physical & Electrical)		0	01-Apr-21 08 AM A	29-Apr-21 04 PM A
CS001662	SP	DSSE-460	Operating Instructions - SSED Review Draft Distribution OI		5	04-Oct-21 08 AM	08-Oct-21 04 PM
CS001662	SP	DSSE-920	Operating Instructions - SSED Review Draft Convex OI		5	04-Oct-21 08 AM	08-Oct-21 04 PM
Transformer- Vendor Drawings with Schematics	SP				0	27-Jul-20 08 AM A	01-Mar-21 04 PM A
CS001662	SP	DSSE-1150	ES Reviews & Comments Transformer Drawings & Schematics 3X		0	27-Oct-20 08 AM A	08-Jan-21 04 PM A
CS001662	SP	DSSE-1140	Vendor Submits Transformer Drawings & Schematics 3X (?????? Logic is incorrect????)		0	27-Jul-20 08 AM A	01-Mar-21 04 PM A
CS001662	SP	DSSE-1160	Vendor Submits Firm Transformer Drawings & Schematics 3X		0	20-Oct-20 08 AM A	01-Mar-21 04 PM A
Circuit Switcher - Vendor Drawings with Schematics	SP				0	20-Oct-20 08 AM A	20-Oct-20 04 PM A
CS001662	SP	1123	Vendor Submits Circuit Switcher Drawings & Schematics Circuit Switcher		0	20-Oct-20 08 AM A	20-Oct-20 04 PM A
CS001662	SP	1124	ES Reviews & Comments Circuit Switcher Drawings & Schematics Circuit Switcher		0	20-Oct-20 08 AM A	20-Oct-20 04 PM A
CS001662	SP	1125	Vendor Submits Firm Circuit Switcher Drawings & Schematics Circuit Switcher		0	20-Oct-20 08 AM A	20-Oct-20 04 PM A
Distribution Thermal Ratings NX-9 (Transformer Repl	SP				533	05-Oct-20 08 AM A	19-Oct-23 04 PM
Thermal Ratings - Substation - Preliminary Thermal Da	SP				27	05-Oct-20 08 AM A	13-Oct-21 04 PM
CS001662	SP	NX9A-NC159	LTRC Reviews and Makes "GO / NO-GO" Decision for 1-Line Nomenclature - GO!		0	05-Oct-20 08 AM A	05-Oct-20 04 PM A
CS001662	SP	NX9A-NC69	PE Updates 1-Line Nomenclature Dwgs & Complete PE Checklist M7-EN-3006.2 - e-mail link to project team & CONVEX		0	02-Nov-20 08 AM A	16-Nov-20 04 PM A
CS001662	SP	NX9A-NC169	LTRC Submits 1-Line Nomenclature to TRC		0	13-Nov-20 08 AM A	16-Nov-20 04 PM A
CS001662	SP	NX9A-NC59	LTRC Reviews and Makes "GO / NO-GO" Decision for Thermal Ratings - GO!		0	26-Feb-21 08 AM A	26-Feb-21 04 PM A
CS001662	SP	NX9A-NC99	LTRC Requests P&C Checklist		0	08-Mar-21 08 AM A	12-Mar-21 04 PM A
CS001662	SP	NX9A-NC79	P&C Develops and Provides LTRC with P&C Checklist (M7-EN-3006.1)		5	03-Sep-21 08 AM	10-Sep-21 04 PM
CS001662	SP	NX9A-NC139	LTRC Reviews and Sends Thermal Rating Data for TRC Review		5	13-Sep-21 08 AM*	17-Sep-21 04 PM
CS001662	SP	NX9A-NC129	TRC Reviews and Approves Thermal Rating Data		5	20-Sep-21 08 AM	24-Sep-21 04 PM
CS001662	SP	NX9A-NC119	LTRC Sends Thermal Rating Data for Approval & Submit to NURS		5	27-Sep-21 08 AM*	01-Oct-21 04 PM
CS001662	SP	NX9A-NC109	Scheduler @ NURS email "Submitted for PP Review" - Updates NURS with DOE		1	04-Oct-21 08 AM	04-Oct-21 04 PM
CS001662	SP	NX9A-NC89	TRC Review and Submit NX-9 Data to LCC + ISO-NE for S/S Thermal Ratin		5	05-Oct-21 08 AM	12-Oct-21 04 PM
CS001662	SP	NX9A-NC149	Scheduler @ NURS email "Submitted for DOE Monitoring" - Updates T-18, EquipDOE, Revs DOE per M7-EN-3006		1	13-Oct-21 08 AM	13-Oct-21 04 PM
Thermal Ratings - Substation - Verify Thermal Data	SP				42	30-Sep-21 08 AM	01-Dec-21 04 PM
CS001662	SP	NX9A-NC31	PE to Verify Thermal Data Review PE Chectlist (M7-EN-3006.2)		5	30-Sep-21 08 AM	06-Oct-21 04 PM
CS001662	SP	NX9A-NC33	LTRC Reviews and Makes "GO / NO-GO" Decision		5	07-Oct-21 08 AM	14-Oct-21 04 PM
CS001662	SP	NX9A-NC35	LTRC Requests P&C Checklist		5	15-Oct-21 08 AM	21-Oct-21 04 PM
CS001662	SP	NX9A-NC37	P&C Develops and Provides LTRC with P&C Checklist (M7-EN-3006.1)		5	22-Oct-21 08 AM	28-Oct-21 04 PM

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Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
CS001662	SP	NX9A-NC39	LTRC Reviews and Sends Thermal Rating Data for TRC Review	[redacted]	5	29-Oct-21 08 AM	04-Nov-21 04 PM
CS001662	SP	NX9A-NC41	TRC Reviews and Approves Thermal Rating Data		5	05-Nov-21 08 AM	12-Nov-21 04 PM
CS001662	SP	NX9A-NC43	LTRC Sends Thermal Rating Data for Approval & Submit to NURS		5	15-Nov-21 08 AM	19-Nov-21 04 PM
CS001662	SP	NX9A-NC45	Scheduler @ NURS email "Submitted for PP Review" - Updates NURS with DOE		1	22-Nov-21 08 AM	22-Nov-21 04 PM
CS001662	SP	NX9A-NC47	TRC Review and Submit NX-9 Data to LCC + ISO-NE for S/S Thermal Ratin		5	23-Nov-21 08 AM	30-Nov-21 04 PM
CS001662	SP	NX9A-NC49	Scheduler @ NURS email "Submitted for DOE Monitoring" - Updates T-3, EquipDOE, Revs DOE per M7-EN-3006		1	01-Dec-21 08 AM	01-Dec-21 04 PM
Thermal Ratings - Substation - NX-9 Pre NX9-DOE	SP				1	18-Aug-23 08 AM	18-Aug-23 04 PM
CS001662	SP	NX9500	Scheduler - Send Email for 48Hrs Notification before DOE.		1	18-Aug-23 08 AM	18-Aug-23 04 PM
Thermal Ratings - Substation - NX-9 Post NX9-DOE/ISD	SP				8	10-Oct-23 08 AM	19-Oct-23 04 PM
CS001662	SP	NX9FINAL50	Review + Affirm Accuracy of NX-9 for ISO Submission (Tie after Equip DOE or CFM/ISD)		3	10-Oct-23 08 AM	12-Oct-23 04 PM
CS001662	SP	NX9FINAL60	[If Required] Receive + Issue Final Affirmed NX-9 Data to NURS		5	13-Oct-23 08 AM	19-Oct-23 04 PM
Thermal Ratings - Non NX-9 Thermal Ratings	SP				20	01-Mar-22 08 AM	28-Mar-22 04 PM
CS001662	SP	NX9A-EM44	P&C Develops and Provides LTRC with P&C Checklist & Thermal Ratings D		5	01-Mar-22 08 AM*	07-Mar-22 04 PM
CS001662	SP	NX9A-EM54	LTRC Prepares and Sends Thermal Rating Data for TRC Review		5	08-Mar-22 08 AM	14-Mar-22 04 PM
CS001662	SP	NX9A-EM64	TRC Reviews and Approves Thermal Rating Data		5	15-Mar-22 08 AM	21-Mar-22 04 PM
CS001662	SP	NX9A-EM74	LTRC Files Capability Sheets		5	22-Mar-22 08 AM	28-Mar-22 04 PM
P&C Engineering	SP				156	22-Jul-20 08 AM A	29-Dec-21 04 PM
CS001662	SP	DSSE-400	Prepare & Issue P&C Design Package to Drafting		0	22-Jul-20 08 AM A	23-Oct-20 04 PM A
CS001662	SP	DSSE-410	Drafting Prepare & Issue Back to P&C		0	15-Feb-21 08 AM A	19-Feb-21 04 PM A
CS001662	SP	A3380	Issue P&C Package Design		0	23-Feb-21 08 AM A	01-Apr-21 04 PM A
CS001662	SP	DSSE-480	PE INITIATES CASCADE FORMS (Apenndix A) for Construction		20	17-May-21 08 AM	14-Jun-21 04 PM
CS001662	SP	DSSE-220	SDS Complete (~= P&C IFC)		63	01-Jul-21 08 AM*	29-Sep-21 04 PM
CS001662	SP	DSSE-450	Operating Instructions - Prepare and Issue Draft Distribution OI to Engineering		20	03-Sep-21 08 AM	01-Oct-21 04 PM
CS001662	SP	DSSE-470	Operating Instructions - P&C Review Draft Distribution OI		5	04-Oct-21 08 AM	08-Oct-21 04 PM
CS001662	SP	DSSE-930	Operating Instructions - P&C Review Draft Convex OI		5	04-Oct-21 08 AM	08-Oct-21 04 PM
CS001662	SP	DSSE-990	P&C INITIATE SCADA Data Sheets		61	30-Sep-21 08 AM*	29-Dec-21 04 PM
Relay Settings	SP				20	06-Aug-21 08 AM	02-Sep-21 04 PM
CS001662	SP	DSSE-440	Relay Settings - Prepare and Issue Relay Settings IFC- (Is standard Relay logic Needed?)		20	06-Aug-21 08 AM*	02-Sep-21 04 PM
MATERIAL PROCUREMENT	SP				474	08-Sep-20 08 AM A	27-Jun-23 04 PM
MATERIAL FOR TRANSFORMER	SP				366	08-Sep-20 08 AM A	24-Jan-23 04 PM
CS001662	SP	DSSE-1170	N/R (per CK 9/14/20) MATERIAL - Transformer - Prepare & Issue LNTP for Vendor Dwgs. & Schematics		0	08-Sep-20 08 AM A	14-Sep-20 04 PM A
CS001662	SP	1126	N/R (per CK 9/14/20) MATERIAL - Transformer - Prep& Issue DR For Approval Drawing		0	08-Sep-20 08 AM A	14-Sep-20 04 PM A
CS001662	SP	1127	N/R (per CK 9/14/20) MATERIAL - Transformer - Procurement Issue PO For Approval Drawing		0	08-Sep-20 08 AM A	14-Sep-20 04 PM A
CS001662	SP	DSSE-530	MATERIAL - Transformer - Prepare & Issue DR		10	06-Aug-21 08 AM	19-Aug-21 04 PM

