

**OFFICIAL COORDINATION REQUEST
FOR
NON-ROUTINE OPERATIONS AND MAINTENANCE**

COORDINATION TITLE: 14 MCN 03 Adult Steelhead Direct Injury and Survival through the TSW and Turbines. (**UPDATED 13 MCN 01 coordinated and approved at Jan. 2013 FPOM, see first MOC below**)

COORDINATION DATE- 13 February 2014
PROJECT- McNary
RESPONSE DATE- FPOM Feb 2014

Description of the problem:

Direct injury and survival estimation of adult steelhead passing turbines and temporary spillway weirs (TSW) will occur at McNary during March, 2014. Installation of the TSW outside of the fish passage season was previously approved for the month of **March, 2013**, for this study by FPOM, and approximately 10kcfs spill approved by BPA. The study has been delayed until early March, 2014 as a result of adult steelhead being unavailable for executing the study. BPA and NOAA Fisheries are aware of the delay and have been supportive of conducting the study.

It is currently scheduled with McNary to install the TSW in spillbay 20 by 4 March, 2014 and spill 10kcfs for approximately 7 days, 8-10 hours per day. This operation outside of the fish passage season was previously approved through FPOM and supported by BPA for earlier study dates.

Turbine unit 12A will be used for the study and the turbine will operate at peak efficiency during the study. A scintillation frame with a release pipe attached will be installed in the A slot, scheduled for 26-27 February, 2014.

Type of outage required:

Previously Coordinated:

Turbine unit 12 outage may be required to install the direct release pipe structure in the head gate slot of intake A and has been previously coordinated and approved through FPOM and with McNary.

Spill requirements for the TSW in bay 20 was approved through FPOM and BPA. Installation and operation of the TSW has been coordinated with McNary for 4 March, 2014. Previously approved spill of 10kcfs has not changed.

Updates:

1) TSW installation by 4 March, 2014; 2) Installation of the turbine scintillation frame in unit 12A 26-27 February, 2014 with a possible unit 12 outage for the installation; 3) Execution of the study 4-14 March, 2014 with 10kcfs spill over the TSW for approximately 7 days, 8-10 hours per day

New Request:

Leave the TSW installed subsequent to study execution for the upcoming fish passage season (approximately 15 March – 1 April). Spill will not be required during this time period.

Impact on facility operation:

Project personnel have already agreed to install the scintillation frame in turbine unit 12A. This requires removing the head gate, installing the frame, and replacing the head gate. McNary staff may decide to move the head gate to a vacant slot if convenient.

Length of time for repairs: N/A

Expected impacts on fish passage:

During the study period, juveniles will not be outmigrating and are not expected to experience any impacts from this study. Adults may fall back through the TSW, but many adult will already be in the tributaries for spawning; hence, a minimum impact to adults is expected. There are no special operations for fish passage during the study period.

Comments from agencies

Approved with the changes described at FPOM on Feb 13, 2014. Can proceed as described.

Oregon needed to review.

From: Gary Fredricks - NOAA Federal [mailto:gary.fredricks@noaa.gov]

Sent: Wednesday, February 26, 2014 9:00 AM

To: Moody, Gregory P NWW

Subject: [EXTERNAL] Re: FPOM MOC: 14 MCN 03 Adult Steelhead Direct Injury and Survival through the TSW and Turbines.docx (UNCLASSIFIED)

Greg, Looks good, no issues with leaving the TSW in place. Thanks, Gary

Final results:

First MOC from Jan 2013:

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COORDINATION TITLE: 13 MCN 01 Adult Steelhead Direct Injury and Survival through the TSW and Turbines.

COORDINATION DATE- 7 January 2013

PROJECT- McNary

RESPONSE DATE- FPOM meeting Jan. 10, 2013

Description of the problem:

Direct injury and survival estimation of adult steelhead passing turbines and temporary spillway weirs (TSW) will occur at McNary during March, 2013. It is expected that TSW's will need to be installed in spill bays 19 and 20 beginning by 18 February, 2013. The FPP does not specify an installation date for the TSW's but simply states that the TSW's must be available for the start of the fish passage season. The TSW's will operate up to 10kcfs in bay 20. It is expected that the study will begin by 11 March, 2013 and will require approximately three weeks for completion. Upon the completion of the study it is expected that the TSW's will remain in place for the fish passage season beginning in early April. Turbine unit 12A will be used for the study and turbine operations have been identified as peak efficiency and best geometry (approximately 14kcfs). Turbines operate under the 1% soft constraint between November 1 and March 31; however, operation at the best geometry point (~14kcfs) will be coordinated through FPOM. Equipment removal will occur prior to the beginning of the fish passage season and is expected during the last week of March and first week of April.

Type of outage required:

Turbine unit 12 outage may be required to install the direct release pipe structure in the head gate slot of intake A. Operation at ~14kcfs will need approval through FPOM and BPA. Spill requirements for the TSW in bay 20 will need approval through FPOM and BPA.

Impact on facility operation:

The study will potentially require the flat bed truck to move the fish release apparatus from the bone yard to the powerhouse deck. Project personnel and the use of the gantry crane will be required for install and removal of the fish release structure as well. Operations assistance for changing turbine operations will be required. These requirements may be difficult for the project to support and is currently being coordinated through McNary personnel.

Length of time for repairs: N/A

Expected impacts on fish passage:

The study is expected to be completed with equipment removed prior to the beginning of fish passage season with no expected impact on fish passage.

Comments from agencies

General FPOM consideration was favorable. Need to coordinate with BPA to go forward with this study.

Final results:

Delayed – no steelhead for the study