

Keys Pump/Generation Station Reliability Investments

The John W. Keys III Pump Generating Plant (Keys PGP) was originally placed in operation in 1953 with six pumps providing irrigation water to the Columbia Basin Project. By the mid-1980s, six pump/generators had been added to provide additional pumping and some generation capability. Today, much of the equipment is original equipment that is well past its expected service life. The existing equipment is at risk of failure and obsolete in many cases. Replacing and upgrading these components will maintain reliability and will improve efficiency in both system performance and operation. These replacements and upgrades will only maintain the current capability of the Keys PGP and are required whether or not the agency ultimately decides to maximize the pump storage capability of the system.

Description	Units
Unit Circuit Breaker Replacement	PG7 - PG12
Impeller Replacement and Rewinds	P5, P6
Exciter Upgrades	P1 - P6
Exciter Upgrades	PG7 - PG12
Governor Upgrades	PG7 - PG12
Control Upgrades	All
Switchgear and KP10B Transformer Replacement	-
Phase Reversal Switch Replacement	PG7 - PG12
Protective Relay Upgrades	All