OFFICIAL COORDINATION REQUEST FOR
NON-ROUTINE OPERATIONS AND MAINTENANCE

COORDINATION TITLE- 16 LGS 12 Change Emergency Gate Closure Fish Guidance Efficiency Study.
COORDINATION DATE- 14 June 2016
PROJECT- Little Goose Dam
RESPONSE DATE - 21 June 2016

Description of the problem – The Emergency Gate Closure Fish Guidance Efficiency study currently being conducted at Little Goose Dam has determined that there are differences in test results to date between units 2 and 3. Adhering to the protocol outlined in Appendix A of the 2016 Fish Passage Plan (FPP) may induce unnecessary bias in study results. Changes in test procedures are planned to eliminate or reduce this bias.

The current Appendix A section reads as follows:

FPP Section: Appendix A
8.2.2.a. *Hydroacoustic transducers will be installed on the trashrack and ESBS frames in turbine units 2 and 3. Installation is expected to occur during the in-water work window in February, 2016. A dive to install transducers on the trashracks will require a three-unit outage. Project personnel will assist with alternating unit 2 and unit 3 head gate orientation between raised and stored operating positions once per week on a random block design for the duration of the study beginning approximately 4 April, 2016 through approximately 15 July, 2016. Should low flow limit the Project's ability to operate three turbine units in June and July, an alternating turbine unit operating priority between units 2 and 3 will be necessary to meet the study design, assuming river conditions will permit the operation of two units. Head gates will remain in either the raised or lowered position in units 2 and 3 and unit operation will alternate on the random block design rather than changing head gate position during the low flow period. Adult fish passage will not be affected as all in-water work will be conducted during the work window. No specific turbine unit operating points (MW) are requested for this study.*

Low flow at the project has caused generation to decrease to two operating units during portions of the day. The FPP states that #2 priority will shift between units 2 and 3 to meet the study design while flows remain low enough to limit generation to two units. Originally, the head gates were going to remain in their position during low flows, however, further discussion with the researcher warrants continuing to swap the head

gates. The unit priority change would allow for both units to continue to be tested and swapping the head gates would alleviate any bias between the individual intake systems.

Type of outage required – None.

Impact on facility operation –

It is proposed to continue with the original head gate change schedule and run units 2 and 3 for approximately equal amounts of time each week. [ex: Unit 2 (Sat-Mon), Unit 3 (Tues-Thurs)]. Data on Fridays is not being analyzed due to the normal outages.

This change will allow the flow to be equally distributed among the test units as planned while also allowing the head gate positions to continue to change on the random block schedule to alleviate bias between units.

Dates of impacts/repairs – Head gate changes will continue to occur on Fridays.

Length of time for repairs – No repairs are involved.

Expected impacts on fish passage – No additional fish passage impacts are expected other than the impacts described and discussed in the original study design.

Comments from agencies –

Final results -

Please email or call with questions or concerns.

Thank you,

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