OFFICIAL COORDINATION REQUEST FOR
NON-ROUTINE OPERATIONS AND MAINTENANCE

COORDINATION TITLE- 19 DWR 01 Unit 1, 2, and 3 Digital Exciter Commissioning
COORDINATION DATE- 25 November 2019
PROJECT- Dworshak Dam
RESPONSE DATE- COB on 29 November, 2019

Description of the problem- Replacement of Dworshak Dam exciters was complete on unit 2 and 3 in November. The contractor had tentatively scheduled the commissioning of unit 2 and 3 digital exciters December 2-12 with the dates for special field testing to occur December 7-12. On November 20 the contractors provided a new schedule that shortened the total commissioning time to six days. At this time the Project was notified units would need to be operated at speed no load during the commissioning and that the schedule had been shifted for commissioning to begin December 2. Commissioning will require operating the units at speed no load for up to 6 hours December 2 and up to 2 hours December 5. Project operations and the contractor were able to reduce the number of starts and stops from 5 to 2 but the two speed no load operations are required. Unit 1 digital exciter will be installed during January with commissioning scheduled between January 29 and February 10 with the same commissioning as described for unit 1. This late coordination was due to a Project operations oversight of the requirement to operate at speed no load for commissioning.

Not commissioning units 2 and 3 will leave them inoperable in the event unit 1 has an unexpected outage. Having all three units out of service could put Dworshak in an involuntary spill operation that has the potential to increase the amount of TDG in the tailrace and at Dworshak National Fish Hatchery. LWG Project biologist will be onsite for biological monitoring of the tailrace during commissioning and has contacted Sherman Sprague from NPT to participate.

Type of outage required- N/A

Impact on facility operation (FPP deviations) – N/A

Impact on unit priority- N/A

Impact on forebay/tailwater operation- Tailwater conditions will change based on turbine operations during the commissioning process.

Impact on spill- N/A

Dates of impacts/repairs- Commissioning will be over a six day period from December 2-6 with units operated as outlined in the attached schedule.

Length of time for repairs- Commissioning is expected to take up to six days to complete. Testing requiring the units to be operated at speed no load will be limited to about 6 hours December 2 and up to about 2 hours December 5 or 6. 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 23.6% of the ten year average and fall Chinook is about 42.4% of the ten year average at Lower Granite Dam. Coho 2019 returns are about 158.4%. 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: Based on previous biological monitoring of unit testing and/or commissioning has the potential to result in fish injury and/or mortality. Unit start and stop procedures to include ensuring the units are depressed outlined in FPP Section 4 of Appendix I Dworshak Maintenance will be followed.

Upstream migrants (including Bull Trout): Based on previous biological monitoring of unit testing and/or commissioning has the potential to result in fish injury and/or mortality. Unit start and stop procedures to include ensuring the units are depressed outlined in FPP Section 4 of Appendix I Dworshak Maintenance will be followed. Low steelhead returns indicate that injury and /or mortality will have a larger impact on the steelhead run over all.

Lamprey: Minimal impacts are expected.

Comments from agencies:

From: Jay Hesse [mailto:jayh@nezperce.org]
Sent: Tuesday, November 26, 2019 9:20 AM
To: Holecek, Dean E CIV USARMY CENWW (US) <Dean.Holecek@usace.army.mil>; Setter, Ann L CIV
USARMY CENWW (USA) <Ann.L.Setter@usace.army.mil>
Cc: Becky Johnson <beckyj@nezperce.org>; Bill Young <billy@nezperce.org>; Jason Vogel

<jasonv@nezperce.org>
Subject: [Non-DoD Source] FW: Coordination for 19 DWR 1 Unit 1, 2, and 3 Digital Exciter Commissioning with short timeframe
Dean and Ann - Given this type of testing has resulted in adult steelhead mortality in the past, coupled with current state and tribal harvest closures due to low hatchery return, I need to get assurance that this testing is absolutely required. Can you help get that confirmation?
jay

