

Heat Recovery for the Water Treatment Plant & Community Store for Marshall

Grantees City of Marshall (Local Government)
Technology Type HEAT RECOVERY
Region Lower Yukon-Kuskokwim
AEDG Project Code 10409

REF Grants Received

Round	App	Grant Title	Grant #	AEA Project #	Phase	Start Date	End Date	Status
6	940	Marshall Heat Recovery - Water Treatment Plant and Community Store	7060940	403066	Construction	7/1/13	12/31/16	Active

Grant 7060940: Marshall Heat Recovery - Water Treatment Plant and Community Store

Project Scope: This grant consists of \$183,200 from Round VI of the Renewable Energy Fund for design and construction of heat recovery project to capture the recovered heat from the existing electrical power plant to the water treatment plant (WTP) and village store. To provide maximum recovered heat benefit, the piping in the WTP needs to be reconfigured, and the heat recovery controls need to be replaced. New work will include adding a hydronic unit heater and a BTU meter for billing. A bypass line around the heat exchanger in the power plant will be installed with a modulating valve to prevent back pressure against the generator engines. The proposed design will modify piping so that the heat recovery system serves the entire WTP building load, and the three-way valve will be replaced with a heat injection pump.

It is expected to reduce the fuel oil usage of the facilities by 7,700 gallons per year, fully offsetting the fuel oil usage. The feasibility study for this project was completed in 2012.

The total project cost is \$189,200 with \$6,000 of in-kind contribution provided by Alaska Native Tribal Health Consortium (ANTHC) as a match. ANTHC will be providing project and program management services.

The City of Marshall is the grantee. The City of Marshall and the power utility must finalize a heat sales agreement; a copy must be submitted to AEA before construction funds are released to grantee. Similarly, a final design must be accepted by AEA for review before construction funds are released to the grantee.

The final reimbursement of grant funds will not be disbursed without an O&M reporting plan accepted by the AEA Project Manager. AEA may retain up to 10% of the contributed grant funds until the grantee has submitted an acceptable O&M reporting plan.

Project Status: This heat recovery system is operational and is awaiting final deliverables for close-out.

As of Nov. 30, 2013	Budget	Expenditures
Renewable Energy Funding	\$183,200.00	\$167,833.76
Other State Funding	\$0.00	\$0.00
Total State	\$183,200.00	\$167,833.76
Required Local Match	\$6,000.00	\$6,000.00
Federal Grant Funding	\$0.00	\$0.00
Total Project Costs	\$189,200.00	\$173,833.76