

John Day SQ Board Replacement

The purpose of this project is to replace the electrical boards, switchgear and associated equipment that power the generating unit auxiliary systems and station service. Most of these components are original equipment, in service since the dam was completed in 1971. Replacement parts are becoming increasingly difficult to find, while maintenance needs are increasing. Consequently, there is an increasing risk of a long term outage due to component failure. A failure could result in an outage ranging from one generator to the entire plant. These reliability risks, in conjunction with the arc-flash safety risks the old equipment poses, make this project a high priority.

The project will replace boards SQO1, SQO2, SQ1 through SQ4, and SU1 through SU16. The scope includes other work that is necessary, including installation of high-resistance grounds, replacement of feeder cables, installation of protective relays and replacement of annunciation, controls, and alarms. SQ02 will be increased to 1000kVA to accommodate planned HVAC upgrades and other future needs. The replacements will reduce the arc flash hazards for the SP System, SU boards, and SQ switchgear to meet the requirements of OSHA and ER 385-1-100. Beyond the replacements, a number of additional relays and breakers will be installed to further reduce arc-flash hazards and enable safer maintenance access.