From: Setter, Ann L CIV USARMY CENWW (USA)
To: Jay Hesse
Cc: Holecek, Dean E CIV USARMY CENWW (US)
Subject: FW: Coordination for 19 DWR 1 Unit 1, 2, and 3 Digital Exciter Commissioning with short timeframe
Date: Tuesday, November 26, 2019 9:36:00 AM
Jay:
Please see response below.
Ann
-----Original Message-----
From: Chatfield, John L Jr CIV USARMY CENWW (US)
Sent: Tuesday, November 26, 2019 9:34 AM
To: Setter, Ann L CIV USARMY CENWW (USA) <Ann.L.Setter@usace.army.mil>; Holdren, Elizabeth A CIV
USARMY CENWW (USA) <Elizabeth.A.Holdren@usace.army.mil>
Subject: RE: Coordination for 19 DWR 1 Unit 1, 2, and 3 Digital Exciter Commissioning with short timeframe
Yes, there will not be any generation without it and we will be limited to RO valve release only for water resulting in high TDG.
Thanks
John L. Chatfield
O&M Manager
Dworshak Project, USACE
office: 208-476-1257

From: Trevor Conder - NOAA Federal
To: Setter, Ann L CIV USARMY CENWW (USA); Josie Thompson
Subject: [Non-DoD Source] Re: Coordination for 19 DWR 1 Unit 1, 2, and 3 Digital Exciter Commissioning with short timeframe
Date: Tuesday, November 26, 2019 10:52:53 AM
Ann,
I have a few comments on this MOC. I think the expected impacts to upstream migrants should be updated. To say it is just minimal risk does not reflect the issues we have had in the past with this type of testing during this time of year. This is exacerbated by the fact the we have had an extremely low return of wild adult steelhead and some hatcheries are still concerned about meeting broodstock objectives for hatchery B run fish. I think the risk section should describe the range of instances we have had in context with the low return.
I appreciate that a BiO will be on site to document mortalities, and injured fish. This is essential at this point. Given the low return and broodstock issues, I would like for the Bio to have some authority to pull the plug on the testing should they observe excessive losses. I am not thinking five or even ten fish, but if it appears there is severe mortality leading to something similar to the last major incident, the Bio needs to pull the plug until we can determine a work around. I also suggest that the Bio have some authority to inform operations to minimize mortality to the degree possible without our input but with post coordination through the FPOM/MFR process.
My last point is that this is all really unnecessary, Reynolds et al. found that a simple

exclusion fence/gate is feasible and effective at preventing adult losses and poor Elizabeth would not even have to stand out in the frigid cold all day, which would likely save money in the long run. While we have done what we could in the FPP process, this issue has not been resolved as suggested by some upper management folks. I guess we'll just cross our fingers again and continue to document what happens.
-Trevor

From: Jay Hesse [mailto:jayh@nezperce.org]
Sent: Tuesday, November 26, 2019 3:43 PM
To: Setter, Ann L CIV USARMY CENWW (USA) <Ann.L.Setter@usace.army.mil>
Subject: [Non-DoD Source] RE: Coordination for 19 DWR 1 Unit 1, 2, and 3 Digital Exciter Commissioning with short timeframe
Importance: High
Ann - Thank you for getting the quick response. That being said, the Nez Perce Tribe is very concerned this commissioning will have 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 (Blockedhttp://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). Given the last minute notification of this operation, it is unclear how (or if) the Corps planned the timing of the commissioning. Please describe how the Corps scheduling took into consideration Appendix I. In addition, FPOM coordination/notification of this operation two business days (coinciding with common Thanksgiving Day leave) prior to implementation does not provide reasonable response time. I request the commissioning be postponed until adequate coordination is accomplished.
As you are aware, steelhead returns are so low this year that recreational and tribal harvest (including catch and release fisheries) have been closed in an effort to ensure adequate hatchery brood stock collections at Dworshak Hatchery can 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.
We request further discussion/consideration on the need to conduct full commissioning of the units before they can be operated and/or reconsideration of when the commission testing will be done.
If the Corps decides not to postpone this action, we request to be notified ASAP (but no later than noon on the 27th) so we can pursue other alternatives. Please email or call my cell phone (208) 790-2576 to communicate updates as I will be on Thanksgiving leave starting tomorrow.
Thank you,
Jay

