

**RESPONSE TO FREEDOM OF
INFORMATION ACT (FOIA) REQUEST**

2017-0031

2

RESPONSE
TYPE☐

INTERIM

☒

FINAL

REQUESTER:

Eileen Morrison

DATE:

FEB 01 2017

DESCRIPTION OF REQUESTED RECORDS:

All records, including communications, related to the specified contention in the Environmental Protection Agency's ("EPA") draft permit for Pilgrim Nuclear Power Station

PART I. -- INFORMATION RELEASED

- ☐ Agency records subject to the request are already available in public ADAMS or on microfiche in the NRC Public Document Room.
- ☒ Agency records subject to the request are enclosed.
- ☐ Records subject to the request that contain information originated by or of interest to another Federal agency have been referred to that agency (see comments section) for a disclosure determination and direct response to you.
- ☐ We are continuing to process your request.
- ☒ See Comments.

PART I.A -- FEES

AMOUNT*

\$

*See Comments for details

☐

You will be billed by NRC for the amount listed.

☒

None. Minimum fee threshold not met.

☐

You will receive a refund for the amount listed.

☐

Fees waived.

PART I.B -- INFORMATION NOT LOCATED OR WITHHELD FROM DISCLOSURE

- ☐ We did not locate any agency records responsive to your request. *Note:* Agencies may treat three discrete categories of law enforcement and national security records as not subject to the FOIA ("exclusions"), 5 U.S.C. 552(c). This is a standard notification given to all requesters; it should not be taken to mean that any excluded records do, or do not, exist.
- ☒ We have withheld certain information pursuant to the FOIA exemptions described, and for the reasons stated, in Part II.
- ☐ Because this is an interim response to your request, you may not appeal at this time. We will notify you of your right to appeal any of the responses we have issued in response to your request when we issue our final determination.
- ☒ You may appeal this final determination within 30 calendar days of the date of this response by sending a letter or email to the FOIA Officer, at U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001, or FOIA.Resource@nrc.gov. Please be sure to include on your letter or email that it is a "FOIA Appeal."

PART I.C COMMENTS (Use attached Comments continuation page if required)

In conformance with the FOIA Improvement Act of 2016, the NRC is informing you that: (1) you have the right to seek assistance from the NRC's FOIA Public Liaison; (2) you have the right to seek dispute resolution services from the NRC's FOIA Public Liaison or the Office of Government Information Services; and (3) notwithstanding the language in Parts I.B and II.B of this form, you may appeal this final determination within 90 calendar days of the date of this response by sending a letter or email to the FOIA Officer, at U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001, or FOIA.Resource@nrc.gov. Please be sure to include on your letter or email that it is a "FOIA Appeal."

SIGNATURE - FREEDOM OF INFORMATION ACT OFFICER

Stephanie Blaney

2017-0031

2

**RESPONSE TO FREEDOM OF INFORMATION
ACT (FOIA) REQUEST Continued**

RESPONSE
TYPE

☐

INTERIM

☒

FINAL

REQUESTER:

Eileen Morrison

DATE:

FEB 01 2017

PART I.C COMMENTS (Continued)

The record Confidential/Interagency Deliberative Process/Do Not Cite or Quote Draft, Revision 12/4/2015 is the record that was referred to the Environmental Protection Agency. They provided additional records that are relevant to your request.

**RESPONSE TO FREEDOM OF
INFORMATION ACT (FOIA) REQUEST**

2017-0031

DATE:

FEB 01 2017

PART II.A -- APPLICABLE EXEMPTIONS

Records subject to the request are being withheld in their entirety or in part under the FOIA exemption(s) as indicated below (5 U.S.C. 552(b)).

- ☐ Exemption 1: The withheld information is properly classified pursuant to an Executive Order protecting national security information.
- ☐ Exemption 2: The withheld information relates solely to the internal personnel rules and practices of NRC.
- ☐ Exemption 3: The withheld information is specifically exempted from public disclosure by the statute indicated.
- ☐ Sections 141-145 of the Atomic Energy Act, which prohibits the disclosure of Restricted Data or Formerly Restricted Data (42 U.S.C. 2161-2165).
- ☐ Section 147 of the Atomic Energy Act, which prohibits the disclosure of Unclassified Safeguards Information (42 U.S.C. 2167).
- ☐ 41 U.S.C. 4702(b), which prohibits the disclosure of contractor proposals, except when incorporated into the contract between the agency and the submitter of the proposal.
- ☐ Exemption 4: The withheld information is a trade secret or confidential commercial or financial information that is being withheld for the reason(s) indicated.
- ☐ The information is considered to be proprietary because it concerns a licensee's or applicant's physical protection or material control and accounting program for special nuclear material pursuant to 10 CFR 2.390(d)(1).
- ☐ The information is considered to be another type or confidential business (proprietary) information.
- ☐ The information was submitted by a foreign source and received in confidence pursuant to 10 CFR 2.390(d)(2).
- ☒ Exemption 5: The withheld information consists of interagency or intraagency records that are normally privileged in civil litigation.
- ☒ Deliberative process privilege.
- ☐ Attorney work product privilege.
- ☐ Attorney-client privilege.
- ☐ Exemption 6: The withheld information from a personnel, medical, or similar file, is exempted from public disclosure because its disclosure would result in a clearly unwarranted invasion of personal privacy.
- ☐ Exemption 7: The withheld information consists of records compiled for law enforcement purposes and is being withheld for the reason(s) indicated.
- ☐ (A) Disclosure could reasonably be expected to interfere with an open enforcement proceeding.
- ☐ (C) Disclosure could reasonably be expected to constitute an unwarranted invasion of personal privacy.
- ☐ (D) The information consists of names and other information the disclosure of which could reasonably be expected to reveal identities of confidential sources.
- ☐ (E) Disclosure would reveal techniques and procedures for law enforcement investigations or prosecutions, or guidelines that could reasonably be expected to risk circumvention of the law.
- ☐ (F) Disclosure could reasonably be expected to endanger the life or physical safety of an individual.
- ☐ Other

