Public Service Company of New Hampshire
d/b/a Eversource Energy
DE 22-030
Attachment DOE 1-4
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Operations Project Authorization Form

Date Prepared: 12/18/2020	Project Title: Purchase Transformers and Regulators					
Company/ies: Eversource NH	Project ID Number: DT7P					
Organization: NH Operations	Class(es) of Plant: Distribution					
Project Initiator: Skyla Normand	Project Category: Basic Business – Pre-Cap Line Transformers/Regulators					
Project Manager: Richard Roy	Project Type: Annual					
Project Sponsor: Paul Rotty	Project Purpose: Purchase Line Transformers/Regulators					
Estimated in service date: 12/31/2021	If Transmission Project: PTF? NA					
Eng. /Constr. Resources Budgeted? Yes	Capital Investment Part of Original Operating Plan? Yes					
Authorization Type: Full Funding	Facility Type (check all that apply):					
Total Request (gross): \$11,566,000	□ PTF □ non-PTF ⊠ Distribution					

Financial Requirements:

FP&A:	

Executive Summary

An approval of \$11,566,000 is requested for the 2021 Purchase Transformer and Regulators annual program. This annual program covers the purchase, initial installation and retirement of overhead, duct (DG) and direct buried (DB) distribution transformers and voltage regulators. Distribution line transformers up to 2,500 kVa are a pre-capitalized units of property.



Project Costs Summary Note: Dollar values are in thousands

Line item Category	Prior Authorized	Actuals to Date	2020 to Go	2021	2022	2023	2024	2025	Total
1. ROW / Easements / Land Acquisition	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2. Environmental Approvals / Permits	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3. Outreach	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4. Siting Approvals / Permits	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5. Engineering / Design	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6. Materials (Eversource purchased)	\$0	\$0	\$0	\$10,793	\$0	\$0	\$0	\$0	\$10,793
7. Construction (incl matl's by contractors)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8. Testing / Commissioning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9. Project Mgmt Team	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10. Removals	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
11. Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12. Risks	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SUBTOTAL DIRECTS W/ RISKS	\$0	\$0	\$0	\$10,793	\$0	\$0	\$0	\$0	\$10,793
13. Indirects/Overhead	\$0	\$0	\$0	\$773	\$0	\$0	\$0	\$0	\$773
14. AFUDC	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT TOTAL – BASELINE BUDGET	\$0	\$0	\$0	\$11,566	\$0	\$0	\$0	\$0	\$11,566
15. Contingency	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL CAPITAL REQUEST	\$0	\$0	\$0	\$11,566	\$0	\$0	\$0	\$0	\$11,566
16. Reimbursables/Customer Contribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT TOTAL (LESS REIMBURSABLES)	\$0	\$0	\$0	\$11,566	\$0	\$0	\$0	\$0	\$11,566
O&M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL REQUEST	\$0	\$0	\$0	\$11,566	\$0	\$0	\$0	\$0	\$11,566

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

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Breakout Costs

Note: Dollar values are in thousands

Line item Category	Prior Authorized	Actuals to Date	2020 to Go	2021	2022	2023	2024	2025	Total
ST Labor	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OT Labor	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Outside Services Labor	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Materials*	\$0	\$0	\$0	\$10,793	\$0	\$0	\$0	\$0	\$10,793
Removals	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Indirects	\$0	\$0	\$0	\$773	\$0	\$0	\$0	\$0	\$773
AFUDC	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL CAPITAL REQUEST - W/O REIMBURSABLES	\$0	\$0	\$0	\$11,566	\$0	\$0	\$0	\$0	\$11,566

^{*}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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Future Financial Impacts:

Provide below the estimated future costs that will result from the project:

Note: Dollar values are in thousands

										Total Future
Future Costs		Yea	r 20	Yea	r 20	Yea	r 20	Yea	r 20+	Project Costs
Capital		\$	-	\$	-	\$	-	\$	-	\$ -
O&M			-		-		-		-	-
Other			-		-		-		-	-
Т	OTAL	\$	-	\$	-	\$	-	\$	-	\$ -

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

What functional area(s) will these future costs be funded in?	
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

									Tot	al Future
Future Benefits	Yea	r 20	Yea	r 20	Yea	r 20 _	Yea	r 20+	Proje	ct Benefits
Capital	\$	-	\$	-	\$	-	\$	-	\$	-
O&M		-		-		-		-		-
Other		-		-		-		-		-
TOT	AL \$	-	\$	-	\$	-	\$	-	\$	-

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

What functional area(s) will these benefits be reflected in?	
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

Are there other environmental cleanup costs associated with this project? No.

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Technical Justification

Project Need Statement

Capital funding is needed to purchase transformers and regulators throughout the year.

Project Objectives

This annual program covers the purchase, initial installation and retirement of overhead, conventional underground, and direct buried (URD) distribution line transformers and voltage regulators. Distribution transformers up to and including 2,500 kVa are a pre-capitalized units of property.

Project Scope

Work under this annual will be performed at various locations around the state of NH within the Eversource service territory. Approval of the Purchase Transformers and Regulators (DT7P) annual program covers authorization of all overhead, conventional underground, and direct buried (URD) distribution line transformers and voltage regulators

Background / Justification

Capital funding is needed to address planned and emergent line transformer purchases that are needed each year to support distribution line work due to equipment failures and infrastructure upgrades.

Business Process and / or Technical Improvements:

Not applicable

Alternatives Considered with Cost Estimates

Not applicable.

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Annual program completion	12/31/2021

Regulatory Approvals

The construction budget is submitted to the New Hampshire Public Utilities Commission in accordance with Rule Puc 308.07 using Form E-22. Also on a quarterly basis projects not previously reported in the annual construction budget that have exceeded \$100,000 are reported to the New Hampshire Public Utilities Commission.

Risks and Risk Mitigation Plans

On a monthly basis, capital project spending is reviewed and any risks are identified and managed during that meeting.

References

Not applicable.

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

Not applicable.

Cost Estimate Backup Details

Annual funding level was estimated using historical spending.

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Appendix 4 Supplement Request Form

Supplement Request Form

Project Title: Purchase Transformers and Regulators	Project Number: DT7P
Date Prepared: 01/13/2022	Company: NH Electric Distribution 06
Organization: NH Operations	Class(es) of Plant: Distribution
Project Initiator: Skyla Normand	Project Category: Annual - Lines
Project Manager: Richard Roy	Project Type: Annual
Project Sponsor: Paul Rotty	Project Purpose: Purchase, initial installation, and retirement of overhead, duct (DG) and direct buried (DB) distribution transformers and voltage regulators.
Estimated in service date: 12/31/2021	Capital Investment part of original Operating Plan: Yes
Current Authorization Amount: \$ 11,566,000	O&M Expenses part of request: No
Supplement Request: \$ 3,058,958	Other:
Total Request: \$ 14,624,958	

Supplement Justification

Direct spend for calendar year 2021 of \$13,339,696 has exceeded the authorized amount of \$10,793,000 by \$2,546,696 (23.6%). The threshold for supplement funding requests for projects greater than \$250,000 is a 10% overrun on authorized direct cost.

The reason for the additional costs in 2021 was the increased Ceost of Ffirst linstallation (CFI).

CFI is a calculated cost based on internal labor and contractor rates. The CFI calculation was updated in 2021 for the first time in several years and the increases in labor and contractor costs (as reflected in the \$2288 increase in outside services and the \$1457 increase in internal labor) over the years wereas significant. Costs increases in the table below include \$2,288k increase in outside services and \$1,457k increase in internal labor. The increased costs have resulted as reflected in the need for a supplement.

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Appendix 4 Supplement Request Form

Supplement Cost Summary

Note: Dollar values are in Thousands

Capital Costs	Prior Authorized	Supplemental Request	Total
Direct Capital Costs			
Internal Labor	\$0	\$1,457	\$1,457
Outside Services	\$0	\$2,288	\$2,288
Materials	\$10,793	(\$1,198)	\$9,595
Removals	\$0	\$0	\$0
Risk and Contingency	\$0	\$0	\$0
Other	\$0	\$0	\$0
<u>Subtotal</u>	\$10,793	\$2,547	\$13,340
Indirect Capital Costs			
Indirect/Overheads (including benefits)	\$773	\$512	\$1,285
Capitalized interest or AFUDC, if any	\$0	\$0	\$0
<u>Subtotal</u>	\$773	\$512	\$1,285
Total Customer Contribution	\$0	\$0	\$0
Total Capital Project Costs	\$11,566	\$3,059	\$14,625

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Operations Project Authorization Form

Date Prepared: 12/18/2020	Project Title: Purchase Transformers and Regulators					
Company/ies: Eversource NH	Project ID Number: DT7P					
Organization: NH Operations	Class(es) of Plant: Distribution					
Project Initiator: Skyla Normand	Project Category: Basic Business – Pre-Cap Line Transformers/Regulators					
Project Manager: Richard Roy	Project Type: Annual					
Project Sponsor: Paul Rotty	Project Purpose: Purchase Line Transformers/Regulators					
Estimated in service date: 12/31/2021	If Transmission Project: PTF? NA					
Eng. /Constr. Resources Budgeted? Yes	Capital Investment Part of Original Operating Plan? Yes					
Authorization Type: Full Funding	Facility Type (check all that apply):					
Total Request (gross): \$11,566,000	□ PTF □ non-PTF ☒ Distribution					

	Financial Requirements:
	Project Authorization
ERM:	
FP&A:	
	Executive Summary

An approval of \$11,566,000 is requested for the 2021 Purchase Transformer and Regulators annual program. This annual program covers the purchase, initial installation and retirement of overhead, duct (DG) and direct buried (DB) distribution transformers and voltage regulators. Distribution line transformers up to 2,500 kVa are a pre-capitalized units of property.



