

Vermont Gas Systems, Inc.  
 FY2023 Expense Projects & Capital Investments exceeding \$100K  
 Approval & Spec Sheet

Date: 1/3/2022

Project Name & Owner: Winooski Gate Boiler Replacement, Steve Miner Project & Work Order (project task) Number(s): TBD

Submitted by & Department: Christopher LeForce, Transmission Maintenance

Project Summary & Benefit: The project is to install two new boilers at the Winooski Gate Station. The boilers are approximately 15 years old and are in need of replacement. They are a piece of equipment that are used throughout the entire year to heat the gas coming into the gate station. This is also one of our largest gate stations so a lot of gas goes through it. When gas is regulated down in pressure, it loses 7 degrees F. of temperature per 100 psi. At Winooski Gate, the gas can be regulated down as much as 400-500 psi, which would cause a temperature drop of 28-35 degrees F. The gas typically is delivered to the VGS system at 40 degrees F. Without heat, the gas would be below the freezing temperature and can cause damage and issues to the operation of the equipment at the gate station and beyond. The gas is heated before regulation to avoid any freezing issues.

Schedule/Timing of In-Service: Start ordering materials and equipment in the Fall of 2022. Install in early Summer 2023. In service late Summer 2023

What type of cost?  Capital  Expense

Other Notes (include business case and estimated useful life of capital purchase): Useful life will be approximately 15-20 years, depending on the type of boiler purchased. The higher efficiency boilers will be on the lower end, which is what we plan to purchase.

There are no real alternatives to this project other than other types of gas heating systems and equipment. The heating equipment is needed, as explained above. Installing another type of heating equipment would require a design process to make necessary alternations to the current configuration for another type of heating system. This would be more costly and may reduce the efficiency at the gate station. Replacing just the boilers is the most cost effective and most efficient method.

Assessment of Alternatives

BUDGET (add lines as needed)

Vendor	Product/Service	Type Of Known & Measurable Documentation Provided	Label on Documentation Found	Capital Spend	FY2023 Expenses	Total
Cooper Mechanical	Boiler Replacement	Quote from 11/18/2021. Adjusted for inflation.	3690 - Winooski Gate Boil	\$110,857.74		\$110,857.74
				\$0.00		\$0.00
						\$0.00
						\$0.00
<b>Internal Components of Budget (if applicable):</b>						
VGS labor	Piping / Start up	Two weeks of labor for two technicians.	3690 - Winooski Gate Boil	\$6,339.20		\$6,339.20
VGS Overhead	VGS Overhead - Benefits, TR, DO (59.73%)			\$3,786.40		\$3,786.40
VGS - Administrative	VGS administrative overhead 34.19%			\$40,069.63		\$40,069.63
						\$0.00
<b>PROJECT TOTALS</b>				<b>\$161,053</b>	<b>\$0</b>	<b>\$161,053</b>
Contingency (20%)				\$32,211	\$0	\$32,211
<b>PROJECT TOTAL, INCLUDING CONTINGENCY</b>				<b>\$193,264</b>	<b>\$0</b>	<b>\$193,264</b>

**Prior to Spend/Contract Commitment**  
 All projects **over \$100,000** must be presented and approved by the Project Steering Committee

**Subsequent approval, if required based upon the criteria below:**  
 If the project RE-forecast is greater than 15% or \$25,000 (unless otherwise assigned) over the original budget and/or the schedule has shifted into a new fiscal year, the project must be presented to the VP, of that area for additional approval.  
 If the re-forecast is greater than \$250,000 the project must be presented to the VP of Finance for additional approval

Threshold if otherwise assigned		Variance > \$25,000	Variance > 15%
Updated Forecast Project Total:	\$193,264	0	0%
Schedule:			
Vice President (as applicable)			
VP, Finance (as applicable)			