PART II.B -- DENYING OFFICIALS

In accordance with 10 CFR 9.25(g) and 9.25(h) of the U.S. Nuclear Regulatory Commission regulations, the official(s) listed below have made the determination to withhold certain information responsive to your request.

DENYING OFFICIAL	TITLE/OFFICE	RECORDS DENIED	APPELLATE OFFICIAL	
			EDO	SECY
Stephanie Blaney	FOIA Officer/OCIO		<input checked="" type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>

Appeals must be made in writing within 30 calendar days of the date of this response by sending a letter or email to the FOIA Officer, at U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001, or FOIA.Resource@nrc.gov. Please be sure to include on your letter or email that it is a "FOIA Appeal."

To: Casto, Greg[Greg.Casto@nrc.gov]
Cc: Zobrist, Marcus[Zobrist.Marcus@epa.gov]; Webster, David[Webster.David@epa.gov]; Curley, Michael[Curley.Michael@epa.gov]; Papadopoulos, George[papadopoulos.george@epa.gov]
From: Houlihan, Damien
Sent: Thur 7/16/2015 3:03:35 PM
Subject: RE: Pilgrim and EPA / NRC review processes
7 16 15 Memo to NRC on NPDES Permit Process and Pilgrim BTA Technologies.docx

Greg –

See attached memo, as previously discussed, that outlines the NPDES process (generally) from draft to finalization, and also includes some specific question related to nuclear safety concerns raised by Entergy with regard to certain potential Best Technology Available (BTA) options under consideration.

We look forward to discussing this memo with you and others at NRC in the near future. I'll be in touch to set something up.

Please feel free to call with questions. Thanks.

Damien Houlihan, Chief
Industrial Permits Section
Office of Ecosystem Protection
US EPA

617 918-1586

From: Casto, Greg [mailto:Greg.Casto@nrc.gov]

Sent: Tuesday, May 19, 2015 11:04 AM
To: Houlihan, Damien
Cc: Zobrist, Marcus
Subject: RE: Pilgrim and EPA / NRC review processes

Damien,

Just following up for scheduling our next meeting. I've been thinking on how we can push this forward on our end, and believe that if we have the template examples for how EPA envisions a pre-draft permit consultation, and a post- draft permit consultation, then we can use those to provide to our senior management with our recommended definition for 'conflict' and how that will interface with the consulting process. Given that approval, then we may be able to proceed.

I believe that from the last meeting, your staff got an understanding of where we might consider alternatives within our understanding of 'conflict', given our regulatory process. After the meeting, we discussed this further among our group and we ended up with a common picture of how that definition could generally work with licensee justifications, and how they would enhance those justifications from the current example provided by Pilgrim.

If we had the templates in advance of the next meeting, then we should be able to talk to those and work through an example using Pilgrim. That should help our explanation to senior management to get acceptance and/or comments on our path forward. Feel free to call if questions or to discuss path forward. Tx greg

Greg Casto

Chief, Division of Safety Systems/Balance of Plant

United States Nuclear Regulatory Commission

Washington, DC 20555-0001

Greg.casto@nrc.gov

(301)415,0565

From: Houlihan, Damien [<mailto:houlihan.damien@epa.gov>]
Sent: Tuesday, April 14, 2015 8:48 AM
To: Casto, Greg
Subject: RE: Pilgrim follow-up

Good morning, Greg.

Looking forward to our call at 2:30 today. I've attached a draft agenda based on what you proposed in earlier email and some follow up from our meeting in January. Let me know if it's o.k. and I can then circulate to you and EPA folks. Thanks.

Damien

From: Casto, Greg [<mailto:Greg.Casto@nrc.gov>]
Sent: Friday, April 10, 2015 1:32 PM
To: Houlihan, Damien
Subject: RE: Pilgrim follow-up
Importance: High

We are firm for our Tuesday meeting at 230P. We will have the following on the call:

Myself

Tim Collins – senior technical regulatory expert

Fred Lyons – project manager for site specific licensing activities

Dave Beaulieu (bow-yer) – senior 10 CFR 50.59 expert

Brian Harris – environmental area related technical reviewer

Andrew Pessin – general counsel (or either Susan Uttal or Daniel Straus, OGC. They were all at the January meeting)

Call in information is below:

800-857-5160, pass code

(b)(6)

If issues crop up, and you can't get me in the office, my cell is

(b)(6)

Tx greg

Greg Casto

Chief, Division of Safety Systems/Balance of Plant

United States Nuclear Regulatory Commission

Washington, DC 20555-0001

Greg.casto@nrc.gov

(301)415,0565

From: Houlihan, Damien [<mailto:houlihan.damien@epa.gov>]

Sent: Wednesday, April 08, 2015 10:36 AM

To: Casto, Greg

Subject: RE: Pilgrim follow-up

Thanks, Greg. We're are confirmed for Tuesday, 4/14, from 2:30 – 4.

