Callaway2COLPEm Resource

From: Ward, Jeffrey A [ja.ward@pnl.gov]
Sent: Friday, January 23, 2009 12:52 PM
To: Fringer, John
Cc: JSScherrer@AOL.com; Olson, Bruce; Last, George V
Subject: RE: NMFS Scoping Letter

No problem
There's quite a bit of information on the internet about collector well systems—they are in use on the Missouri and Mississippi

Jeffrey A. Ward
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From: John Fringer [mailto:John.Fringer@nrc.gov]
Sent: Friday, January 23, 2009 9:49 AM
To: Ward, Jeffrey A
Cc: JSScherrer@AOL.com; Bruce Olson; Last, George V
Subject: RE: NMFS Scoping Letter

Jeff,

Thanks again!

From: Ward, Jeffrey A [mailto:ja.ward@pnl.gov]
Sent: Friday, January 23, 2009 11:42 AM
To: John Fringer
Cc: JSScherrer@AOL.com; Bruce Olson; Last, George V
Subject: RE: NMFS Scoping Letter

Hi John

The statement is made in Section 5.3.1 Intake System on page 5-23 of the ER.
Because these systems eliminate the need for a conventional surface water intake, there is no entrainment or impingement.

Based on the description in the ER (Section 3.4.2.1 Missouri River Collector Wells, ER Page 3-27), each of the three collector wells will consist of a concrete caisson extending to bedrock (approximately 90 to 100 ft down). Lateral lines extend out approximately 200ft from the caisson to obtain water.

Based on pump tests conducted by the applicant, approximately 85% of the water obtained from this system is from the Missouri River, with the remainder obtained from the surrounding aquifer (Section 2.3.1.2.3.4.2 Missouri River Alluvial Aquifer, ER Pages 2-69 and 2-70)

Hope this helps—call or email if you need anything else.

-J

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From: John Fringer [mailto:John.Fringer@nrc.gov]
Sent: Friday, January 23, 2009 4:52 AM
To: Ward, Jeffrey A
Cc: JSScherrer@AOL.com; Bruce Olson; Last, George V
Subject: RE: NMFS Scoping Letter

Jeff,

Can you provide a reference explaining why the collector well system eliminates entrainment and impingement effects?

Thanks a lot,

John

From: Ward, Jeffrey A [mailto:ja.ward@pnl.gov]
Sent: Wednesday, January 21, 2009 4:07 PM
To: Last, George V; John Fringer
Cc: ^PNNL NRC Callaway COL; JSScherrer@AOL.com
Subject: RE: NMFS Scoping Letter

Bottom of Page 2-69.

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From: Last, George V
Sent: Wednesday, January 21, 2009 12:53 PM
To: Ward, Jeffrey A; John Fringer
Cc: ^PNNL NRC Callaway COL; JSScherrer@AOL.com
Subject: Re: NMFS Scoping Letter

Thanks Jeff. The section that was revised was in the attachment. The paragraph included in John's original message was just the template. By the way, where did you find the water withdrawl rate for Unit 1?

Thanks,
George

From: "Ward, Jeffrey A" <ja.ward@pnl.gov>
Date: Wed, 21 Jan 2009 08:42:43 -0800
To: George Last <george.last@pnl.gov>, John Fringer <john.fringer@nrc.gov>
Cc: ^PNNL NRC Callaway COL <nrc.callaway.col@pnl.gov>, <JSScherrer@AOL.com>
Subject: RE: NMFS Scoping Letter

George

Unit 1 uses approximately 16,000 gpm fro a surface water intake
Unit 2 will use approximately 24,160 gpm (see bottom of page 2-69 in ER).
The collector well system is designed to provide a maximum of 50,000 gpm.

Because both units will use water from the collector well system, entrainment and impingement effects will be eliminated.
Consumptive water use will continue however, and approximately 85% of this water will come from the Missouri River (see top of page 2-70 in ER).

The message below contains a reference to Chesapeake Bay—looks like a cut & paste error

-J

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From: Last, George V
Sent: Wednesday, January 21, 2009 7:53 AM
To: John Fringer
Cc: Bruce Olson; Simmons, Mary Ann; ^PNNL NRC Callaway COL; JSScherrer@AOL.com; Ward, Jeffrey A
Subject: Re: NMFS Scoping Letter

Hi John,
Per your request, I revised the subject section of the letter. Please note that I deviated from the template, to remove comparison of the Plant 2 withdrawls to Plant 1 withdrawls. I think the important thing here is AmerenUE's estimates of the withdrawl impacts on the Missouri River. Besides, I could not easily find the withdrawl rates for the current plant.

I have also copied, Jeff Ward (Aquatic Ecology) and Jim Scherrer (Hydrology) on this message so that they can add or modify as needed.

Let us know if you need something more,
George

From: John Fringer <john.fringer@nrc.gov>
Date: Wed, 21 Jan 2009 07:28:08 -0500
To: George Last <george.last@pnl.gov>

Cc: Bruce Olson <Bruce.Olson@nrc.gov>
Subject: NMFS Scoping Letter

Hi George,

Can you please (or ask the appropriate specialist to) review & edit (in Revision Marks) the highlighted paragraph on p. 2 of the attached letter? Here's that paragraph from the NMFS Scoping Letter Template:

"The proposed cooling system consists of a [description of cooling systems e.g. mechanical draft wet cooling tower]. Approximately [#####] gallons per minute (gpm) would be taken from [water body] to make up losses from [water losses described in the ER e.g. evaporation, blowdown, drift, and desalinization]. Such withdrawal is roughly [##] percent of the current withdrawal for one of the existing [##] operating unit[s]. Waste heat would be dissipated to the atmosphere through a [describe towers i.e. single non-plume-abated mechanical draft cooling tower]. Blowdown from the cooling tower would discharge to a [describe how the blowdown is released e.g. common retention basin prior to discharging to the Chesapeake Bay]. Enclosed with this letter is a copy of a site map. Note: The map should include as much detail of the site including proposed footprint, switchyard, current and proposed transmission line corridors etc."

Can you possibly get it revised by 1 pm ET tomorrow? (I'll be in training until about 1 pm ET today.)

Thanks much,

John

John Fringer
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From: Ward, Jeffrey A

Created By: ja.ward@pnl.gov

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"JSScherrer@AOL.com" <JSScherrer@AOL.com>
Tracking Status: None
"Olson, Bruce" <Bruce.Olson@nrc.gov>
Tracking Status: None
"Last, George V" <george.last@pnl.gov>
Tracking Status: None
"Fringer, John" <John.Fringer@nrc.gov>
Tracking Status: None

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