OFFICIAL COORDINATION REQUEST FOR
NON-ROUTINE OPERATIONS AND MAINTENANCE

COORDINATION TITLE- 20 DWR 01 Unit 1 Digital Exciter Commissioning
COORDINATION DATE- 6 January 2020 (updated with comments received 1/13/20)
PROJECT- Dworshak Dam
RESPONSE DATE- 13 January 2020
Description of the problem- Replacement of Dworshak Dam exciters was complete on unit 2 and 3 in November with commissioning of unit 2 and 3 digital exciters occurring early December. Unit 1 digital exciter will be installed during January with commissioning scheduled for January 22-28. Commissioning will require intermittently operating unit 1 at speed no load and starts and stops. The after action section in MOC 19 DWR 01 Unit 1, 2, and 3 Digital Exciter Commissioning gives an account of the actual commissioning process that will again be used.

LWG Project biologist will be onsite for biological monitoring of the tailrace during commissioning and will contact NPTH staff to encourage their participation.

Type of outage required- N/A

Impact on facility operation (FPP deviations) – Unit 1 will be operated at SNL for longer than 5 minutes on 1/22/20 and 1/23/20. On 1/24/20 partial and full load testing will occur. Expect SNL intervals longer than 5 minutes again on 1/27/20 and 1/28/20 for Special field testing.

Impact on unit priority- N/A

Impact on forebay/tailwater operation- Tailwater conditions will change based on turbine operations during the commissioning process. Unit 2 will be operated at 100 MW during the testing to help reduce TDG in the river.

Impact on spill- Voluntary spill will be provided for 2 hrs prior to testing unit 1, and throughout SNL and low load testing.

Dates of impacts/repairs- Commissioning will be over a five day period from January 22-28 with units operated as outlined in the attached schedule.

Length of time for repairs- Commissioning is expected to take up to five days to complete. Testing requiring the units to be operated at speed no load will be limited as much as possible. Units will remain rolling during starts and stops to minimize potential impacts to fish.

Analysis of potential impacts to fish

1. 10-year average passage by run during the period of impact for adults and juvenile listed species, as appropriate for the proposed action and time of year; Information not accessible.
2. Statement about the current year's run (e.g., higher or lower than 10-year average); The 2019 Fall Chinook and Steelhead returns at Lower Granite are below the 10 year average. As of November 22 adult steelhead passage is 23.8% of the ten year average. Reduced fish passage at Lower Granite suggests the less adult steelhead will have migrated into the North Fork of the Clearwater River to hold prior to spawning.
3. Estimated exposure to impact by species and age class (i.e., number or percentage of run exposed to an impact by the action); Information not accessible. Type of impact by species and age class (increased delay, exposure to predation, exposure to a route of higher injury/mortality rate, exposure to higher TDG, etc.); Information not accessible.

Summary statement - expected impacts on:

Downstream migrants: Minimal impacts are expected.

Upstream migrants (including Bull Trout): Minimal impacts are expected.

Lamprey: Minimal impacts are expected.

Comments from agencies:

From: Jay Hesse
Subject: [Non-DoD Source] RE: 20 DWR 01 coordination
Date: Monday, January 6, 2020 9:04:52 AM

Ann - The Nez Perce Tribe has similar concerns about this testing to those we expressed about testing of units 2 and 3 in December, that being direct mortality impacts to adult B-run steelhead. Our concern is based on past observed mortality events during similar testing (unit start/stop and speed no load operations); steps to avoid/minimize injury or killing adult steelhead was subsequently established in the Fish Passage Plan (FPP), Appendix I (http://pweb.crohms.org/tmt/documents/fpp/2019/final/FPP19_AppI.pdf). That FPP appendix recommends testing during periods when fish are less likely to be present (April, May, or September).

As you are aware, steelhead returns are so low this year that recreational and tribal harvest (including catch and release fisheries) were closed during the fall and winter of 2019 in an effort to ensure adequate hatchery brood stock collections at Dworshak Hatchery could be achieved. While not definitive, one of the likely contributing factors to the low steelhead abundance was elevated Total Dissolved Gas and Gas Bubble Trauma resulting from the Dworshak Dam Unit 3 outage. To potentially have Dworshak Dam operations further impact this cohort of steelhead is disheartening, if not unacceptable.

The MOC does not describe concurrent spill operation as was implemented in December. Do you plan to provide spill during the testing? If not, why? The "dates of impacts/repairs" states Dec 2-6, while "description of the problem" states January 22-28 - please correct. The Nez Perce Tribe will attempt to provide staff to assist with monitoring. Please coordinate specific testing dates, times, and monitoring plans so we can schedule our staff.

Thank you,
Jay

From: Morrill, Charles (DFW)
Subject: [Non-DoD Source] RE: 20 DWR 01 coordination
Date: Monday, January 6, 2020 9:59:26 AM

Thanks Ann for the MOC on the scheduled commissioning of Unit 1.
Elizabeth describes three information needs as 'Not accessible', Can you clarify that ? I suspect for two of the three, there is no data available but I could be wrong ..
I'm not sure what information the hatcheries have on steelhead entrance into the hatcheries that would, could provide some information on relative timing and relative abundance
We can discuss Thursday ...
Speaking for WDFW we understand the need for the testing and will weigh in with others at FPOM
Charlie

Charlie:

I believe Elizabeth meant not available rather than not accessible. We do not have any juvenile monitoring or adult counting that occurs at Dworshak.

