

Detroit Transformers

Detroit Dam is located approximately 45 miles southeast of Salem, Oregon on the North Santiam River. The powerhouse remotely operates the Big Cliff re-regulating dam, which is located approximately 2.5 miles downstream. The combined generation from the dams feed BPA's power grid via two 87 MVA transformer banks located at the Detroit Powerhouse on the tailrace deck. Power from each transformer is transmitted to the 230kV BPA switchyard via overhead transmission lines.

The existing transformers pose an extremely large environmental risk of spilling large quantities of oil into the North Santiam River and are well beyond their service life. Transformer replacement is required to reduce environmental risk of oil, lead and asbestos; increase reliability, functionality and safety; and to comply with current codes and standards.

This project will replace and relocate the 6 single-phase Detroit dam transformers off the tailrace deck with 2 three-phase transformers to ensure safe, reliable operation.