Project Costs Summary Note: Dollar values are in thousands

Line item Category	Prior Authorized	Actuals to Date	2020 to Go	2021	2022	2023	2024	2025	Total
1. ROW / Easements / Land Acquisition	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2. Environmental Approvals / Permits	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3. Outreach	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4. Siting Approvals / Permits	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5. Engineering / Design	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6. Materials (Eversource purchased)	\$0	\$0	\$0	\$10,793	\$0	\$0	\$0	\$0	\$10,793
7. Construction (incl matl's by contractors)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8. Testing / Commissioning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9. Project Mgmt Team	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10. Removals	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
11. Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12. Risks	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SUBTOTAL DIRECTS W/ RISKS	\$0	\$0	\$0	\$10,793	\$0	\$0	\$0	\$0	\$10,793
13. Indirects/Overhead	\$0	\$0	\$0	\$773	\$0	\$0	\$0	\$0	\$773
14. AFUDC	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT TOTAL – BASELINE BUDGET	\$0	\$0	\$0	\$11,566	\$0	\$0	\$0	\$0	\$11,566
15. Contingency	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL CAPITAL REQUEST	\$0	\$0	\$0	\$11,566	\$0	\$0	\$0	\$0	\$11,566
16. Reimbursables/Customer Contribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT TOTAL (LESS REIMBURSABLES)	\$0	\$0	\$0	\$11,566	\$0	\$0	\$0	\$0	\$11,566
O&M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL REQUEST	\$0	\$0	\$0	\$11,566	\$0	\$0	\$0	\$0	\$11,566

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



Breakout Costs

Note: Dollar values are in thousands

Line item Category	Prior Authorized	Actuals to Date	2020 to Go	2021	2022	2023	2024	2025	Total
ST Labor	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OT Labor	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Outside Services Labor	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Materials*	\$0	\$0	\$0	\$10,793	\$0	\$0	\$0	\$0	\$10,793
Removals	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Indirects	\$0	\$0	\$0	\$773	\$0	\$0	\$0	\$0	\$773
AFUDC	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL CAPITAL REQUEST - W/O REIMBURSABLES	\$0	\$0	\$0	\$11,566	\$0	\$0	\$0	\$0	\$11,566

^{*}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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APS 1 - Project Authorization Policy

Appendix 5
Subsidiary Board Approval Package Template

Future Financial Impacts:

Provide below the estimated future costs that will result from the project:

Note: Dollar values are in thousands

									Total Future
Future Costs	Ye	ar 20	Yea	ar 20	Yea	r 20	Yea	r 20+	Project Costs
Capital	\$	-	\$	-	\$	-	\$	-	\$ -
O&M		-		-		-		-	-
Other		-		-		-		-	-
Т	OTAL \$	-	\$	-	\$	-	\$	-	\$ -

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

What functional area(s) will these future costs be funded in?

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

									To	tal Future
Future Benefits	Yea	r 20	Yea	r 20	Yea	ır 20	Yea	r 20+	Proje	ect Benefits
Capital	\$	-	\$	-	\$	-	\$	-	\$	-
O&M		-		-		-		-		-
Other		-		-		-		-		-
TOT	AL \$	-	\$	-	\$	-	\$	-	\$	-

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

What functional area(s) will these benefits be reflected in?

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

Are there other environmental cleanup costs associated with this project? No.

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d/b/a Eversource Energy **EVERS**URCE

APS 1 - Project Authorization Policy

Appendix 5

Subsidiary Board Approval Package Template

Public Service Company of New Hampshire

Technical Justification

Project Need Statement

Capital funding is needed to purchase transformers and regulators throughout the year.

Project Objectives

This annual program covers the purchase, initial installation and retirement of overhead, conventional underground, and direct buried (URD) distribution line transformers and voltage regulators. Distribution transformers up to and including 2,500 kVa are a pre-capitalized units of property.

Project Scope

Work under this annual will be performed at various locations around the state of NH within the Eversource service territory. Approval of the Purchase Transformers and Regulators (DT7P) annual program covers authorization of all overhead, conventional underground, and direct buried (URD) distribution line transformers and voltage regulators

Background / Justification

Capital funding is needed to address planned and emergent line transformer purchases that are needed each year to support distribution line work due to equipment failures and infrastructure upgrades.

Business Process and / or Technical Improvements:

Not applicable

Alternatives Considered with Cost Estimates

Not applicable.

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Annual program completion	12/31/2021

Regulatory Approvals

The construction budget is submitted to the New Hampshire Public Utilities Commission in accordance with Rule Puc 308.07 using Form E-22. Also on a quarterly basis projects not previously reported in the annual construction budget that have exceeded \$100,000 are reported to the New Hampshire Public Utilities Commission.

Risks and Risk Mitigation Plans

On a monthly basis, capital project spending is reviewed and any risks are identified and managed during that meeting.

References

Not applicable.

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

Not applicable.

Cost Estimate Backup Details

Annual funding level was estimated using historical spending.

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Rev. 6

Public Service Company of New Hampshire
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Operations Project Authorization Form

Date Prepared: 12/18/2020	Project Title: Engineering Tools & Equipment				
Company/ies: Eversource NH	Project ID Number: GE9R				
Organization: NH Operations	Class(es) of Plant: Distribution				
Project Initiator: Thelma Brown	Project Category: Basic Business – Tools & Equipment				
Project Manager: Russel Johnson	Project Type: Specific Annual Program				
Project Sponsor: Russel Johnson	Project Purpose: Purchase Tools and Equipment				
Estimated in service date: 12/31/2021	If Transmission Project: PTF? NA				
Eng. /Constr. Resources Budgeted? Yes	Capital Investment Part of Original Operating Plan? Yes				
Authorization Type: Full Funding	Facility Type (check all that apply):				
Total Request: \$75,000	□ PTF □ non-PTF ☒ Distribution				

Financial Requirements:

Executive Summary

An approval of \$75,000 is requested for the 2021 Tools and Equipment for the NH Engineering organization. Specific tool purchases are not identified during the budget cycle but are a result of requests and needs that arise throughout the year. This project is funded each year.



Project Costs Summary Note: Dollar values are in thousands

Line item Category	Prior	Actuals	2021	2022	2023	2024	2025	Total
Line item category	Authorized	to Date	2021	2022	2023	2024	2023	TOtal
1. ROW / Easements / Land Acquisition	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2. Environmental Approvals / Permits	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3. Outreach	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4. Siting Approvals / Permits	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5. Engineering / Design	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6. Materials (Eversource purchased)	\$0	\$0	\$75	\$0	\$0	\$0	\$0	\$75
7. Construction (incl matl's by contractors)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8. Testing / Commissioning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9. Project Mgmt Team	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10. Removals	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
11. Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12. Risks	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SUBTOTAL DIRECTS W/ RISKS	\$0	\$0	\$75	\$0	\$0	\$0	\$0	\$75
13. Indirects/Overhead	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
14. AFUDC	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT TOTAL – BASELINE BUDGET	\$0	\$0	\$75	\$0	\$0	\$0	\$0	\$75
15. Contingency	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL CAPITAL REQUEST	\$0	\$0	\$75	\$0	\$0	\$0	\$0	\$75
16. Reimbursables/Customer Contribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT TOTAL (LESS REIMBURSABLES)	\$0	\$0	\$75	\$0	\$0	\$0	\$0	\$75
O&M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL REQUEST	\$0	\$0	\$75	\$0	\$0	\$0	\$0	\$75

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



Breakout Costs

Note: Dollar values are in thousands

Line item Category	Prior	Actuals	Actuals 2021		2023	2024	2025	Total	
Line item category	Authorized	to Date	2021	2022	2023	2024	2023	Total	
ST Labor	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
OT Labor	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Outside Services Labor	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Materials*	\$0	\$0	\$75	\$0	\$0	\$0	\$0	\$75	
Removals	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Indirects	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
AFUDC	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
TOTAL CAPITAL REQUEST - W/O	\$0	\$0	\$75	\$0	\$0	\$0	\$0	\$75	
REIMBURSABLES	\$ 0	φU	\$15	φU	φU	φU	φU	\$15	

^{*}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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Future Financial Impacts:

Provide below the estimated future costs that will result from the project:

Note: Dollar values are in thousands

											Total Future
Future Costs	•	Yea	r 20	Yea	ar 20	Yea	r 20	Yea	r 20+	F	Project Costs
Capital		\$	-	\$	-	\$	-	\$	-	\$	-
O&M			-		-		-		-		-
Other			-		-		-		-		-
Т	OTAL	\$	-	\$	-	\$	-	\$	-	\$	-

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

What functional area(s) will these future costs be funded in?	
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

									Tot	al Future
Future Benefits	Yea	r 20	Yea	r 20	Yea	r 20	Yea	r 20+	Proje	ct Benefits
Capital	\$	-	\$	-	\$	-	\$	-	\$	-
O&M		-		-		-		-		-
Other		-		-		-		-		-
TOT	AL \$	-	\$	-	\$	-	\$	-	\$	-

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

What functional area(s) will these benefits be reflected in?	
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

Are there other environmental cleanup costs associated with this project? No.

