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**Craver, Patti**

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**From:** Balsam, Briana *NR*  
**Sent:** Friday, April 13, 2012 10:05 AM  
**To:** Egan, Joseph  
**Subject:** RE: Pilgrim - MIT study

Good thought. I am probably just going to refer Julie at NMFS to this reference and let her know that she could request a copy if she wants. I think we have provided her with more than enough information, especially since the NRC concluded that there would be no effect on any species.

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**From:** Egan, Joseph [jegan1@entergy.com] *19:11(10)*  
**Sent:** Friday, April 13, 2012 9:10 AM  
**To:** Balsam, Briana  
**Subject:** FW: Pilgrim - MIT study

Briana,

Another possibility might be requesting a copy directly from MIT's Civil Engineering Dept. Not sure if this would be quicker than waiting till next week.

Good luck.  
Joe

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**From:** Egan, Joseph  
**Sent:** Friday, April 13, 2012 8:14 AM  
**To:** 'Balsam, Briana'  
**Subject:** FW: Pilgrim - MIT study

Briana,

I just got an email from a former employee (now a consultant) who thinks he may have a copy of this document. Unfortunately, he won't be back in the office till Monday, 4/16. I will let you know as soon as we find out anything.

Thanks,  
Joe

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**From:** Egan, Joseph  
**Sent:** Thursday, April 12, 2012 5:04 PM  
**To:** Balsam, Briana  
**Subject:** RE: Pilgrim - MIT study

Briana,

I'm not familiar with this document. I'll ask some folks here to look into it and I will let you know what we find.

Thanks

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**From:** Balsam, Briana [mailto:Briana.Balsam@nrc.gov]

B/20

Sent: Thursday, April 12, 2012 4:47 PM  
To: Egan, Joseph  
Subject: RE: Pilgrim - 2010 Annual Report\_Marine Ecology Studies

Joe,

Is there any chance that you have a copy of the MIT study (Pagenkoff et al. 1974) that is cited in the 2000 ENSR Corp. 316 Demonstration? Julie still wants more information on the geographic extent of the surface thermal plume and isotherm maps, if available. I don't know if this reference would have that information, but since it is the main study that studied the plume at the surface, it may have that info. Here's the full reference:

Pagenkoff, J.R., D.F. Harieman, A.T. Ippen and B.R. Pearce. 1974. Oceanographic Studies at Pilgrim Nuclear Power Station to Determine Characteristics of Condenser Water Discharge. Massachusetts Institute of Technology. Parsons Laboratory for Water Resources and Hydrodynamics. Cambridge, MA. 156 p.

Thanks,

Briana

From: Egan, Joseph [mailto:jegan1@entergy.com]  
Sent: Tuesday, April 10, 2012 12:00 PM  
To: Balsam, Briana  
Subject: RE: Pilgrim - 2010 Annual Report\_Marine Ecology Studies

Briana,

Thanks for your patience. Attached are two sections from Pilgrim's 2010 Annual Report [Marine Ecology Studies] — 3.2 "Entrainment Monitoring" and 3.3 "Impingement Monitoring".

I will let you know what I find regarding the ENSR 316 Demonstration Report from 2000. Please contact me if there is anything else I can do.

Thanks,  
Joe

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From: Balsam, Briana [mailto:Briana.Balsam@nrc.gov]  
Sent: Tuesday, April 10, 2012 11:26 AM  
To: Egan, Joseph  
Subject: RE: Pilgrim - A few clarification questions

Thanks, Joe.

After looking back over the questions, I think that if you just transmitted the most recent (2010) entrainment and impingement reports, that would be enough, and you wouldn't have to worry about the 2006 reports specifically referenced in the SEIS. That might help unload some of the burden of putting those documents together.

Briana

From: Egan, Joseph [mailto:jegan1@entergy.com]  
Sent: Tuesday, April 10, 2012 11:17 AM  
To: Balsam, Briana  
Subject: RE: Pilgrim - A few clarification questions

Briana,

After our conversation this morning I began following up on your request. Sorry, but it's taking me longer than I expected. I'm still in the process of locating the documents and files you requested.

In addition, I need to ensure what is sent is in the right format and has been approved for transmittal. Please be patient while I work through this process. I'll be in touch as soon as possible.

Thanks,  
Joe

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Chemistry Dept.  
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From: Balsam, Briana [mailto:[Briana.Balsam@nrc.gov](mailto:Briana.Balsam@nrc.gov)]  
Sent: Tuesday, April 10, 2012 8:32 AM  
To: Egan, Joseph  
Subject: FW: Pilgrim - A few clarification questions

Joe,

Thanks for talking to me this morning and being willing to track down the impingement and entrainment studies for me.

I attached the questions that we got from Julie Crocker of NMFS. I have been able to answer about half without additional references, but questions 2 and 5 (the first 5—Julie numbered the questions incorrectly) I need more information about the thermal plume. The last three questions 5, 6, and 7 are about cancer crabs, atlantic herring, and sand lance, and I think I can pull answers to from the impingement and entrainment reports.

Thanks for your help on this. If you know of any additional studies or documents that would provide information related to these questions, that would be helpful, too.

Briana

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