# OFFICIAL COORDINATION REQUEST FOR NON-ROUTINE OPERATIONS AND MAINTENANCE

COORDINATION TITLE- 14BON59 T11 and T12 outages COORDINATION DATE- 25 August 2014 PROJECT- BONNEVILLE Lock and Dam RESPONSE DATE- 5 September 2014

**Description of the problem-** The contracted work to rehab Bonneville transformer T11 will no longer occur this fall as originally coordinated in 14BON13 T11 and T12 outages in 2014-2016. The T11 and T12 rehab will be rescheduled. The failure to get this work accomplished, however, now forces BON to do maintenance (as required by WECC NERC) on both T11 and T12. Bonneville would like to start this maintenance for T11 on either 8 Sept or 15 Sept. The duration for the required work is 2 weeks. Bonneville would like to immediately follow the T11 work with the work on T12 for another 2 weeks. This would result in a total outage time of 4 weeks as opposed to the originally coordinated outage of 8 weeks for the T11 rehabilitation.

From personal communication with Fredricks and BON, 8 September is the preferred start date.

**Type of outage required-** T11 and T12 will each take four units out of service at a time. T11 has units 11-14. T12 has units 15-18.

**Impact on facility operation-** Four units at PH2 will be unavailable. Units at PH1 will likely be operated instead.

**Dates of impacts/repairs-** 8 September – 2 October 2014.

T12 - 8 - 19 September

T11 – 22 September – 2 October

**Length of time for repairs-** Two weeks for each transformer. Four weeks total.

## Expected impacts on fish passage-

Bull Trout- Occurrence in Action Area. Of the five distinct population segments (DPS) of bull trout listed as threatened by the USFWS, the Columbia River DPS is the only one that is likely to occur in the vicinity of the proposed project. Historically, bull trout of the Columbia River DPS likely ranged through much of the Columbia River Basin with spawning and rearing occurring in the coldest creeks, often at higher elevations. Presently, bull trout of the Columbia River DPS are distributed in a more fragmented pattern throughout the Columbia River Basin with fewer adult migratory fish and fewer, more compressed spawning reaches than historically occurred.

WDFW and Corps personnel provided a list of anecdotal sightings/captures of bull trout in the mainstem Columbia River. From 2000 through 2012 there were eleven bull trout reported. Three were downstream of Bonneville Dam, with two at the mouth of Hamilton Creek (RM 143) and one in 2005 at the Bonneville Dam Smolt Monitoring Facility (RM 144). Upstream of the dam, one bull trout was found at Cascade Locks (RM 149), two at Drano Lake (RM 162), two at the mouth of the Klickatat River (RM 180.5), one in 2002 at the John Day Dam Smolt Monitoring Facility (RM 215), and one sighting at Dog Creek Falls by a reputable WDFW creel sampler who observed 18- to 24-inch cuts or dollies working old redds below the splash pool over the course of two weeks.

Fish passage data from the Bonneville Dam fish ladders (Corps, unpublished) show only three sightings of bull trout moving through the fish ladders for 2000 through 2011 during the fish counting season (April 1 through October 31). These sightings occurred between May 30, 2009 and June 2, 2009 and were reported as '12-inch bull trout moving upstream' through the count window on each occasion.

Downstream passage- few impacts except when priority units are unavailable to provide normal flows for downstream egress. PH1 units would remain in service and in FPP criteria.

Upstream passage-Below are two tables (recycled from MOC 14BON13) showing the five year average adult fish passage (by species) for each transformer outage. Also noted are the high passage years and the low passage years.

Table 1. Bonneville Bradford Island 5-year average Fish Passage Numbers for 2008 – 2012 During T11 and T12												
Proposed Outages.												
Date		All Chinook	Clipped Steelhead	Unclipped Steelhead	All Coho	Sockeye	Chum	Pink				
8 Sep - 6 Nov	Average	76617.2	16310	5573.2	30326.4	2	11	128				
T11 outage (U11-		133852	20212	7345	47832	7	16	632				
14)	High/year	2011	2011	2011	2011	2008	2010	2011				
		32759	12985	4634	14651	0	3	0				
	Low/year	2009	2010	2010	2012	2010-12	2012	2008,12				

Table 2. Bonneville Washington Shore 5-year average Fish Passage Numbers for 2008 – 2012 During T11 and T12 Proposed Outages.											
Date		All Chinook	Clipped Steelhead	Unclipped Steelhead	All Coho	Sockeye	Chum	Pink			
8 Sep - 6 Nov	Average	160070.2	31501.4	9949.4	69763.4	2.6	32.4	475.8			
T11 outage		233320	45314	14110	124658	5	52	2326			
(U11-14)	High/year	2010	2009	2009	2009	2008,10	2010	2011			
		93585	33164	7505	24083	0	4	0			
	Low/year	2008	2010	2012	2012	2009,2011	2011	2008,2010			

# **Comments from agencies**

#### NOAA Fisheries –

----Original Message----

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

Sent: Wednesday, September 03, 2014 7:41 AM

To: Mackey, Tammy M NWP

Cc: Hausmann, Ben J NWP; Lorz, Tom

Subject: [EXTERNAL] Re: FPOM: Official Coordination - 14BON59 T11

and T12 outages

Tammy, I've been working with Ben on this one while I was in Mississippi. After a some discussion, we agreed that it would probably be best to start the work as soon as you can (apparently September 8) and do T12 first. I don't think any of the choices will have much effect on adult passage at the project given the current low (~80k) flow and split powerhouse operations, however, completing T12 first may allow more flow through PH2 later in the

season to facilitate late season adult steelhead trapping and tagging operations. Thanks, Gary

## CRITFC -

----Original Message----

From: Tom Lorz [mailto:lort@critfc.org]
Sent: Tuesday, September 02, 2014 5:21 PM

To: Mackey, Tammy M NWP

Subject: [EXTERNAL] Re: FPOM: Official Coordination - 14BON59 T11

and T12 outages

Still not excited about starting early since we are going to have limited units operating, but can live with, would support going with the T12 which should allow 4 unit operation first then go to T11 for the two unit operation.

**Final results-** The T12 and T11 outages will occur as coordinated above. T12 will be followed by T11. Outages begin on 8 September.

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

Tammy Mackey NWP Operations Division Fishery Section Columbia River Coordination Biologist 503-961-5733 Tammy.m.mackey@usace.army.mil