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Technical Justification

Project Need Statement

Capital funding is needed to address capital tool and equipment purchases for Engineering throughout the year.

Project Objectives

The tools and equipment project is used to respond to requests for tools and equipment purchases identified throughout the year.

Project Scope

The engineering tools and equipment project covers the costs associated with purchasing tools and equipment used by the Engineering organization.

Background / Justification

Capital funding is needed to address planned and emergent tool and equipment needs that develop each year.

Business Process and / or Technical Improvements:

Not applicable

Alternatives Considered with Cost Estimates

Not applicable.

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Annual program completion	12/31/2021

Regulatory Approvals

The construction budget is submitted to the New Hampshire Public Utilities Commission in accordance with Rule Puc 308.07 using Form E-22.

Risks and Risk Mitigation Plans

On a monthly basis, capital project spending is reviewed and any risks are identified and managed during that meeting.

References

Not applicable.

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

Not applicable.

Cost Estimate Backup Details

Project funding level was estimated using historical spending.

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Appendix 4
Supplement Request Form

Supplement Request Form

Project Title: 2021 NH Distribution Engineering Tools & Equipment	Project Number: GE9R
Date Prepared: 04/20/2022	Company: NH Electric Distribution 06
Organization: NH Electric System Operations	Class(es) of Plant: Distribution
Project Initiator: Jim Devereaux	Project Category: Annual - Engineering
Project Manager:	Project Type: Annual
Project Sponsor:	Project Purpose: Purchase Capital Tools & Equipment
Estimated in service date: 12/31/2021	Capital Investment part of original Operating Plan: Yes
Current Authorization Amount: \$ 75,000	O&M Expenses part of request: No
Supplement Request: \$ 67,000	Other:
Total Request: \$ 142,000	

Supplement Justification

The spend for calendar year 2021 of \$142,000 has exceeded the authorized amount of \$75,000 by \$67,000 (90%). The threshold for supplemental funding requests for projects less than \$250,000 is a \$25,000 overrun on the authorized direct cost.

Justification for Additional Resources

The additional resources were needed to fund the replacement of defective meters and the purchase of new voltage and power monitoring equipment used by Distribution Engineering to analyze customer voltage or service quality complaints.

Policy Sponsor: EVP and CFO Page 1 of 2 Issued 12/31/21 Rev. 6

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Appendix 4 Supplement Request Form

Supplement Cost Summary

Note: Dollar values are in thousands:

Capital Costs	Prior Authorized	Supplemental Request	Total
Direct Capital Costs			
Internal Labor	\$0	\$0	\$0
Outside Services	\$0	\$0	\$0
Materials	\$75	\$65	\$140
Removals	\$0	\$0	\$0
Risk and Contingency	\$0	\$0	\$0
Other	\$0	\$0	\$0
<u>Subtotal</u>	\$75	\$65	\$140
Indirect Capital Costs			
Indirect/Overheads (including benefits)	\$0	\$2	\$2
Capitalized interest or AFUDC, if any	\$0	\$0	\$0
<u>Subtotal</u>	\$0	\$2	\$2
Total Customer Contribution	\$0	\$0	\$0
Total Capital Project Costs	\$75	\$67	\$142

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Operations Project Authorization Form

Date Prepared: 12/18/2020	Project Title: Engineering Tools & Equipment				
Company/ies: Eversource NH	Project ID Number: GE9R				
Organization: NH Operations	Class(es) of Plant: Distribution				
Project Initiator: Thelma Brown	Project Category: Basic Business – Tools & Equipment				
Project Manager: Russel Johnson	Project Type: Specific Annual Program				
Project Sponsor: Russel Johnson	Project Purpose: Purchase Tools and Equipment				
Estimated in service date: 12/31/2021	If Transmission Project: PTF? NA				
Eng. /Constr. Resources Budgeted? Yes	Capital Investment Part of Original Operating Plan? Yes				
Authorization Type: Full Funding	Facility Type (check all that apply):				
Total Request: \$75,000	□ PTF □ non-PTF ☒ Distribution				

Financial Requirements:

Executive Summary

An approval of \$75,000 is requested for the 2021 Tools and Equipment for the NH Engineering organization. Specific tool purchases are not identified during the budget cycle but are a result of requests and needs that arise throughout the year. This project is funded each year.



Project Costs Summary Note: Dollar values are in thousands

Line item Category	Prior Authorized	Actuals to Date	2021	2022	2023	2024	2025	Total
1. ROW / Easements / Land Acquisition	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2. Environmental Approvals / Permits	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3. Outreach	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4. Siting Approvals / Permits	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5. Engineering / Design	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6. Materials (Eversource purchased)	\$0	\$0	\$75	\$0	\$0	\$0	\$0	\$75
7. Construction (incl matl's by contractors)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8. Testing / Commissioning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9. Project Mgmt Team	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10. Removals	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
11. Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12. Risks	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SUBTOTAL DIRECTS W/ RISKS	\$0	\$0	\$75	\$0	\$0	\$0	\$0	\$75
13. Indirects/Overhead	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
14. AFUDC	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT TOTAL – BASELINE BUDGET	\$0	\$0	\$75	\$0	\$0	\$0	\$0	\$75
15. Contingency	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL CAPITAL REQUEST	\$0	\$0	\$75	\$0	\$0	\$0	\$0	\$75
16. Reimbursables/Customer Contribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT TOTAL (LESS REIMBURSABLES)	\$0	\$0	\$75	\$0	\$0	\$0	\$0	\$75
O&M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL REQUEST	\$0	\$0	\$75	\$0	\$0	\$0	\$0	\$75

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



Breakout Costs

Note: Dollar values are in thousands

Line item Category	Prior Authorized	Actuals to Date	2021	2022	2023	2024	2025	Total
ST Labor	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OT Labor	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Outside Services Labor	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Materials*	\$0	\$0	\$75	\$0	\$0	\$0	\$0	\$75
Removals	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Indirects	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
AFUDC	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL CAPITAL REQUEST - W/O REIMBURSABLES	\$0	\$0	\$75	\$0	\$0	\$0	\$0	\$75

^{*}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:

Note: Dollar values are in thousands

										Total Future
Future Costs	6	Yea	r 20	Yea	ar 20	Yea	ar 20	Yea	r 20+	Project Costs
Capital		\$	-	\$	-	\$	-	\$	-	\$ -
O&M			-		-		-		-	-
Other			-		-		-		-	-
Т	OTAL	\$	-	\$	-	\$	-	\$	-	\$ -

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

What functional area(s) will these future costs be funded in?	
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

									To	tal Future
Future Benefits	Yea	ır 20	Yea	r 20	Yea	r 20	Year	20+	Proj	ect Benefits
Capital	\$	-	\$	-	\$	-	\$	-	\$	-
O&M		-		-		-		-		_
Other		-		-		-		-		-
TO	TAL \$	-	\$	-	\$	-	\$	-	\$	-

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

What functional area(s) will these benefits be reflected in?	
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

Are there other environmental cleanup costs associated with this project? No.

EVERS URCE

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Appendix 5 Subsidiary Board Approval Package Template

Technical Justification

Project Need Statement

Capital funding is needed to address capital tool and equipment purchases for Engineering throughout the year.

Project Objectives

The tools and equipment project is used to respond to requests for tools and equipment purchases identified throughout the year.

Project Scope

The engineering tools and equipment project covers the costs associated with purchasing tools and equipment used by the Engineering organization.

Background / Justification

Capital funding is needed to address planned and emergent tool and equipment needs that develop each year.

Business Process and / or Technical Improvements:

Not applicable

Alternatives Considered with Cost Estimates

Not applicable.

Project Schedule

1 10 10 00 00 00 00 00 00 00 00 00 00 00	
Milestone/Phase Name	Estimated Completion Date
Annual program completion	12/31/2021

Regulatory Approvals

The construction budget is submitted to the New Hampshire Public Utilities Commission in accordance with Rule Puc 308.07 using Form E-22.

Risks and Risk Mitigation Plans

On a monthly basis, capital project spending is reviewed and any risks are identified and managed during that meeting.

References

Not applicable.

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

Not applicable.

Cost Estimate Backup Details

Project funding level was estimated using historical spending.

