



Rural Power Systems Upgrade Program (RPSU)

The Alaska Energy Authority's Rural Power Systems Upgrade (RPSU) program provides reliable power systems for rural Alaska.

Electricity provides for lighting, communications, heat and power necessary to operate infrastructure that supports safe and healthy living conditions. In rural communities throughout Alaska, electricity is generated by a small local "system" (generation and distribution) using diesel fuel at a cost that is three to five times higher than that in urban parts of the state.

Of 200 rural Alaska communities, approximately half are served by cooperatives or another form of utility that performs under a well-established organization. Others are served by very small entities, many which experience technical and administrative problems due to lack of economies of scale and/or lack of specialized skills in the community.

Upgrades may include efficiency improvements, powerhouse upgrades or replacements, line assessments, lines to new customers, demand-side improvements, heat recovery and repairs to generation and distribution systems. It is not uncommon to see a 30 to 40 percent increase in fuel savings after a project is completed. Funding includes Alaska legislative appropriations, Denali Commission and other matching funds.

Current Status Third Quarter 2016:

The following projects are currently under construction: The mobilization and installation of the Perryville powerhouse module is underway by a contractor. Construction has begun on the Fort Yukon powerhouse. Diesel engine generator sets are being manufactured for the Kipnuk powerhouse. The Kake powerhouse module structure is being fabricated. The replacement of four diesel engines in the Middle Kuskokwim Electric Cooperative powerhouses in Chuathbaluk, Cooked Creek, Sleetmeute and Stoney River is completed. The replacement wind turbine for St George is installed and producing power.



Alec and Thomas from Perryville assisting the contractors fit out their new powerhouse module.