Ann

From: Setter, Ann L CIV USARMY CENWW (USA)
To: Jay Hesse; et al.
Subject: RE: 20 DWR 01 coordination
Date: Tuesday, January 7, 2020 7:37:00 AM

Jay:
The Corps will plan to undertake a similar operation to that used in December in order to minimize the risk of injury to steelhead during the unit 1 exciter testing. This will entail operating unit 2 to reduce TDG, and spilling to attract adults prior to initiating testing. Elizabeth will contact Sherman specific to the testing schedule. The incorrect date information in the MOC has been updated.
Ann

From: Tom Lorz
To: Setter, Ann L CIV USARMY CENWW (USA); Kovalchuk, Erin H CIV USARMY CENWP (US); Mackey, Tammy M CIV USARMY CENWP (USA); Trevor Conder -NOAA Federal; jayh@nezperce.org
Subject: [Non-DoD Source] Re: 20 DWR 01 coordination
Date: Tuesday, January 7, 2020 10:07:27 AM

Thanks for the heads up.
Again I will make the same comment I made for the December work, that this is outside the agreed upon work window. Looking at flood control elevations (currently the target is around 1564, and the project at 1514ish it appears that with 2 units this work could be postponed until a better time frame. Contracting is not a valid excuse and now that we have 2 units there should be adequate generation to cover flood control issues for the near term.
At the very least similar operations that were used last time for the other unit commissioning should again be used this time. We can discuss more at FPOM but currently the MOC as written does not meet our needs and we would not support it. As noted due to low returns for steelhead additional unnecessary loss or risk needs to be minimized.
Tom Lorz
CRITFC

Final coordination results: Further discussed this MOC with FPOM on 1/9/20; Corps will resend the MOC with additional information outlining mitigative operations to reduce chance of impacting steelhead in the tailrace while the testing is undertaken.

After Action update Testing activity was delayed in starting, however proceeded as planned once initiated. No mortalities were seen. Three days of testing with SNL occurred.

From: Miller, David L CIV (USA)
To: Setter, Ann L CIV USARMY CENWW (USA); Peery, Christopher A CIV USARMY CENWW (USA); Hockersmith, Eric E CIV USARMY CENWW (USA)
Cc: Holdren, Elizabeth A CIV USARMY CENWW (USA)
Subject: Update for Unit 1 Digital Exciter Commissioning at Dworshak (UNCLASSIFIED)
Date: Thursday, January 23, 2020 4:18:32 PM

Good afternoon everyone,
They finally got to where they could test the unit today at 12:59. They were able to run 3 start/stops at speed no load before running into issues with oil in the tailrace. They are working on locating the source of the oil and plan to proceed with more SNL testing tomorrow morning. No salmonids were seen today.

Unit 1 SNL Times
12:59-13:02 3 minutes
13:11-13:14 3 minutes
13:44-14:14 30 minutes
Water temp was 43°F.

David Miller
Supervisory Fisheries Biologist
US Army Corps of Engineers
Lower Granite Project
(509) 843-2264

From: Miller, David L CIV (USA)
To: Setter, Ann L CIV USARMY CENWW (USA); Peery, Christopher A CIV USARMY CENWW (USA); Hockersmith, Eric E CIV USARMY CENWW (USA)
Cc: Holdren, Elizabeth A CIV USARMY CENWW (USA)
Subject: Update for Dworshak Unit 1 Digital Exciter Testing (UNCLASSIFIED)
Date: Monday, January 27, 2020 6:35:31 AM

CLASSIFICATION: UNCLASSIFIED
Good morning everyone,
Last Friday Dworshak conducted SNL testing for the times listed below. They were delayed due to oil sheen in the tailrace which they suspect came from grease. I did observe about 20 adult steelhead throughout the day with no mortalities or injuries.
SNL Times
07:45-08:19 34 minutes
13:43-14:39 56 minutes
15:43-15:48 5 minutes
15:55-16:00 5 minutes
16:05-16:09 4 minutes
Water temp was 43°F.

David Miller
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From: Lee, Steven R CIV USARMY CENWW (USA)
To: Holdren, Elizabeth A CIV USARMY CENWW (USA); Setter, Ann L CIV USARMY CENWW (USA); Hockersmith, Eric E CIV USARMY CENWW (USA); Peery, Christopher A CIV USARMY CENWW (USA)
Cc: Miller, David L CIV (USA)
Subject: RE: DWO
Date: Wednesday, January 29, 2020 10:08:01 AM
Attachments: 28JAN2020_DW Unit 1 Testing.pdf

All,
Four Speed No Load events occurred. Depression air system used for all SNL events. No injured fish or negative fish behavior issues noted during testing.
SNL times were:

07:57 – 07:58:32 1 min 32 sec
10:25-11:00 35 mins
12:43 – 12:45:04 2 mins 4 secs
13:48 – 13:49:50 1 min 50 secs

Water temperature was 46°F.
Steve

*No NPT staff attended to participate in observing testing operations

Please email or call with questions or concerns.

Thank you,
Elizabeth Holdren
Supervisory Fisheries Biologist
Lower Granite Lock and Dam
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