We'll be calling in, so we will need to arrange conferencing. Thanks.

Damien

From: Casto, Greg [<mailto:Greg.Casto@nrc.gov>]
Sent: Wednesday, April 08, 2015 9:51 AM
To: Houlihan, Damien
Subject: RE: Pilgrim follow-up
Importance: High

Just making sure that you know our meeting has been postponed to Tuesday at 230p here at the NRC. This will be a firm meeting and we should discuss what will be needed to support travel by EPA R1 staff (conf call). Tx greg

From: Casto, Greg
Sent: Tuesday, April 07, 2015 11:45 AM
To: 'Houlihan, Damien'
Subject: RE: Pilgrim follow-up
Importance: High

Sorry, left you a voice message to try to not continue to go back and forth on the date/time. I'm having some people who would be beneficial to have at the meeting not able to attend on Thursday, but they could attend next week. Give me a call or respond by email. We should be able to do Tuesday, 230 – 4p (rest of week does not look good for most). I would propose to make the next week meeting firm (and can do so on my end). Sorry again, and let me know. Tx greg

From: Houlihan, Damien [<mailto:houlihan.damien@epa.gov>]
Sent: Monday, April 06, 2015 11:40 AM
To: Casto, Greg
Subject: RE: Pilgrim follow-up

Hi Greg –

We have conflicts on Wednesday. Let's do Thursday 1-2:30. Thanks.

Damien

From: Casto, Greg [<mailto:Greg.Casto@nrc.gov>]
Sent: Monday, April 06, 2015 11:36 AM
To: Houlihan, Damien
Subject: RE: Pilgrim follow-up
Importance: High

Damien,

Please let me know when you can whether the Wednesday afternoon meeting day/time work. If not, then we could make it the same time on Thursday. Tx greg

From: Houlihan, Damien [<mailto:houlihan.damien@epa.gov>]
Sent: Thursday, April 02, 2015 3:03 PM
To: Casto, Greg
Subject: RE: Pilgrim follow-up

Thanks, Greg. What you propose looks great.

I'm out tomorrow. Let's try for early next week. I'm pretty available. From EPA we'll include myself, George Papadopoulos, Dave Webster, and hopefully Marcus Zohrist (from HQ). Possibly include our attorney, Mark Stein.

If you could send me some potential times, I'll coordinate with EPA folks.

Damien

From: Casto, Greg [<mailto:Greg.Casto@nrc.gov>]
Sent: Thursday, April 02, 2015 10:31 AM
To: Houlihan, Damien
Subject: RE: Pilgrim follow-up
Importance: High

Sorry, I just saw this. I was out until yesterday, and am out again this afternoon. I am in tomorrow and currently next week. I'll work on an early next week meeting with people to talk on the following specific to Pilgrim, if this works for you:

- 1) Discussion on the 10 CFR 50.59 process relative to applying to crafting Pilgrim permitting questions
 - a. Overview of 50.59 and NEI 96-07 information
 - b. Examples where current permitting responses (from Pilgrim) appear to fit and do not appear to fit 50.59 approach
- 2) Re- discussion for areas where the EPA has permitting questions
 - a. Review of July 2014 request letter and initial request
 - b. Agreement of definition for 'conflict with an NRC safety requirement'
 - c. Recommended requests for further information to accommodate informational needs to perform consultation
 - d. Discuss NRC perception of what may be needed for future consultation (ie – what information we'd expect to be able to conclude a 'conflict')

3) Discussion of EPA proposed approach to interface with Pilgrim, and identify anything else needed for discussion or investigation for future meetings

Let me know if this looks like the right direction, and feel free to propose anything different or additional. I'm not sure this could be completed in an hour, but we could try. Suggest no more than a 90 minute bite for this meeting. I think that our outcome for this meeting would be to give you an understanding of the kind of documentation that we would need to see to conclude a 'conflict' exists. Tx greg

Greg Casto

Chief, Division of Safety Systems/Balance of Plant

United States Nuclear Regulatory Commission

Washington, DC 20555-0001

Greg.casto@nrc.gov

(301)415,0565

From: Houlihan, Damien [<mailto:houlihan.damien@epa.gov>]

Sent: Thursday, March 26, 2015 7:32 AM

To: Casto, Greg

Cc: Zobrist, Marcus; Webster, David

Subject: RE: Pilgrim follow-up

Thanks, Greg. Let's set something up for next week. If you could send me some proposed times, I'll coordinate with other EPA folks.

