Shared Services Project Authorization Form

Project Title: Waterbury [redacted] - Generator Replacement	**Project Number:** 24788
Date Prepared: 06/07/2024	**Company:** CL&P Electric Distribution 11 Choose an item. Choose an item.
Organization: REPM	**Class(es) of Plant: Buildings**
Project Initiator: [redacted]	**Authorization Type:** Full Funding
Project Manager: [redacted]	**Project Type:** Specific
Project Sponsor: [redacted]	
Estimated in service date: 12/02/2024	**Capital Investment part of original Operating Plan:** Yes
Total Capital Request: $568,907	**O&M Expenses part of request:** No
Estimated Life of Asset (check one): ☐ 5yrs ☐ 10yrs ☐ 15yrs ☐ Other:_____	**Emergency Related Request?** No

Executive Summary

Briefly describe (in a few sentences) the overall description of the project (do not include technical details):

This request is for the replacement of a backup generator at the Waterbury Freight Street area work center (AWC). The Eversource Waterbury [redacted] AWC location supports electric operations, which requires uncompromised reliability of electric power to operate 24/7/365 uninterrupted. The existing backup generator for the AWC is past its useful life and has become undersized. As the AWC critical functions have expanded, more functions need redundant emergency backup power to effectively monitor and perform their work.

Project Costs Summary

See APS3 and APS8 requirements and consult with Plant Accounting for capital/O&M determination. Use published loaders for benefits, materials, and invoices, maintained by the Director, Budget and Internal Reporting.
Note: Dollar values are in whole numbers.

Capital Costs	Year 2024	Year 2025	Year 2-__+	Total
Direct Capital Costs				
Internal Labor	$ 4,500			$ 4,500
Outside Services	$ 490,000			$ 490,000
Removals	$ 20,000			$ 20,000
Risk and Contingency	$ 30,000			$ 30,000
Other				$ -
Subtotal	$ 544,500	$ -	$ -	$ 544,500
Indirect Capital Costs				
Indirect/Overheads (including benefits)	$ 20,820			$ 20,820
Capitalized interest or AFUDC, if any	$ 3,587			$ 3,587
Subtotal	$ 24,407	$ -	$ -	$ 24,407
Total Customer Contribution				$ -
Total Capital Project Costs	**$ 568,907**	**$ -**	**$ -**	**$ 568,907**

Costs by Entity				Total
Direct Capital	$ 524,500	$ -	$ -	$ 524,500
Indirect Capital	$ 24,407	$ -	$ -	$ 24,407
Removal net of salvage	$ 20,000	$ -	$ -	$ 20,000
Total Capital Project Costs by Entity	**$ 568,907**	**$ -**	**$ -**	**$ 568,907**

Software as a Service (SaaS):

SAAS*	Year 20__	Year 20__	Year 20__	Year 20__
Capital				
O&M				
Total				

**Identify any vendor software costs in this table and indicate whether or not they are included in the Project Costs Summary above. Identify capital vs. O&M costs based on parameters found in the vendor SaaS calculation document in the appendices. Ensure any future software O&M costs are also disclosed within the Future Costs section below.*

Alternatives Considered:

If Yes to any of the following, please provide a detailed explanation in the appendix section

Were project alternative solutions considered/applicable?
Alternatives were considered (please describe below)

The alternatives considered included the following:

Utilize the existing operable generator.
This option was considered however, since the generator itself is 30+ years old; parts are difficult to obtain and the voltage will only power the lighting and elevator, it would not provide the scope of redundant power needed.

Utilize the existing generator and add in a step down transformer.
This option was considered, however, since the generator itself is 30+ years old; parts are difficult to obtain and stepping down the power with a new transformer, it would not be large enough to power the required equipment and receptables needed for a reliable and redundant system.

Replace the non-operable generator only.
This option was considered; however, the existing operable generator is 30+ years old and parts are difficult to obtain. Overall reliability will be compromised due to the age of the existing unit.

Replace each generator in kind.
This option was considered however, providing 2 generators is more costly than one larger unit and maintenance costs would be double that of a single unit.