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Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
CS001662	SP	DSSE-1180	Transformer Material Ordered	[redacted]	0		19-Aug-21 04 PM
CS001662	SP	DSSE-1060	MATERIAL - Transformer - Procurement Issue PO		10	20-Aug-21 08 AM	29-Aug-21 04 PM
CS001662	SP	DSSE-1070	MATERIAL - Transformer 4X - Material Vendor Delivery Leadtime		512	30-Aug-21 08 AM	23-Jan-23 04 PM
CS001662	SP	DSSE-570	MATERIAL - Transformer - Material Handler Confirm Material Delivery to Site		1	24-Jan-23 08 AM	24-Jan-23 04 PM
MATERIAL FOR CIRCUIT SWITCHER	SP				474	09-Oct-20 08 AM A	27-Jun-23 04 PM
CS001662	SP	1130	MATERIAL - Circuit Switcher - Prepare & Issue DR For App Drawing (Need Pred to be added for Eng to provide Scope/Spec)		0	09-Oct-20 08 AM A	12-Oct-20 04 PM A
CS001662	SP	1131	MATERIAL - Circuit Switcher - Procurement Issue PO For Approval Drawing		0	13-Oct-20 08 AM A	20-Oct-20 04 PM A
CS001662	SP	1115	MATERIAL - Circuit Switcher- Prepare & Issue DR		10	06-Aug-21 08 AM	19-Aug-21 04 PM
CS001662	SP	1119	Circuit Switcher Material Ordered		0		19-Aug-21 04 PM
CS001662	SP	1117	MATERIAL - Circuit Switcher - Procurement Issue PO		10	20-Aug-21 08 AM	29-Aug-21 04 PM
CS001662	SP	1118	MATERIAL - Circuit Switcher - Material Vendor Delivery Leadtime		666	30-Aug-21 08 AM	26-Jun-23 04 PM
CS001662	SP	1116	MATERIAL - Circuit Switcher - Material Handler Confirm Material Delivery to Site		1	27-Jun-23 08 AM	27-Jun-23 04 PM
OTHER MATERIALS(CIVIL, ELECTRICAL, P&C)	SP				148	06-Aug-21 08 AM	12-Mar-22 04 PM
CS001662	SP	1129	MATERIAL - Other Materials- Prepare & Issue DR		10	06-Aug-21 08 AM	19-Aug-21 04 PM
CS001662	SP	1169	Other Materials Ordered		0		19-Aug-21 04 PM
CS001662	SP	1149	MATERIAL - Other Materials - Procurement Issue PO		5	20-Aug-21 08 AM	26-Aug-21 04 PM
CS001662	SP	1159	MATERIAL - Other Materials - Material Vendor Delivery Leadtime		197	27-Aug-21 08 AM	11-Mar-22 04 PM
CS001662	SP	1139	MATERIAL - Other Materials - Material Handler Confirm Material Delivery to Site		1	12-Mar-22 08 AM	12-Mar-22 04 PM*
CONSTRUCTION	SP				580	01-Feb-21 08 AM A	06-Sep-23 04 PM
CONSTRUCTION SERVICES SELECTION	SP				77	01-Feb-21 08 AM A	02-Sep-21 04 PM
CONSTRUCTION SERVICES - BID PROCESS Civil	SP				77	01-Feb-21 08 AM A	02-Sep-21 04 PM
CS001662	SP	A3430	CONST.SERVICES - BID - Eversource provide Spec / RFP - Civil		0	01-Feb-21 08 AM A	15-Mar-21 04 PM A
CS001662	SP	A3440	CONST.SERVICES - BID - Contractors Evaluate RFP and Provide Proposal - Civil		0	15-Mar-21 08 AM A	21-Apr-21 04 PM A
CS001662	SP	A3450	CONST.SERVICES - BID - Eversource reviews contractor proposals - Civil		9	27-Apr-21 08 AM A	27-May-21 04 PM
CS001662	SP	A3460	CONST.SERVICES - BID - Contract is Awarded - PO Issued - Civil		20	06-Aug-21 08 AM	02-Sep-21 04 PM
CONSTRUCTION SERVICES - BID PROCESS Electric	SP				77	01-Feb-21 08 AM A	02-Sep-21 04 PM
CS001662	SP	1111	CONST.SERVICES - BID - Eversource provide Spec / RFP - Electrical		0	01-Feb-21 08 AM A	15-Mar-21 04 PM A
CS001662	SP	1112	CONST.SERVICES - BID - Contractors Evaluate RFP and Provide Proposal - Electrical		0	15-Mar-21 08 AM A	26-Apr-21 04 PM A
CS001662	SP	1113	CONST.SERVICES - BID - Eversource reviews contractor proposals - Electrical		9	27-Apr-21 08 AM A	27-May-21 04 PM
CS001662	SP	1114	CONST.SERVICES - BID - Contract is Awarded - PO Issued - Electrical		20	06-Aug-21 08 AM	02-Sep-21 04 PM
CONSTRUCTION - CIVIL	SP				5	03-Apr-23 08 AM	07-Apr-23 04 PM
CS001662	SP	A1120	Construction - Civil		5	03-Apr-23 08 AM	07-Apr-23 04 PM
CONSTRUCTION - ELECTRICAL	SP				468	04-Oct-21 08 AM	15-Aug-23 04 PM
CS001662	SP	A3580	Construction - Electrical Non Outage		226	04-Oct-21 08 AM	26-Aug-22 04 PM*
CS001662	SP	A1130	Construction - Electrical Phase 1 Outage		73	06-Sep-22 08 AM	20-Dec-22 04 PM
CS001662	SP	A3590	Construction - Electrical Phase 2 Outage		95	03-Apr-23 08 AM	15-Aug-23 04 PM

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Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
CONSTRUCTION - P&C	SP			[redacted]	100	03-Apr-23 08 AM	22-Aug-23 04 PM
CS001662	SP	A1140	Construction - P&C Implement Relay Settings		100	03-Apr-23 08 AM	22-Aug-23 04 PM
CONSTRUCTION - COMMUNICATIONS	SP				100	03-Apr-23 08 AM	22-Aug-23 04 PM
CS001662	SP	A1150	Construction - Field Communications		100	03-Apr-23 08 AM	22-Aug-23 04 PM
CONSTRUCTION - CONST.REP TASKS	SP				349	19-Apr-22 08 AM	06-Sep-23 04 PM
CS001662	SP	A1280	Construction Rep SUBMIT OUTAGE REQUESTS for TRANSFORMER INSTALLATION (13 weeks before outage)		5	19-Apr-22 08 AM*	25-Apr-22 04 PM
CS001662	SP	A1290	Construction Rep SUBMIT OUTAGE REQUESTS for TRANSFORMER TEST ENERGIZATION (18 weeks before outage)		5	19-Apr-22 08 AM*	25-Apr-22 04 PM
CS001662	SP	A1250	Construction Rep SUBMIT OUTAGE REQUESTS for NON-transformer equipment (4 weeks before outage)		5	19-Apr-22 08 AM*	25-Apr-22 04 PM
CS001662	SP	A1260	Construction Rep Finalize CASCADE Forms (within 14 days folloiwng ISD)		10	23-Aug-23 08 AM	06-Sep-23 04 PM
CONSTRUCTION RESOURCE TRACKING	SP				473	04-Oct-21 08 AM	22-Aug-23 04 PM
CS001662	SP	A1070	RESOURCE ONLY ACTIVITY - CONSTRUCTION - SWITCH OUT		1	05-Oct-21 08 AM	05-Oct-21 04 PM
CS001662	SP	A1080	RESOURCE ONLY ACTIVITY - CONSTRUCTION - SWITCH IN		1	16-Sep-22 08 AM	16-Sep-22 04 PM
CS001662	SP	ConRep-S	RESOURCE ONLY ACTIVITY - CONSTRUCTION - CONSTRUCTION REP		473	04-Oct-21 08 AM	22-Aug-23 04 PM
CS001662	SP	CONSTelec	RESOURCE ONLY ACTIVITY - CONSTRUCTION - ELECTRICIAN		473	04-Oct-21 08 AM	22-Aug-23 04 PM
CONSTRUCTION OUTAGES	SP				590	04-Oct-21 08 AM	22-Aug-23 04 PM
CS001662	SP	CSM	Construction Start Milestone - Civil		0	04-Oct-21 08 AM	
CS001662	SP	TOA-Const	OUTAGE / General Construction Work		298	05-Oct-21 08 AM	16-Sep-22 04 PM
CS001662	SP	ISD	EQUIPMENT IN SERVICE DATE		0		22-Aug-23 04 PM*
CS001662	SP	CFM	Construction Finish Milestone - Overall		0		22-Aug-23 04 PM
TEST OUTAGES	SP				5	03-Apr-23 08 AM	07-Apr-23 04 PM
CS001662	SP	TOA-Test	OUTAGE / Test Transformer		5	03-Apr-23 08 AM	07-Apr-23 04 PM
CONSTRUCTION CLOSEOUT	SP				2	23-Aug-23 08 AM	24-Aug-23 04 PM
CS001662	SP	DSSE-900	Prepare Civil Field Mark Ups (Tie after Last Civil Construction Activity)		2	23-Aug-23 08 AM	24-Aug-23 04 PM
TEST AND COMMISSION	SP				178	01-Mar-21 08 AM A	01-Feb-22 04 PM
TEST - SERVICES STAFFING DECISION	SP				105	01-Mar-21 08 AM A	14-Oct-21 04 PM
TEST SERVICES - CONTRACTOR OF CHOICE	SP				35	25-Aug-21 08 AM	14-Oct-21 04 PM
CS001662	SP	A3470	TEST SERVICES - COC - Eversource Provides Spec / RFQ to COC		5	25-Aug-21 08 AM*	31-Aug-21 04 PM
CS001662	SP	A3480	TEST SERVICES - COC - COC Evaluates Spec and Provides Quote		10	01-Sep-21 08 AM	15-Sep-21 04 PM
CS001662	SP	A3490	TEST SERVICES - COC - Eversource Reviews Quote from COC		10	16-Sep-21 08 AM	29-Sep-21 04 PM
CS001662	SP	A3500	TEST SERVICES - COC - Eversource Awards Contract - PO Issued		10	30-Sep-21 08 AM	14-Oct-21 04 PM
TEST SERVICES - BID PROCESS	SP				77	01-Mar-21 08 AM A	02-Sep-21 04 PM
CS001662	SP	A3510	TEST SERVICES - BID - Eversource provide Spec / RFP		0	01-Mar-21 08 AM A	31-Mar-21 04 PM A
CS001662	SP	A3520	TEST SERVICES - BID - Contractors Evaluate RFP and Provide Proposal		0	01-Apr-21 08 AM A	21-Apr-21 04 PM A
CS001662	SP	A3530	TEST SERVICES - BID - Eversource reviews contractor proposals		10	22-Apr-21 08 AM A	28-May-21 04 PM
CS001662	SP	A3540	TEST SERVICES - BID - Eversource awards contract - PO Issued		20	06-Aug-21 08 AM	02-Sep-21 04 PM
LCE PLANNING	SP				148	17-May-21 08 AM	16-Dec-21 04 PM
CS001662	SP	LCE100	PM to Request Lead Commissioning Engineer GO/NO-GO		2	17-May-21 08 AM	18-May-21 04 PM
CS001662	SP	LCE200	Assign Lead Commissioning Engineer		2	06-Jul-21 08 AM*	07-Jul-21 04 PM