Damien

From: Casto, Greg [<mailto:Greg.Casto@nrc.gov>]
Sent: Wednesday, March 25, 2015 4:35 PM
To: Houlihan, Damien
Cc: Zobrist, Marcus; Webster, David
Subject: RE: Pilgrim follow-up

Thanks Damien. Sorry but I am out of the office until next Tuesday. We have been working to schedule our next physical meeting (to further work on the action items from the January meeting) and it appears that the week of April 20th will be the next opportunity. I'll be able to call mid to late next week to generally discuss questions you might have on 50.59 and other options for Pilgrim. Let me know and we can set that up if you like. Tx greg

From: Houlihan, Damien [<mailto:houlihan.damien@epa.gov>]
Sent: Wednesday, March 25, 2015 2:28 PM
To: Casto, Greg
Cc: Zobrist, Marcus; Webster, David
Subject: RE: Pilgrim follow-up

Hi Greg -

I'm wondering if you have any time to touch base tomorrow? It could be a quick check-in where we can discuss status and next steps. Please let me know. Thanks.

Damien

From: Casto, Greg [<mailto:Greg.Casto@nrc.gov>]
Sent: Monday, March 16, 2015 4:30 PM
To: Houlihan, Damien
Cc: Zobrist, Marcus; Webster, David
Subject: RE: Pilgrim follow-up

Thanks, and we have done work on these topics since the meeting, but it was about a month ago. I'm getting with the other NRC meeting attendees now on recent work on this. I am probably not available this week to discuss in detail, so I'd say next week would be a good target to generally re-visit the bullets. Another overall follow-up meeting might be possible the following week, I'll need to check with our participants. To discuss Pilgrim path forward specifically, that might be able to happen as early as next week, but again I'd need to check with the staff. Tx greg

From: Houlihan, Damien [<mailto:houlihan.damien@epa.gov>]
Sent: Monday, March 16, 2015 3:30 PM
To: Casto, Greg
Cc: Zobrist, Marcus; Webster, David
Subject: Pilgrim follow-up

Hi Greg –

I wanted to follow-up with you on the consultation process for the Pilgrim draft NPDES permit. As you know, we continue to work on selecting the CWA 316(b) best technology available for the facility, and we believe working with NRC is a very important part of the process in terms of determining whether a technology is "available."

Specifically, I'm wondering about items c, d, and e from you 1/16 email to Marcus. They're listed below:

- c. NRC will further deliberate on how our processes may be adapted to support EPA's desire to consult with us. (As example, B. above)
- d. NRC will consider whether it can issue a letter to Pilgrim requesting additional information on why certain technologies conflict with NRC safety requirements. (more discussion internally on this in progress, but appears to be in conflict with OMB policy if Pilgrim does not formally send correspondence to NRC, as no apparent direct basis for fee recovery)
- e. NRC will review Pilgrim's assertion to EPA that certain technologies conflict with NRC safety requirements. We informed EPA that our initial review indicated there was insufficient information for NRC to make a conclusion one way or the other. However, NRC would come prepared to discuss conceptually our views on Pilgrim's assertions. We were very clear that any perspectives provided would not constitute official NRC positions. (Will use work

on (b) above to see how it applies to Pilgrim. Believe that at a minimum, will result in basis for EPA follow up questions to Pilgrim that will illicit better regulatory based justification for conflicts.)

Would you be available for a call this week to discuss? Please let me know if you have any availability. Thanks.

Damien

Damien Houlihan, Chief

Industrial Permits Section

Office of Ecosystem Protection

US EPA

617 918-1586

To: Morgan, Nadiyah[Nadiyah.Morgan@nrc.gov]
From: Papadopoulos, George
Sent: Mon 6/1/2015 4:06:42 PM
Subject: RE: Pilgrim NPDES - FSAR Chapter 11

Thank you Dee and good luck to you too -

George Papadopoulos - USEPA - (617) 918-1579

From: Morgan, Nadiyah [mailto:Nadiyah.Morgan@nrc.gov]
Sent: Monday, June 01, 2015 11:54 AM
To: Papadopoulos, George
Subject: Re: Pilgrim NPDES - FSAR Chapter 11

Hello George,

I'm going to forward your email to Rich Guzman, as I am no longer the Pilgrim PM.

Good luck!

Thanks,

Dee

On: 01 June 2015 10:41, "Papadopoulos, George" <papadopoulos.george@epa.gov>
wrote:

Hi Nadiyah.

For Section 11.6 of Pilgrim's FSAR, were there a few pages of this that was not sent to me ?
Your only attachment that referenced Section 11.6 was a figure that had been moved to a

different document. This was also the case for a few other Sections, but I am mainly interested in any text portion of Section 11.6

Thank you

George Papadopoulos - USEPA - (617) 918-1579

From: Morgan, Nadiyah [<mailto:Nadiyah.Morgan@nrc.gov>]
Sent: Tuesday, May 19, 2015 6:36 PM
To: Papadopoulos, George
Cc: Beasley, Benjamin; Dudck, Michael; Guzman, Richard
Subject: Pilgrim NPDES - FSAR Chapter 11

Hello George,

Please see attached.

Thanks,

Dee

From: Papadopoulos, George [<mailto:papadopoulos.george@epa.gov>]
Sent: Friday, May 15, 2015 1:05 PM
To: Beasley, Benjamin
Cc: Houlihan, Damien; Gaito, Danielle
Subject: RE: Pilgrim NPDES

Hi Ben,

Do you have any sense as to when we can expect those Pilgrim FSAR sections? As I mentioned in my prior email, we are most interested in Section or Part II if you could provide that at your earliest convenience. The FSAR would greatly assist us in putting our promised correspondence to you in specific language that you requested pertaining to operations at Pilgrim.