Were Energy Efficiency Design alternatives considered?

No

Were Carbon Reduction Design alternatives considered?
Yes - detailed explanation provided in appendix

Regulatory Requirements:

If yes, provide a detailed explanation in the appendix section
No

If yes, provide a detailed explanation in the appendix section
Choose an item.

Future Costs:

Future Costs	Year 20__	Year 20__	Year 20__	Year 20__
Capital				
O&M				

Other				
Total Future Costs				

Future O&M represents:
N/A

What functional area(s) will these future costs be funded in (include manager and CCC)?

Future Financial Benefits:

If yes, provide a detailed explanation in the appendix section

No - project is not undertaken for financial benefits

Project Justification:

Include a summary of the project details including background and scope

The existing facility emergency power is configured with two generators located in the basement of the building providing back up power. One unit is currently inoperable due to age and repair parts are no longer manufactured. The second generator is of similar age as the other generator and only supports 480v equipment (lighting and elevator.) The work scope will locate one natural gas fired generator outside of the building. A step-down transformer will be added to the 480v side to properly power all equipment. Relocating the unit outside will allow for more efficient repairs and maintenance in the future.

Project Schedule:

Milestone/Phase Name	Estimated Date
Design	completed
Construct	2024 Q3
Test	November 2024
In Service Date	Q4 2024

Risks and Risk Mitigation Plans

List top risks and mitigation plans associated with this project (from Table in the Appendix). Include any contingency related to each risk.
(Permitting/siting; environmental; outage constraints; customer/community outreach; material delivery; constructability challenges; excavation; etc.)

Equipment lead time – Construction manager has been tracking unit availability and has pre-secured specified unit pending approval of the project to alleviate equipment delay.

Appendices

Reference appendices items in the appropriate section of the PAF and list items in the same order as referenced in the PAF.

Carbon Reduction Design – As part of the Facilities carbon reduction measures globally, it has been agreed upon that any new emergency generators that are 350kW or less shall be fueled by natural gas, or propane if natural gas is not available. The specified unit for this project is 250kW and has been specified as a natural gas unit.

- ***Future Financial Benefits:***

If the project has future financial benefits, please use the following table to provide the yearly amounts.

Financial Benefits	Year 20__	Year 20__	Year 20__	Year 20__
O&M reductions				
Other (i.e: return on investment, revenues)				
Total Financial Benefits				

Describe the estimated future financial 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.

- ***If the project has regulatory requirements, please disclose here***

Analysis of Vendor Software Payments for Cloud-Based Software Applications Hosting Fees ONLY

This document ONLY needs to be utilized if Eversource Energy is entering into a Cloud-Based Application and the Application has Hosting Fees which are also referred to as; Hosted Solution, Cloud Fees, Cloud Solution, Enterprise Agreement (EA), Enterprise License Agreement (ELA), Licensing Fee, RTU's (Rights to Use), Maintenance Agreement, Support & Service Agreement.

Project Name:

Complete the following analysis of vendor software payments for cloud-based software applications for the *hosting fees only* (as defined above):

- Accounting should be determined by Plant Accounting Services during PAF development.
- Attach documentation or information from IT supporting the nature of software payments.
- Also see APS 3 for capitalization policy for software costs.

NOTE: A pro rata portion **of the hosting fees** incurred during the development phase (described below) may be capitalized up to the point when the product goes **in-service**.

Development phase: In accordance with APS 3, SaaS/Cloud projects that do not meet the two capitalization criteria as outlined in APS 3 may have internal and external direct costs during the development phase (**prior to in service date**) that may be capitalized. External direct costs may include the pro-rata portion of an up-front software usage fee applicable to use of the software to develop the project before it is in service. Indicate below pro rata portion of development phase hosting fees requested to be capitalized:

Development phase: # months (provide support) (A) _____

÷ Total hosting contract period: # months (B) _____

= Pro rata portion that may be capitalized (A) ÷ (B) _____%

Total hosting fees over contract period $_____

Development phase amount requested to be capitalized (% x Total fees above) $_____
For costs after development phase, complete PAF break-out of capital/expense.