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Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
CS001662	SP	LCE400	Develop Test and Commissioning Plan	[redacted]	21	18-Oct-21 08 AM	16-Nov-21 04 PM
CS001662	SP	LCE500	LCE Review and Approve Vendor's Test and Commissioning Plan		21	17-Nov-21 08 AM	16-Dec-21 04 PM
TEST ACTIVITIES	SP				72	16-Oct-21 08 AM	01-Feb-22 04 PM
CS001662	SP	LCE310	Mobilize LCE Prior to Construction		2	16-Oct-21 08 AM	17-Oct-21 04 PM
CS001662	SP	LCE320	Mobilize Testing Vendor Prior to Construction		2	16-Oct-21 08 AM	17-Oct-21 04 PM
CS001662	SP	LCE620	LCE Ensure Test Group Prepare Electrical Field Mark Ups		1	17-Dec-21 08 AM	17-Dec-21 04 PM
CS001662	SP	LCE610	LCE Oversee Execution of Test and Commissioning Plan		30	17-Dec-21 08 AM	01-Feb-22 04 PM
CS001662	SP	LCE700	Execute Test and Commissioning Plan		30	17-Dec-21 08 AM	01-Feb-22 04 PM
PROJECT CLOSE OUT	SP				40	26-Feb-21 08 AM A	19-Oct-23 04 PM
CS001662	SP	DSSE-1100	Complete TD-707 Turnover Document / Forward to SOC & Mailing List		5	23-Aug-23 08 AM	29-Aug-23 04 PM
Civil As-Builts	SP				22	26-Feb-21 08 AM A	29-Sep-23 04 PM
CS001662	SP	DSSE-1120	N/R(per CK 2/26/21) Complete TD-176 CIVIL Design Prep & Issue As-Built Dwgs		0	26-Feb-21 08 AM A	26-Feb-21 04 PM A
CS001662	SP	DSSE-860	Eversource Engineering Verifies Civil Mark Up As-Built Drawing Package		10	30-Aug-23 08 AM	13-Sep-23 04 PM
CS001662	SP	DSSE-970	Eversource Engineering Updates Civil As-Built Drawing Package		3	14-Sep-23 08 AM	18-Sep-23 04 PM
CS001662	SP	DSSE-870	ES Create Transmittal, Approve Final As-Built Package, and EDC Files and Issue Drawings to Field		8	19-Sep-23 08 AM	28-Sep-23 04 PM
CS001662	SP	DSSE-880	PM to Document Civil As-Built Drawings Complete		1	29-Sep-23 08 AM	29-Sep-23 04 PM
Electrical As-Builts	SP				25	26-Feb-21 08 AM A	12-Oct-23 04 PM
CS001662	SP	DSSE-1110	N/R(per CK 2/26/21) Complete TD-176 ELECTRICAL Design Prep & Issue As-Built Dwgs		0	26-Feb-21 08 AM A	26-Feb-21 04 PM A
CS001662	SP	DSSE-1130	Eversource Engineering Obtains Hard Copy As-Builts from the Field		3	07-Sep-23 08 AM	11-Sep-23 04 PM
CS001662	SP	DSSE-820	Eversource Engineering Verifies Quality of Electrical Mark Up As-Built Drawing Package		10	12-Sep-23 08 AM	25-Sep-23 04 PM
CS001662	SP	DSSE-940	Eversource Engineering Updates Electrical As-Built Drawing Package		3	26-Sep-23 08 AM	28-Sep-23 04 PM
CS001662	SP	DSSE-830	ES Create Transmittal, Approve Final As-Built Package, and EDC Files and Issue Drawings to Field		8	29-Sep-23 08 AM	11-Oct-23 04 PM
CS001662	SP	DSSE-840	PM to Document Electrical As-Built Drawings Complete		1	12-Oct-23 08 AM	12-Oct-23 04 PM
P&C As-Builts	SP				5	07-Sep-23 08 AM	13-Sep-23 04 PM
CS001662	SP	DSSE-950	P&C Submits SDS As-Builts		5	07-Sep-23 08 AM	13-Sep-23 04 PM
CS001662	SP	DSSE-960	P&C Submits Relay Setting As-Builts		5	07-Sep-23 08 AM	13-Sep-23 04 PM
Test Closout	SP				10	23-Aug-23 08 AM	06-Sep-23 04 PM
CS001662	SP	A3290	LCE Ensures Marked up Prints Ready for Pick-up		5	23-Aug-23 08 AM	29-Aug-23 04 PM
CS001662	SP	A3570	LCE Review Test Data and Issue Commissioning Report		5	30-Aug-23 08 AM	06-Sep-23 04 PM
SITE RESTORATION CLOSEOUT	SP				10	23-Aug-23 08 AM	06-Sep-23 04 PM
CS001662	SP	A1110	Restore / Remediate Site		10	23-Aug-23 08 AM	06-Sep-23 04 PM
MATERIAL, EQUIPMENT, COST, AND ASSET MANA(	SP				40	23-Aug-23 08 AM	19-Oct-23 04 PM
CS001662	SP	A1020	Cost Analyst Prepares FINAL Units of Property		30	23-Aug-23 08 AM	04-Oct-23 04 PM
CS001662	SP	A1030	Asset Management Complete Asset Update(s) in CASCADE		30	07-Sep-23 08 AM	19-Oct-23 04 PM
PROJECT MANAGEMENT CLOSEOUT	SP				40	23-Aug-23 08 AM	19-Oct-23 04 PM
CS001662	SP	A1040	PM Prepares Closeout Documentation, Lessons Learned Meeting, etc.		30	23-Aug-23 08 AM	04-Oct-23 04 PM
CS001662	SP	A1270	Prepare TD-707 Document		30	23-Aug-23 08 AM	04-Oct-23 04 PM

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Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
CS001662	SP	FINISH	Project / Work Order Complete (FINAL SCHEDULE TASK/MILESTONE)	[redacted]	0		19-Oct-23 04 PM
OVERHEAD / INDIRECTS	SP				11	20-Sep-21 08 AM	04-Oct-21 04 PM
PROJECT MANAGEMENT	SP				11	20-Sep-21 08 AM	04-Oct-21 04 PM
CS001662	SP	A1170	Prepare CAN (Construction Authorization Notice) AT0		11	20-Sep-21 08 AM*	04-Oct-21 04 PM
CS001662	SP	1110	Prepare CAN (Construction Authorization Notice) BT0,CT0, DT0		11	20-Sep-21 08 AM*	04-Oct-21 04 PM