Policy Sponsor: EVP and CFO Page 1 of 1 Issued 12/31/21



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Operations Project Authorization Form

Approved by EPAC Chairmen external to meeting on 10/20/2020 Link to 10/28/2020 EPAC Meeting Minutes

Date Prepared: 10/20/2020	Project Title: 2021 NH Distribution S/S Capital Tool Annual			
Company: Eversource NH	Project Number: GM9R21			
Organization: Electric System Operations	Class(es) of Plant: General Plant			
Project Initiator: John DiPaola-Tromba	Project Category: Annual - General			
Project Manager: Operations Manager	Project Type: Annual			
Project Sponsor: Joseph Purington	Project Purpose: Purchase of Tools			
Estimated in service date: Various	Capital Investment part of original Oper. Plan: Yes			
Eng./Constr. Resources Budgeted? Yes	O&M Expenses part of original Oper. Plan: N/A			
Authorization Type: Full Funding	Facility Type (check all that apply):			
Total Request: \$100K	□ PTF ⊠ non-PTF ⊠ Distribution			

Financial Requirements:

-	t Authorization
ERM: _	
FP&A:	

Executive Summary

An approval of \$100K is requested for the purchase of tools meeting the capitalization threshold requirement of \$500 per unit cost. Any work order greater than \$100K (Directs) will require a separate Project Authorization Form (PAF) and Delegation of Authority (DOA) approval.

Project Costs Summary

Note: Dollar values are in thousands

	Pr	ior					
	Autho	orized*	2021	2022	2023	Т	otals
Capital Additions - Direct	\$	-	\$ 100	\$ -	\$ -	\$	100
Customer Contribution	\$	-	\$ -	\$ -	\$ -	\$	-
Removals net of Salvage	\$	-	\$ -	\$ -	\$ -	\$	
Total - Direct Spending	\$	-	\$ 100	\$ -	\$ -	\$	100
Capital Additions - Indirect	\$	-	\$ -	\$ -	\$ -	\$	
Subtotal Request	\$	-	\$ 100	\$ -	\$ -	\$	100
AFUDC	\$	-	\$ -	\$ -	\$ -	\$	
Total Request	\$	-	\$ 100	\$ -	\$ -	\$	100

^{*}To be completed if supplemental authorization is required

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Public Service Company of New Hampshire d/b/a Eversource Energy **EVERS**URCE Attachment DOE 1-4 APS 1 - Project Authorization Policy

> Appendix 4 Supplement Request Form

Supplement Request Form

Project Title: 2021 NH Distribution S/S Capital Tool Annual	Project Number: GM9R21
Date Prepared: 04/20/2022	Company: NH Electric Distribution 06
Organization: NH Electric System Operations	Class(es) of Plant: General Plant
Project Initiator: James Devereaux	Project Category: Annual - General
Project Manager: Annette Conticchio	Project Type: Annual
Project Sponsor:	Project Purpose: Purchase Capital Tools & Equipment
Estimated in service date: 12/31/2021	Capital Investment part of original Operating Plan: Yes
Current Authorization Amount: \$ 100,000	O&M Expenses part of request: No
Supplement Request: \$ 525,000	Other:
Total Request: \$ 625,000	

Supplement Justification

Spend for calendar year 2021 of \$625,000 has exceeded the authorized amount of \$100,000 by \$525,000 (525%). The threshold for supplemental funding requests is a 10% overrun in direct cost.

Justification for Additional Resources

There was a significant underrun in 2021 on project DS9RD1 (emergent equipment failures). The savings on that program allowed for the opportunity to shift the capital investment from equipment failures to GM9R21 (tools & equipment). The additional spending on GM9R21 addressed a number of safety concerns and aging tools while netting close to \$0 on the overall budget.

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Appendix 4 Supplement Request Form

Supplement Cost Summary

Note: Dollar values are in thousands:

Capital Costs	Prior Authorized	Supplemental Request	Total
Direct Capital Costs			
Internal Labor	\$0	\$0	\$0
Outside Services	\$0	\$4	\$4
Materials	\$100	\$514	\$614
Removals	\$0	\$0	\$0
Risk and Contingency	\$0	\$0	\$0
Other	\$0	\$0	\$0
<u>Subtotal</u>	\$100	\$518	\$618
Indirect Capital Costs			
Indirect/Overheads (including benefits)	\$0	\$7	\$7
Capitalized interest or AFUDC, if any	\$0	\$0	\$0
<u>Subtotal</u>	\$0	\$7	\$7
Total Customer Contribution	\$0	\$0	\$0
Total Capital Project Costs	\$100	\$525	\$625

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Appendix 5 Subsidiary Board Approval Package Template

Operations Project Authorization Form

Approved by EPAC Chairmen external to meeting on 10/20/2020 Link to 10/28/2020 EPAC Meeting Minutes

Date Prepared: 10/20/2020	Project Title: 2021 NH Distribution S/S Capital Tool Annual			
Company: Eversource NH	Project Number: GM9R21			
Organization: Electric System Operations	Class(es) of Plant: General Plant			
Project Initiator: John DiPaola-Tromba	Project Category: Annual - General			
Project Manager: Operations Manager	Project Type: Annual			
Project Sponsor: Joseph Purington	Project Purpose: Purchase of Tools			
Estimated in service date: Various	Capital Investment part of original Oper. Plan: Yes			
Eng./Constr. Resources Budgeted? Yes	O&M Expenses part of original Oper. Plan: N/A			
Authorization Type: Full Funding	Facility Type (check all that apply):			
Total Request: \$100K	☐ PTF ☒ non-PTF ☒ Distribution			

Financial Requirements:

<i>Projec</i> : ERM:	t Authorization		
FP&A: _			

Executive Summary

An approval of \$100K is requested for the purchase of tools meeting the capitalization threshold requirement of \$500 per unit cost. Any work order greater than \$100K (Directs) will require a separate Project Authorization Form (PAF) and Delegation of Authority (DOA) approval.

Policy Sponsor: EVP and CFO Page 1 of 1 Issued 12/31/21

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Appendix 5

Subsidiary Board Approval Package Template

Project Costs Summary

Note: Dollar values are in thousands

	Prior									
	Authorized*		2021		2022		2023		Totals	
Capital Additions - Direct	\$	-	\$	100	\$	-	\$	-	\$	100
Customer Contribution	\$	-	\$	-	\$	-	\$	-	\$	-
Removals net of Salvage	\$	-	\$	-	\$	-	\$	-	\$	-
Total - Direct Spending	\$	-	\$	100	\$	-	\$	-	\$	100
Capital Additions - Indirect	\$	-	\$	-	\$	-	\$	-	\$	-
Subtotal Request	\$	-	\$	100	\$	-	\$	-	\$	100
AFUDC	\$	-	\$	-	\$	-	\$	-	\$	-
Total Request	\$	-	\$	100	\$	-	\$	-	\$	100

^{*}To be completed if supplemental authorization is required

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> Appendix 4 Supplement Request Form

Supplement Request Form

Project Title: Telecom WAN Annual	Project Number: IT6DWANA
Date Prepared: 04/20/2022	Company: PSNH
Organization: Telecommunications Strategy	Class(es) of Plant: General Plant - Communications
Project Initiator: James Ahrens	Project Category: Annual - General
Project Manager: Oloruntomi Fadipe	Project Type: Annual
Project Sponsor: Roderick Kalbfleisch	Project Purpose: Telecommunications
Estimated in service date: 12/31/2021	Capital Investment part of original Operating Plan: Yes
Current Authorization Amount: \$ 779,000	O&M Expenses part of request: No
Supplement Request: \$ 271,000	Other:
Total Request: \$1,050,000	

Supplement Justification

Direct spend for calendar year 2021 of \$901,000 has exceeded the authorized amount of \$706,000 by \$195,000 (28%). The threshold for supplemental funding is a 10% overrun.

Justification for Additional Resources

Spending under NH WAN Annuals in 2021 was used to complete critical improvement efforts needed on the Telecom system. The following list of work orders describes the work that was completed.

WO	Title	Description	2021 Actuals (\$k)
NH20D001	LANCASTER TELECOM UPGRADES 2020	Microwave Link Install to Prospect Mtn.	8.7
NH20D002	PROSPECT MTN TELECOM UPGRADES 2020	Microwave Link Install to Lancaster	0
NH20D003	MONADNOCK S/S TELECOM UPGRADES	Node Upgrade to SEL ICON	16.1
NH20D004	SCOBIE 326 LINE, ADSS FIBER DROP CABLE	minor	
NH20D005	Nashua AWC Tower Replacement	40 Foot Antenna Structure Installation; Removal of old one	0.6
NH20D006	TAIT Radio Evaluation	Deployment of voice base radio at Tower Hill; Removal of existing GE III radio.	15.4

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Appendix 4 Supplement Request Form

