EVERSOURCE
Project Authorization Form

Operations Project Authorization Form

Approved at March 21, 2019 EPAC
Link to Meeting Minutes

Date Prepared: 02/13/2019	**Project Title:** [redacted]
Company/ies: Eversource CT	**Project ID Number: CS00326**
Organization: Asset Management	**Class(es) of Plant: Distribution Substations**
Project Initiator: [redacted]	**Project Category: Stations – Breakers**
Project Manager: [redacted]	**Project Type: Specific**
Project Sponsor: [redacted]	**Project Purpose: Replacement of failed equipment**
Estimated in service date: 07/13/2018	**If Transmission Project: PTF? N/A**
Eng. /Constr. Resources Budgeted? Y	**Capital Investment Part of Original Operating Plan? Y**
Authorization Type: Full Funding	**O&M Expenses Part of the Original Operating Plan? N**
Total Request: $256,000	

Financial Requirements:

Project Authorization

ERM: _____

FP&A: _____

Executive Summary

This project is seeking full funding of $256,000 for the [redacted] This PAF seeks funding for the replacement costs. The initial annual work order DSQ82022 was issued on 6/15/2018 in the amount of $78,500 to complete this project.

Project Costs Summary
Note: Dollar values are in thousands

	Prior Authorized	2018	Totals
Capital Additions - Direct	$64.4	$126	$126
Less Customer Contribution	$0	$0	$0
Removals net of Salvage 24%	$14.1	$30	$30
Total - Direct Spending	$78.5	$156	$156
Capital Additions - Indirect	$0	$100	$100
Subtotal Request	$0	$256	$256
AFUDC	$0	$0	$0
Total Capital Request	$0	$256	$256
O&M	$0	$0	$0
Total Request	$78.5	$256	$256

Financial Evaluation
Note: Dollar values are in thousands

Direct Capital Costs	2018	Total
Straight Time Labor	$70	$70
Overtime Labor	$50	$50
Outside Services	$0	$0
Materials	$26	$26
Other, including contingency amounts (describe)	$10	$10
Total Direct Costs	$156	$156

Indirect Capital Costs	2018	Total
Indirects/Overheads (including benefits)	$100	$100
Capitalized interest or AFUDC, if any	$0	$0
Total Indirect Costs	$100	$100

Total Capital Costs	$256	$256
Less Total Customer Contribution	$0	$0
Total Capital Project Costs	**$256**	**$256**
Total O&M Project Costs	$0	$0

Note: Explain unique payment provisions, if applicable. Other charges are for misc. others such as meals, mileage, rental equipment.

Future Financial Impacts:

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

Future Costs	Year 20__	Year 20__	Year20__	Year 20__+	Total Future Project Costs
Capital	$ -	$ -	$ -	$ -	$ -
O&M	-	-	-	-	-
Other	-	-	-	-	-
TOTAL	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

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

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

If this is other than a Reliability Project, please complete the section below;

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

Future Benefits	Year 20__	Year 20__	Year20__	Year 20__+	Total Future Project Benefits
Capital	$ -	$ -	$ -	$ -	$ -
O&M	-	-	-	-	-
Other	-	-	-	-	-
TOTAL	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

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

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

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

Is there an ARO associated with this project? No. If yes, please provide details:

Are there other environmental cleanup costs associated with this project? No. If yes, please provide details:

Technical Justification:

Project Need Statement

This project addresses the [redacted]

This project has been completed and placed in service.

Project Objectives

[redacted]

Project Scope

The scope of this specific PAF was to [redacted], the following actions were taken:

[redacted]

Background / Justification

[redacted]

Business Process and / or Technical Improvements:

This was an emergent project with restoring the system to a normal configuration as the priority.

Alternatives Considered with Cost Estimates

This was an emergent replacement and alternatives were not considered.

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Breaker replacement completed and in service	7-13-2018

Regulatory Approvals

N/A

Risks and Risk Mitigation Plans

All risks were evaluated at the time and mitigated by the operations group.