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Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
Mansfield 12J Expansion (40493201)	SP				697	02-Dec-19 12 AM A	27-Feb-24 04 PM
INITIALIZATION AND SCOPE DEVELOPEMEI	SP				470	02-Dec-19 12 AM A	03-Apr-23 08 AM
40493201	SP	START	SCHEDULE START MILESTONE	[redacted]	0	02-Dec-19 12 AM A	
Initial Funding	SP				0	06-Dec-19 12 AM A	04-May-20 04 PM A
40493201	SP	PI1200	Project Initiator Develop Intitial Funding Request		0	06-Dec-19 12 AM A	06-Dec-19 12 AM A
40493201	SP	PI1300	Initial Funding Request Approved @ EPAC		0	06-Dec-19 12 AM A	06-Dec-19 12 AM A
40493201	SP	PI1000	Submit Initial Funding Request		0		06-Dec-19 12 AM A
40493201	SP	PI1610	Power Plan Approval Create WO#		0	06-Dec-19 12 AM A	06-Dec-19 04 PM A
40493201	SP	PI1400	Assign Project Manager Request Resources for Project Team		0	06-Dec-19 12 AM A	06-Dec-19 04 PM A
40493201	SP	PI1500	Assign Scheduler		0	04-May-20 08 AM A	04-May-20 08 AM A
40493201	SP	PI1600	Assign Cost Analyst		0	04-May-20 08 AM A	04-May-20 04 PM A
SDC Approval	SP				0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
40493201	SP	CE1100	ES Develop Electrical Substation Conceptual Engineering Design in Accordance with Deliverables Checklist		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
40493201	SP	CE1700	Review Conceptual Siting, Real Estate,SCS, & Permitting (If Required)		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
40493201	SP	SSF1000	Develop Soultions Selection Form (SSF)		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
40493201	SP	CE1400	ES Engineering Develop P&C Conceptual Engineering Design in Accordance with Deliverables Checklist		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
40493201	SP	CGE1000	Develop Conceptual Grade Estimate (-25%+50% SDC)		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
40493201	SP	CE1000	ES Engineering Develop Civil Substation Conceptual Engineering Design in Accordance with Deliverables Checklist		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
40493201	SP	CE1500	ES Engineering Develop Communications Conceptual Engineering Design in Accordance with Deliverables Checklist		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
40493201	SP	SDC1000	Solution Design Committee(SDC) Approval		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
40493201	SP	CE1710	Conduct Conceptual Constructability Walk Down		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
40493201	SP	CE1600	Conduct Project Team Kickoff Meeting Verify SDC Need		0	12-Dec-19 12 AM A	12-Dec-19 04 PM A
Project Initiation	SP				58	05-Mar-20 12 AM A	06-Aug-21 04 PM
EPAC Partial Funding	SP				0	05-Mar-20 12 AM A	05-Mar-20 04 PM A
40493201	SP	PF1000	EPAC Partial Funding Approval		0	05-Mar-20 08 AM A	05-Mar-20 04 PM A
40493201	SP	ATCGE1010	Develop At Least Conceptual Grade Estimate (-25%+50% Partial Funding)		0	05-Mar-20 08 AM A	05-Mar-20 04 PM A
40493201	SP	PE1600	Review Preliminary Siting & Permitting (If Required)		0	05-Mar-20 08 AM A	05-Mar-20 04 PM A
40493201	SP	PE1700	Conduct Preliminary Constructability Walk Down		0	05-Mar-20 12 AM A	05-Mar-20 04 PM A
40493201	SP	PAFP1000	Submit Partial Funding PAF for Internal Review		0	05-Mar-20 08 AM A	05-Mar-20 04 PM A
40493201	SP	PAFP1100	Incorporate Internal Review Comments & Submit Partial Funding PAF to EPAC for Review		0	05-Mar-20 08 AM A	05-Mar-20 04 PM A
40493201	SP	PAFP1200	Incorporate EPAC Partial Funding PAF Review Comments		0	05-Mar-20 08 AM A	05-Mar-20 04 PM A
40493201	SP	PE1710	Create Engineering Scope Document		0	05-Mar-20 08 AM A	05-Mar-20 04 PM A
40493201	SP	PE1720	Engineering Scope Document Complete		0		05-Mar-20 04 PM A
EPAC Full Funding	SP				58	20-Oct-20 08 AM A	06-Aug-21 04 PM
40493201	SP	PAFF2110	Prepare Draft Subsidiary Board Presentation		0	02-Nov-20 08 AM A	23-Nov-20 04 PM A
40493201	SP	DE1800	Review Detail Siting & Permitting (If Required)		0	20-Oct-20 08 AM A	12-Feb-21 04 PM A

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40493201	SP	DE1900	Conduct FINAL Detail Constructability Walk Down	[redacted]	0	01-Mar-21 08 AM A	01-Mar-21 04 PM A
40493201	SP	DE1700	Conduct Initial Risk Management & SCLL Review (Project Initiator & PM)		0	01-Mar-21 08 AM A	04-Mar-21 04 PM A
40493201	SP	DE2000	Project Constructability Review Complete		0	02-Mar-21 08 AM A	05-Mar-21 04 PM A
40493201	SP	DE1600	Create Planning Grade Estimate (+/-25% Full Funding)		0	16-Feb-21 08 AM A	12-May-21 04 PM A
40493201	SP	PAFF2000	Submit Full Funding PAF for Internal Review		8	06-Apr-21 08 AM A	26-May-21 04 PM
40493201	SP	PAFF2100	Incorporate Internal Review Comments & Submit Full Funding PAF to EPAC for Review		3	27-May-21 08 AM	01-Jun-21 04 PM
40493201	SP	PAFF2120	Perform Risk Assessment (Enterprise Risk Management – ERM)		15	30-Nov-20 08 AM A	07-Jun-21 04 PM
40493201	SP	PAFF2200	Incorporate EPAC Full Funding PAF Review Comments		5	02-Jun-21 08 AM	08-Jun-21 04 PM
40493201	SP	FF1000	EPAC Full Funding Approval		1	09-Jun-21 08 AM	09-Jun-21 04 PM
40493201	SP	PAFF2130	Finalize Subsidiary Board Presentation		9	08-Jun-21 08 AM	18-Jun-21 04 PM
40493201	SP	PAFF2210	Subsidiary Board Approval		34	21-Jun-21 08 AM	06-Aug-21 04 PM*
T-Minus Milestones	SP				686	05-Mar-20 12 AM A	03-Apr-23 08 AM
T-Minus Milestones "A" Group	SP				594	05-Mar-20 12 AM A	31-Dec-22 04 PM
40493201	SP	AT3001	Eng. Project Scoping Document Issued (Scope Lockdown)		0		05-Mar-20 12 AM A
40493201	SP	AT1811	70% Design/Engineering Completed		0		22-Mar-21 12 AM A
40493201	SP	AT0805E	IFC - Electrical (AG) w/Final BOM		0		05-Apr-21 04 PM A
40493201	SP	AT0805C	IFC - Civil (BG) w/BOM		0		22-Apr-21 08 AM A
40493201	SP	AT0804	A-T-08.04 ALL PERMITS RECEIVED		0		17-May-21 08 AM
40493201	SP	AT1201	SCADA Date (Tab) Sheets/Signal List Sent to LCC		0		17-May-21 08 AM
40493201	SP	AT0805PC	P&C IFC - P&C w/BOM		0		17-May-21 08 AM
40493201	SP	AT0301	T-03 NX9 THERMAL RATINGS TO LCC AND CONVEX		0		15-Jul-21 04 PM*
40493201	SP	AT2605	30% Design / Engineering Completed		0		30-Jul-21 04 PM
40493201	SP	AT0813	A-T-08.13 SITING PETITION AND APPLICATION FILED		0		24-Sep-21 04 PM*
40493201	SP	AT00	T-00 - START OF CONSTRUCTION - WO# Start [redacted]		0	04-Oct-21 08 AM*	
40493201	SP	AT00.1	A-T-00 - Start [redacted]		0	04-Oct-21 08 AM*	
40493201	SP	AT0203	A-T-02.03 CAN COMPLETE (CONSTRUCTION AUTHORIZATION NOTICE)-CIVIL		0		04-Oct-21 04 PM*
40493201	SP	AT1202	P/C DESCRIPTION / DRAFT OPERATING INSTRUCTIONS ISSUED		0		12-Oct-21 04 PM
40493201	SP	AT1805	T-18 - NX9 Preliminary Ratings to LCC for New Equipment (transformers are considered 'NEW EQUIPMENT')		0		14-Oct-21 04 PM*
40493201	SP	AT0401	A-T-04.01 ALL MATERIAL RECEIVED, STAGED, INVENTORIED, REVIEW		0		09-Mar-22 04 PM*
40493201	SP	AT0409	A-T-04.09 ALL FIRM TOA APPLICATIONS DUE TO LCC (for DISTRIBUTION Non-transformer equipment)		0		25-Apr-22 04 PM*
40493201	SP	AT2404	A-T-24.04 DETERMINE / ASSIGN LCE (LEAD COMMISSIONING ENGINE		0		16-Aug-22 04 PM*
40493201	SP	AT1301	COMMISSIONING PLAN COMPLETE		0		21-Sep-22 04 PM
40493201	SP	AT0404	ALL FINAL RELAY PROTECTIVE SETTING ISSUED		0		31-Dec-22 04 PM
T-Minus Milestones "B" Group (Non-Outage)	SP				1	04-Oct-21 08 AM	04-Oct-21 04 PM
40493201	SP	BT00	T-00 - START OF CONSTRUCTION - WO# Start [redacted] (40493201)		0	04-Oct-21 08 AM*	

