

Thayer Lake Hydropower Project

Grantees	Kootznoowoo, Inc. (Independent Power Producer)
Technology Type	HYDRO
Region	Southeast
AEDG Project Code	10293

REF Grants Received

Round	App	Grant Title	Grant #	AEA Project #	Phase	Start Date	End Date	Status
4	670	Thayer Lake Hydropower Project	7040038	407074	Final Design	7/1/11	3/31/17	Active
5	825	Thayer Lake Hydropower Development Transmission Project	7050825	407074	Construction	7/1/12		Active

Grant 7040038: Thayer Lake Hydropower Project

Project Scope: The project is to complete pre-construction work to develop the Thayer Lake Hydropower Project (TLHP). The project is a run-of-river hydropower project on Thayer Creek approximately 6 miles north of Angoon. Thayer Creek flows out of the 64 square mile Thayer Lake at a gentle grade through a broad forested valley, then steepens for 6,800 feet through a narrow forested canyon and finally flattens again for 2000 feet before flowing into Chatham Strait. The development will tap the energy potential in the steep section of the creek and will avoid impact on anadromous fish that use the lower portion of the creek. Though the final concept remains to be identified, Kootznoowoo is funded to complete permitting, preliminary and final design for the hydropower project.

KI received a grant of \$1,110,500 in August 2009 from the U.S. Department of Energy for hydropower development on Thayer Creek. It will be used as match for preconstruction activities to be completed with this AEA grant of \$1,060,500.

Preliminary design, permitting and final design will be conducted with the available grant funds, with the intent that the project is construction ready at the completion of all grant activities. Additionally, special conditions associated with this grant include the following provisions to be completed prior to releasing any AEA grant funds: KI and IPEC must provide a written joint report acceptable to AEA that documents the integration of project design and operation with the needs of the existing IPEC system, the design specifying the power output capacity and monthly energy production from the new Thayer Lake Hydropower project, and demonstrating expected amounts of diesel consumption from existing diesel fired generation.

Project Status: After performing significant design work including costly geotechnical investigations the overall project concept has been discarded as too costly. This realization came about in early 2015. After another review of project concept options two emerged as potentially viable with the goal of constructing a project that could meet the present day demand in Angoon. A grant revision has been agreed upon but it is apparent that there are not enough funds remaining in the grant to complete all the permitting and final design work required. In Sep 2015 a new grant amendment was drafted that refocused work on completing a technical feasibility study for the two project options and then following up with revision of permits and completing a 35% design. It is expected that final design will occur in the construction phase.

As of Nov. 30, 2013	Budget	Expenditures
Renewable Energy Funding	\$1,060,500.00	\$824,630.24
Other State Funding	\$0.00	\$0.00
Total State	\$1,060,500.00	\$824,630.24
Required Local Match	\$1,142,856.00	\$883,995.94
Federal Grant Funding	\$0.00	\$0.00
Total Project Costs	\$2,203,356.00	\$1,708,626.18

Grant 7050825: Thayer Lake Hydropower Development Transmission Project

Project Scope: The proposed grant would fund construction of the Thayer Lake hydroelectric project, including the transmission connection to the IPEC managed power system at the City of Angoon. The grant remains in the planning stages.