Jay:
Please see response below.
Ann
-----Original Message-----
From: Chatfield, John L Jr CIV USARMY CENWW (US)
Sent: Tuesday, November 26, 2019 9:34 AM
To: Setter, Ann L CIV USARMY CENWW (USA) <Ann.L.Setter@usace.army.mil>; Holdren, Elizabeth A CIV
USARMY CENWW (USA) <Elizabeth.A.Holdren@usace.army.mil>
Subject: RE: Coordination for 19 DWR 1 Unit 1, 2, and 3 Digital Exciter Commissioning with short timeframe
Yes, there will not be any generation without it and we will be limited to RO valve release only for water resulting in high TDG.
Thanks
John L. Chatfield
O&M Manager

Dworshak Project, USACE
office: 208-476-1257
cell: 509-520-4501

From: Setter, Ann L CIV USARMY CENWW (USA)
To: "Jay Hesse"; Baus, Douglas M CIV USARMY CENWD (USA); Scott Bettin; Dave Benner; David Swank (david_swank@fws.gov); Ed Meyer (ed.meyer@noaa.gov); Haeseker, Steve; Jason Sweet; Jeffrey Brown - NOAA Federal; Josie Thompson; Kiefer,Russell; Langeslay, Michael J CIV USARMY USACE (US); Lorz, Tom; Mackey, Tammy M CIV USARMY CENWP (US); Richards, Steven P (DFW); trevor.conder@noaa.gov; Cordie, Robert P CIV (USA); Dykstra, Timothy A CIV USARMY CENWD (US); Eppard, Matthew B CIV CENWP CENWD (USA); Feil, Daniel H CIV CENWD CENWD (US); Gibbons, Karrie M CIV USARMY CENWP (USA); Dave Johnson; Grosvenor, Eric G CIV (US); Roberts, Jonathan M CIV USARMY CENWW (US); Hamilton, Laura J CIV USARMY CENWD (USA); Hausmann, Benjamin J CIV USARMY CENWP (USA); Kirk, Tony R CIV USARMY CENWD (USA); Kovalchuk, Erin H CIV USARMY CENWP (US); McClain, Nathan A CIV USARMY CENWP (USA); Medina, George J NWP; Rerecich, Jonathan G CIV USARMY CENWP (US); Richards, Natalie A NWP; Tackley, Sean C CIV USARMY CENWD (USA); Traylor, Andrew W CIV USARMY CENWP (USA); Turner, Daniel F CIV USARMY CENWD (USA); van der Leeuw, Bjorn Kristian CIV USARMY CENWP (USA); Walker, Christopher E CIV USARMY USACE (US); Wright, Lisa S CIV USARMY CENWD (USA); Zyndol, Miroslaw A; Anderson, Karl R CIV USARMY CENWW (US); Barnes, Charles A CIV USARMY CENWW (USA); Eskildsen, Robert D Jr CIV USARMY CENWW (USA); FCRPS NWW; Fone, Kenneth R CIV CENWW CENWD (USA); Griffith, Denise S CIV (USA); Hockersmith, Eric E CIV USARMY CENWW (US); Holdren, Elizabeth A CIV USARMY CENWW (USA); Johnson, Bobby R CIV USARMY CENWW (USA); Juhnke, Steven D CIV USARMY CENWW (USA); Juul, Steve T CIV USARMY CENWW (US); Laughery, Ryan O CIV USARMY CENWW (USA); Norton, Joseph A III CIV (US); Peery, Christopher A CIV USARMY CENWW (USA); St John, Scott J CIV USARMY CENWW (USA); Shutters, Marvin K CIV USARMY CENWW (USA); Thoren, Scott D CIV USARMY CENWD (USA); Trachtenbarg, David A CIV USARMY CENWP (USA); Weis, Richard W CIV CENWW CENWD (US); Sears, Sheri; allan martin; Ballinger, Dean; Bellringer, Holly H CIV USARMY CENWP (USA); Blane Bellerud (blane.bellerud@noaa.gov); Brandon Chockley ; Brian McIlraith; Charles Morrill (charles.morrill@dfw.wa.gov); Chris Caudill (caudill@uidaho.edu); Darren Ogden (darren.ogden@noaa.gov); Statler, Dave; Erick VanDyke; Fryer, Jeff; Jerry McCann; Kovalchuk, Greg; Leah Sullivan; Martinson, Rick; Roger Dick Jr.; Rapp, Shawn; Shane Scott; Skidmore,John T - KEWR-4; tiffani marsh; Tucker Jones; Warf, Don; Whiteaker, John; Becky Johnson; Holecek, Dean E CIV USARMY CENWW (US); Rhynard, Chad A CIV USARMY CENWW (US); Lance Hebdon (lance.hebdon@idfg.idaho.gov)
Subject: RE: Coordination for 19 DWR 1 Unit 1, 2, and 3 Digital Exciter Commissioning with short timeframe
Date: Tuesday, November 26, 2019 4:54:00 PM

