OFFICIAL COORDINATION REQUEST FOR
NON-ROUTINE OPERATIONS AND MAINTENANCE

COORDINATION TITLE – 18TDA07 TDA AWS Backup System Commissioning
COORDINATION DATE – 12 June 2018
PROJECT – TDA
RESPONSE DATE- 26 June 2018

Description of the problem

Due to an unsuccessful attempt to complete flow testing during the commissioning process the last week of April (17TDA27 MOC AWS Commissioning), a new date of August 6-7 is proposed for completion of the flow test. The flow test will be conducted the night prior to the mid-season annual ROV grating inspection that is scheduled to occur ~0600-1000 August 7.

The TDA-E AWS PDT requires that the flow test portion of the commissioning of The Dalles AWS backup system be conducted without the operation of the fish units. During the commissioning, the contractor will be operating the system components and will need to address any deficiencies that arise. If fish units are attempted to be operated simultaneously, there could be serious seiching within the AWS and fish ladder[1]. The fish units will be off during night hours similar to the original coordination. The PDT would like to reserve a later time (perhaps during FY 19 In-water work period) to test a concurrent AWS penstock and fish unit operation to determine the viability of such an operation.

Type of outage required - Both fish units will be out of service. The south and west entrances will be closed.

Impact on facility operation –The East ladder system during adult fish passage season will be out of criteria.

Configuration during testing –

1. Provide lighting at East Entrance area, AWS conduit, forebay intake area and both valve rooms.

[1] This occurred at Bonneville A Branch fish ladder decades ago when they attempted to open FV3-8 while simultaneously feeding the A Branch AWS and powerhouse conduit from both ends: FV1-1 and FV3-7. Since those tests, FV3-8 remains closed to assure that the AWS conduits for the Powerhouse and A Brach are hydraulically separated.

2. Allow fish units to operate 1/2 hour past sunset so that most fish may evacuate the south and powerhouse channels.
3. Shut down fish units and close entrance gates at South & West entrances
4. East entrance remains open in FPP criteria.

Impact on unit priority – None for main unit operation

Impact on forebay/tailwater operation - None

Impact on spill – None. Spill for juvenile passage will be in effect.

Dates of impacts/repairs – Aug 6-7, 2018

Length of time for repairs – Approximately nine hours overnight.

Analysis of potential impacts to fish

Per Fish Passage Center database: The 10 year average on Aug 7 is 452 Chinook, 1,709 Steelhead, 33 Sockeye and 99 Lamprey. Night passage is <1% for Chinook, ~4% for Steelhead, ~7% for Sockeye and ~16% Lamprey. The spillway will be open for juvenile passage during this time with optimal attraction to the north ladder normally seen during that time of year. Approximately 30-60% of migrants use the north ladder during this time of year, dependent on species and volume of spill.
It should be noted that attraction flow to the east ladder will not be absent the entire night. The AWS will be intermittently operated during this time, providing criteria attraction flow to the east entrance. This equals about 30% of total discharge normally provided by 2 fish unit operation. The rest of the fish ladder will remain in criteria operation.

Summary statement - expected impacts on

Upstream migrating salmon – Given the amount of passage, the expected night passage and the likely optimal attraction conditions to the north ladder, the east ladder numbers should be expected relatively low. And with intermittent attraction flow to the east entrance during the testing, delay time should be short for fish near that area.

Downstream migrants - There are no expected impacts since there are likely no downstream migrants near this location.

Upstream migrants Bull Trout – No impact. Very few bull trout have been counted at TDA in the last 10 years.

Lamprey – This is the tail end of lamprey passage, though some lamprey will be present. However, past passage has shown during optimal spill conditions, the majority of lamprey will use the north ladder.

Comments from agencies – No comments were received.

Final coordination results- No comments were received so the work will go forward as planned.

After Action update – The test was completed as planned.

Please email or call with questions or concerns.
Thank you,
Erin

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