NH20D007	Newington AP offload	Off-loaded DSCADA pole-top radios from Newington AP base data radio to other area base data radios	22.8
NH20D008	JMUX 1250 Lab nodes - Hooksett	radio	4.5
NH20D009	JMUX R7 OC-48 node 1 – Scobie Pond Londonderry		9.7
NH20D010	JMUX R7 OC-48 node 2 – North Merrimack	,	15.9
NH20D011	JMUX R7 OC-48 node 3 – Bedford		9.3
NH20D012	JMUX R7 OC-48 node 5 – Scobie 115 Londonderry	,	20.2
NH20D013	JMUX R7 OC-48 node 6 - Hudson		10.6
NH20D014	JMUX R7 OC-48 node 7 – Bridge St		18.8
NH20D015	JMUX R7 OC-48 node 8 – Power St		16.5
NH20D016	JMUX R7 OC-48 node 9 – Mammoth Road		19.9
NH20D017	JMUX R7 OC-48 node 10 – Watts Brook		13.1
NH20D018	JMUX R7 OC-48 node 11 – Reeds Ferry		14.2
NH20D019	JMUX R7 OC-48 node 12 - Amherst		15.6
NH20D020	JMUX R7 OC-48 node 13 – Lawrence Road	JMUX Upgrades	16.5
NH20D021	JMUX R7 OC-48 node 14 - Thornton		6.4
NH20D022	JMUX R7 OC-48 node 15 – Scobie Comm Shelter		22.7
NH20D023	JMUX R7 OC-48 node 16 – Eagle 115		14
NH20D024	JMUX R7 OC-48 node 17 – Huse Road		15.5
NH20D025	JMUX R7 OC-48 node 18 – Eagle 345		14.3
NH20D026	PSNH E&I Lab Video Wall - Hooksett	Video Wall Installation in Lab	81.3
NH21D001	Mitchell Hill Batteries	minor	
NH21D002	Mt Agassiz	CES Backhaul and SiteBoss RTU Installation	65.3
NH21D003	Breezy Hill Data Site	Data Radio, CES Backhaul and SiteBoss RTU Installation	188.9
NH21D004	Core Box Additions	minor	
NH21D005	Garvins G146 Line Fiber Splice Can	minor	
NH21D006	Power St Telecom RTU & DSCADA Radio	Antenna Addition; Data Radio, SiteBoss RTU Installation	93.8
NH21D007	Pack Monadnock RTU & DSCADA Radio	Antenna Replacement and Addition; Data Radio, and SiteBoss RTU Installation	98.9

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Appendix 4 Supplement Request Form

NH21D008	Chesley Mountain RTU & DSCADA Radio	Antenna, Data Radio, CES Backhaul and SiteBoss RTU Installation	51.8
NH21D009	Morse Mtn RTU and Antenna	Antenna Replacement and SiteBoss RTU Installation	50.8
NH21D010	Epping AWC RTU and Antenna	Antenna Replacement and SiteBoss RTU Installation	22.1
NH21D011	Bean Hill Antenna	minor	
NH21D012	Bedford Fiber	minor	
NH21D013	Canal St. Comm Upgrades	Node Upgrade to SEL ICON	32.5

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Appendix 4 Supplement Request Form

Supplement Cost Summary

Note: Dollar values are in thousands:

Capital Costs	Prior Authorized	Supplemental Request	Total
Direct Capital Costs			
Internal Labor	\$165	\$44	\$209
Outside Services	\$392	\$108	\$500
Materials	\$145	\$40	\$185
Removals	\$0	\$0	\$0
Risk and Contingency	\$0	\$0	\$0
Other	\$4	\$3	\$7
<u>Subtotal</u>	\$706	\$195	\$901
Indirect Capital Costs			
Indirect/Overheads (including benefits)	\$73	\$76	\$149
Capitalized interest or AFUDC, if any	\$0	\$0	\$0
<u>Subtotal</u>	\$73	\$76	\$149
Total Customer Contribution	\$0	\$0	\$
Total Capital Project Costs	\$779	\$271	\$1,050

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Appendix 4 Supplement Request Form

Date Prepared: 01/31/2019	Project Title: Telecom WAN Annuals 2017
Company/Companies: PSNH	Project ID Number: IT6DWANA
Organization: Telecommunications Strategy	Plant Class/(F.P.Type): General Plant - Communications
Project Initiator: James Ahrens	Project Type: Specific
Project Owner/Manager: Oloruntomi Fadipe	Project Category: Telecommunications
Project Sponsor: Roderick Kalbfleisch	Project purpose: Telecommunications
Current Authorized Amount: \$622K	Estimated in service date(s): 12/31/2017
Supplement Request: \$157K	
Total Request: \$779K	

Project Authorization Supplement Justification

This request is for supplemental funding in the amount of \$157K for annual improvements to the Telecommunications Wide Area Network "WAN" in New Hampshire. The original plan was expanded to include additional installations of antenna's, microwave upgrades, sonnet nodes and radios at various sites. The additional work was added to improve communications in remote areas of the state that were experiencing operations communication issues.

Project Need Statement (Description of Issue)

Eversource's Vision is to be the best energy company in the nation by 2020. Eversource's objectives are to maintain safety, reliability and service standards at an increasingly lower cost while maximizing shareholder return.

Telecommunications services are essential to meeting these objectives.

Project Scope

- Install new antenna's and repeaters at various locations including dedicated frequency allocations, enclosures, physical security, and standby power supplies.
- Establish new radio sites at various locations with a UHF remote radio.
- Upgrade microwave by replacing existing DVM equipment at various locations
- Install Cisco sonnet nodes at various remote locations.

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APS 1 - Project Authorization Policy

Appendix 5 Subsidiary Board Approval Package Template

EVERSOURCE

Project Authorization Policy

Appendix 5 Subsidiary Board Approval Package Template

Project Authorization Supplement Cost Summary

Supplement (doll ars in thousands)

	Α	Prior uthorized	plemental equest	т	otal
Capital Additions - Direct	\$	494	\$ 211	\$	706
Less Customer Contribution		-	-		-
Removals new of Salvage_ %		-	-		-
Total Direct Spending Capital Additions - Indirect	\$	494 128	\$ 211 (55)	\$	706 73
AFUDC			-		-
Total Capital Request	\$	622	\$ 157	\$	779
O&M		-	-		-
Total Request	\$	622	\$ 157	\$	779

Total Supplement Request by year view:

Total Supplement Request by year view.						
	Pric	or/2017	2018	2	019	Total
Capital Additions - Direct	\$	706 \$	-	\$	- \$	706
Less Customer Contribution		-	-		-	-
Removals new of Salvage_ %		-	-		-	-
Total Direct Spending	\$	706 \$	-	\$	- \$	706
Capital Additions - Indirect		73	-		-	73
AFUDC		-	-		-	-
T o tal Capital Request	\$	779 \$	-	\$	- \$	779
O&M		-	-		-	-
Total Request	\$	779 \$	-	\$. \$	779

Policy Sponsor: EVP and CFO

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Appendix 4 Supplement Request Form

Supplement Request Form

Approved by NH PAC on 4/7/2022

Project Title: Distribution Line Emergent Equipment Failure – Minor Storms Program	Project Number: MINOR9R	
Date Prepared: 4/1/2022	Company: Eversource NH	
Organization: Electric Systems Operations	Class(es) of Plant: D Line	
Project Initiator: Anthony Zawadski	Project Category: Annual - Lines	
Managing Organization: Operations	Schedule ID#:	
Project Manager: Thomas Davis	Project Type: Program	
Project Sponsor: Jason Yergeau	Capital Investment part of original Op Plan: Yes	
Current Authorized Amount: \$202,000	Emergency Related Request? No	
Supplement Request: \$ 450,000	ISO-NE Approval Required (check all that apply):	
Total Capital Request: \$ 652,000	□ PAC □ TCA	

Supplement Justification

Due to the higher than expected number of minor storms and their related unprecedented costs in 2021, supplementary funding is necessary for this annual to cover the capital expenditures associated with minor storm events. This project captures the cost of assets replaced during a minor weather event.

Minor storm costs in 2021 exceeded \$5,000,000, which also surpassed the entire 2021 PSNH storm budget of \$3,200,000.

Policy Sponsor: EVP and CFO Page 1 of 2 Issued 12/31/21 Rev. 6

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Appendix 4 Supplement Request Form

Supplement Cost Summary

Note: Dollar values are in Thousands

Capital Costs	Prior Authorized	Supplemental Request	Total
Direct Capital Costs			
Internal Labor	\$45	\$109	\$154
Outside Services	\$55	\$12	\$67
Materials	\$0	\$12	\$12
Removals	\$0	\$0	\$0
Risk and Contingency	\$0	\$0	\$0
Other	\$0	\$2	\$2
<u>Subtotal</u>	\$100	\$135	\$235
Indirect Capital Costs			
Indirect/Overheads (including benefits)	\$100	\$315	\$415
Capitalized interest or AFUDC, if any	\$2	\$0	\$2
<u>Subtotal</u>	\$102	\$315	\$417
Total Customer Contribution	\$0	\$0	\$0
Total Capital Project Costs	\$202	\$450	\$652

Lessons Learned

2021 was the first full year that the minor storm accounting was utilized. The PAF request for 2021 was based on 2020 actual expenditures, therefore an increase over previous storm capital expenditures should have been anticipated based on performance during the second half of 2020. The dramatic spike in total storm costs could not have been known in advance, however.