Jay:
Corps feels the need to move forward to complete this testing as planned. After further internal discussion, we have an alternative operational scenario for consideration. We will constrain ourselves to stop testing if we see > 10 mortalities to reconsider how to proceed; and we are limited by the 110% TDG state of ID water quality standard. The possible alternative for consideration to additionally implement to mitigate this situation would be to operate regulating outlets (RO) to spill ~ 1500 cfs as an attractant to move any fish in the tailrace away from below units 2, 3. RO's could be opened ~ 2 hrs before start of testing and operated until the units are online. We can operate Unit 1 continuously to minimize the generation of TDG during testing. Additional operation would be limited to minimize creating high TDG in the tailrace. Please let me know if you feel this would be beneficial and want us to pursue use of the RO's.
Ann Setter

From: Morrill, Charles (DFW)
Subject: [Non-DoD Source] RE: Coordination for 19 DWR 1 Unit 1, 2, and 3 Digital Exciter Commissioning with short timeframe
Date: Tuesday, November 26, 2019 5:23:25 PM
Importance: High

Hi Ann,
Yes, thank you for your quick reply to the Nez Perce concerns expressed by Jay in his email.
Given the amount of time and effort in discussions in FPOM, with Dworshak staff, NOAA's expressed concerns, resultant changes to the operational procedures and the concern for B run Steelhead, WDFW and WA concur with Jay's concerns.
Charlie

From: Tom Lorz [mailto:lort@critfc.org]
Sent: Wednesday, November 27, 2019 11:42 AM
To: Setter, Ann L CIV USARMY CENWW (USA) <Ann.L.Setter@usace.army.mil>; Trevor Conder - NOAA
Federal <trevor.conder@noaa.gov>; jayh@nezperce.org; Kovalchuk, Erin H CIV USARMY CENWP (US)

<Erin.H.Kovalchuk@usace.army.mil>; Mackey, Tammy M CIV USARMY CENWP (US) <Tammy.M.Mackey@usace.army.mil>; Charles Morrill (charles.morrill@dfw.wa.gov) <charles.morrill@dfw.wa.gov>
Subject: [Non-DoD Source] Re: Coordination for 19 DWR 1 Unit 1, 2, and 3 Digital Exciter Commissioning with short timeframe

This is problematic for many reasons that others have stated. (I have highlighted a few)

1) We really need to insure that we adhere to our planning docs and do this sort of work in the approved times unless under emergency situations which I am not sure this is.

2) A couple of days turn around time for these sort of coordination prior to a holiday makes it near impossible for a thorough review and discussion to insure the best operation can be agreed to, as well as insuring all region interests have an opportunity to respond.

3) The MOC states that we only have unit 1 available currently. What is the risk that unit 1 would fail prior to testing later in January or February? And if it did could the contractor then come in and complete the commission early to deal with this situation and not put the risk on an already depressed steelhead return?

