

Black Canyon Third Generating Unit

This project will install a third generating unit at the Black Canyon hydroelectric plant. The Black Canyon plant is owned by the Bureau of Reclamation and is located northwest of Boise, Idaho. The dam's primary function is to divert Payette River stream flow for agricultural irrigation. Power generation serves a secondary function. The dam and powerhouse were placed in service in 1924-25. There are two existing generators with capacities of 5.1 MW each. The turbine runners are original equipment, and the electrical equipment was last updated in 1994 and 1995.

The addition of a new unit will include a new powerhouse, intake, penstock, structure, and associated equipment. The new unit will provide 10 to 15 MW of additional generating capacity, with the final size determined after further analysis on integrating the existing units operationally with the new unit. The new unit will serve as the main operating unit. The two existing units will operate when there is sufficient load and when the project flow is too low to operate the new, larger unit efficiently.