References

Distribution Report # **D0103-2018** Investigation # **22517**

Attachments (One-Line Diagrams, Images, etc.)
TD-707 Turnover of Substation Electrical Equipment Memo
Figure 1 – Nomenclature diagram showing breaker location in circuit
Figure 2 – One-line protection scheme for Branford 11J
Figure 3 – Newly Installed Siemens SDV7 vacuum breaker

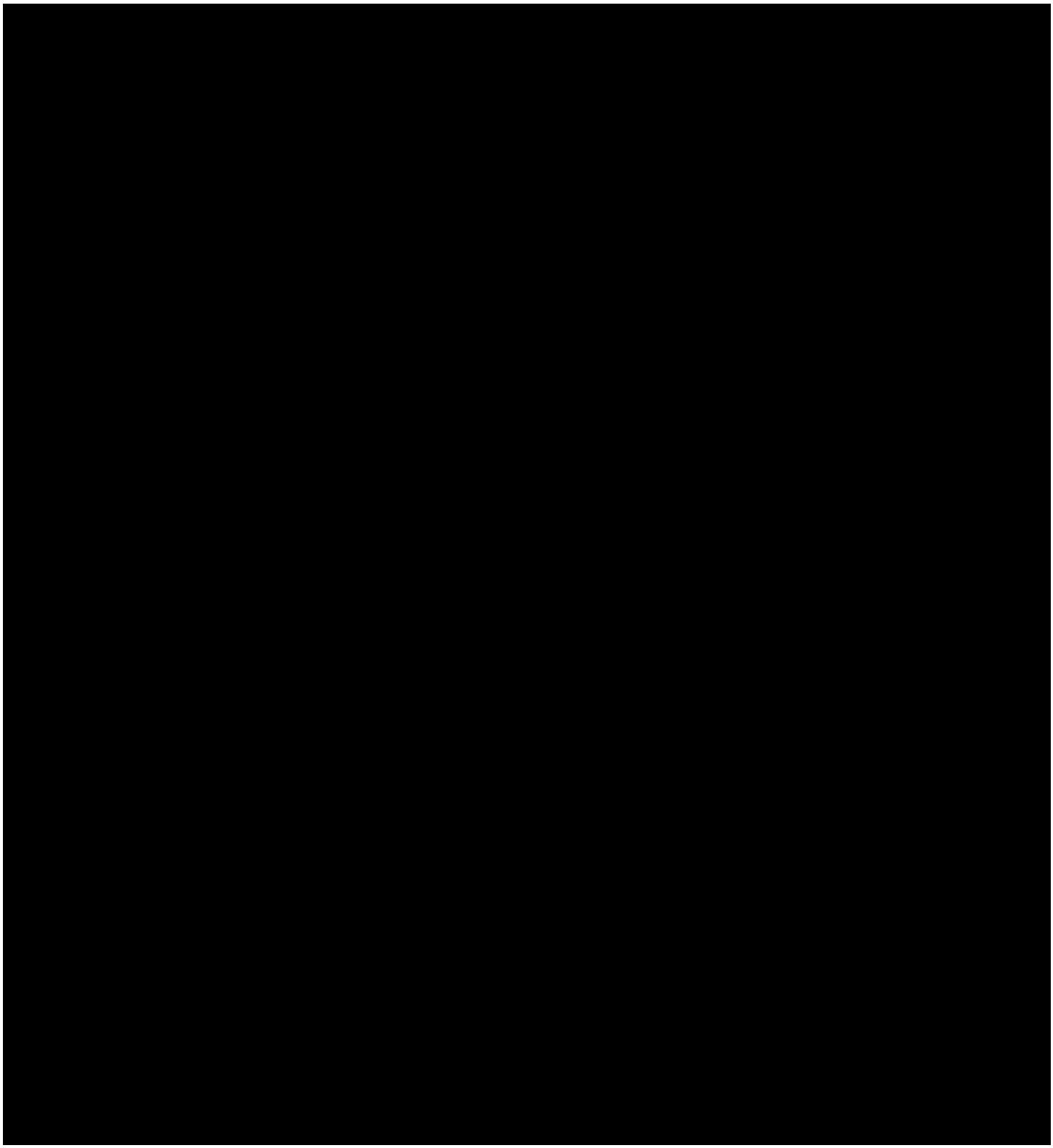

Figure 1- Nomenclature diagram showing breaker location in circuit

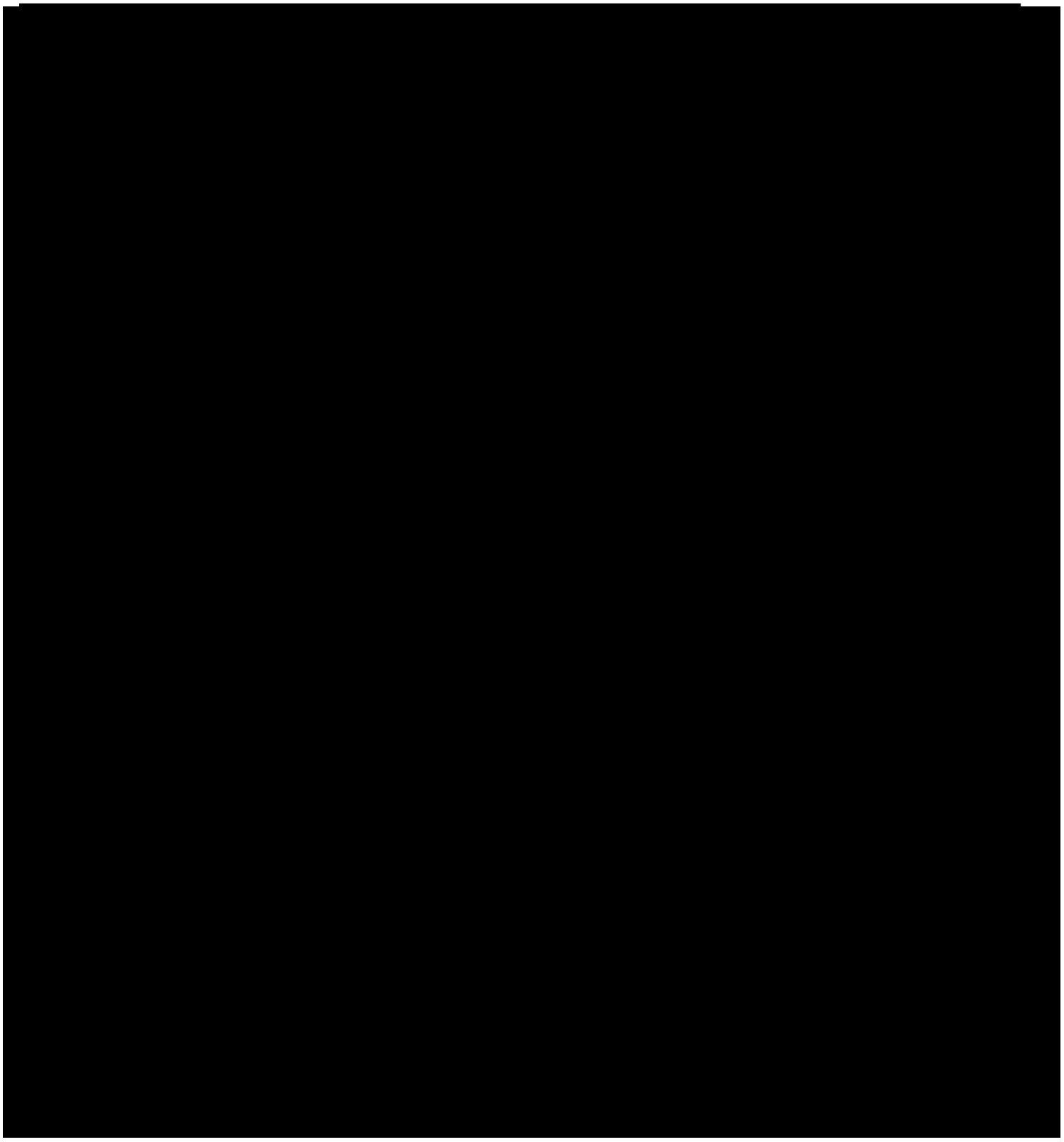

Figure 2 – One-line protection scheme for [redacted]



Figure 3- Newly Installed Siemens SDV7 vacuum breaker

Project Checklist – Transmission and Substation

Checklist for Studies and Processes of a Transmission & Substation Capital Project						
Project Name: [redacted]					**PAF No: CS00326**	
Facility Type: ☐ BPS	☐ BES	☐ PTF	☒ non-PTF	☐ CIP	☒ Distribution	
PLANNING						
Is a NX-9 required?					No	
Is an ISO-NE PAC presentation required?					No	
Is a PPA required?					No	
Is a TCA Application Required?					No	
PLANNING/PROTECTION & CONTROLS						
Are RAS/SPS/UVLs affected?					No	
OPERATIONS						
Outage Required?	☒ Primary Equipment (Power Transfer)		☒ Secondary Equipment (P&C only)		☐ Outage Not Required	
Do SCLL Conditions Exist?					No	
Has an outage schedule been approved?					Yes	
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?					No	
Is a Transient Over Voltage (TOV) analysis required?					No	
P&C ENGINEERING						
OP-22 - Are PMUs and DDR required?					No	
If BPS, is an NPCC Directory #4 presentation required?					No	

Checklist for Studies and Processes of a Transmission & Substation Capital Project	
Project Name: [redacted]	**PAF No: CS00326**
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?	No
PERMITTING	
Is there any permitting required?	No
SITING & CONSTRUCTION SERVICES (OUTREACH)	
What is the level of outreach expected?	None
INITIATOR	
Has a field constructability review been completed?	Yes
INVESTMENT RECOVERY	
Does the project require development of an Investment Recovery plan?	No
COST ESTIMATING	
How was the cost estimate prepared?	Other (specify below)
Who prepared the estimate?	Actuals
Was the estimate reviewed by Eversource Estimating?	No