4) Looking at the newest DWR forecast we appear to well below the flood control target of 1558. Current elevation is below 1520, so we appear to have some flexibility there. Would really appreciate the COE reviewing this to insure that this work has to be done right now and that there is no way we could push this off to a better time unless Unit 1 goes down.

With that said - The last proposal that the COE put forth maybe the best of the bad situations as long as the operation does not preclude the ability to monitor the tailrace for steelhead mortality. If that is the case I am concerned that we will not be able to assess any impacts and not be able to determine if the 10 fish criteria has been meet. Where did this number come from or what was it based on?

Lastly we should have a follow up discussion on this topic at the next FPOM to close the loop and see if there are any lesions learned that can be taken from this MOC since I do not think this is meeting anyone's expectations on the MOC process. Would appreciate a response when possible. Happy turkey feastivious.

Tom Lorz
CRITFC

From: Setter, Ann L CIV USARMY CENWW (USA) <Ann.L.Setter@usace
From: Setter, Ann L CIV USARMY CENWW (USA)
To: Tom Lorz; Trevor Conder -NOAA Federal; jayh@nezperce.org; Kovalchuk, Erin H CIV USARMY CENWP (US); Mackey, Tammy M CIV USARMY CENWP (US); Charles Morrill (charles.morrill@dfw.wa.gov)
Cc: Holecek, Dean E CIV USARMY CENWW (US); Elizabeth Holdren (Elizabeth.A.Holdren@usace.army.mil); John Chatfield (John.L.Chatfield@usace.army.mil); Roberts, Jonathan M CIV USARMY CENWW (US); Hall, Stephen C CIV USARMY CENWW (USA); Morgan, Kara M CIV USARMY CENWW (USA); FCRPS NWW
Subject: RE: Coordination for 19 DWR 1 Unit 1, 2, and 3 Digital Exciter Commissioning with short timeframe
Date: Friday, November 29, 2019 9:44:00 AM

Tom:

Circumstances do not always allow a perfect world response in terms of timely vetting of maintenance activities. In this case, while commissioning testing had been known by DWR project staff for some time, the specific element of extended SNL during the commissioning had not previously been disclosed until last Thursday.

As for the 10 fish threshold, this is above any mortality we have seen since we have implemented more stringent requirements and seemed a good place to draw a line for a testing pause and rethink if there is anything else that could be done. If mortality occurs at startup, this may not make sense as pausing testing means we could again incur a similar occurrence upon restart. We hope to not see this level of loss.

You along with Jay have suggested agreement with using RO's as long as it does not interfere with viewing for mortalities. We do not believe it will as we will use 1&3 to spread it out across the spillway.

Delaying commissioning further for Units 2 & 3 is also not feasible because Unit 1 is scheduled for outage beginning in January under the same contract for excitation system replacement. The contractual end date for all work is 1 March 2020 for all three units. If work was suspended on the contract we would incur significant costs, and further risk incurring schedule conflict with 2020 flood risk mgmt. operations. This work was originally scheduled to occur in 2017, but due to delays with Unit 3 RTS, was deferred until now. In an effort to reduce the total number of outages, this work was scheduled in conjunction with other critical maintenance activities.

Given our current situation with only 1 operational unit and the consequences of high total dissolved gas levels (TDG) for prolonged periods should that one unit fail, we ultimately believe proceeding with commissioning testing next week is the best option.

I believe both project and district staff have been reminded of the need to understand testing requirements with adequate lead time to facilitate better coordination with the Region in the future. We are happy to have further discussions on this MOC within the FPOM forum. Thanks for taking the time to express your concerns, sorry we are unable to change our course of action.
Ann Setter

From: Holdren, Elizabeth A CIV USARMY CENWW (USA)
To: Setter, Ann L CIV USARMY CENWW (USA); Roberts, Jonathan M CIV USARMY CENWW (US); Chatfield, John L Jr CIV USARMY CENWW (US); Holecek, Dean E CIV USARMY CENWW (US); Morgan, Kara M CIV USARMY CENWW (USA)
Subject: RE: Coordination for 19 DWR 1 Unit 1, 2, and 3 Digital Exciter Commissioning with short timeframe
Date: Wednesday, November 27, 2019 3:27:58 PM

