# OFFICIAL COORDINATION REQUEST FOR NON-ROUTINE OPERATIONS AND MAINTENANCE

COORDINATION TITLE- 15BON86 Powerhouse priority switching COORDINATION DATE- 19 October 2015

**PROJECT-** Bonneville Dam

**RESPONSE DATE- 29 October 2015** 

**Description of the problem-** The deluge system that protects the transformers from a potential fire needs to be modified to install isolation valves. Currently, there is no way to isolate the system between the two transformers so a blank flange has to be installed to allow isolation of the cleared out transformer while still providing fire suppression to the energized transformer. This situation could be greatly improved with the addition of the isolation valves but both transformers have to be down to do this work for safety. Since T11 is already out, Bonneville would like to request T12 out for one week to do this work.

**Type of outage required-**Total Powerhouse 2 outage (T11 and T12)

**Impact on facility operation-**Powerhouse priority would have to be switched to Powerhouse 1. No significant impact with total river flow of less than 100K currently.

Dates of impacts/repairs-Nov 2-6, 2015

**Length of time for repairs-** One week

**Expected impacts on fish passage-**Very limited impact to adult fish as they will get drawn to the Bradford Island ladder when Powerhouse priority is switched. Chinook numbers have decreased to less than 2000 per day. See below for the 10 year fish passage averages for the first week of November. With Cascades Island down for valve repair, it may be beneficial for pulling fish away from that ladder and to the Bradford Island fish passage system.

BON 10-yr average 2004-2013

|            | Chk     | Jack Chk | Sth10YrA | Wild Sth | Soc     | Coho    |
|------------|---------|----------|----------|----------|---------|---------|
| Date       | 10YrAvg | 10YrAvg  | vg       | 10YrAvg  | 10YrAvg | 10YrAvg |
| 11/1/2014  | 166     | 26       | 93       | 26       |         | 254     |
| 11/2/2014  | 140     | 23       | 99       | 28       |         | 209     |
| 11/3/2014  | 179     | 21       | 91       | 28       |         | 1 188   |
| 11/4/2014  | 181     | 25       | 93       | 28       |         | 162     |
| 11/5/2014  | 163     | 15       | 92       | 24       |         | 164     |
| 11/6/2014  | 152     | 16       | 107      | 32       |         | 143     |
| 11/7/2014  | 65      | 9        | 84       | 26       |         | 120     |
| 11/8/2014  | 53      | 7        | 64       | 19       |         | 104     |
| 11/9/2014  | 49      | 5        | 44       | 17       |         | 72      |
| 11/10/2014 | 47      | 3        | 56       | 18       |         | 53      |
| 11/11/2014 | 58      | 9        | 65       | 21       |         | 56      |
| 11/12/2014 | 49      | 4        | 76       | 21       |         | 54      |
| 11/13/2014 | 47      | 5        | 85       | 23       |         | 53      |
| 11/14/2014 | 33      | 3        | 74       | 26       |         | 66      |
| 11/15/2014 | 33      | 3        | 57       | 19       |         | 55      |

### **Comments from agencies**

CRITFC----Original Message-----

From: Tom Lorz [mailto:lort@critfc.org] Sent: Monday, October 19, 2015 3:15 PM

To: Gibbons, Karrie M NWP

Subject: [EXTERNAL] Re: FPOM: Official Coordination - MOC 15BON86 Powerhouse priority

switching (UNCLASSIFIED)

no problem with this, honestly with CI going down I thought we had switched priority.

#### NOAA-----Original Message-----

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

Sent: Tuesday, October 20, 2015 3:15 PM

To: Gibbons, Karrie M NWP

Cc: Hausmann, Ben J NWP; Lorz, Tom; Mackey, Tammy M NWP

Subject: [EXTERNAL] Re: FPOM: Official Coordination - MOC 15BON86 Powerhouse priority

switching (UNCLASSIFIED)

Carrie, This one would be better done a week later when numbers have dropped off significantly. Including 2014 in the average increases the coho number quite a bit. I don't doubt that the Bradford Island would provide sufficient for passage at this time, but I am concerned with delay these fish can ill afford if second powerhouse is suddenly shut down. One thought would be to split the flows for a bit to lessen the impact of a sudden shut down? Thanks, Gary

NWP-BON-----Original Message-----

From: Hausmann, Ben J NWP

Sent: Tuesday, October 20, 2015 3:40 PM

To: Gary Fredricks - NOAA Federal; Gibbons, Karrie M NWP

Cc: Lorz, Tom; Mackey, Tammy M NWP

Subject: RE: [EXTERNAL] Re: FPOM: Official Coordination - MOC 15BON86 Powerhouse

priority switching (UNCLASSIFIED)

#### Gary,

For what it's worth, the work requires both transformers to be out to be able to install the isolation valves because otherwise we are running one of the transformers with no fire protection and that can't be allowed from a safety perspective. So splitting flows is not an option. We tried to pick a later week but at that time the electricians will be doing commissioning work that also required fire suppression capability. If the first week is totally unacceptable we'll have to attempt to do this later. I just thought it was worth asking since there was talk of changing powerhouse priority when we were discussing the Cascades Island valve repair work.

Thanks.

Ben

NOAA-----Original Message-----

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

Sent: Tuesday, October 20, 2015 3:59 PM

To: Hausmann, Ben J NWP

Cc: Gibbons, Karrie M NWP; Lorz, Tom; Mackey, Tammy M NWP

Subject: Re: [EXTERNAL] Re: FPOM: Official Coordination - MOC 15BON86 Powerhouse

priority switching (UNCLASSIFIED)

Ben, Well, actually you are spitting the flows right now. Can that continue up to the point you cut off P2 (actually, I don't see that you have much choice with the flow in the river)? If so, then I'm ok with the work. (I wasn't asking to split the flows while you do the work.)

Too many MOC's in one day for me. In any case, I guess I was viewing the CI ladder as more of an emergency situation than this transformer work.

Thanks, Gary

**NWP-BON**-----Original Message-----

From: Hausmann, Ben J NWP

Sent: Tuesday, October 20, 2015 4:21 PM To: Gary Fredricks - NOAA Federal

Cc: Gibbons, Karrie M NWP; Lorz, Tom; Mackey, Tammy M NWP

Subject: RE: [EXTERNAL] Re: FPOM: Official Coordination - MOC 15BON86 Powerhouse

priority switching (UNCLASSIFIED)

Absolutely. Sorry, I thought you were asking to split flows during the work. Yes, we can continue to split flows right up until then and then switch priority for that week only. Thanks Gary.

## Final results – this action went forward as coordinated

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

Karrie Gibbons NWP Operations Division Fishery Section Columbia River Coordination Biologist 503-779-6131 Karrie.m.gibbons@usace.army.mil