

## **Ice Harbor Stator Winding Replacements**

This proposed project will install new stator windings in Ice Harbor Units 1-3 to coincide with the turbine replacements planned for these three units. Since commissioning Ice Harbor Dam in the early 1960's, generating units 1, 2 and 3 have undergone extensive maintenance and repairs. The turbine hubs on these units have experienced chronic oil leaks. The history of problems led to a decision to replace the turbine runners in all three units.

The stator windings for these units are nearing the end of their design life. The planned (and approved) turbine runner replacements provide an outage opportunity to replace these aged windings at the same time. This will avoid additional unit outages that would be required in the very near future.

These generators were originally manufactured by General Electric Company and were commissioned between 1961 and 1962. They are salient pole, air cooled (via air-water heat exchangers) machines and rated at 94,737 kVA. The winding is composed multi-turn asphalt-mica coils. The condition ratings are "poor." Some of the stator bars have been jumpered and units are showing signs of loose wedges and increased partial discharge.