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Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
40493201	SP	BT0203	B-T-02.03 CAN COMPLETE (CONSTRUCTION AUTHORIZATION NOTICE) - Electrical Start	[redacted]	0		04-Oct-21 04 PM*
T-Minus Milestones "C" Group for Transformer Test- Ph	SP				336	04-Oct-21 04 PM	06-Sep-22 08 AM
40493201	SP	CT0203	C-T-02.03 CAN COMPLETE (CONSTRUCTION AUTHORIZATION NOTICE) - Electrical Start		0		04-Oct-21 04 PM*
40493201	SP	CT1811	CT-18 ALL FIRM TOA APPLICATIONS DUE TO LCC (for DISTRIBUTION Transformer TEST ENERGIZATION)		0		25-Apr-22 04 PM*
40493201	SP	CT00	C-T-00 - START OF CONSTRUCTION - 40493201 Phase 1		0	06-Sep-22 08 AM*	
T-Minus Milestones "D" Group for Transformer Test- Ph	SP				545	04-Oct-21 04 PM	03-Apr-23 08 AM
40493201	SP	DT0203	D-T-02.03 CAN COMPLETE (CONSTRUCTION AUTHORIZATION NOTICE) - Electrical Start		0		04-Oct-21 04 PM*
40493201	SP	DT1801	DT-18 ALL FIRM TOA APPLICATIONS DUE TO LCC (for DISTRIBUTION T		0		25-Apr-22 04 PM*
40493201	SP	DT00	D-T-00 - START OF CONSTRUCTION - 40493201 Phase 2		0	03-Apr-23 08 AM*	
ENVIRONMENTAL APPROVALS AND PERMIT	SP				92	05-Mar-20 08 AM A	24-Sep-21 04 PM
PREPARE COMPLIANCE MATRICES - REGULATORY	SP				92	05-Mar-20 08 AM A	24-Sep-21 04 PM
40493201	SP	1100	Incorporate Comments to Property Abutter Petition Letter		0	23-Nov-20 08 AM A	23-Nov-20 04 PM A
40493201	SP	1101	Receive Scope, Arrangement Drwg, Equip List (to support CSC Petition)		0	23-Nov-20 08 AM A	23-Nov-20 04 PM A
40493201	SP	1102	Outreach to Property Owners		0	23-Nov-20 08 AM A	23-Nov-20 04 PM A
40493201	SP	1103	Obtain Cultural Resources Approval		0	23-Nov-20 08 AM A	23-Nov-20 04 PM A
40493201	SP	1105	Prepare Property Abutter Petition Letter		0	03-Mar-21 08 AM A	24-Mar-21 04 PM A
40493201	SP	1104	Prepare Preliminary Draft CSC Petition		0	14-Dec-20 08 AM A	16-Apr-21 04 PM A
40493201	SP	1106	Mandatory Commenter Review of Preliminary Draft CSC Petition		0	03-May-21 08 AM A	07-May-21 04 PM A
40493201	SP	1107	Prepare Final CSC Petition / Submit Petition to CSC for Review		10	28-Apr-21 08 AM A	28-May-21 04 PM
40493201	SP	A1230	Prepared Compliance Matrices - Regulatory		87	05-Mar-20 08 AM A	17-Sep-21 04 PM
40493201	SP	A1220	Prepared Compliance Matrices - Non-Reqgulatory (Commitments)		87	05-Mar-20 08 AM A	17-Sep-21 04 PM
40493201	SP	1109	CSC Petition Approval (Tie to T-8)		1	24-Sep-21 08 AM	24-Sep-21 04 PM
40493201	SP	1108	CSC Petition Review		119	29-May-21 08 AM	24-Sep-21 04 PM
APPROVALS - FEDERAL	SP				0	08-Mar-21 08 AM A	12-Mar-21 04 PM A
40493201	SP	A1180	Determine Requirment for and Prepare Permitting Docments - FEDERAL (CT) TBD		0	08-Mar-21 08 AM A	12-Mar-21 04 PM A
APPROVALS - STATE	SP				0	08-Mar-21 08 AM A	16-Apr-21 04 PM A
40493201	SP	A1190	Determine Requirment for and Prepare Permitting Docments - STATE TBD (STORM WATER)		0	08-Mar-21 08 AM A	16-Apr-21 04 PM A
APPROVALS - REGIONAL	SP				0	08-Mar-21 08 AM A	12-Mar-21 04 PM A
40493201	SP	A1200	Determine Requirment for and Prepare Permitting Docments - REGIONAL (CT) TBD		0	08-Mar-21 08 AM A	12-Mar-21 04 PM A
APPROVALS - LOCAL	SP				0	08-Mar-21 08 AM A	12-Mar-21 04 PM A
40493201	SP	A1210	Determine Requirment for and Prepare Permitting Docments - LOCAL TBD		0	08-Mar-21 08 AM A	12-Mar-21 04 PM A
ENGINEERING & DESIGN	SP				697	07-Feb-20 08 AM A	27-Feb-24 04 PM
Engineering Services Staffing	SP				0	07-Feb-20 08 AM A	31-Jul-20 04 PM A
40493201	SP	A3370	Decision Required Regarding Engineering Staffing (ES, COC, BID)		0	07-Feb-20 08 AM A	07-Feb-20 04 PM A
Bid Process	SP				0	31-Jul-20 08 AM A	31-Jul-20 04 PM A

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Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
40493201	SP	TMP1280	(N/R per SP 7/31/20)Contractor Selection (Bid) - Engineering - Bid Review / Score Bids/ Negotiations	[redacted]	0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
40493201	SP	TMP1300	(N/R per SP 7/31/20)Contractor Selection (Bid) - Engineering - Notice to Proceed		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
40493201	SP	TMP1190	(N/R per SP 7/31/20) Contractor Selection (Bid) - Engineering- Prepare / Issue RFP for Engineering Contractor		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
40493201	SP	TMP1210	(N/R per SP 7/31/20)Contractor Selection (Bid) - Engineering - Issue RFP Out to Bid to Engineering Contractor		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
40493201	SP	TMP1230	(N/R per SP 7/31/20)Contractor Selection (Bid) - Engineering - Hold Pre-Bid Meeting for Engineering Contractor		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
40493201	SP	TMP1310	(N/R per SP 7/31/20) Contractor Selection (Bid) - Engineering - Bid Period		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
40493201	SP	TMP1320	(N/R per SP 7/31/20)Contractor Selection (Bid) - Engineering - Award Contractor		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
40493201	SP	TMP1330	(N/R per SP 7/31/20)Contractor Selection (Bid) - Engineering - Issue DR		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
40493201	SP	TMP1340	(N/R per SP 7/31/20)Contractor Selection (Bid) - Engineering - Issue PO		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
EOC - Engineer of Choice Process	SP				0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
40493201	SP	TMP1180	(N/R per SP 7/31/20)Engineering of Choice (EOC) - EOC Committee Reviews at Monthly Meeting & Approves (?)		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
40493201	SP	TMP1140	(N/R per SP 7/31/20)Engineering of Choice (EOC) - Provide RFP to Single Vendor		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
40493201	SP	TMP1200	(N/R per SP 7/31/20)Engineering of Choice (EOC) - DR Prepared by Project Engineer & Project Controls		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
40493201	SP	TMP1220	(N/R per SP 7/31/20)Engineering of Choice (EOC) - PO Issued for Vendor -30% Design Effort		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
40493201	SP	TMP1150	(N/R per SP 7/31/20)Engineering of Choice (EOC) - Vendor Responds with Proposal		0	31-Jul-20 08 AM A	31-Jul-20 04 PM A
Civil Engineering	SP				0	10-Aug-20 08 AM A	22-Apr-21 04 PM A
Civil Engineering	SP				0	10-Aug-20 08 AM A	22-Apr-21 04 PM A
Civil Engineering 100%	SP				0	22-Feb-21 08 AM A	10-Mar-21 04 PM A
40493201	SP	DSSE-1340	Vendor Incorporates Detail Comments and Issues 100% Civil Package to ES		0	22-Feb-21 08 AM A	01-Mar-21 04 PM A
40493201	SP	DSSE-1350	ES Reviews and Comments 100% Civil Package		0	02-Mar-21 08 AM A	10-Mar-21 04 PM A
Civil Engineering IFC	SP				0	04-Mar-21 08 AM A	22-Apr-21 04 PM A
40493201	SP	DSSE-1290	Vendor Incorporates 100% Design Comments Submits IFC Civil Package to ES w/BOM		0	04-Mar-21 08 AM A	05-Mar-21 04 PM A
40493201	SP	DSSE-1320	ES Reviews IFC Civil Package		0	08-Mar-21 08 AM A	08-Mar-21 04 PM A
40493201	SP	DSSE-1300	ES Issues Civil Package IFC w/BOM		0	01-Apr-21 08 AM A	22-Apr-21 04 PM A
Civil Engineering Detailed	SP				0	08-Feb-21 08 AM A	19-Feb-21 04 PM A
40493201	SP	DSSE-1210	Vendor Incorporates Preliminary Comments and Issues Detailed Civil Package to ES		0	08-Feb-21 08 AM A	12-Feb-21 04 PM A
40493201	SP	DSSE-1240	ES Reviews and Comments Detailed Civil Package		0	15-Feb-21 08 AM A	19-Feb-21 04 PM A
Civil Engineering Preliminary	SP				0	10-Aug-20 08 AM A	03-Feb-21 04 PM A
40493201	SP	DSSE-1270	Design Package to Civil		0	10-Aug-20 08 AM A	01-Oct-20 04 PM A
40493201	SP	DSSE-1250	Vendor Submits Preliminary Civil Package to ES		0	12-Jan-21 08 AM A	01-Feb-21 04 PM A
40493201	SP	DSSE-1280	ES Reviews and Comments Preliminary Civil Package		0	01-Feb-21 08 AM A	03-Feb-21 04 PM A

