

JOHN DAY - BIG EDDY DESCHUTES RIVER CROSSING



A 4100' span, deep canyons, majestic views and challenging conductor make this river crossing one Hawkeye Construction won't soon forget

by Paula Frisina, MYR Group

FASTEN YOUR SEAT BELTS

There was no doubt this project had its share of challenges before it even began, but Hawkeye Construction, a subsidiary of MYR Group Inc. was certain about their team's ability to handle the job. "Collectively, MYR has performed numerous river crossings all across the nation, and although this project involved a few new issues, we knew our people, resources and specialized equipment would get the job done," commented Terry Roberts, MYR Group's Group Vice President of Transmission for the Western U.S.

Bonneville Power Administration (BPA) selected Hawkeye Construction, a subsidiary of MYR Group Inc., to replace a portion of 500kV conductor that spanned 4100' across the Deschutes River, near the Columbia River Gorge in south central Oregon. Hawkeye also replaced an additional two miles of conductor - 1 mile on the west side of the river that fed into the Big Eddy Dam substation near The Dalles, Oregon, and 1 mile on the west side that fed into the John Day Dam substation.

Out With the Old. In With the New.

The existing conductor was 2 1/2" in diameter, making it extremely heavy - nearly 4 lbs. per foot. "We've never seen conductor like this before," commented Bryan Vorwaller, Project Manager. "This conductor was used back in the 50's and 60's and is unique to BPA." "It is an inefficient wire by today's standards, considering how large it is," added Vorwaller. The old conductor was replaced with Checker 1790 ACSR conductor.

The new conductor was pulled in while the old conductor was being pulled out, and the extremely heavy weight plus the 4100' span required pulling at tensions in excess of 25,000+ lbs.

The entire project was completed in 3 1/2 weeks, with the river crossing taking approximately a week to complete. The project was completed safely with no accidents or lost time incidents. "Most importantly, we didn't drop the wire," said Vorwaller.



Bryan Vorwaller, Project Manager for Hawkeye Construction communicates with crews on either side of the 4100' span as old conductor is replaced with new and pulled over and across a set of railroad tracks and the Deschutes River. Crews and equipment can be seen in the background on top of the eastern bluff.



A wire set-up shown high atop a bluff on the west side of the Deschutes River, at the mouth of the Columbia River.



Heavy conductor and an extremely wide span contribute to very high tensions, making bulldozers the method of choice for rolling-up old conductor



The old conductor is pulled out while the new conductor is pulled in INSET: A closer look



A lineman installs insulators on the new line



These linemen easily demonstrate that this is no ordinary desk job.



Climbing into the spacer buggy



A lineman installs spacers on the new line, overlooking the Columbia River Gorge



Crews preparing to load and lift the spacer buggies onto the new line

