



Tanana Chiefs Conference (TCC)

Auditor: Nortech

Audit date: April 2014

The Tanana Chiefs Conference is a traditional tribal consortium of 42 villages in Interior Alaska. TCC was officially formed in 1962, but tribes in the region have been banding together for over 100 years. Today, the tribal organization offers health and social services to members while balancing traditional Native values with modern demands.

TCC joined the pilot project after the application period had ended. It had already received two audits, completed by Nortech, for its two largest Fairbanks buildings through the AEA commercial energy audit program in Spring 2014, and joined FNRP for the technical assistance and the opportunity to use loan financing.

Mission

To provide a unified voice in advancing sovereign tribal governments through the promotion of physical and mental wellness, education, socioeconomic development, and culture of the Interior Alaska Native people.



Building – Chief Peter John Tribal Building

Size: 70,000 ft²

Fuel consumption

Baseline annual fuel use: 7,667 MBTU

Electricity (1,394,667 kWh / 4,760 MBTU)

District heating water (2,907 MBTU)

Baseline EUI: 110 kBtu/ft²/yr

Baseline annual energy costs: \$327,154

Electricity (\$217,718)

District heating water (\$72,246)

Electric demand (\$37,190)



Audit recommendations – Chief Peter John Tribal Building (Completed retrofits in black)

Recommendation	Predicted costs	Actual cost	Contractor	Date completed	Notes
Heating/Cooling					
1. Repair head bolt heater timers and implement a schedule	\$286	N/A	TCC maintenance department	2014	The TCC maintenance department has its own energy audit process and timeline to establish priorities and complete the remaining recommendations in the future.
2. Replace electric water heater	\$4,455				
3. Put DHW pump on a timer					
HVAC					
4. Program exhaust fan	\$440	N/A	TCC maintenance department	2014	
5. Retro-commission the HVAC system	\$21,000				
Lighting/Electric					
6. Install Vending Miser controls	\$750				
7. Replace fluorescent and incandescent lamps with LEDs	\$141,576				
	Total: \$168,507				



Photo Courtesy of Nortech

Building – Al Ketzler Sr. Building

Size: 30,000 ft²

Fuel consumption

Baseline annual fuel use: 3,505 MBTU

Electricity (428,948 kWh / 1,464 MBTU)

District heating water (2,041 MBTU)

Baseline EUI: 117 kBtu/ft²/yr

Baseline annual energy costs: \$129,695

Electricity (\$66,608)

District heating water (\$50,766)

Electric demand (\$12,321)



Audit recommendations – Al Ketzler Sr. Building (Completed retrofits in black)

Recommendation	Predicted costs	Actual cost	Contractor	Date completed	Notes
Heating/Cooling					The TCC maintenance department has its own energy audit process and timeline to establish priorities and complete the remaining recommendations in the future.
1. Repair head-bolt heater timers and implement a schedule	\$286	N/A	TCC maintenance department	2014	
Ventilation					
2. Reduce run time on air handler units	\$3,190				
3. Retro-commission on HVAC system	\$19,500	N/A	TCC maintenance department	2014	
Plumbing					
4. Re-plumb DHW to use an indirect water heater instead of boilers	\$4,455				
5. Put DHW pump on a timer					
Lighting					
7. Replace fluorescent and incandescent lamps with LEDs	\$85,954				
	Total:				
	\$113,385				