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Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
Electrical Engineering	SP			[redacted]	5	20-Oct-20 08 AM A	12-Oct-21 04 PM
40493201	SP	DSSE-260	Submit Plan/Profile to Siting & Permitting for Filing w/Regulator Authority (Should this be tied to the IFC)		0	20-Oct-20 08 AM A	12-Feb-21 04 PM A
40493201	SP	DSSE-200	Detail (70%) Electrical Design Package Design		0	29-Jan-21 08 AM A	05-Mar-21 04 PM A
40493201	SP	DSSE-205	Detail (70%) Electrical Design Package Drafting		0	08-Mar-21 08 AM A	22-Mar-21 04 PM A
40493201	SP	DSSE-210	Final (100%) Electrical Design Package IFR		0	22-Mar-21 08 AM A	26-Mar-21 04 PM A
40493201	SP	DSSE-230	Electrical Engineering - BOM Complete		0	29-Mar-21 08 AM A	31-Mar-21 04 PM A
40493201	SP	DSSE-240	Electrical Engineering - Electrical Package IFC (Physical & Electrical)		0	29-Mar-21 08 AM A	31-Mar-21 04 PM A
40493201	SP	DSSE-460	Operating Instructions - SSED Review Draft Distribution OI		5	05-Oct-21 08 AM	12-Oct-21 04 PM
40493201	SP	DSSE-920	Operating Instructions - SSED Review Draft Convex OI		5	05-Oct-21 08 AM	12-Oct-21 04 PM
Distribution Thermal Ratings NX-9 (Transformer Repl	SP				687	02-Oct-20 08 AM A	27-Feb-24 04 PM
Thermal Ratings - Substation - Preliminary Thermal Da	SP				27	02-Oct-20 08 AM A	14-Oct-21 04 PM
40493201	SP	NX9A-NC69	PE Updates 1-Line Nomenclature Dwgs & Complete PE Checklist M7-EN-3006.2 - e-mail link to project team & CONVEX		0	02-Oct-20 08 AM A	16-Nov-20 04 PM A
40493201	SP	NX9A-NC169	LTRC Submits 1-Line Nomenclature to TRC		0	09-Nov-20 08 AM A	16-Nov-20 04 PM A
40493201	SP	NX9A-NC159	LTRC Reviews and Makes "GO / NO-GO" Decision for 1-Line Nomenclature		0	11-Jan-21 08 AM A	15-Jan-21 04 PM A
40493201	SP	NX9A-NC59	LTRC Reviews and Makes "GO / NO-GO" Decision for Thermal Ratings - GO!		0	22-Mar-21 08 AM A	02-Apr-21 04 PM A
40493201	SP	NX9A-NC99	LTRC Requests P&C Checklist		0	29-Mar-21 08 AM A	02-Apr-21 04 PM A
40493201	SP	NX9A-NC79	P&C Develops and Provides LTRC with P&C Checklist (M7-EN-3006.1)		5	07-Sep-21 08 AM	13-Sep-21 04 PM
40493201	SP	NX9A-NC139	LTRC Reviews and Sends Thermal Rating Data for TRC Review		5	14-Sep-21 08 AM	20-Sep-21 04 PM
40493201	SP	NX9A-NC129	TRC Reviews and Approves Thermal Rating Data		5	21-Sep-21 08 AM	27-Sep-21 04 PM
40493201	SP	NX9A-NC119	LTRC Sends Thermal Rating Data for Approval & Submit to NURS		5	28-Sep-21 08 AM	04-Oct-21 04 PM
40493201	SP	NX9A-NC109	Scheduler @ NURS email "Submitted for PP Review" - Updates NURS with DOE		1	05-Oct-21 08 AM	05-Oct-21 04 PM
40493201	SP	NX9A-NC89	TRC Review and Submit NX-9 Data to LCC + ISO-NE for S/S Thermal Ratin		5	06-Oct-21 08 AM	13-Oct-21 04 PM
40493201	SP	NX9A-NC149	Scheduler @ NURS email "Submitted for DOE Monitoring" - Updates T-18, EquipDOE, Revs DOE per M7-EN-3006		1	14-Oct-21 08 AM	14-Oct-21 04 PM
Thermal Ratings - Substation - Verify Thermal Data	SP				32	05-Apr-21 08 AM A	15-Jul-21 04 PM
40493201	SP	NX9A-NC33	LTRC Reviews and Makes "GO / NO-GO" Decision - GO!		0	05-Apr-21 08 AM A	09-Apr-21 04 PM A
40493201	SP	NX9A-NC35	LTRC Requests P&C Checklist		0	26-Apr-21 08 AM A	01-May-21 04 PM A
40493201	SP	NX9A-NC37	P&C Develops and Provides LTRC with P&C Checklist (M7-EN-3006.1)		5	08-Jun-21 08 AM	14-Jun-21 04 PM
40493201	SP	NX9A-NC39	LTRC Reviews and Sends Thermal Rating Data for TRC Review		5	15-Jun-21 08 AM*	21-Jun-21 04 PM
40493201	SP	NX9A-NC41	TRC Reviews and Approves Thermal Rating Data		5	22-Jun-21 08 AM	28-Jun-21 04 PM
40493201	SP	NX9A-NC31	PE to Verify Thermal Data Review PE Chectlist (M7-EN-3006.2)		24	01-Jun-21 08 AM*	02-Jul-21 04 PM
40493201	SP	NX9A-NC43	LTRC Sends Thermal Rating Data for Approval & Submit to NURS		5	29-Jun-21 08 AM	06-Jul-21 04 PM
40493201	SP	NX9A-NC45	Scheduler @ NURS email "Submitted for PP Review" - Updates NURS with DOE		1	07-Jul-21 08 AM	07-Jul-21 04 PM
40493201	SP	NX9A-NC47	TRC Review and Submit NX-9 Data to LCC + ISO-NE for S/S Thermal Ratin		5	08-Jul-21 08 AM	14-Jul-21 04 PM
40493201	SP	NX9A-NC49	Scheduler @ NURS email "Submitted for DOE Monitoring" - Updates T-3, EquipDOE, Revs DOE per M7-EN-3006		1	15-Jul-21 08 AM	15-Jul-21 04 PM
Thermal Ratings - Substation - NX-9 Pre NX9-DOE	SP				1	29-Dec-22 08 AM	29-Dec-22 04 PM
40493201	SP	NX9500	Scheduler - Send Email for 48Hrs Notification before DOE.		1	29-Dec-22 08 AM*	29-Dec-22 04 PM

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Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
Thermal Ratings - Substation - NX-9 Post NX9-DOE/ISD	SP			[redacted]	8	15-Feb-24 08 AM	27-Feb-24 04 PM
40493201	SP	NX9FINAL50	Review + Affirm Accuracy of NX-9 for ISO Submission (Tie after Equip DOE or CFM/ISD)		3	15-Feb-24 08 AM	20-Feb-24 04 PM
40493201	SP	NX9FINAL60	[If Required] Receive + Issue Final Affirmed NX-9 Data to NURS		5	21-Feb-24 08 AM	27-Feb-24 04 PM
Thermal Ratings - Non NX-9 Thermal Ratings	SP				20	01-Feb-22 08 AM	01-Mar-22 04 PM
40493201	SP	NX9A-EM44	P&C Develops and Provides LTRC with P&C Checklist & Thermal Ratings D		5	01-Feb-22 08 AM*	07-Feb-22 04 PM
40493201	SP	NX9A-EM54	LTRC Prepares and Sends Thermal Rating Data for TRC Review		5	08-Feb-22 08 AM	14-Feb-22 04 PM
40493201	SP	NX9A-EM64	TRC Reviews and Approves Thermal Rating Data		5	15-Feb-22 08 AM	22-Feb-22 04 PM
40493201	SP	NX9A-EM74	LTRC Files Capability Sheets		5	23-Feb-22 08 AM	01-Mar-22 04 PM
P&C Engineering	SP				103	22-Jul-20 08 AM A	12-Oct-21 04 PM
40493201	SP	DSSE-400	Prepare & Issue P&C Design Package to Drafting		0	22-Jul-20 08 AM A	09-Oct-20 04 PM A
40493201	SP	DSSE-410	Drafting Prepare & Issue Back to P&C (draft Logic Diagram Schematics/Adep		0	26-Oct-20 08 AM A	28-Oct-20 04 PM A
40493201	SP	DSSE-1360	Prepare & Issue P&C Design Package to Drafting (includes Logic Diagrams)		0	28-Oct-20 08 AM A	30-Oct-20 04 PM A
40493201	SP	DSSE-220	SDS Complete (~= P&C IFC)		0	26-Apr-21 08 AM A	30-Apr-21 12 AM A
40493201	SP	DSSE-990	P&C INITIATE SCADA Data Sheets		0	28-Apr-21 08 AM A	30-Apr-21 12 AM A
40493201	SP	DSSE-480	PE INITIATES CASCADE FORMS (Apenndix A) for Construction		20	17-May-21 08 AM*	14-Jun-21 04 PM
40493201	SP	A3380	Issue P&C Package Design (includes Logic Diagrams)		39	07-Jun-21 08 AM*	30-Jul-21 04 PM
40493201	SP	DSSE-450	Operating Instructions - Prepare and Issue Draft Distribution OI to Engineering		20	07-Sep-21 08 AM	04-Oct-21 04 PM
40493201	SP	DSSE-470	Operating Instructions - P&C Review Draft Distribution OI		5	05-Oct-21 08 AM	12-Oct-21 04 PM
40493201	SP	DSSE-930	Operating Instructions - P&C Review Draft Convex OI		5	05-Oct-21 08 AM	12-Oct-21 04 PM
Relay Settings	SP				20	09-Aug-21 08 AM	03-Sep-21 04 PM
40493201	SP	DSSE-440	Relay Settings - Prepare and Issue Relay Settings IFC- (Is standard Relay logic Needed?)		20	09-Aug-21 08 AM	03-Sep-21 04 PM
MATERIAL PROCUREMENT	SP				147	09-Aug-21 08 AM	13-Mar-22 04 PM
MATERIAL FOR P&C	SP				144	09-Aug-21 08 AM	08-Mar-22 04 PM
40493201	SP	DSSE-510	MATERIAL - P&C - Prepare & Issue DR		10	09-Aug-21 08 AM	20-Aug-21 04 PM
40493201	SP	DSSE-980	MATERIAL - P&C - Procurement Issue PO		5	23-Aug-21 08 AM	27-Aug-21 04 PM
40493201	SP	DSSE-1000	MATERIAL - P&C - Material Vendor Delivery Leadtime		192	28-Aug-21 08 AM	07-Mar-22 04 PM
40493201	SP	DSSE-1010	MATERIAL - P&C - Material Handler Confirm Material Delivery to Site		1	08-Mar-22 08 AM	08-Mar-22 04 PM*
MATERIAL FOR ELECTRICAL	SP				55	09-Aug-21 08 AM	26-Oct-21 04 PM
40493201	SP	DSSE-520	MATERIAL - Electrical - Prepare & Issue DR		10	09-Aug-21 08 AM	20-Aug-21 04 PM
40493201	SP	DSSE-590	Electrical (AG) Material Ordered		0		20-Aug-21 04 PM
40493201	SP	DSSE-1020	MATERIAL - ELectrical - Procurement Issue PO		5	23-Aug-21 08 AM	27-Aug-21 04 PM
40493201	SP	DSSE-1030	MATERIAL - ELectrical - Material Vendor Delivery Leadtime		59	28-Aug-21 08 AM	25-Oct-21 04 PM
40493201	SP	DSSE-550	MATERIAL - Electrical - Material Handler Confirm Material Delivery to Site		1	26-Oct-21 08 AM	26-Oct-21 04 PM*
MATERIAL FOR CIVIL	SP				60	09-Aug-21 08 AM	02-Nov-21 04 PM
40493201	SP	DSSE-500	MATERIAL - CIVIL - Prepare & Issue DR		10	09-Aug-21 08 AM	20-Aug-21 04 PM
40493201	SP	DSSE-600	Civil (BG) Material Ordered		0		20-Aug-21 04 PM
40493201	SP	DSSE-1040	MATERIAL - CIVIL - Procurement Issue PO		7	23-Aug-21 08 AM	31-Aug-21 04 PM
40493201	SP	DSSE-1050	MATERIAL - CIVIL - Material Vendor Delivery Leadtime		62	01-Sep-21 08 AM	01-Nov-21 04 PM

