Jones Canyon 230kV Shunt Reactor Replacement

This project will replace Jones Canyon 230 kV shunt capacitor group 1 (section 1 or section 2) with a 40 Mvar or 60 Mvar switchable shunt reactor. This project is required to keep system operating voltages within BPA standards as well as to meet NERC TPL-001-4 compliance requirements. Jones Canyon regularly experiences voltages above 245 kV and has experienced voltages above 270 kV during N-1 planned outages. Dispatch has cancelled planned maintenance outages because of these high voltages. These high voltages pose a risk to safety and equipment life. This project is also a contingent facility for a RAS at Morrow Flat to enable load service in the Boardman area to accommodate the line and load request L0389. If this project is not completed before Summer of 2023, load growth in the Boardman area may not be able to be served reliably.

This project is needed to keep system operating voltages within BPA and NERC standards (230 kV - 241.5 kV). Jones Canyon substation regularly experiences voltages above 241.5 kV (75% of the time since 2018, and has experienced voltages above 250 kV during outages. Studies show voltages during a worst case contingency could approach 270 kV. These voltages pose a risk to safety and equipment life.