

Long Range Planning and Section E Joint Hearing of February 3, 2021 Follow Up Questions on Montana University System Projects

Question #1: Priority CD-01 and MR-02 – Heating System Upgrades, Montana Technological University

What would the cost savings for operations and maintenance be as a result of completing the upgrades?

The extra operations and maintenance costs that have been incurred by Montana Tech to address the failing heating system for the last three years are detailed in the spreadsheet below. With the upgrade of the failing system, resources that would continue to be dedicated to repairs could be dedicated to other maintenance projects across the campus.

The spreadsheet details the last three years of cost relative to repairing leaks and issues with the steam distribution systems and projects annual cost savings for water usage and for chemical treatment based on a system with no leaks. In addition, the number of man hours and associated cost that could be used for other maintenance purposes and not for dealing with a manual water treatment system for the boilers and makeup water.

Montana Technological University - Costs of Steam and Condensate Repairs last three years			
Date	Repair	Contractor	Cost
Aug-20	Replace condensate line MG to Plant	Leonbro	\$99,972
Apr-20	Site Restoration by SUB	Hunter Bros.	\$10,000
Mar-20	Steam & Condensate Line Replacement to SUB	Lockmer Plumbing	\$23,850
Dec-19	Condensate Repair	Lockmer Plumbing	\$1,529
Dec-19	Condensate Repair	Lockmer Plumbing	\$492
Oct-19	Steam Tube Bundle Replacement	Lockmer Plumbing	\$3,274
Jan-19	Steam Line Repairs	Lockmer Plumbing	\$1,053
Jan-19	Steam Line Repairs (buried)- Library Parking Area	Lockmer Plumbing	\$11,257
Dec-18	Site Prep for Steam Repairs - Library lot area	Lockmer Plumbing	\$1,190
Nov-18	Steam Line Repairs (buried)- Library Parking Area	Lockmer Plumbing	\$33,665
Aug-18	Steam Heat Exchanger Repairs	Lockmer Plumbing	\$845
Aug-18	MG Steam Line Repairs	Lockmer Plumbing	\$2,870
May-18	Steam Line Manhole Repair Work	Lockmer Plumbing	\$5,550
Aug-17	Prospector Steam & Condensate Repairs	Lockmer Plumbing	\$2,775
	Total from 8/2017 - 1/2021		\$198,322
Cost Savings for having No Leaks and Automated Water Treatment System			
	Annual Labor Cost Savings by going to automatic water treatment system		\$10,400
	(8 hours x 52 weeks x \$25 per hour - associated cost)		
	416 hours saved to be spent in other maintenance activities.		
	Gallons of water saved annually by not having leaks in distribution system	146,000 - 182,500	
	(associated cost savings)		\$630 - \$788
	Annual chemical cost savings by not having leaks in the distribution system.		about \$5,000
	(this equates to over a 35% savings in chemicals when system is not leaking.)		

Question #2: Priority MUS-08 - MT Museum for Art and Culture - Operation and Maintenance Funding, University of Montana

Will this building be completed in FY 2023 and thus require the operations and maintenance funding included in DP1801?

Further analysis determined this request for operations and maintenance funding is not needed and can be removed.