Thank you

George Papadopoulos - USEPA - (617) 918-1579

From: Beasley, Benjamin [<mailto:Benjamin.Beasley@nrc.gov>]
Sent: Friday, April 17, 2015 4:18 PM
To: Papadopoulos, George
Cc: Morgan, Nadiyah; Casto, Greg; Dudek, Michael
Subject: RE: Pilgrim NPDES

George,

The Pilgrim operating license is publicly available. By copy of this e-mail, I am asking Dee Morgan to forward a hyperlink or file of the license to you. The FSAR is not publicly available but with a review for sensitive information, we can send you most of it, or at least the pertinent sections. We will begin reviewing the FSAR for sensitive information as soon as our workload permits. Next week we will send you a date for when we expect to provide the FSAR sections.

Regards,

Ben Beasley

Benjamin Beasley, Acting Deputy Director

Division of Operating Reactor Licensing

Office of Nuclear Reactor Regulation

301-415-2062

Benjamin.Beasley@nrc.gov



From: Papadopoulos, George [<mailto:papadopoulos.george@epa.gov>]
Sent: Friday, April 17, 2015 4:06 PM
To: Beasley, Benjamin
Subject: FW: Pilgrim NPDES

From: Papadopoulos, George
Sent: Friday, April 17, 2015 3:45 PM
To: 'Greg.Casto@nrc.gov'; 'ben.beasley@nrc.gov'
Cc: Houlihan, Damien
Subject: Pilgrim NPDES

Hi Greg and Ben,

I took part in our conference call this past Tuesday regarding the reissuance of the Pilgrim NPDES Permit. We promised to get back to you with an assessment of certain technologies that are being considered at Pilgrim with some detail on how they may affect nuclear safety and/or Pilgrim's (NRC) operating license. Would you be able to pass along Pilgrim's current license? If the FSAR is not part of the license, is that something you could share with us also? We are

just trying put things in language that is consistent with those documents and the 10 CFR 50.59 process as we had discussed.

Thank you

George Papadopoulos - USEPA - (617) 918-1579

To: Beasley, Benjamin[Benjamin.Beasley@nrc.gov]
Cc: Morgan, Nadiyah[Nadiyah.Morgan@nrc.gov]
From: Papadopoulos, George
Sent: Fri 5/1/2015 5:18:00 PM
Subject: RE: Pilgrim NPDES

Hi Ben,

Regarding Pilgrim's FSAR, we are most interested in Section 11, if you can provide this part first. Thank you

George Papadopoulos - USEPA - (617) 918-1579

From: Beasley, Benjamin [mailto:Benjamin.Beasley@nrc.gov]
Sent: Friday, April 17, 2015 4:18 PM
To: Papadopoulos, George
Cc: Morgan, Nadiyah; Casto, Greg; Dudek, Michael
Subject: RE: Pilgrim NPDES

George,

The Pilgrim operating license is publicly available. By copy of this e-mail, I am asking Dee Morgan to forward a hyperlink or file of the license to you. The FSAR is not publicly available but with a review for sensitive information, we can send you most of it, or at least the pertinent sections. We will begin reviewing the FSAR for sensitive information as soon as our workload permits. Next week we will send you a date for when we expect to provide the FSAR sections.

Regards,

Ben Beasley

Benjamin Beasley, Acting Deputy Director

Division of Operating Reactor Licensing

Office of Nuclear Reactor Regulation

301-415-2062

Benjamin.Beasley@nrc.gov



From: Papadopoulos, George [<mailto:papadopoulos.george@epa.gov>]
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Subject: FW: Pilgrim NPDES

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Sent: Friday, April 17, 2015 3:45 PM
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Cc: Houlihan, Damien
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Thank you

George Papadopoulos - USEPA - (617) 918-1579

To: Morgan, Nadiyah[Nadiyah.Morgan@nrc.gov]
From: Papadopoulos, George
Sent: Mon 6/8/2015 8:04:39 PM
Subject: RE: Pilgrim Station

Hi Dee,

The Pilgrim NPDES permit was last issued in 1991 and modified in 1994. Although it expired in 1996, the permittee reapplied for the permit at that time, so it has been administratively continued, in other words it is still in effect. We have been working on a draft permit to reissue, but have yet to publish it for public comment.

Let me know if you have any other questions.

George Papadopoulos - USEPA - (617) 918-1579

From: Morgan, Nadiyah [mailto:Nadiyah.Morgan@nrc.gov]
Sent: Monday, June 08, 2015 3:28 PM
To: Papadopoulos, George
Subject: RE: Pilgrim Station

Hi George,

Is it correct that Pilgrim has a "temporary" NPDES permit? If it's public information, when does it expire?

Thanks,

Dee

To: Morgan, Nadiyah[Nadiyah.Morgan@nrc.gov]
From: Papadopoulos, George
Sent: Tue 5/19/2015 10:49:14 PM
Subject: Re: Pilgrim NPDES - FSAR Chapter 11

Thank you Dee -

George P.