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Operations Project Authorization Form

Date Prepared : 12/18/2020	Project Title: Distribution Line Emergent Equipment Failure – Minor Storms Program				
Company/ies: Eversource NH	Project ID Number: MINOR9R				
Organization: NH Operations	Class(es) of Plant: Distribution				
Project Initiator: Pat Sullivan	Project Category: Basic Business – Emergent Equipment Failure -				
Project Manager: Pat Sullivan	Project Type: Specific Annual Program				
Project Sponsor: Mark Sandler	Project Purpose: Restore power following minor storms				
Estimated in service date: 12/31/2021	If Transmission Project: PTF? NA				
Eng. /Constr. Resources Budgeted? Yes	Capital Investment Part of Original Operating Plan? Yes				
Authorization Type: Full Funding	Facility Type (check all that apply):				
Total Request: \$202,000	□ PTF □ non-PTF ⊠ Distribution				

Financial Requirements: Summary

An approval of \$202,000 is requested for the 2021 Minor Storms (MINOR9R) project. This project covers capital expenditures associated with minor storm events. A minor storm event is defined as events not reaching the company defined threshold for a work order event but do achieve the company threshold for a minor storm classification. This project captures the cost of assets replaced during a minor weather event.



Project Costs Summary Note: Dollar values are in thousands

Line item Category	Prior Authorized	Actuals to Date	2020 to Go	2021	2022	2023	2024	2025	Total
1. ROW / Easements / Land Acquisition	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2. Environmental Approvals / Permits	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3. Outreach	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4. Siting Approvals / Permits	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5. Engineering / Design	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6. Materials (Eversource purchased)	\$0	\$0	\$0	\$45	\$0	\$0	\$0	\$0	\$45
7. Construction (incl matl's by contractors)	\$0	\$0	\$0	\$50	\$0	\$0	\$0	\$0	\$50
8. Testing / Commissioning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9. Project Mgmt Team	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10. Removals	\$0	\$0	\$0	\$5	\$0	\$0	\$0	\$0	\$5
11. Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12. Risks	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SUBTOTAL DIRECTS W/ RISKS	\$0	\$0	\$0	\$100	\$0	\$0	\$0	\$0	\$100
13. Indirects/Overhead	\$0	\$0	\$0	\$100	\$0	\$0	\$0	\$0	\$100
14. AFUDC	\$0	\$0	\$0	\$2	\$0	\$0	\$0	\$0	\$2
PROJECT TOTAL – BASELINE BUDGET	\$0	\$0	\$0	\$202	\$0	\$0	\$0	\$0	\$202
15. Contingency	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL CAPITAL REQUEST	\$0	\$0	\$0	\$202	\$0	\$0	\$0	\$0	\$202
16. Reimbursables/Customer Contribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT TOTAL (LESS REIMBURSABLES)	\$0	\$0	\$0	\$202	\$0	\$0	\$0	\$0	\$202
O&M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL REQUEST	\$0	\$0	\$0	\$202	\$0	\$0	\$0	\$0	\$202

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



Breakout Costs

Note: Dollar values are in thousands

Line item Category	Prior Authorized	Actuals to Date	2020 to Go	2021	2022	2023	2024	2025	Total
ST Labor	\$0	\$0	\$0	\$50	\$0	\$0	\$0	\$0	\$50
OT Labor	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Outside Services Labor	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Materials*	\$0	\$0	\$0	\$45	\$0	\$0	\$0	\$0	\$45
Removals	\$0	\$0	\$0	\$5	\$0	\$0	\$0	\$0	\$5
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Indirects	\$0	\$0	\$0	\$100	\$0	\$0	\$0	\$0	\$100
AFUDC	\$0	\$0	\$0	\$2	\$0	\$0	\$0	\$0	\$2
TOTAL CAPITAL REQUEST - W/O REIMBURSABLES	\$0	\$0	\$0	\$202	\$0	\$0	\$0	\$0	\$202

^{*}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:

Note: Dollar values are in thousa

									Total Future
Future Costs	Yea	r 20	Yea	r 20	Yea	r 20	Year	20+	Project Costs
Capital	\$	-	\$	-	\$	-	\$	-	\$ -
O&M		-		-		-		-	-
Other		-		-		-		-	-
TO	TAL \$	-	\$	-	\$	-	\$	-	\$ -

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

What functional area(s) will these future costs be funded in?	
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

									Tot	al Future
Future Benefits	Yea	r 20	Yea	r 20	Yea	r 20	Year	· 20+	Proje	ct Benefits
Capital	\$	-	\$	-	\$	-	\$	-	\$	-
O&M		-		-		-		-		-
Other		-		-		-		-		-
TOTAL	_ \$	-	\$	-	\$	-	\$	-	\$	-

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

What functional area(s) will these benefits be reflected in?	
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

Are there other environmental cleanup costs associated with this project? No.

EVERSURCE APS 1 - Project Authorization Policy

Public Service Company of New Hampshire d/b/a Eversource Energy DF 22-030 Attachment DOE 1-4 Page 435 of 450

Appendix 5 Subsidiary Board Approval Package Template

Technical Justification

Project Need Statement

This project provides funding for a variety of activities relating to repairs and replacement of failed distribution equipment during minor storm events.

Project Objectives

This project is intended to provide funding for the replacement of failed distribution plant units to restore power during minor storm events.

Project Scope

This project addresses statewide issues with the distribution system including overhead, underground, and direct buried systems during minor storm events. Approval of the Minor Storm (MINOR9R) project covers authorization of all area work center capitalized storm work orders during minor storm events. The funding is authorized at the MINOR9R level, but this is the parent project for all minor storm projects. Actual charges will accumulate in the individual area work center work orders.

Background / Justification

This is a project that is funded each year and is required to maintain the integrity of the Company's distribution system and restore power during minor storm events.

Business Process and / or Technical Improvements:

Emergent capital repairs to distribution system during minor storm events.

Alternatives Considered with Cost Estimates

Not applicable.

Project Schedule

Milestone/Phase Name	Estimated Completion Date
In-Service date	12/31/2021

Regulatory Approvals

The construction budget is submitted to the New Hampshire Public Utilities Commission in accordance with Rule Puc 308.07 using Form E-22. Also on a quarterly basis projects not previously reported in the annual construction budget that have exceeded \$100,000 are reported to the New Hampshire Public **Utilities Commission**

Risks and Risk Mitigation Plans

On a monthly basis, capital project spending is reviewed and any risks are identified and managed during that meeting.

References

Not applicable.

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

Not applicable.

Cost Estimate Backup Details

Annual funding level for this project was estimated using historical spending.

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Operations Project Authorization Form

Date Prepared: 12/18/2020	Project Title: Distribution Line Emergent Equipment Failure – Minor				
Company/ies: Eversource NH	Project ID Number: MINOR9R				
Organization: NH Operations	Class(es) of Plant: Distribution				
Project Initiator: Pat Sullivan	Project Category: Basic Business – Emergent Equipment Failure -				
Project Manager: Pat Sullivan	Project Type: Specific Annual Program				
Project Sponsor: Mark Sandler	Project Purpose: Restore power following minor storms				
Estimated in service date: 12/31/2021	If Transmission Project: PTF? NA				
Eng. /Constr. Resources Budgeted? Yes	Capital Investment Part of Original Operating Plan? Yes				
Authorization Type: Full Funding	Facility Type (check all that apply):				
Total Request: \$202,000	□ PTF □ non-PTF ☒ Distribution				

Financial Requirements:

Summary

An approval of \$202,000 is requested for the 2021 Minor Storms (MINOR9R) project. This project covers capital expenditures associated with minor storm events. A minor storm event is defined as events not reaching the company defined threshold for a work order event but do achieve the company threshold for a minor storm classification. This project captures the cost of assets replaced during a minor weather event.



Project Costs Summary Note: Dollar values are in thousands

Line item Category	Prior Authorized	Actuals to Date	2020 to Go	2021	2022	2023	2024	2025	Total
1. ROW / Easements / Land Acquisition	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2. Environmental Approvals / Permits	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3. Outreach	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4. Siting Approvals / Permits	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5. Engineering / Design	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6. Materials (Eversource purchased)	\$0	\$0	\$0	\$45	\$0	\$0	\$0	\$0	\$45
7. Construction (incl matl's by contractors)	\$0	\$0	\$0	\$50	\$0	\$0	\$0	\$0	\$50
8. Testing / Commissioning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9. Project Mgmt Team	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10. Removals	\$0	\$0	\$0	\$5	\$0	\$0	\$0	\$0	\$5
11. Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12. Risks	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SUBTOTAL DIRECTS W/ RISKS	\$0	\$0	\$0	\$100	\$0	\$0	\$0	\$0	\$100
13. Indirects/Overhead	\$0	\$0	\$0	\$100	\$0	\$0	\$0	\$0	\$100
14. AFUDC	\$0	\$0	\$0	\$2	\$0	\$0	\$0	\$0	\$2
PROJECT TOTAL – BASELINE BUDGET	\$0	\$0	\$0	\$202	\$0	\$0	\$0	\$0	\$202
15. Contingency	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL CAPITAL REQUEST	\$0	\$0	\$0	\$202	\$0	\$0	\$0	\$0	\$202
16. Reimbursables/Customer Contribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT TOTAL (LESS REIMBURSABLES)	\$0	\$0	\$0	\$202	\$0	\$0	\$0	\$0	\$202
O&M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL REQUEST	\$0	\$0	\$0	\$202	\$0	\$0	\$0	\$0	\$202

