# John Day Fire Protection

The purpose of this project is to upgrade smoke and fire detection and containment, fire suppression, smoke evacuation, compartmentalization, controls and ventilation in the powerhouse. This project seals and pressurizes the control room and egress stairs to allow the operator time to shut down the main units and egress in the event of a major fire.

USACE Portland District projects have experienced a powerhouse fire on average once per decade. Like many projects of this era, smoke and fire detection and ventilation system response was never considered in the original powerhouse design. Many of the life safety features now considered to be mandatory in even the most fundamental industrial facilities were not incorporated into the powerhouse design. Stairwells and elevators are not fully enclosed or provided with fire resistant door assemblies. The means of egress throughout many of the levels is difficult to negotiate, poorly lighted, and open to other potential fire areas. Exit to the outside requires traversing through hazardous operating areas without the aid of fire resistive egress corridors. Emergency lighting is incomplete along emergency egress paths. There is no central emergency alarm system that is capable of providing local alarm within all portions of the powerhouse. These deficiencies must be corrected to meet current operational requirements and life safety codes. The capability to maintain occupancy and provide emergency egress from the control room in the event of a fire must be established.