From: Morgan, Nadiyah <Nadiyah.Morgan@nrc.gov>
Sent: Tuesday, May 19, 2015 6:35 PM
To: Papadopoulos, George
Cc: Beasley, Benjamin; Dudek, Michael; Guzman, Richard
Subject: Pilgrim NPDES - FSAR Chapter 11

Hello George,

Please see attached.

Thanks,

Dee

From: Papadopoulos, George [mailto:papadopoulos.george@epa.gov]
Sent: Friday, May 15, 2015 1:05 PM
To: Beasley, Benjamin
Cc: Houlihan, Damien; Gaito, Danielle
Subject: RE: Pilgrim NPDES

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Thank you

George Papadopoulos - USEPA - (617) 918-1579

From: Beasley, Benjamin [mailto:Benjamin.Beasley@nrc.gov]
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To: Papadopoulos, George
Cc: Morgan, Nadiyah; Casto, Greg; Dudek, Michael
Subject: RE: Pilgrim NPDES

George,

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Regards,

Ben Beasley

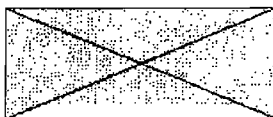
Benjamin Beasley, Acting Deputy Director

Division of Operating Reactor Licensing

Office of Nuclear Reactor Regulation

301-415-2062

Benjamin.Beasley@nrc.gov



From: Papadopoulos, George [<mailto:papadopoulos.george@epa.gov>]
Sent: Friday, April 17, 2015 4:06 PM
To: Beasley, Benjamin
Subject: FW: Pilgrim NPDES

From: Papadopoulos, George
Sent: Friday, April 17, 2015 3:45 PM
To: 'Greg.Casto@nrc.gov'; 'ben.beasley@nrc.gov'
Cc: Houlihan, Damien
Subject: Pilgrim NPDES

Hi Greg and Ben,

I took part in our conference call this past Tuesday regarding the reissuance of the Pilgrim NPDES Permit. We promised to get back to you with an assessment of certain technologies that are being considered at Pilgrim with some detail on how they may affect nuclear safety and/or Pilgrim's (NRC) operating license. Would you be able to pass along Pilgrim's current license ? If the FSAR is not part of the license, is that something you could share with us also? We are just trying put things in language that is consistent with those documents and the 10 CFR 50.59 process as we had discussed.

Thank you

George Papadopoulos - USEPA - (617) 918-1579

To: Houlihan, Damien[houlihan.damien@epa.gov]; Zobrist, Marcus[Zobrist.Marcus@epa.gov]
From: Casto, Greg
Sent: Fri 6/3/2016 1:29:27 PM
Subject: RE: RE: Pilgrim and EPA / NRC review processes

Thanks for your information last week regarding the Pilgrim NPDES permit process. I'm sorry that the process between us seemed to take so long, but I think the outcome identified a number of unidentified process issues in our interface with licensees and our ability to coordinate and perform consultation with EPA. The guidance for protocol that you developed, and our defining "conflicts" and further describing the process on how we communicate among ourselves, licensees, and EPA should make this repeatable and much more efficient.

I have moved on to other areas, (risk analysis and fire protection issues for the time being), but you can continue to use me as a contact if you have new permitting questions. Robert Dennig (301) 415,1156 is the new branch chief for balance of plant as well as other areas as we've consolidated branches and have begun to reduce our staff resources overall in the agency. Tim McGinty, (301) 415, 3283, and Rob Taylor (same #) are still good director contacts in the Division of Safety Systems. Andrew Pessin (301) 287, 9179, continues to be the general counsel contact for this topic. I have informed all of them that you may be contacting them in the future.

If you have problems contacting anyone, need information quickly, or are having problems getting responses or actions out of us, please do not hesitate to call or email me. Thank you again, and look forward to talking to you sometime in the future. Tx
greg

Greg Casto

Chief, Division of Risk Assessment/Fire Protection

United States Nuclear Regulatory Commission

Washington, DC 20555-0001

Greg.casto@nrc.gov

(301)415,0565

To: Ramach, Sean[Ramach.Sean@epa.gov]; Houlihan, Damien[houlihan.damien@epa.gov]
From: Zobrist, Marcus
Sent: Tue 12/15/2015 10:23:00 PM
Subject: FW: Clean Water Act EPA Consultation Memo rev 4.docx
Clean Water Act EPA Consultation Memo rev 4.docx

Damien: do you see any value in finalizing this memo at this time? Seems we might need some guidance on how we work through these issue where a State, and not EPA, is the permitting authority.

Sean: Attached is a draft memo that we were working on with NRC regarding consulting on 316(b) permits for nukes. This was to inform the Pilgrim permit renewal (an EPA-issued permit). That facility is now scheduled to close.