Ann,
Spill will not negatively impact the ability to monitor the spillway.
Smile,
E

From: Jay Hesse
To: Setter, Ann L CIV USARMY CENWW (USA)
Cc: Baus, Douglas M CIV USARMY CENWD (USA); Scott Bettin; Dave Benner; David Swank (david_swank@fws.gov); Ed Meyer (ed.meyer@noaa.gov); Haeseker, Steve; Jason Sweet; Jeffrey Brown - NOAA Federal; Josie Thompson; Kiefer,Russell; Langeslay, Michael J CIV USARMY USACE (US); Lorz, Tom; Mackey, Tammy M CIV USARMY CENWP (US); Richards, Steven P (DFW); trevor.conder@noaa.gov; Cordie, Robert P CIV (USA); Dykstra, Timothy A CIV USARMY CENWD (US); Eppard, Matthew B CIV CENWP CENWD (USA); Feil, Daniel H CIV CENWD CENWD (US); Gibbons, Karrie M CIV USARMY CENWP (USA); Dave Johnson; Grosvenor, Eric G CIV (US); Roberts, Jonathan M CIV USARMY CENWW (US); Hamilton, Laura J CIV USARMY CENWD (USA); Hausmann, Benjamin J CIV USARMY CENWP (USA); Kirk, Tony R CIV USARMY CENWD (USA); Kovalchuk, Erin H CIV USARMY CENWP (US); McClain, Nathan A CIV USARMY CENWP (USA); Medina, George J NWP; Rerecich, Jonathan G CIV USARMY CENWP (US); Richards, Natalie A NWP; Tackley, Sean C CIV USARMY CENWD (USA); Traylor, Andrew W CIV USARMY CENWP (USA); Turner, Daniel F CIV USARMY CENWD (USA); van der Leeuw, Bjorn Kristian CIV USARMY CENWP (USA); Walker, Christopher E CIV USARMY USACE (US); Wright, Lisa S CIV USARMY CENWD (USA); Zyndol, Miroslaw A; Anderson, Karl R CIV USARMY CENWW (US); Barnes, Charles A CIV USARMY CENWW (USA); Eskildsen, Robert D Jr CIV USARMY CENWW (USA); FCRPS NWW; Fone, Kenneth R CIV CENWW CENWD (USA); Griffith, Denise S CIV (USA); Hockersmith, Eric E CIV USARMY CENWW (US); Holdren, Elizabeth A CIV USARMY CENWW (USA); Johnson, Bobby R CIV USARMY CENWW (USA); Juhnke, Steven D CIV USARMY CENWW (USA); Juul, Steve T CIV USARMY CENWW (US); Laughery, Ryan O CIV USARMY CENWW (USA); Norton, Joseph A III CIV (US); Peery, Christopher A CIV USARMY CENWW (USA); St John, Scott J CIV USARMY CENWW (USA); Shutters, Marvin K CIV USARMY CENWW (USA); Thoren, Scott D CIV USARMY CENWD (USA); Trachtenbarg, David A CIV USARMY CENWP (USA); Weis, Richard W CIV CENWW CENWD (US); Sears, Sheri; allan martin; Ballinger, Dean; Bellringer, Holly H CIV USARMY CENWP (USA); Blane Bellerud (blane.bellerud@noaa.gov); Brandon Chockley; Brian McIlraith; Charles Morrill (charles.morrill@dfw.wa.gov); Chris Caudill (caudill@uidaho.edu); Darren Ogden (darren.ogden@noaa.gov); Statler, Dave; Erick VanDyke; Fryer, Jeff; Jerry McCann; Kovalchuk, Greg; Leah Sullivan; Martinson, Rick; Roger Dick Jr.; Rapp, Shawn; Shane Scott; Skidmore,John T - KEWR-4; tiffani marsh; Tucker Jones; Warf, Don; Whiteaker, John; Becky Johnson; Holecek, Dean E CIV USARMY CENWW (US); Rhynard, Chad A CIV USARMY CENWW (US); Lance Hebdon (lance.hebdon@idfg.idaho.gov)
Subject: [Non-DoD Source] Re: Coordination for 19 DWR 1 Unit 1, 2, and 3 Digital Exciter Commissioning with short timeframe
Date: Wednesday, November 27, 2019 2:09:45 PM

