CENWP-OD-J

March 10, 2021

MEMORANDUM FOR THE RECORD

SUBJECT: 21JDA01 MRF South Fish Turbine #2 out of service

During the winter maintenance period of the South fish ladder at the John day project the #2 South fish turbine was inspected and found to have significant wear on the Teflon strips for the brass guide bearing of the lower guide bearing for the pump assembly. The guide bearing holds the shaft within the stay vanes while the impeller rotates pumping water into the auxiliary water supply conduit producing the attraction water in the collection channel of the South fish ladder.

There is a a large backlog of parts required and they have arrived in time to return the turbine pump to service for the beginning of the adult fish passage season on 1 March. Therefore, the ladder was watered up and South fish turbines 1 & 3 are being used to provide attraction water to ladder entrances at this time. With the current configuration the two pumps are adequate to meet FPP requirements and maintain entrance and channel criteria.

JD maintenance is expecting once parts arrive that the turbine pump can be returned to service within a week.



Lower guide bearing



Pump shaft leading to impeller

- A. Species -
- B. Origin -
- C. Length -
- D. Marks and tags –
- E. Marks and Injuries found on carcass -
- F. Cause and Time of Death –
- G. Future and Preventative Measures -

Sincerely, JD Project Fisheries