

IPRenewal NPEmails

From: Gray, Dara F [DGray@entergy.com]
Sent: Thursday, October 11, 2012 6:12 PM
To: Wentzel, Michael
Cc: Caputo, Charles; Curry, John J
Subject: RE: Meeting Summary
Attachments: Entergy_Responses_NMFS_PRD_Questions_10 October2012_#2.docx

Hi Mike

Attached is the additional data, as promised.
Please let me know if you have any questions.

Thanks
(See you next week)

From: Gray, Dara F
Sent: Thursday, September 27, 2012 9:07 AM
To: 'Wentzel, Michael'
Cc: Caputo, Charles; Curry, John J
Subject: RE: Meeting Summary

Hi Mike

Please see the attached. As indicated, we will be providing the additional requested data when our consultant is available.

Please let me know if you have questions.

Thanks

From: Wentzel, Michael [<mailto:Michael.Wentzel@nrc.gov>]
Sent: Wednesday, September 26, 2012 3:00 PM
To: Gray, Dara F
Cc: Caputo, Charles; Curry, John J
Subject: RE: Meeting Summary

Thanks for the update, Dara.

From: Gray, Dara F [<mailto:DGray@entergy.com>]
Sent: Wednesday, September 26, 2012 2:59 PM
To: Wentzel, Michael
Cc: Caputo, Charles; Curry, John J
Subject: RE: Meeting Summary

Hi Mike

We do have some comments and are currently corraling them all. I hope to have something for you tomorrow – with a follow-up of the additional data requested.

Thanks

From: Wentzel, Michael [<mailto:Michael.Wentzel@nrc.gov>]
Sent: Wednesday, September 26, 2012 2:33 PMup
To: Gray, Dara F
Cc: Caputo, Charles; Curry, John J
Subject: RE: Meeting Summary

Hi Dara, Charlie, and John,

I wanted to see if you had any comments on the NMFS summary I forwarded last week? If not, do you have any idea when you will?

Thanks,
Mike

From: Gray, Dara F [<mailto:DGray@entergy.com>]
Sent: Wednesday, September 19, 2012 4:00 PM
To: Wentzel, Michael
Cc: Caputo, Charles; Curry, John J
Subject: RE: Meeting Summary

Thanks Mike

I am traveling - so I asked Charlie and John (copied here) to provide any comments on Entergy's behalf.

From: Wentzel, Michael [<mailto:Michael.Wentzel@nrc.gov>]
Sent: Wednesday, September 19, 2012 3:30 PM
To: Gray, Dara F
Subject: Meeting Summary

Dara,

Can you take a look at the summary that NMFS prepared and let me know if you have any comments?

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
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Hearing Identifier: IndianPointUnits2and3NonPublic_EX
Email Number: 3850

Mail Envelope Properties (DA94DFACF1201C4A91A21BD336C2520A085F84F2)

Subject: RE: Meeting Summary
Sent Date: 10/11/2012 6:11:50 PM
Received Date: 10/11/2012 6:11:55 PM
From: Gray, Dara F

Created By: DGray@entergy.com

Recipients:

"Caputo, Charles" <ccapu90@entergy.com>
Tracking Status: None
"Curry, John J" <jcurry2@entergy.com>
Tracking Status: None
"Wentzel, Michael" <Michael.Wentzel@nrc.gov>
Tracking Status: None

Post Office: LITXMETSP003.etrsouth.corp.entergy.com

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MESSAGE	2318	10/11/2012 6:11:55 PM	
Entergy_Responses_NMFS_PRD_Questions_10 October2012_#2.docx			18870

Options

Priority: Standard
Return Notification: Yes
Reply Requested: Yes
Sensitivity: Normal
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NMFS PRD Questions related to Entergy's 7/23/12 "sturgeon report"

Entergy's Response #2

10 October 2012

Entergy provided responses to NMFS PRD Questions following a conference call on 12 September 2012 attached to an email from Dara Gray to Mike Wentzel of NRC dated 27 September 2012. There were two questions that were not completely answered at that time, and this Response #2 repeats those previously unanswered questions and completes Entergy's responses by providing the remaining information. Each of the two NMFS questions is shown in yellow highlight followed by Entergy's response #2 answer in blue text.

2nd part of my new question – because this includes cooling and service water does it include water withdrawn through the IP1 intake?].

The historic (1976-1990) impingement density estimates were not based on Unit 1 flows because that flow was not sampled to determine impingement abundance. Impingement density was estimated separately for Unit 2 and Unit 3. For each unit, impingement density was estimated by dividing the estimated number impinged (adjusted for collection efficiency) by the intake flow derived from the sum of circulating water flow plus the service water flow.

Projections of sturgeon impingement numbers for current (2001-2008) conditions included Unit 1 intake flows. Atlantic sturgeon (Figure 3) and shortnose sturgeon (Figure 9) average impingement numbers per month were calculated as the product of average monthly impingement density times the average intake monthly flow. Actual intake flows (2001-2008 average) were obtained from Section 2.4.2.3.2 of Indian Point's Alternative Technology (Enercon, February 2010) and used to represent the average monthly Unit 2 and Unit 3 flows. Specifically, the average historic (2001-2008) monthly intake flow rate in millions of gallons per day (MGD) for Unit 2 included the circulating water, service water and Unit 1 river water withdrawn from the Hudson River (Table 2.1 of Enercon, February 2010). For Unit 3, the average historic (2001-2008) monthly intake flow rate in MGD included the circulating water and service water (Table 2.2 of Enercon, February 2010).

[NMFS additional question – can you give us a “zoomed” in picture for the last 10 years (i.e., adjust the scale of the graph) or provide the estimates that are on the vertical axis in a table by year? Also, is it possible to take these estimates out through 2011? We see having these abundance estimates as possibly a powerful piece of information when conducting our jeopardy analysis (i.e., being able to compare the expected number of impingements to an abundance estimate).

The table below provides the most recent ten years of sturgeon abundance projections, by species, that were plotted on the Y-axis in Figures 13 and 16 of Entergy’s 23 July 2012 Sturgeon Report. We have not yet calculated these estimates for 2008 through 2011.

Annual estimates of Hudson River Atlantic sturgeon or shortnose sturgeon for 1998 through 2007 based on standing crop estimates for the Long River Survey (LRS) or Fall Shoals Survey (FSS) sampling programs and published population abundance estimates from mark-recapture studies.

Year	Atlantic sturgeon		Shortnose sturgeon	
	Figure 13 Top	Figure 13 Bottom	Figure 16 Top	Figure 16 Bottom
	LRS Abundance Estimate	FSS Abundance Estimate	LRS Abundance Estimate	FSS Abundance Estimate
1998	13,201	14,151	96,580	54,461
1999	0	11,559	81,085	41,841
2000	0	4,575	10,102	53,752
2001	13,465	28,952	55,505	47,280
2002	117,727	45,385	70,031	16,485
2003	66,727	36,167	53,209	32,710
2004	14,276	27,293	82,610	28,659
2005	0	9,803	0	36,565
2006	0	7,842	92,983	41,584
2007	35,831	30,315	147,180	30,787