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

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Breakout Costs

Note: Dollar values are in thousands

Line item Category	Prior Authorized	Actuals to Date	2020 to Go	2021	2022	2023	2024	2025	Total
ST Labor	\$0	\$0	\$0	\$50	\$0	\$0	\$0	\$0	\$50
OT Labor	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Outside Services Labor	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Materials*	\$0	\$0	\$0	\$45	\$0	\$0	\$0	\$0	\$45
Removals	\$0	\$0	\$0	\$5	\$0	\$0	\$0	\$0	\$5
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Indirects	\$0	\$0	\$0	\$100	\$0	\$0	\$0	\$0	\$100
AFUDC	\$0	\$0	\$0	\$2	\$0	\$0	\$0	\$0	\$2
TOTAL CAPITAL REQUEST - W/O REIMBURSABLES	\$0	\$0	\$0	\$202	\$0	\$0	\$0	\$0	\$202

^{*}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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Future Financial Impacts:

Provide below the estimated future costs that will result from the project:

Note: Dollar values are in thousands

										Total Future
Future Costs	Yea	r 20	Yea	r 20	Yea	r 20 _	Year	20+	F	Project Costs
Capital	\$	-	\$	-	\$	-	\$	-	\$	-
O&M		-		-		-		-		-
Other		-		-		-		-		-
T	OTAL \$	-	\$	-	\$	-	\$	-	\$	-

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

What functional area(s) will these future costs be funded in?	
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

									Total	Future
Future Benefits	Yea	r 20	Yea	r 20	Year	20	Year	²⁰ +	Project	Benefits
Capital	\$	-	\$	-	\$	-	\$	-	\$	-
O&M		-		-		-		-		-
Other		-		-		-		-		-
TOTA	L \$	-	\$	-	\$	-	\$	-	\$	-

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

What functional area(s) will these benefits be reflected in?
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

Are there other environmental cleanup costs associated with this project? No.

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Technical Justification

Project Need Statement

This project provides funding for a variety of activities relating to repairs and replacement of failed distribution equipment during minor storm events.

Project Objectives

This project is intended to provide funding for the replacement of failed distribution plant units to restore power during minor storm events.

Project Scope

This project addresses statewide issues with the distribution system including overhead, underground, and direct buried systems during minor storm events. Approval of the Minor Storm (MINOR9R) project covers authorization of all area work center capitalized storm work orders during minor storm events. The funding is authorized at the MINOR9R level, but this is the parent project for all minor storm projects. Actual charges will accumulate in the individual area work center work orders.

Background / Justification

This is a project that is funded each year and is required to maintain the integrity of the Company's distribution system and restore power during minor storm events.

Business Process and / or Technical Improvements:

Emergent capital repairs to distribution system during minor storm events.

Alternatives Considered with Cost Estimates

Not applicable.

Project Schedule

Ξ.	10,000 0011041010	
	Milestone/Phase Name	Estimated Completion Date
	In-Service date	12/31/2021

Regulatory Approvals

The construction budget is submitted to the New Hampshire Public Utilities Commission in accordance with Rule Puc 308.07 using Form E-22. Also on a quarterly basis projects not previously reported in the annual construction budget that have exceeded \$100,000 are reported to the New Hampshire Public Utilities Commission

Risks and Risk Mitigation Plans

On a monthly basis, capital project spending is reviewed and any risks are identified and managed during that meeting.

References

Not applicable.

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

Not applicable.

Cost Estimate Backup Details

Annual funding level for this project was estimated using historical spending.

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Supplement Request Form

Date Prepared: 09/09/2020	Project Title: 3178X Circuit Tie Hinsdale
Company: Eversource NH	Project Number: R18CTC02
Organization: Distribution Engineering	Class(es) of Plant: D Line
Project Initiator: Nate Duford	Project Category: Lines - General
Project Manager: Mark Fraser	Project Type: Specific
Project Sponsor: James Eilenberger	Capital Investment Part of Original Oper. Plan: Yes
Project Manager's Director: Russel Johnson	O&M Expenses Part of the Original Oper. Plan: N/A
Current Authorized Amount: \$1,534,000	Estimated in service date:
Supplement Request: \$535,000	ISO-NE Approvals Required (check all that apply):
Total Request: \$2,069,000	□ PAC □ TCA

Background

In 2014 an express feed circuit named at 3178X3 was constructed in ROW from Chestnut Hill substation in Hinsdale, west to Plain Road. This was to be the beginning of a circuit tie to the far end of the 3178X, one of our poor performing circuits. The project is intended to complete this tie with new spacer cable built up Plain Road and across Monument Road out to Route 119. A 10,500' 477 spacer cable three-phase line extension will be needed as well as replacing 5500' of # 2ACSR and with 477 spacer cable. Total cost of this tie \$1,534,000.

Supplement Justification Overview

This job was intended to be completed by internal crews without sufficient funding in the original estimate for this project to be completed by contractors. Contractors were utilized instead of internal resources due to increased customer-driven work for internal resources. Internal labor costs were \$511K less than their estimate however outside service increased costs surpassed those savings.

In addition to the above reason for the supplement, there was a scope change to replace a 1000' section of single phase URD on Monument Road.

The cost differences were reviewed at monthly budget meetings and were projected in the financials.

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Supplement Justification Detail

Provide a detailed summary of the various cost drivers for each line item; identify the supplemental dollar amount and describe in detail the justification for the cost increase. Please delete any line items here and in the table below that are \$0 and have no change.

The reasons for the project authorization supplement of \$535,000 are summarized below.

1	ROW	/ Easements /	I and Ac	auisition:
Ι.	KUVV	/ Casements /	Lallu AC	uuisilioii.

- 2. Environmental Approvals / Permits:
- Outreach:
- 4. Siting Approvals / Permits:
- 5. Engineering / Design:
- 6. Materials (by Eversource): (\$1,000)
- 7. Construction: \$481,000
- 8. Testing / Commissioning:
- 9. **Project Management Team:**
- 10. Removals:
- 11. Other:
- 12. Risk:
- 13. Indirects/Overhead: \$51,000
- 14. AFUDC: \$4,000
- 15. Contingency:
- 16. Reimbursables/Customer Contribution:

Total Supplement Request: \$535,000

Please find a copy of the prior authorization document attached as reference.

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Supplement Cost Summary

The table below summarizes the line item categories from the original project estimates and the updated project estimates.

Note: Dollar values are in thousands:

Line item Category	Prior Authorized	New Total Request	Variance (Supplemental Request)
ROW / Easements / Land Acquisition	\$	\$	\$
Environmental Approvals / Permits	\$	\$	\$
3. Outreach	\$	\$	\$
4. Siting Approvals / Permits	\$	\$	\$
5. Engineering / Design	\$	\$	\$
Materials (Eversource purchased)	\$368	\$367	(\$1)
7. Construction (incl matl's by contractors)	\$551	\$1,032	\$481
8. Testing / Commissioning	\$	\$	\$
Project Mgmt Team	\$	\$	\$
10. Removals	\$	\$	\$
11. Other	\$	\$	\$
12. Risks	\$	\$	\$
SUBTOTAL DIRECTS W/ RISKS	\$919	\$1,399	\$480
13. Indirects/Overhead	\$613	\$664	\$51
14. AFUDC	\$2	\$6	\$4
PROJECT TOTAL – BASELINE BUDGET	\$1,534	\$2,069	\$535
15. Contingency	\$	\$	\$
TOTAL CAPITAL REQUEST	\$1,534	\$2,069	\$535
16. Reimbursables/Customer Contribution	\$	\$	\$
PROJECT TOTAL (LESS REIMBURSABLES)	\$	\$	\$

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Total Supplement Request by Year Note: Dollar values are in thousands:

Line item Category	Year 2019	Year 20	Year 20+	Total
ROW / Easements / Land Acquisition	\$	\$	\$	\$
2. Environmental Approvals / Permits	\$	\$	\$	\$
3. Outreach	\$	\$	\$	\$
4. Siting Approvals / Permits	\$	\$	\$	\$
5. Engineering / Design	\$	\$	\$	\$
6. Materials (Eversource purchased)	(\$1)	\$	\$	\$
7. Construction (incl matl's by contractors)	\$481	\$	\$	\$
8. Testing / Commissioning	\$	\$	\$	\$
Project Mgmt Team	\$	\$	\$	\$
10. Removals	\$	\$	\$	\$
11. Other	\$	\$	\$	\$
12. Risks	\$	\$	\$	\$
SUBTOTAL DIRECTS W/ RISKS	\$480	\$	\$	\$
13. Indirects/Overhead	\$51	\$	\$	\$
14. AFUDC	\$4	\$	\$	\$
PROJECT TOTAL – BASELINE BUDGET	\$535	\$	\$	\$
15. Contingency	\$	\$	\$	\$
TOTAL CAPITAL REQUEST	\$535	\$	\$	\$
16. Reimbursables/Customer Contribution	\$	\$	\$	\$
PROJECT TOTAL (LESS REIMBURSABLES)	\$	\$	\$	\$

DE 22-030 Exhibit 7

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Lessons Learned

Include a description of lessons learned to prevent reoccurrence for each item discussed above that was a reason for a line item overage.

