

# IDAHO FALLS OLD LOWER POWERHOUSE REHABILITATION

## Project Summary

The Idaho Falls Power Old Lower Powerhouse project included refurbishment of the component for two Kaplan turbine hydropower generators. This initial scope of work required HCMS to perform the in-shop complete rehabilitation of two head covers and thirty-two wicket gates, the evaluation and painting of two control rings, thirty-two lever arms, thirty-two shear links, the evaluation only of thirty-two packing glands, and the replacement of bushings and bearings.

Additional work was required after a thorough evaluation of the turbine equipment. Wagstaff AT manufactured two new thrust blocks and stator shim plates.

## Burke Electric Scope

As a subcontractor, Burke Electric LLC was involved in the construction of a new bay that was added to the existing substation. Work completed by Burke Electric LLC included; transformer installation, all relay/control installation, steel procurement and installation and new concrete pads. Burke Electric LLC also furnished and installed a new 46 kv overhead switch and a new high voltage substation breaker and GSU. In addition to the substation work, Burke Electrical installed all associated equipment into the newly empty powerhouse including all of the equipment as listed (left).

## Equipment and Systems Overview

- Two (2) Kaplan turbine hydropower generators
- MV Switchgear
- Motor Control Centers
- Control Panels including generator terminal cabinets
- Governor Controls
- Excitation equipment
- All associated plant/facility controls
- Conduit and wiring
- New substation bay
- Transformers
- Relays and Controls
- 46kV overhead switch
- High Voltage substation breaker and GSU

## Offeror Role Subcontractor

## Owner Information

Idaho Falls Power Company  
140 S Capital Ave  
Idaho Falls, ID 83402  
208.612.8430

## Contract Amount & Type

\$1,162,211—firm fixed price

## Customer Information

HCMS  
11836 N. Reed Rd.  
Hayden, ID 83835  
Rod Graybeal, rgraybeal@hydro911.com  
208-635-5551

## Project Start and Finish Dates

Xxx -8/31/2016

## Project Location

Idaho Falls Old Lower Powerhouse  
1690 Sunnyside Road  
Idaho Falls, ID 83402



## Problems Encountered and Solutions Executed

Layout took a lot of planning to avoid conflict with structure and other equipment. There was no space to use lifts or scaffold for any overhead work, so all work was done from ladders. Small footprint also forced different trades to work in the same areas at the same time.

## Burke Electric Project Personnel

Aaron Carpenter, General Foreman  
Pete Kelly, Project Manager  
Dominic Burke, COO  
Katie Morton, Safety Manager