From: Casto, Greg [mailto:Greg.Casto@nrc.gov]
Sent: Tuesday, December 15, 2015 10:04 AM
To: Zobrist, Marcus <Zobrist.Marcus@epa.gov>; Houlihan, Damien <houlihan.damien@epa.gov>
Subject: Clean Water Act EPA Consultation Memo rev 4.docx
Importance: High

Damien and Marcus,

We apologize for the delay, and attached is our NRC language version to your consultation memo. We are ready to meet and discuss the path forward at your convenience. If you would like to call me on potential dates to arrange, then I am in the office throughout most of the holiday period. Tx greg

Greg Casto

Chief, Division of Safety Systems/Balance of Plant

United States Nuclear Regulatory Commission

Washington, DC 20555-0001

Greg.casto@nrc.gov

(301)415,0565

To: Gaito, Danielle[Gaito.Danielle@epa.gov]; Papadopoulos, George[papadopoulos.george@epa.gov]; Curley, Michael[Curley.Michael@epa.gov]
From: Houlihan, Damien
Sent: Wed 8/26/2015 8:13:14 PM
Subject: FW: Follow up on Consultation template
Additional Pilgrim specific questions from EPA.docx

George, Michael and Danielle –

Please take a look at NRC's response to our Pilgrim questions. We can discuss next week.

Damien

From: Casto, Greg [mailto:Greg.Casto@nrc.gov]
Sent: Tuesday, August 25, 2015 3:58 PM
To: Zobrist, Marcus; Houlihan, Damien
Subject: Follow up on Consultation template

Marcus and Damien,

We are completing our review and response to your earlier proposed template for conducting consultations. I apologize that we haven't responded sooner, but several of our staff and counsel have been out of the office. We have drafted a revised template based on the one you provided, and believe that we should have one more meeting to discuss before we seek executive agreement on the process.

Given our current work schedules and out of office for school and vacations for some of the staff, we would like to target the week of September 21 for our next meeting. That meeting should discuss and resolve the template comments, and our next step would be to get executive approval of the resulting document.

There are two primary comments. 1) early consultation prior to receiving licensee

comments on a draft permit (to discuss potential licensee specific alternatives) is not recommended by our legal staff, and 2) opportunity for the licensee to respond to the NRC and EPA with identified conflicts, and NRC review and response should be an activity separate from a public comment period. Our conclusions on conflicts should result in Director decision making and relevant to changes in the final permit consistent with rulemaking language.

I'm getting final legal comments, and will forward the revised template soon.

Attached are my comments to your questions, which are outside of the template. Feel free to call me to discuss. Tx greg

Greg Casto

Chief, Division of Safety Systems/Balance of Plant

United States Nuclear Regulatory Commission

Washington, DC 20555-0001

Greg.casto@nrc.gov

(301)415,0565



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MA 02109-3912**

**Confidential/Interagency Deliberative Process/Do Not Cite or Quote
DRAFT, Revision 12/4/2015**

Memorandum

Date: XX/XX, 2016

Subject: Template for Clean Water Act 316(b) Consultation Activities between EPA and NRC

This memorandum discusses the National Pollution Discharge Elimination System (NPDES) permitting process with inclusion for Nuclear Regulatory Commission (NRC) consultation related to the Environmental Protection Agency's (EPA's) understanding of "conflict with a safety requirement established" by the NRC as set forth in the EPA regulation, 40 CFR 125.94(f), and discussed in the preamble to the EPA's Clean Water Act Section 316 (b) final rulemaking (79 FR 48300, 48322-23, 48372-73; August 15, 2014). Section 125.94(f) provides that, in the case of a nuclear facility or a facility constructing or conducting maintenance on nuclear powered vessels of the Armed Services, if the owner or operator of the facility demonstrates to the Director, upon the Director's consultation with the Nuclear Regulatory Commission, the Department of Energy or the Naval Nuclear Propulsion Program, that compliance with this subpart would result in a conflict with a safety requirement established by these entities, the Director must establish best technology available (BTA) requirements that would not result in a conflict with the Commission's, the Department's or the Naval Nuclear Propulsion Program's safety requirement.

(b)(5)

I. NPDES Permit Process and NRC Consultation

Relevant documents are prepared and discussed internally (draft permit, fact sheet, attachments, and any other determination documents), portions of which are potentially shared/discussed with State permitting authorities (e.g., MassDEP). EPA uses a variety of sources and tools to collect relevant permitting information, including using its authority pursuant to section 308 of the Clean Water Act, 33 U.S.C. § 1318(a), to request owners and/or operators of permitted sources to provide requested information. It is possible that EPA will seek consultation/input from other resource agencies (e.g., MassWildlife, NOAA) at this development stage.

After internal review and discussion is completed (or nearing completion) the draft permit and associated documents are shared with applicable State authorities responsible for permitting (e.g., MassDEP) for their complete review and comment. During this time, selected portions of the draft permit or fact sheet may be shared with the permittee to ensure that certain factual elements are accurate. Note that this is not an opportunity for the permittee to provide substantive comment on the draft documents, rather, it is an opportunity for the permittee to correct any basic information (e.g., facility description, contact information, etc.) that may be incorrect.

