

Heat Recovery for the Water Treatment Plant for Noorvik

Grantees	City of Noorvik (Local Government)
Technology Type	HEAT RECOVERY
Region	Northwest Arctic
AEDG Project Code	10410

REF Grants Received

Round	App	Grant Title	Grant #	AEA Project #	Phase	Start Date	End Date	Status
6	941	Noorvik Heat Recovery - Water Treatment Plant	7060941	403067	Construction	7/1/13	12/31/16	Active

Grant 7060941: Noorvik Heat Recovery - Water Treatment Plant

Project Scope: This grant consists of \$985,805 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). To provide maximum recovered heat benefit, the piping in the WTP needs to be reconfigured, and the heat exchangers will be added, etc.

It is expected to reduce the fuel oil usage of the facilities by 18,600 gallons per year by replacing that consumption with jacket heat from the diesel engines, nearly offsetting the total fuel oil usage. Arctic piping will run from the power plant alongside the road to the end-user building. The end-user facility will also receive a BTU meter to provide recovered heat use totalization and instantaneous use. The feasibility study for this project was completed in 2012.

The total project cost is \$1,015,580 with \$29,580 of in-kind contribution provided by Alaska Native Tribal Health Consortium (ANTHC) as a match. ANTHC will be providing project and program management services.

City of Noorvik is the grantee. City of Noorvik 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 Authority Project Manager. The Authority may retain up to 10% of the contributed grant funds until the grantee has submitted an acceptable O&M reporting plan.

Project Status: The design is 65% complete

As of Nov. 30, 2013	Budget	Expenditures
Renewable Energy Funding	\$985,805.00	\$106,743.09
Other State Funding	\$0.00	\$0.00
Total State	\$985,805.00	\$106,743.09
Required Local Match	\$29,580.00	\$26,011.42
Federal Grant Funding	\$0.00	\$0.00
Total Project Costs	\$1,015,385.00	\$132,754.51