

## Background

Refurbishment of the two Rocky Reach 250 Ton Powerhouse Bridge Cranes.

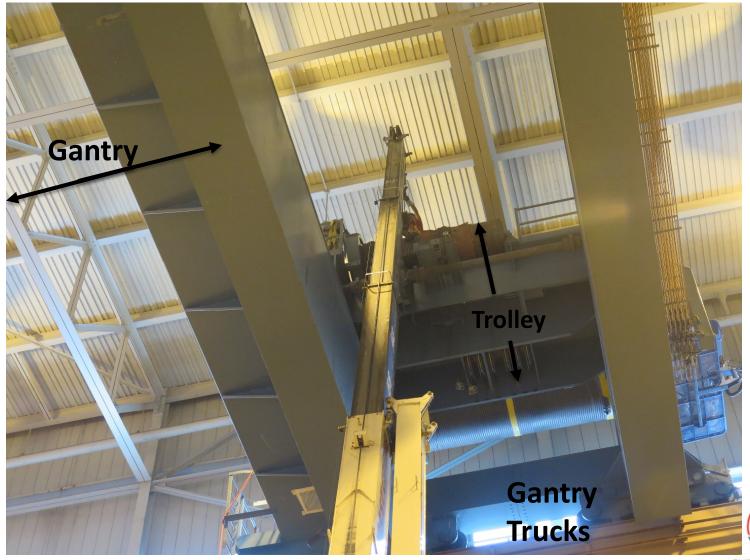
Contract 15-65 awarded for \$4.4M in May 2016.

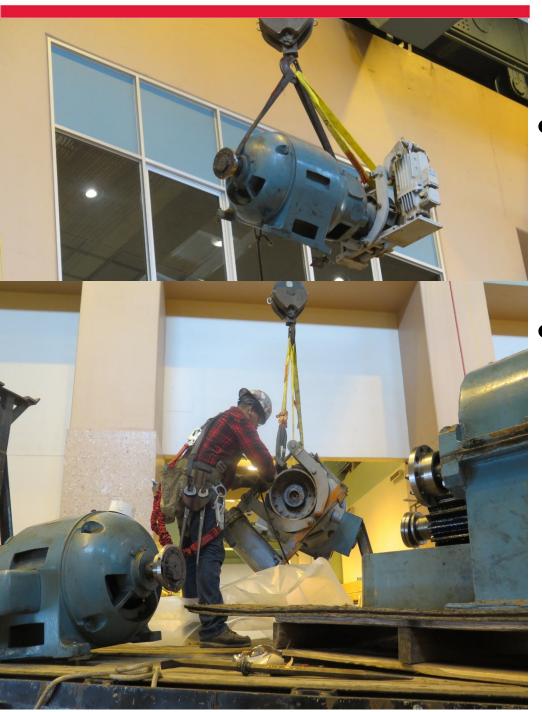
Field work originally scheduled to start Dec. 2016.

Field work started after C8 re-assembly in Aug. 2017



# Bridge Crane





### Scope

Complete disassembly and inspection.

 Replacement of all electrical equipment and controls.





#### Scope

- Refurbishment of 250 ton main hoist mechanical equipment.
- Refurbishment of gantry and trolley drive equipment.



#### **Current Status**

Disassembly and inspections complete.

Numerous cracks in welds and material defects found on trolley structures. Repairs completed.

Significant damage found on all 16 gantry wheel housing structures (trucks). Evaluation and prototype repairs are underway.



