

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

COORDINATION TITLE- 18JDA06 MOC SQ, SU and CQSTS Panels Replacement Contract.

COORDINATION DATE- 06 August 2018

PROJECT- JOHN DAY DAM

RESPONSE DATE- 20 August 2018

Description of the problem – JDA has a contract to replace our SQ, SU and CQSTS panels the first time since 1968 (in 50 years.) The contractor is going to provide temporary power during the replacement. The process to provide temporary power to STS screens during the CQSTS and SQO2 panel replacements will take approximately 10 minutes per line (4 units at a time.) This work is scheduled to take place around September 12th. The contractor is willing to do the cut-over (moving one wire from one terminal to another) at night, when the power demand is low and a high number turbines is shut down already.

Type of outage required – STS mesh will not rotate for up to 30 minutes per line (4 turbines at a time will be affected) while the turbines continue operating; 10 minutes for work and 20 minutes for the Safety Clearance procedures. A dedicated operator will assist to minimize the time when the STS mesh won't rotate.

Impact on facility operation – STS are required to rotate when a unit is in service.

Impact on unit priority – No impact

Impact on forebay/tailwater operation – No impact

Impact on spill – No impact

Dates of impacts/repairs – Approximately 12 September, 2018. This work will be done at night to minimize a number of turbines affected by this action.

Length of time for repairs – up to 30 minutes per line (4 turbines.)

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; Index numbers are skewed by the high temperature sampling protocol normally conducted in September.
2. Statement about the current year's run (e.g., higher or lower than 10-year average);

Average

3. Estimated exposure to impact by species and age class (i.e., number or percentage of run exposed to an impact by the action);

Less than 10% of the sub yearlings could be impacted.

4. 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.);

If debris were to accumulate on the STS then the salmonids would be exposed to higher rate of injury or mortality.

Summary statement - expected impacts on:

Downstream migrants – The impact on downstream migrants is expected to be very little since the purpose of the STS mesh rotation is to prevent wooden debris from accumulating on it. There isn't any significant amount of river debris present to result in its accumulation on the mesh in September, which is a low flow time of year. Also, most of the downstream migrants will have passed already.

Upstream migrants (including Bull Trout) – Very few bull trout have been observed at John Day. This action is not expected to impact bull trout.

Lamprey – Very few juvenile lamprey are observed this time of year. This action is expected to have little impact on juvenile lamprey.

September Lamprey Collection Numbers (Estimated number of lamprey passing the dam through the bypass system)

Date	Macrothalmia and Amocoetes combined				
	2017	2016	2015	2014	2013
1-Sep	0	0	0	0	0
2-Sep	0	0	0	0	0
3-Sep	0	0	0	0	0
4-Sep	0	0	0	0	0
5-Sep	0	0	0	0	0
6-Sep	0	0	0	0	0
7-Sep	0	0	5	0	0
8-Sep	1	0	0	0	0
9-Sep	0	0	0	0	0
10-Sep	0	0	0	0	0
11-Sep	0	0	0	0	0
12-Sep	0	0	0	0	0
13-Sep	0	0	0	0	0
14-Sep	0	0	0	0	0
15-Sep	0	0	0	0	0
16-Sep	0	0	0	0	0

Total 1 0 5 0 0

Comments from agencies

USFWS-

Hi Erin,

On this MOC, can you explain what "SQ", "SU", and "CQ" stand for?

I'd also suggest that for this MOC (and any MOC really), instead of saying that "juvenile lamprey are not expected to be present at this time of year", actually look at the numbers for that time of year (mid September) and say something like "very few juvenile lamprey are typically observed at this time of year", if that's what has been observed.

Dave

Response –

David,

SQ, SU and CQSTS panels are electrical/electronic boards controlling the turbines' operations including our fish- STS screens. This is a large scale, long term, replacement contract and the contractor will be providing temporary power necessary to continue the regular turbine operations.

This MOC pertains to only a tiny detail of the larger scope (30 minutes per line.)

Frankly, this isn't a real MOC but rather FYI since the short duration lack of mesh rotation doesn't have any impact on passing fish; as it says in the MOC the mesh rotates to prevent debris accumulation on its face which is critical during the spring run-off. September's river debris loads are typically very low or none - existent therefore, a short lapse, up to 30 minutes in mesh rotation is perfectly begin and there is no impact on passing smolts from it whatsoever. That is the reason, we didn't provide an extensive and/or detailed analysis of fish passage # which incidentally are very low by mid-September anyway (99% of annual smolt passage has already occurred.)

This is a lucky coincident that this work will be performed during the low power, low debris time of year, at night, in September which assures no impact to fish passage.

I hope this helps and looking forward to answering more questions at FPOM.

Thanks!

MZ

Final coordination results – This MOC was approved at the August FPOM meeting.

After Action update - The work was delayed until October.

Temporary power to CQ-STS panel was cutover on 25 OCT 18. CQ-STS was de-energized at 0740 and re-energized at 0846. There were no other issues with this work.

Please email or call with questions or concerns.
Thank you,
Erin

Erin Kovalchuk
NWP Operations Division Fishery Section
Columbia River Coordination Biologist
Erin.H.Kovalchuk@usace.army.mil

And

Miro Zyndol
John Day Dam
Chief of Fisheries
Miroslaw.A.Zyndol@usace.army.mil