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Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
40493201	SP	DSSE-560	MATERIAL - CIVIL - Material Handler Confirm Material Delivery to Site	[redacted]	1	02-Nov-21 08 AM	02-Nov-21 04 PM*
MATERIAL FOR RELAY AND CONTROL ENCLOSURE	SP				126	09-Aug-21 08 AM	09-Feb-22 04 PM
40493201	SP	DSSE-530	MATERIAL - Relay and Control House - Prepare & Issue DR		10	09-Aug-21 08 AM	20-Aug-21 04 PM
40493201	SP	DSSE-1180	Relay and Control House Material Ordered		0		20-Aug-21 04 PM
40493201	SP	DSSE-1060	MATERIAL - Relay and Control House - Procurement Issue PO		5	23-Aug-21 08 AM	27-Aug-21 04 PM
40493201	SP	DSSE-1070	MATERIAL - Relay and Control House - Material Vendor Delivery Leadtime		165	28-Aug-21 08 AM	08-Feb-22 04 PM
40493201	SP	DSSE-570	MATERIAL - Relay and Control House - Material Handler Confirm Material Delivery to Site		1	09-Feb-22 08 AM	09-Feb-22 04 PM*
MATERIAL FOR RELAY PANELS	SP				145	09-Aug-21 08 AM	09-Mar-22 04 PM
40493201	SP	DSSE-540	MATERIAL - Relay Panels- Prepare & Issue DR		10	09-Aug-21 08 AM	20-Aug-21 04 PM
40493201	SP	DSSE-1190	Relay Panels Material Ordered		0		20-Aug-21 04 PM
40493201	SP	DSSE-1080	MATERIAL - Relay Panels - Procurement Issue PO		5	23-Aug-21 08 AM	27-Aug-21 04 PM
40493201	SP	DSSE-1090	MATERIAL - Relay Panels- Material Vendor Delivery Leadtime		193	28-Aug-21 08 AM	08-Mar-22 04 PM
40493201	SP	DSSE-580	MATERIAL - Relay Panels - Material Handler Confirm Material Delivery to Sit		1	09-Mar-22 08 AM	09-Mar-22 04 PM*
MATERIAL FOR CIRCUIT BREAKERS	SP				147	09-Aug-21 08 AM	13-Mar-22 04 PM
40493201	SP	1115	MATERIAL - Breakers- Prepare & Issue DR		10	09-Aug-21 08 AM	20-Aug-21 04 PM
40493201	SP	1119	Breakers Material Ordered		0		20-Aug-21 04 PM
40493201	SP	1117	MATERIAL - Circuit Breakers - Procurement Issue PO		5	23-Aug-21 08 AM	27-Aug-21 04 PM
40493201	SP	1118	MATERIAL - Circuit Breakers - Material Vendor Delivery Leadtime		197	28-Aug-21 08 AM	12-Mar-22 04 PM
40493201	SP	1116	MATERIAL - Circuit Breakers - Material Handler Confirm Material Delivery to Site		1	13-Mar-22 08 AM	13-Mar-22 04 PM*
OTHER MATERIALS(CIVIL, ELECTRICAL, P&C)	SP				99	09-Aug-21 08 AM	31-Dec-21 04 PM
40493201	SP	1129	MATERIAL - Other Materials- Prepare & Issue DR		10	09-Aug-21 08 AM	20-Aug-21 04 PM
40493201	SP	1169	Other Materials Ordered		0		20-Aug-21 04 PM
40493201	SP	1149	MATERIAL - Other Materials - Procurement Issue PO		5	23-Aug-21 08 AM	27-Aug-21 04 PM
40493201	SP	1159	MATERIAL - Other Materials - Material Vendor Delivery Leadtime		125	28-Aug-21 08 AM	30-Dec-21 04 PM
40493201	SP	1139	MATERIAL - Other Materials - Material Handler Confirm Material Delivery to Site		1	31-Dec-21 08 AM	31-Dec-21 04 PM*
CONSTRUCTION	SP				667	01-Feb-21 08 AM A	12-Jan-24 04 PM
CONSTRUCTION SERVICES SELECTION	SP				63	01-Feb-21 08 AM A	13-Aug-21 04 PM
CONSTRUCTION SERVICES - BID PROCESS Civil	SP				63	15-Mar-21 08 AM A	13-Aug-21 04 PM
40493201	SP	A3430	CONST.SERVICES - BID - Eversource provide Spec / RFP - Civil		0	15-Mar-21 08 AM A	15-Mar-21 04 PM A
40493201	SP	A3440	CONST.SERVICES - BID - Contractors Evaluate RFP and Provide Proposal - Civil		0	15-Mar-21 08 AM A	26-Apr-21 04 PM A
40493201	SP	A3450	CONST.SERVICES - BID - Eversource reviews contractor proposals - Civil		15	27-Apr-21 08 AM A	07-Jun-21 04 PM
40493201	SP	A3460	CONST.SERVICES - BID - Contract is Awarded - PO Issued - Civil		5	09-Aug-21 08 AM*	13-Aug-21 04 PM
CONSTRUCTION SERVICES - BID PROCESS Electric	SP				63	01-Feb-21 08 AM A	13-Aug-21 04 PM
40493201	SP	1111	CONST.SERVICES - BID - Eversource provide Spec / RFP - Electrical		0	01-Feb-21 08 AM A	15-Mar-21 04 PM A
40493201	SP	1112	CONST.SERVICES - BID - Contractors Evaluate RFP and Provide Proposal - Electrical		0	15-Mar-21 08 AM A	26-Apr-21 04 PM A
40493201	SP	1113	CONST.SERVICES - BID - Eversource reviews contractor proposals - Electrical		15	27-Apr-21 08 AM A	07-Jun-21 04 PM

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Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
40493201	SP	1114	CONST.SERVICES - BID - Contract is Awarded - PO Issued - Electrical	[redacted]	5	09-Aug-21 08 AM	13-Aug-21 04 PM
CONSTRUCTION - CIVIL	SP				226	04-Oct-21 08 AM	26-Aug-22 04 PM
40493201	SP	A1120	Construction - Civil		226	04-Oct-21 08 AM	26-Aug-22 04 PM
CONSTRUCTION - ELECTRICAL	SP				560	04-Oct-21 08 AM	28-Dec-23 04 PM
40493201	SP	A3550	Construction - Electrical Non-Outage		226	04-Oct-21 08 AM	26-Aug-22 04 PM*
40493201	SP	A1130	Construction - Electrical - Phase 1 Outage		80	06-Sep-22 08 AM	30-Dec-22 04 PM
40493201	SP	A3560	Construction - Electrical - Phase 2 Outage		187	03-Apr-23 08 AM	28-Dec-23 04 PM
CONSTRUCTION - P&C	SP				9	01-Mar-22 08 AM	11-Mar-22 04 PM
40493201	SP	A1140	Construction - P&C Implement Relay Settings		9	01-Mar-22 08 AM	11-Mar-22 04 PM*
CONSTRUCTION - COMMUNICATIONS	SP				104	03-Apr-23 08 AM	28-Aug-23 04 PM
40493201	SP	A1150	Construction - Field Communications		104	03-Apr-23 08 AM	28-Aug-23 04 PM
CONSTRUCTION - CONST.REP TASKS	SP				436	19-Apr-22 08 AM	12-Jan-24 04 PM
40493201	SP	A1280	Construction Rep SUBMIT OUTAGE REQUESTS for TRANSFORMER INSTALLATION (13 weeks before outage)		5	19-Apr-22 08 AM*	25-Apr-22 04 PM
40493201	SP	A1290	Construction Rep SUBMIT OUTAGE REQUESTS for TRANSFORMER TEST ENERGIZATION (18 weeks before outage)		5	19-Apr-22 08 AM*	25-Apr-22 04 PM
40493201	SP	A1250	Construction Rep SUBMIT OUTAGE REQUESTS for NON-transformer equipment (4 weeks before outage)		5	19-Apr-22 08 AM*	25-Apr-22 04 PM
40493201	SP	A1260	Construction Rep Finalize CASCADE Forms (within 14 days following ISD)		10	29-Dec-23 08 AM	12-Jan-24 04 PM
CONSTRUCTION RESOURCE TRACKING	SP				560	04-Oct-21 08 AM	28-Dec-23 04 PM
40493201	SP	A1070	RESOURCE ONLY ACTIVITY - CONSTRUCTION - Non-Outage Start		1	04-Oct-21 08 AM	04-Oct-21 04 PM
40493201	SP	A1080	RESOURCE ONLY ACTIVITY - CONSTRUCTION - Non-Outage Finish		1	26-Aug-22 08 AM	26-Aug-22 04 PM
40493201	SP	A3590	RESOURCE ONLY ACTIVITY - CONSTRUCTION - SWITCH OUT-Phase 1		1	06-Sep-22 08 AM	06-Sep-22 04 PM
40493201	SP	ConRep-S	RESOURCE ONLY ACTIVITY - CONSTRUCTION - CONSTRUCTION REP - Non Outage		311	04-Oct-21 08 AM	30-Dec-22 04 PM
40493201	SP	CONSTelec	RESOURCE ONLY ACTIVITY - CONSTRUCTION - ELECTRICIAN - Phase		80	06-Sep-22 08 AM	30-Dec-22 04 PM
40493201	SP	A3570	RESOURCE ONLY ACTIVITY - CONSTRUCTION - SWITCH IN- Phase 1		1	30-Dec-22 08 AM	30-Dec-22 04 PM
40493201	SP	ConRep-S10	RESOURCE ONLY ACTIVITY - CONSTRUCTION - CONSTRUCTION REP - Outage Phase1		80	06-Sep-22 08 AM	30-Dec-22 04 PM
40493201	SP	CONSTelec20	RESOURCE ONLY ACTIVITY - CONSTRUCTION - ELECTRICIAN - Non-Ou		311	04-Oct-21 08 AM	30-Dec-22 04 PM
40493201	SP	A3580	RESOURCE ONLY ACTIVITY - CONSTRUCTION - SWITCH OUT-Phase 2		1	03-Apr-23 08 AM	03-Apr-23 04 PM
40493201	SP	A3600	RESOURCE ONLY ACTIVITY - CONSTRUCTION - SWITCH IN- Phase 2		1	28-Dec-23 08 AM	28-Dec-23 04 PM
40493201	SP	ConRep-S20	RESOURCE ONLY ACTIVITY - CONSTRUCTION - CONSTRUCTION REP - Outage Phase 2		187	03-Apr-23 08 AM	28-Dec-23 04 PM
40493201	SP	CONSTelec10	RESOURCE ONLY ACTIVITY - CONSTRUCTION - ELECTRICIAN - Phase		187	03-Apr-23 08 AM	28-Dec-23 04 PM
CONSTRUCTION OUTAGES	SP				700	04-Oct-21 08 AM	28-Dec-23 04 PM
40493201	SP	CSM	Construction Start Milestone - Non- Outage(Civil & Electrical)		0	04-Oct-21 08 AM	
40493201	SP	Const	NON OUTAGE / General Construction Work (Civil & Electrical)		281	04-Oct-21 08 AM	26-Aug-22 04 PM
40493201	SP	CSM10	Construction Start Milestone - Outage Phase 1		0	06-Sep-22 08 AM	
40493201	SP	TOA-Const	OUTAGE / General Construction Work- Phase 1		100	06-Sep-22 08 AM	30-Dec-22 04 PM
40493201	SP	CFM	Construction Finish Milestone - Phase 1		0		31-Dec-22 04 PM
40493201	SP	DOE	DATE OF ENERGIZATION-Phase 1		0		31-Dec-22 04 PM*

