

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

COORDINATION TITLE – 13LMN03 – Transformer PM and Relay Installation

COORDINATION DATE- July 9, 2013

PROJECT- Lower Monumental Lock and Dam

RESPONSE DATE - ASAP

Description of the problem: Station Service Bus #1, T-01, and XJ-01 need to be removed from service for annual preventative maintenance (PM) and installation of protective relaying. Work is expected to require approximately one ten hour shift to complete. The work has been scheduled to be accomplished during the week of 8 July 2013.

The work plan is to energize Bus 2 through T-02 with ZJ-05 closed. This will require operation of Unit 5 to provide station service for the period XJ-01 is undergoing PM and relay installation. The consequences of not performing this routine maintenance could cause forced outages and delays in the return of fish priority units.

We will need to deviate from Unit Priority Table LMN-5 on page LMN-21. We will also have to deviate from FOP requirement for flows on minimum generation. Unit 5 uses 13.5 kcfs at minimum generation as compared to 11.3 kcfs for Main Unit 2.

Type of outage required: None – just change in unit priority.

Impact on facility operation:

Deviation from Unit Priority table LMN-5. Unit 5 will be the first-priority unit while this work is being performed. Unit 2 will be next in operating priority, however with the current river flows, there will only be a need to operate one unit.

Length of time for repairs:

One ten hour shift, 0630-1700 hours, preferably on July 10, 2013.

Expected impacts on fish passage:

Average daily adult passage numbers using the north fish ladder (June 29 – July 7, 2013) by species group and percent of the total daily passage of that group were: Chinook adult (118 at 50.5%), Chinook jack (97 at 70%), Steelhead hatchery (21 at 58%), Steelhead wild (5 at 53%), and Sockeye (17 at 58%). This unit priority change would not affect south fish ladder function or attraction conditions.

Passage trends for all groups show daily passage numbers declining or at very low levels through this period. With passage percentages indicating a strong attraction to the south ladder (generally 40-50%), one would expect only about half of the migrating fish to see a potential for delay. In that fish numbers are low and attraction flow is strong at the spillway side (relatively near unit 5 and the south powerhouse ladder entrances) it would be expected that the fish would not have trouble finding the south powerhouse entrances. There may however be a small increase in fallout through the north entrance, but with no floating orifices across the dam face, fallout would likely be infrequent.

So long as the work can be accomplished in a single work day within the next week the impact would likely be minimal.

Comments from agencies

Phone call with Russ Kiefer on the morning of July 10, 2013: Russ has no issues with the work starting at noon.

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

From: Fone, Kenneth R NWW
Sent: Tuesday, July 09, 2013 4:36 PM
To: Trevor Conder - NOAA Federal; Lorz, Tom
Cc: Setter, Ann L NWW; Gary Fredricks - NOAA Federal; Bill Hevlin - NOAA Federal; Kiefer, Russell; Wills, Dave; Moody, Gregory P NWW (Gregory.P.Moody@usace.army.mil); Bailey, John C NWW (John.C.Bailey@usace.army.mil)
Subject: RE: FPOM: 13LMN03 - Transformer PM and Relay Installation (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Trevor, Tom,

Sorry for such a short notice on this one. It should have been coordinated much earlier.

The project is willing to start the work at noon. Unit 5 will need to be run to provide the station service during this work.

Ken

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

From: Trevor Conder - NOAA Federal [<mailto:trevor.conder@noaa.gov>]
Sent: Tuesday, July 09, 2013 4:11 PM
To: Fone, Kenneth R NWW
Cc: Setter, Ann L NWW; Gary Fredricks - NOAA Federal; Bill Hevlin - NOAA Federal; Kiefer, Russell; Lorz, Tom; Wills, Dave
Subject: Re: FPOM: 13LMN03 - Transformer PM and Relay Installation (UNCLASSIFIED)

Ken,

So given the lower flows in the Snake, I take it unit one hasn't been operated much if at all as last on priority? If there is little risk in running it, I would run unit one for attraction instead of unit five, however, I don't want to see a failure or large oil leak. If the corps decides unit one shouldn't or can't be ran, than I think the operation described in the MOC should begin at noon or as late as possible to allow adults to enter the north ladder during the morning hours. Summer Chinook and sockeye have been preferring the north ladder at LoMo so I would like to minimize delay as much as possible. Another option would

be to do this work in early August after sockeye and summer Chinook have pretty much passed.

-Trevor

On Tue, Jul 9, 2013 at 3:09 PM, Fone, Kenneth R NWW <Kenneth.R.Fone@usace.army.mil> wrote:

Classification: UNCLASSIFIED
Caveats: NONE

Trevor,

No. It is available for service, but recall that it was changed to the last priority unit under all flow conditions via a FPP change form (14LMN001) 2 months ago. This was to minimize the potential for an oil leak from the blade seals from not being able to rotate for so long (fixed blades). The blade linkages are scheduled to be repaired starting in 2015, with repairs taking about a year.

Ken

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

From: Trevor Conder - NOAA Federal
[<mailto:trevor.conder@noaa.gov>]
Sent: Tuesday, July 09, 2013 2:51 PM
To: Fone, Kenneth R NWW
Subject: Re: FPOM: 13LMN03 - Transformer PM and Relay Installation (UNCLASSIFIED)

Ken,

Is unit 1 currently online?

Trevor

On Tue, Jul 9, 2013 at 2:14 PM, Fone, Kenneth R NWW <Kenneth.R.Fone@usace.army.mil> wrote:

Classification: UNCLASSIFIED
Caveats: NONE

FPOM members,

The crew at Lower Monumental Dam would like to perform transformer maintenance and install protective relays on July 10, which is tomorrow. This will require running unit 5, instead of unit 2, while the work is being performed. Please respond as soon as possible with any comments/concerns.

Thanks,
Ken Fone

Fishery Biologist
Operations Division
Walla Walla District
U.S. Army Corps of Engineers
509-527-7140

Classification: UNCLASSIFIED
Caveats: NONE

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

From: Tom Lorz [mailto:lort@critfc.org]
Sent: Tuesday, July 09, 2013 3:45 PM
To: Fone, Kenneth R NWW
Subject: Re: FPOM: 13LMN03 - Transformer PM and Relay Installation
(UNCLASSIFIED)

We really need to have more than a day notification when this kind of work is going to be done, unit 2 is the priority for adult passage reasons since unit 1 is now I believed a fixed unit. I would push this work back in the day a much as possible to allow the morning fish to move up into the ladder at least. It would have been better to discuss this on Thursday. I am a little surprised that this work did not have some prior notification and that this just suddenly caught us by surprise. Can talk more about his on Thursday. If the work is really this critical can support as long as they move the work back later in the morning.

tom

Final results: Recommendations received to start the work at around noon.

Unit 5 was started and unit 2 was turned off just prior to 1200 hours on July 10, 2013, with the transfer to TO2 immediately following the Unit start. The PM and relay work were completed early, and station service power was switched back to TO1 and unit 2 was restarted at 1500 hours that afternoon.

Thank you,

Ken Fone