

## **Chief Joseph Powerbus Units 1-16**

This project seeks to replace/refurbish the existing Powerbus units 1-16 at Chief Joseph Dam.

The original dam was constructed in the late-1950s and included 16 generating units. In the 1970s, new construction expanded the powerhouse to 27 generating units. The powerbus systems supporting generating Units 1-16 were installed during original construction in the late-1950s. These powerbus systems are currently experiencing several age and design-related issues, including rainwater infiltration, low electrical current rating capacities, and overheating.

The powerbuses included in this project transmit power from generating Units 1-16 to four transformers, which then transmit power to the electrical grid. These powerbuses are essential in Chief Joseph Dam's ability to transmit power to customers. Chief Joseph Dam has been experiencing increased performance issues with the existing powerbus systems as noted through an increase in hot spots and bus work vibrations. Both of these occurrences continue to further degrade the equipment and significantly increase risk of forced equipment outages and the loss of four generating units producing 400 megawatts of power production per day.