Ann - If the Corps is going to implement the testing next week, then your suggestion to concurrently spill out of the RO may help reduce risk to adult steelhead. As long as the spill does not negatively impact monitoring ability/effectiveness, it is worth a try.
Jay

Final coordination results:

After Action update: The schedule for commissioning units 2 and 3 deviated from the original timeline due to procedural issues and contractor needs for individual test and subsequent adjustments. Speed no load was not operated for each unit on a continuous run. Run times were determined by the different tests being performed by the contractor (Table 1). Unit 2 was operated at speed no load for a total of 4:51:50 from 2 December through 5 December. Unit 3 was operated at speed no load for a total of 5:44:59 from December 2 through December 9 (Table 2).

Spill through RO 2 occurred prior to each speed no load operation. Spill through RO 2 is standard operation and provides even distribution of flow into the tailrace (Picture 1).

Unit 2 Speed No Load

Date	Start Time	End Time	Total Time at SNL
2 Dec 2019	12:46	13:26	0:38:00
3 Dec 2019	8:06	9:15	1:08:00
3 Dec 2019	9:18	9:43	0:06:00
4 Dec 2019	7:36	9:53	2:15:00
4 Dec 2019	12:29	13:17	0:22:00
4 Dec 2019	13:53	16:20	0:02:25
5 Dec 2019	7:59	12:42	0:18:20
5 Dec 2019	13:26	15:01	0:02:05

Table 1. Unit 2 SNL run times.

Unit 3 Speed No Load

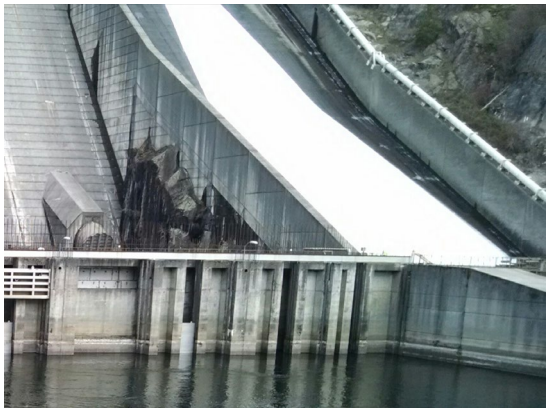
Date	Start Time	End Time	Total Time at SNL
2 Dec 2019	15:50	16:00	0:08:00
3 Dec 2019	13:19	13:25	0:06:00
4 Dec 2019	13:23	13:25	0:01:20
4 Dec 2019	14:05	14:06	0:01:21
4 Dec 2019	14:21	14:24	0:01:23
4 Dec 2019	14:39	15:27	0:47:20
4 Dec 2019	15:35	16:16	0:40:41
5 Dec 2019	9:34	9:37	0:00:32
5 Dec 2019	11:18	13:34	1:15:00
5 Dec 2019	15:22	15:30	0:02:22
6 Dec 2019	9:51	10:55	1:04:00
9 Dec 2019	9:02	10:39	1:37:00

Table 2. Unit 3 SNL run times.

Although adult salmonids were observed in low numbers in the tailrace, no injuries or mortalities were observed during the speed no load testing.

Daily Salmonid Counts

Date	Salmonids Observed	Injuries	Mortalities
2 Dec 2019	20	0	0
3 Dec 2019	2	0	0
4 Dec 2019	3	0	0
5 Dec 2019	6	0	0
6 Dec 2019	4	0	0
9 Dec 2019	2	0	0



Picture 1. Spill through RO 2

Please email or call with questions or concerns.

Thank you,
Elizabeth Holdren
Supervisory Fisheries Biologist
Lower Granite Lock and Dam
Ph. 1(509)843-2263
Elizabeth.a.holdren@usace.army.m