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APS 1 - Project Authorization Policy

Appendix 2 Operations Project Authorization Form

Operations Project Authorization Form

Date Prepared: 10/11/17	Project Title: 3178X Circuit Tie Hinsdale
Company/ies: Eversource NH	Project ID Number: R18CTC02
Organization: Western Field Engineering	Class(es) of Plant: Distribution Line
Project Initiator: Nate Duford	Project Category: D Regulatory Commitments REP
Project Manager: Mark Fraser	Project Type: Specific
Project Sponsor: James Eilenberger	Project Purpose: part of regulatory tracked program? Yes
Estimated in service date: 12/1/2018	If Transmission Project: NA
Authorization Type: Construction	Capital Investment Part of Original Operating Plan? Yes
	O&M Expenses Part of the Original Operating Plan?
	Yes

Project Authorization

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Executive Summary

In 2014, an express feed circuit named the 3178X3 was constructed in ROW (Right-of-way) from Chestnut Hill S/S in Hinsdale west to Plain Road. This was to be the beginning of a circuit tie to the far end of the 3178X, a perennial top worst performing circuit. This project is to complete this tie with a new spacer cable line built up Plain Road and across Monument Road out to Hwy 119. A 10,500ft 477 spacer cable three phase line extension will be needed, as well as replacing 5500ft of #2 ACSR with 477 spacer cable. Monument Rd and Plains Rd will be converted to 34.5kV.

Project Costs Summary

Note: Dollar values are in thousands

	Pr	ior								
	Authorized		2018		20		20+		Totals	
Capital Additions - Direct	\$	-	\$	919	\$	-	\$	-	\$	919
Less Customer Contribution		-		-		-		-		-
Removals net of Salvage%		-		-		-		-		-
Total - Direct Spending	\$	-	\$	919	\$	-	\$	-	\$	919
Capital Additions - Indirect		-		613		-		-		613
Subtotal Request	\$	-	\$	1,532	\$	-	\$	-	\$	1,532
AFUDC		-		2		-		-		2
Total Capital Request	\$	-	\$	1,534	\$	-	\$	-	\$	1,534
O&M		-		66		-		-		66
Total Request	\$	-	\$	1,600	\$	-	\$	-	\$	1,600

Policy Sponsor: EVP, CFO & Treasurer Page 1 of 2 Issued 1/20/17 Rev. 4

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Appendix 2 Operations Project Authorization Form

Financial Evaluation

Note: Dollar values are in thousands

Direct Capital Costs	Year 1	Year 2	Year 3+	Total
Straight Time Labor	551			
Overtime Labor	0			
Outside Services	0			
Materials	368			
Other, including contingency amounts (describe)	0			
Total	\$919			

Indirect Capital Costs	Year 1	Year 2	Year 3+	Total
Indirects/Overheads (including benefits)	613			
Capitalized interest or AFUDC, if any	2			
Total	615			
Total Capital Costs	\$1,534			
Less Total Customer Contribution	0			
Total Capital Project Costs	\$1,534			
Total O&M Project Costs	66			

Future Financial Impacts:

No future financial impacts are anticipated.

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Appendix 2 Operations Project Authorization Form

Operations Technical Authorization Form TAF # NH-180029-D

Date Prepared: 10/11/17	Project Title: 3178X Circuit Tie Hinsdale
Company/ies: Eversource NH	Project ID Number: R18CTC02
Organization: Western Field Engineering	Class(es) of Plant: Distribution Line
Project Initiator: Nate Duford	Project Category: D Regulatory Commitments REP
Project Manager: Mark Fraser	Project Type: Specific
Project Sponsor: James Eilenberger	Project Purpose: Reliability
Estimated in service date: Winter 2018	If Transmission Project: N/A
Authorization Type: Construct	Authorization Amount: \$1,600,000

Project Need Statement (Description of Issue)

This request is for \$1.6M to construct a circuit tie on the 3178X circuit in Hinsdale, NH

The 3178X circuit feeds 4,245 customers radially out of Chestnut Hill SS. Added distributed automation has improved reliability for this circuit to #47 on the worst performing list in 2016. This tie would allow flexibility for addressing loading, maintenance, and emergency situations. This project offers the potential to save 291,000 customer minutes annually.

Construct a 10,500ft 477 spacer cable three phase line extension from the end of the 3178X3 circuit and replace 5500ft of #2 ACSR with 477 spacer cable. Convert Monument Rd and Plains Rd to 34.5kV.

Project Objectives

Improve reliability for the town of Hinsdale particularly in their manufacturing and commercial areas. Hinsdale is remote from Keene and our ability to swiftly isolate faults will significantly reduce minutes. The objective is to have a flexible and reliable circuit loop for the Hinsdale area. Completing this project would result in approximately 291,394 customer minutes saved annually.

Project Scope

- Upgrade to three phase 477 spacer cable from #2 ACSR north on Plain Road and west on Monument Road (15,000 ').
- Convert to 34.5 kV out through Monument Road.

Background / Justification

- The 3178 finished #47 on 2016 Hit List of worst performing circuits.
- Completing this project would save about 291,394 minutes annually, which calculates out to a cost/min of \$4.39

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> Appendix 2 Operations Project Authorization Form

Public Service Company of New Hampshire

Cost Estimate and Assumptions

Line Upgrade and Conversion – Plain and Monument Road: 1,100K Wire Upgrade along Monument Road (5500ft): 500K Total Cost: \$1,600K

Alternatives Considered with Cost Estimates

The original route to create a tie with Route 119 was through ROW. After investigating, it was found that the terrain in that portion of the ROW was too rough and another route to 119 was needed. Plains Rd to Monument Rd provided the most direct and cost effect way to complete the loop between the 3178X3 and the 3178.

Project Schedule

Describe the project schedule and milestones. Include estimated start and end dates.

Milestone/Phase Name	Estimated Completion Date

Risks and Risk Mitigation Plans

We do not anticipate any permitting issues due to entire project being completed on town roads. There is a possibility for extra costs to arise due to a 69kV ROW line which we must complete construction underneath.

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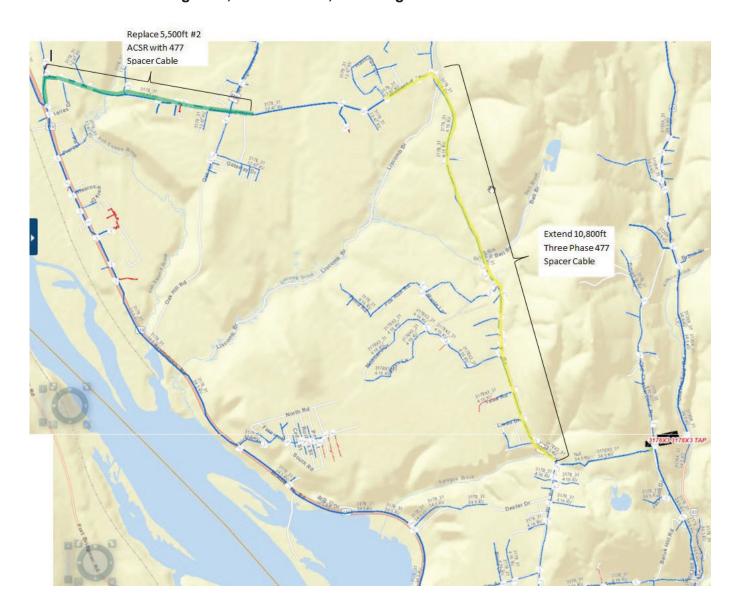
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One-Line Diagrams, Attachments, and Images



Public Service Company of New Hampshire d/b/a Eversource Energy Docket No. DE 22-030

Date Request Received: May 26, 2022 Date of Response: June 06, 2022

Data Request No. DOE 1--006 Page 1 of 1

Request from: Department of Energy

Witness: Devereaux, James J

Request:

The following data request are related to the Attachment RDJ/DLP/JJD-1:

For Specific Projects, please explain why so few projects are completed (account 101) and so many are in-service but not yet closed (account 106).

Response:

The projects listed in the Specific Project tab represent projects first placed into service in 2021; <u>i.e.</u>, 2021 was the first year with any work orders for these projects. The in-service date could have been anytime between January 2021 through the end of December 2021. The average time to move these type of work orders from complete (account 106) to closed (account 101) is slightly more than a year. Therefore, it is not surprising that many of these projects have not been moved to complete.

Movement between account 106 and account 101 is simply moving the projects placed in service into their appropriate units of account classifications under the FERC Electric Plant Chart of Accounts (unitized). The Company acknowledges the delay in certain capital projects completed but not yet unitized and continues to actively facilitate the movement of projects placed in service from account 106 (non-unitized) to account 101 (unitized) as expeditiously and effectively as possible. The Company would also like to note that there is no risk to the customers or rates billed to customers should unitization of account 106 projects be delayed beyond the calendar year in which the projects were placed in service.