

2016/2017 Columbia/Snake River System Extended Navlock Outage The Dalles

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US Army Corps of Engineers
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The Dalles

1956



Present



59 Years

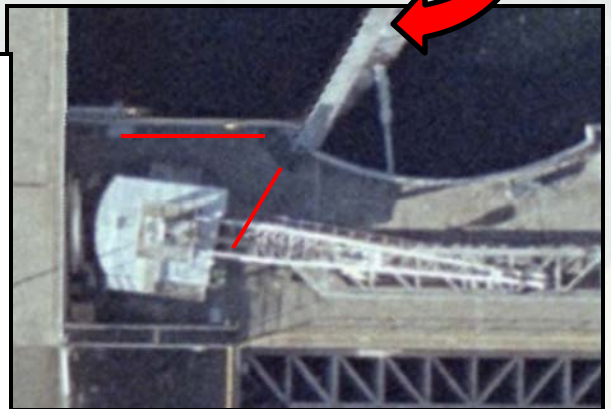
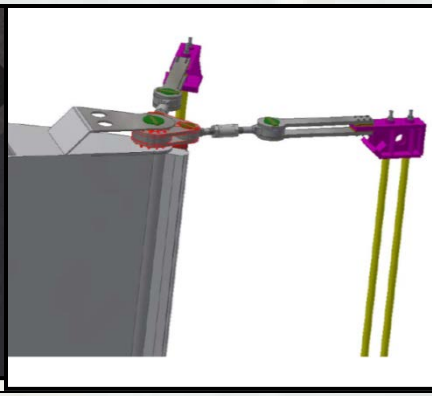
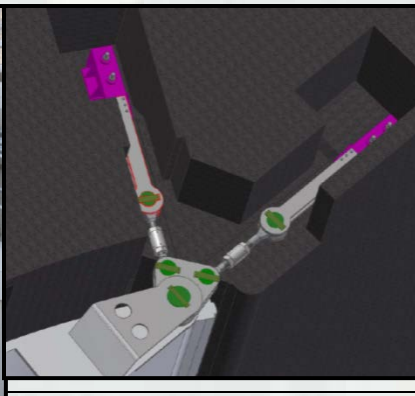


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Current Issues/Plans – Downstream Gate

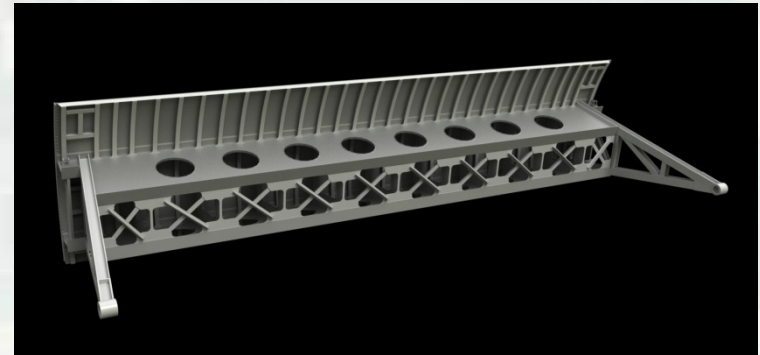
- Gate and Pintle (bottom hinge point) replaced in 2011
- Included in 2016/17 Outage
 - ▶ Gudgeons (top hinge point)
 - ▶ Cathodic protection *
 - ▶ Vibration *

* Optional Items



Current Issues/Plans - Upstream Gate

- Fracture critical structure
- Cracked welds and deformed members
- Gate is twisted, causing uneven lifting
- Included in 2016/17 Outage
 - ▶ Gate replacement



Current Issues/Plan - Controls

- High over-voltage at operator panel and interlock failure
 - ▶ 2013 – temporary fix installed
- 59-year old hardware difficult to maintain
- Included in 2016/17 Outage
 - ▶ Operator Interface Controls upgrade
 - ▶ Electrical Power Distribution System upgrade



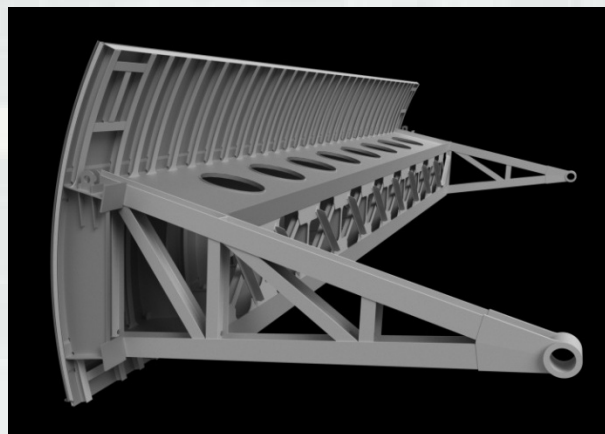
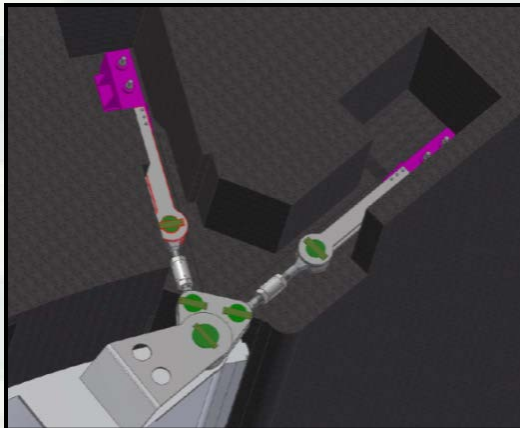
The Process

- FY14
 - ▶ Design Documentation Reports
- FY15
 - ▶ Plans & Specifications
 - ▶ Award power distribution supply contract
- FY16
 - ▶ Award construction contract
 - Contractor fabricate parts
- FY17
 - ▶ Lock outage



The Dalles FY17 Extended Lock Outage

- Outage – Dec 12, 2016 6am, though March 20, 2017 20:59
- Estimated to be 14 weeks in duration



Other Opportunities

- John Day: Estimate 4 weeks (TBD)
 - ▶ DSQ1 Replacement (new switch purchased in 2012)
 - ▶ Friction Sheave and Bearings repair
 - ▶ Replacement of tainter valve operating cylinder
 - ▶ D/S gate wire rope replacement (~ 10 year replacement)

- Bonneville: Estimate 8 weeks (TBD)
 - ▶ NavLock Controls modernization and electrical repairs
 - ▶ In-place since 1993 – no longer supported by industry
 - ▶ System Failures occurring more frequently



Questions?