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Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
40493201	SP	CFM20	Construction Finish Milestone - Non-Outage (Civil & Electrical)	[redacted]	0		31-Dec-22 04 PM
40493201	SP	CSM20	Construction Start Milestone - Outage Phase 2		0	03-Apr-23 08 AM	
40493201	SP	TOA-Const10	OUTAGE / General Construction Work- Phase 2		130	03-Apr-23 08 AM	31-Aug-23 04 PM
40493201	SP	ISD	EQUIPMENT IN SERVICE DATE		0		28-Dec-23 04 PM*
40493201	SP	CFM10	Construction Finish Milestone- Phase 2		0		28-Dec-23 04 PM
TEST OUTAGES	SP				147	06-Sep-22 08 AM	07-Apr-23 04 PM
40493201	SP	TOA-Test	OUTAGE / Test Transformer- Phase 1		5	06-Sep-22 08 AM	12-Sep-22 04 PM
40493201	SP	TOA-Test10	OUTAGE / Test Transformer- Phase 2		5	03-Apr-23 08 AM	07-Apr-23 04 PM
CONSTRUCTION CLOSEOUT	SP				2	29-Dec-23 08 AM	02-Jan-24 04 PM
40493201	SP	DSSE-900	Prepare Civil Field Mark Ups (Tie after Last Civil Construction Activity)		2	29-Dec-23 08 AM	02-Jan-24 04 PM
TEST AND COMMISSION	SP				408	01-Mar-21 08 AM A	30-Dec-22 04 PM
TEST - SERVICES STAFFING DECISION	SP				73	01-Mar-21 08 AM A	27-Aug-21 04 PM
TEST SERVICES - CONTRACTOR OF CHOICE	SP				0	03-May-21 08 AM A	03-May-21 04 PM A
40493201	SP	A3500	N/R TEST SERVICES - COC - Eversource Awards Contract - PO Issued		0	03-May-21 08 AM A	03-May-21 04 PM A
40493201	SP	A3470	N/R TEST SERVICES - COC - Eversource Provides Spec / RFQ to COC		0	03-May-21 08 AM A	03-May-21 04 PM A
40493201	SP	A3480	N/R TEST SERVICES - COC - COC Evaluates Spec and Provides Quote		0	03-May-21 08 AM A	03-May-21 04 PM A
40493201	SP	A3490	N/R TEST SERVICES - COC - Eversource Reviews Quote from COC		0	03-May-21 08 AM A	03-May-21 04 PM A
TEST SERVICES - BID PROCESS	SP				73	01-Mar-21 08 AM A	27-Aug-21 04 PM
40493201	SP	A3510	TEST SERVICES - BID - Eversource provide Spec / RFP		0	01-Mar-21 08 AM A	31-Mar-21 04 PM A
40493201	SP	A3520	TEST SERVICES - BID - Contractors Evaluate RFP and Provide Proposal		0	01-Apr-21 08 AM A	21-Apr-21 04 PM A
40493201	SP	A3530	TEST SERVICES - BID - Eversource reviews contractor proposals		15	22-Apr-21 08 AM A	07-Jun-21 04 PM
40493201	SP	A3540	TEST SERVICES - BID - Eversource awards contract - PO Issued		15	09-Aug-21 08 AM	27-Aug-21 04 PM
LCE PLANNING	SP				32	08-Aug-22 08 AM	21-Sep-22 04 PM
40493201	SP	LCE100	PM to Request Lead Commissioning Engineer GO/NO-GO		5	08-Aug-22 08 AM*	12-Aug-22 04 PM
40493201	SP	LCE200	Assign Lead Commissioning Engineer		2	15-Aug-22 08 AM*	16-Aug-22 04 PM
40493201	SP	LCE400	Develop Test and Commissioning Plan		20	19-Aug-22 08 AM	16-Sep-22 04 PM
40493201	SP	LCE500	LCE Review and Approve Vendor's Test and Commissioning Plan		3	19-Sep-22 08 AM	21-Sep-22 04 PM
TEST ACTIVITIES	SP				335	28-Aug-21 08 AM	30-Dec-22 04 PM
40493201	SP	LCE320	Mobilize Testing Vendor Prior to Construction		2	28-Aug-21 08 AM*	29-Aug-21 04 PM
40493201	SP	LCE310	Mobilize LCE Prior to Construction		2	17-Aug-22 08 AM	18-Aug-22 04 PM
40493201	SP	LCE620	Execute Test and Commissioning Plan		30	22-Sep-22 08 AM	03-Nov-22 04 PM
40493201	SP	LCE610	LCE Oversee Execution of Test and Commissioning Plan		38	22-Sep-22 08 AM	16-Nov-22 04 PM
40493201	SP	LCE700	LCE Ensure Test Group Prepare Electrical Field Mark Ups		38	04-Nov-22 08 AM	30-Dec-22 04 PM
PROJECT CLOSE OUT	SP				40	26-Feb-21 08 AM A	27-Feb-24 04 PM
40493201	SP	DSSE-1100	Complete TD-707 Turnover Document / Forward to SOC & Mailing List		5	29-Dec-23 08 AM	05-Jan-24 04 PM
Civil As-Builts	SP				22	26-Feb-21 08 AM A	07-Feb-24 04 PM
40493201	SP	DSSE-1120	N/R(per CK 2/26/21) Complete TD-176 CIVIL Design Prep & Issue As-Built Dwgs		0	26-Feb-21 08 AM A	26-Feb-21 04 PM A
40493201	SP	DSSE-860	Eversource Engineering Verifies Civil Mark Up As-Built Drawing Package		10	08-Jan-24 08 AM	22-Jan-24 04 PM
40493201	SP	DSSE-970	Eversource Engineering Updates Civil As-Built Drawing Package		3	23-Jan-24 08 AM	25-Jan-24 04 PM

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Project ID	Project Lead	Activity ID	Activity Name	Activity Scheduler	Remaining Duration	Start	Finish
40493201	SP	DSSE-870	ES Create Transmittal, Approve Final As-Built Package, and EDC Files and Issue Drawings to Field	[redacted]	8	26-Jan-24 08 AM	06-Feb-24 04 PM
40493201	SP	DSSE-880	PM to Document Civil As-Built Drawings Complete		1	07-Feb-24 08 AM	07-Feb-24 04 PM
Electrical As-Builts	SP				25	26-Feb-21 08 AM A	14-Feb-24 04 PM
40493201	SP	DSSE-1110	N/R(per CK 2/26/21) Complete TD-176 ELECTRICAL Design Prep & Issue As-Built Dwgs		0	26-Feb-21 08 AM A	26-Feb-21 04 PM A
40493201	SP	DSSE-1130	Eversource Engineering Obtains Hard Copy As-Builts from the Field		3	10-Jan-24 08 AM	12-Jan-24 04 PM
40493201	SP	DSSE-820	Eversource Engineering Verifies Quality of Electrical Mark Up As-Built Drawing Package		10	16-Jan-24 08 AM	29-Jan-24 04 PM
40493201	SP	DSSE-940	Eversource Engineering Updates Electrical As-Built Drawing Package		3	30-Jan-24 08 AM	01-Feb-24 04 PM
40493201	SP	DSSE-830	ES Create Transmittal, Approve Final As-Built Package, and EDC Files and Issue Drawings to Field		8	02-Feb-24 08 AM	13-Feb-24 04 PM
40493201	SP	DSSE-840	PM to Document Electrical As-Built Drawings Complete		1	14-Feb-24 08 AM	14-Feb-24 04 PM
P&C As-Builts	SP				5	10-Jan-24 08 AM	17-Jan-24 04 PM
40493201	SP	DSSE-950	P&C Submits SDS As-Builts		5	10-Jan-24 08 AM	17-Jan-24 04 PM
40493201	SP	DSSE-960	P&C Submits Relay Setting As-Builts		5	10-Jan-24 08 AM	17-Jan-24 04 PM
Test Closout	SP				7	29-Dec-23 08 AM	09-Jan-24 04 PM
40493201	SP	LCE800	LCE Ensures Marked up Prints Ready for Pick-up		5	29-Dec-23 08 AM	05-Jan-24 04 PM
40493201	SP	LCE900	LCE Review Test Data and Issue Commissioning Report		2	08-Jan-24 08 AM	09-Jan-24 04 PM
SITE RESTORATION CLOSEOUT	SP				10	29-Dec-23 08 AM	12-Jan-24 04 PM
40493201	SP	A1110	Restore / Remediate Site		10	29-Dec-23 08 AM	12-Jan-24 04 PM
MATERIAL, EQUIPMENT, COST, AND ASSET MANA(	SP				40	29-Dec-23 08 AM	27-Feb-24 04 PM
40493201	SP	A1020	Cost Analyst Prepares FINAL Units of Property		30	29-Dec-23 08 AM	12-Feb-24 04 PM
40493201	SP	A1030	Asset Management Complete Asset Update(s) in CASCADE		30	16-Jan-24 08 AM	27-Feb-24 04 PM
PROJECT MANAGEMENT CLOSEOUT	SP				40	29-Dec-23 08 AM	27-Feb-24 04 PM
40493201	SP	A1040	PM Prepares Closeout Documentation, Lessons Learned Meeting, etc.		30	29-Dec-23 08 AM	12-Feb-24 04 PM
40493201	SP	A1270	Prepare TD-707 Document		30	29-Dec-23 08 AM	12-Feb-24 04 PM
40493201	SP	FINISH	Project / Work Order Complete (FINAL SCHEDULE TASK/MILESTONE)		0		27-Feb-24 04 PM
OVERHEAD / INDIRECTS	SP				11	20-Sep-21 08 AM	04-Oct-21 04 PM
PROJECT MANAGEMENT	SP				11	20-Sep-21 08 AM	04-Oct-21 04 PM
40493201	SP	A1170	Prepare CAN (Construction Authorization Notice) AT0, BT0, CT0		11	20-Sep-21 08 AM	04-Oct-21 04 PM
40493201	SP	1110	Prepare CAN (Construction Authorization Notice) DT0		11	20-Sep-21 08 AM	04-Oct-21 04 PM

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