

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

**COORDINATION TITLE- 13BON55 Unit 1 trashrack inspection/repair**

**COORDINATION DATE- 30 July 2013**

**PROJECT- Bonneville Lock and Dam- Powerhouse One**

**RESPONSE DATE- 5 August 2013**

**Description of the problem-** Inspection of trashracks was historically a part of every 4/5 year overhaul. It was neglected for some time but is being reinstated starting with Unit 1 that went out of service on 24 July. The unit is out of service but with trashracks being pulled, Bonneville is not comfortable having flow potentially pulling debris into an open trashrack area and needs to close the chain gates above Unit 1 and compensate by opening 2 more gates above Unit 3.

**Type of outage required-** None. Unit 1 is already out of service for overhaul.

**Impact on facility operation-** A reduction in total flow through the sluiceway is probable because no other chain gates can be opened as far as those at Unit 1 due to its proximity to the drop in the sluiceway channel that occurs immediately south of those gates. Unit 1 chain gates are wide open (70' elevation) Opening other chain gates to this extent will flood the channel.

**Dates of impacts/repairs-** Variable. 5 August until inspection/repair is complete. If they are in good condition it will be accomplished within the week, if not it could be a couple of weeks.

**Length of time for repairs-** 1-2 weeks

**Expected impacts on fish passage-** Impacts to both downstream and upstream migrating fish are expected to be minimal due to the fact that Powerhouse is not currently running any units and is unlikely to do so during the duration of this activity. Therefore most fish will be passing either the spillway or via the Powerhouse 2 fish passage systems. In addition, the sluiceway will still provide a surface bypass route albeit at a slightly lower total flow. The unit priority of Powerhouse 1 will be adjusted to operate units with open chain gates in the event units need to be run due to increased flow.

**Comments from others**

**NWP (Askelson)-**

-----Original Message-----

From: Askelson, Sean K NWP

Sent: Wednesday, July 31, 2013 1:28 PM

To: Mackey, Tammy M NWP; Hausmann, Ben J NWP

Subject: RE: FPOM: Official Coordination- 13BON55 Unit 1 trashrack removal/cleaning (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Tammy, Ben,

I used the old TRASH model, moved the "fixed gates" from unit 1 (gates 1a and 1b) over to unit 2 (same settings in 2a and 2b). I ran the simulation at a Forebay elevation of 74.5 ft.

The flow rate under those conditions is 1077 cfs... this is a reduction of 15 cfs or so (< 2%), which is closer than the model could accurately predict.

If folks are still concerned, might mention that if there is going to be a problem, it would be at a higher pool elevations. Under a higher pool, we would likely see the upstream automatic gates become submerged, reducing channel velocity significantly.

Let me know if you need anything else.

Thanks

Sean x4882

### **NOAA Fisheries (Fredricks)-**

-----Original Message-----

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

Sent: Wednesday, July 31, 2013 4:17 PM

To: Mackey, Tammy M NWP

Cc: Hausmann, Ben J NWP; Lorz, Tom; Trevor Conder - NOAA Federal; Wills, Dave

Subject: Re: FPOM: Official Coordination- 13BON55 Unit 1 trashrack removal/cleaning (UNCLASSIFIED)

Tammy, I've discussed this with the project and agree with the action as proposed. I do want to make sure that we learn from this. Specifically, we need to find out what the final, optimal flow is for this type of configuration. This might help in the future when we may be considering the impacts of such an action when the powerhouse has operating units. Once the project figures out what the right gate settings are to keep the sluiceway flowing downstream, they should be able to get an estimate of the flow passing into the channel. We might be able to use this (at least in part) to develop some go-to language for the FPP for situations like this. Thanks, Gary

### **Final results**

**The Project is moving forward with this action as coordinated above.**

Please email or call with questions or concerns.

Thank you,

Tammy

Tammy Mackey

NWP Operations Division Fishery Section

Columbia River Coordination Biologist

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