#### **Trolley Remove and Disassembly**



550 ton mobile cane picked off components through a hole in the roof

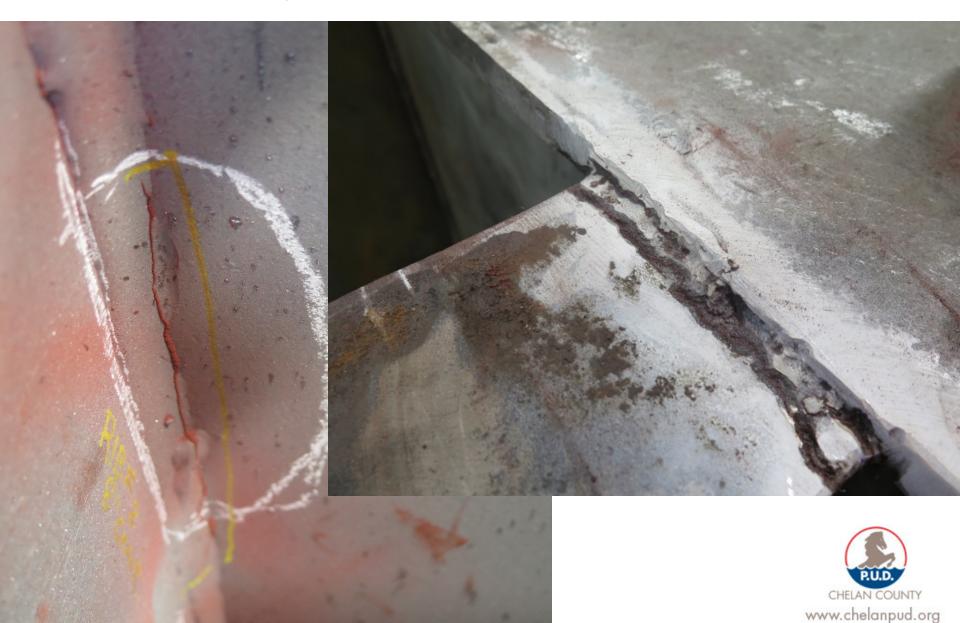
Components set on powerhouse floor for disassembly



## Sandblast and Inspect Trolley Frames



## **Trolley Weld Cracks and Defects**

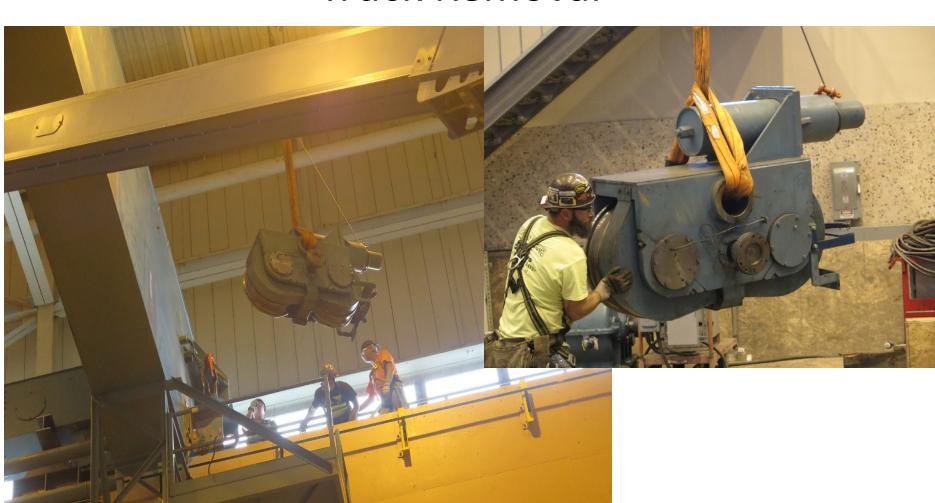


### Trolley Weld Repairs and Repainting





#### Truck Removal





### **Truck Housing Damage**







## New Sleeve in Truck





## **Bore Alignment Measurements**



#### Summary

Schedule impact estimated at four months. Still working on options to minimize impact.

Causes delay in starting C9 Turbine Repairs. Need to negotiate change with Voith.

Cost impact for additional inspection and repairs estimated at \$550k. Need to execute Field Work Order(s) for truck repairs. Contract cost estimated at \$5.25 million. No budget revision - repair work O&M.

Total cost of project estimated to be \$2 million less than purchase of new and no risk of new design issues.

Questions?