Actual Cost Backup Details

Cost Breakdown for WO# DSQ82022

02/13/2019

				FERC Account #			
Cost_Type	Year	CE_Type	DESCRIPTION	106010	107010	108030	Total
Direct	2018	Labor	Labor Overtime Non-Exempt		33,169.67	10,189.42	43,359.09
Direct	2018	Labor	Labor Premium and Special Non-Exempt		5,953.10	1,828.72	7,781.82
Direct	2018	Labor	Labor Straight Time Exempt		5,890.98	1,809.66	7,700.64
Direct	2018	Labor	Labor Straight Time Non-Exempt		47,237.10	14,510.82	61,747.92
		Labor Total		-	92,250.85	28,338.62	120,589.47
Direct	2018	Materials	Materials- Purchased		1,557.24		1,557.24
Direct	2018	Materials	Materials- Stores		24,193.94		24,193.94
		Materials Total		-	25,751.18	-	25,751.18
Direct	2018	Misc Other	Employee Expense Other		44.78	13.75	58.53
Direct	2018	Misc Other	Meals		1,938.88	595.61	2,534.49
Direct	2018	Misc Other	Mileage		3,444.45	1,058.05	4,502.50
Direct	2018	Misc Other	Miscellaneous Accounting Adjustments	203,956.51	(203,956.51)		-
Direct	2018	Misc Other	Rent Expense-External		2,690.94		2,690.94
		Misc Other Total		203,956.51	(195,837.46)	1,667.41	9,786.46
	2018 Total			203,956.51	(77,835.43)	30,006.03	156,127.11
Direct Total				203,956.51	(77,835.43)	30,006.03	156,127.11
Indirect	2018	Indirect	Admin and Eng OH- Acct Use Only		950.36	240.43	1,190.79
Indirect	2018	Indirect	Gen Ser Co Benefit Loader- Acct Use Only		3,986.58	1,224.65	5,211.23
Indirect	2018	Indirect	Non Productive Time Loader- Acct Use Only		14,263.59	4,381.65	18,645.24
Indirect	2018	Indirect	Payroll Benefit Loader- Acct Use Only		40,598.44	12,471.46	53,069.90
Indirect	2018	Indirect	Service Company Allocations- Acct Use Only				-
Indirect	2018	Indirect	Stores Loader- Acct Use Only		5,098.49		5,098.49
Indirect	2018	Indirect	Vehicle Costs Clearing- Acct Use Only		12,937.97	3,974.43	16,912.40
		Indirect Total		-	77,835.43	22,292.62	100,128.05
	2018 Total			-	77,835.43	22,292.62	100,128.05
Indirect Total				-	77,835.43	22,292.62	100,128.05
Grand Total				203,956.51	-	52,298.65	256,255.16

Attachment 2
TD-707 Turnover of Substation Electrical Equipment Memo

To: Manager – CONVEX Operations
Manager – CL&P System Operations
Manager – CL&P Maintenance (East, Central or West as applicable)
Manager – Transmission Substation Const. & Mntc. – CL&P
Manager – Distribution Substation Engineering and Design
Supervisor – CL&P Regional Test (East, Central or West as applicable)
Supervisor – Distribution Substation Construction
Supervisor – T&D Maintenance (DSSE)
NUSCo Project Engineer
Administrator – Distribution Maintenance
Administrator – Transmission Maintenance

From: [redacted]

Title: Distribution Substation Construction Supervisor

Date Sent: 07/13/18

Signed: [redacted]

Substation: [redacted]

Project Number: DSN82022

Project Title: [redacted]

Project Manager: [redacted]

Equipment Included in this Turnover: [redacted]

In-Service Date: 7/13/18

Project Checklist				**Comments**
Testing Complete?	Yes☒	No☐	N/A☐	
CONVEX OI Issued?	Yes☐	No☐	N/A☒	
SOC OI Issued?	Yes☐	No☐	N/A☒	
Equipment Nomenclated and verified w/Nomenclature Diagram/	Yes☒	No☐	N/A☐	
Orientation Meeting Held?	Yes☐	No☐	N/A☒	
Training Complete?	Yes☐	No☐	N/A☒	
Vendor Manuals Distributed	Yes☒	No☐	N/A☐	
System Change Notice Initiated?	Yes☐	No☐	N/A☒	
Cascade Update Initiated?	Yes☒	No☐	N/A☐	
As-Built Submitted to Eng?	Yes☒	No☐	N/A☐	

Note – If any exceptions/discrepancies noted following a review by local supervision refer to section 2.1.1.d for resolution