(b)(5)

EPA is required to "public notice" the comment period in a local newspaper, and we have a standard distribution list for interested parties on all public notices. See 40 C.F.R. § 124.10. The mandatory comment period is 30 days, but the comment period may be extended for additional time based on the degree of public interest anticipated, the complexity of the draft permit, and other relevant factors. The length of an extended comment period is up to the discretion of the Division Director – as example in the case of PNPS, it is likely that EPA will have an extended comment period (several months) due to the complexity of the permit. EPA is also required to hold a public hearing when there is a significant degree of public interest in a draft permit. See 40 C.F.R. § 124.12. At such a hearing, EPA staff would briefly summarize the draft permit and the public would have an opportunity to provide oral and written comments on the draft to EPA and State permitting authorities. Following the initial public comment (possibly extended) period, EPA is authorized to hold a second public comment period, in which EPA may solicit comments on comments received, or on substantial permit changes made by EPA in response to comments received, during the initial comment period. See 40 C.F.R. § 124.14. This process is rarely used, but is possible. EPA also conducts appropriate consultation with the National Oceanographic and Atmospheric Administration (NOAA) and the United States Fish and Wildlife Service (USFWS), where necessary, for Essential Fish Habitat and/or Endangered Species Act concerns either prior to or during the public comment period. Should public comments or separate agency consultation modify or add new challenges to NRC conclusions in regard to the licensee, the EPA will solicit re-consultation with the NRC to ensure that additional potential conflicts are identified and resolved.

After the end of the comment period, EPA would generally issue a final permit, which must include a response to all significant comments and a full account of any changes to permit conditions between the draft and final permits and the reasons for these changes. See 40 C.F.R. § 124.17. As described above, EPA may re-public notice a second draft permit if substantial changes were made as a result of new information received within the comment period. Any re-noticing of a draft permit would delay the issuance of a final permit, often by six months or more, to allow EPA to consider and respond to additional comments.

Once the permit is finalized (signed by the Division Director), there is an opportunity for the permittee or any commenter to appeal one or more conditions of the final permit by filing a Petition for Review with the EPA Environmental Appeals Board (EAB) within 30 days. The EAB, an impartial, independent body within EPA, is the final agency decision maker on administrative appeals of NPDES permits and generally sits in panels of three judges. Filing an appeal with the EAB is a prerequisite to seeking judicial review of a final NPDES permit. *See generally* 40 C.F.R. § 124.19 (describing the EAB appeals process). If such an appeal is made, any appealed condition(s) (and any other conditions that are not severable from the appealed condition(s)) is stayed until resolution of the appeal. *See* 40 C.F.R. § 124.16. The appeal may be resolved either through negotiation with the petitioner, or by ruling from the EAB (including remand back to the Region if warranted). A remand could require re-public notice of the permit for comment. It's difficult to predict the length of litigation before the EAB (a timeframe of one year or more is not unreasonable).

Once all litigation at the EAB is exhausted, the final permit becomes effective. At this time, a petitioner may seek judicial review within 120 days in the U.S. Circuit Court of Appeals, which for EPA Region 1 NPDES permits is generally the First Circuit. *See* 33 U.S.C. § 1369(b). Even if litigation is initiated, the permit would most likely become effective. Once appeals are exhausted at the First Circuit, it is possible to bring a law suit to the U.S. Supreme Court (this judicial litigation process could take several years.)

To: Casto, Greg[Greg.Casto@nrc.gov]
Cc: Zobrist, Marcus[Zobrist.Marcus@epa.gov]
From: Houlihan, Damien
Sent: Mon 10/19/2015 5:18:02 PM
Subject: RE: Pilgrim and EPA / NRC review processes

Greg --

Thanks for your email. We were just discussing the need to reach out to you on Pilgrim, given the recent announcement. We intend to move forward on the draft permit, but have lots to think about in terms of what a permit looks like for the period of time while Pilgrim's still operating, and then post-closure.

How does you week look for a quick call? After 3 would work for me today, and then I'm out tomorrow, back the rest of week.

Damien

From: Casto, Greg [mailto:Greg.Casto@nrc.gov]
Sent: Monday, October 19, 2015 12:35 PM
To: Houlihan, Damien <houlihan.damien@epa.gov>
Cc: Zobrist, Marcus <Zobrist.Marcus@epa.gov>
Subject: RE: Pilgrim and EPA / NRC review processes

Damian and Marcus,

Following up on the status for our meeting to further align on NPDES permitting consultations. With the now announced Pilgrim closure, is there still an urgency on your part to continue to address their NPDES permit? We are still interested in an agency-wide alignment, as this still will need an understanding by States and EPA Regions that are responsible for the permit reviews. Please let me know where you see moving on this in the future. Tx greg

Greg Casto

Chief, Division of Safety Systems/Balance of Plant

United States Nuclear Regulatory Commission

Washington, DC 20555-0001

Greg.casto@nrc.gov

(301)415,0565

From: Houlihan, Damien [<mailto:houlihan.damien@epa.gov>]

Sent: Tuesday, April 14, 2015 8:48 AM

To: Casto, Greg

Subject: RE: Pilgrim follow-up

Good morning, Greg.

Looking forward to our call at 2:30 today. I've attached a draft agenda based on what you proposed in earlier email and some follow up from our meeting in January. Let me know if it's o.k. and I can then circulate to you and EPA folks. Thanks.

Damien

From: Casto, Greg [<mailto:Greg.Casto@nrc.gov>]

Sent: Friday, April 10, 2015 1:32 PM

To: Houlihan, Damien

Subject: RE: Pilgrim follow-up

Importance: High

We are firm for our Tuesday meeting at 230P. We will have the following on the call:

Myself

Tim Collins – senior technical regulatory expert

Fred Lyons – project manager for site specific licensing activities

Dave Beaulieu (bow-yer) – senior 10 CFR 50.59 expert

Brian Harris – environmental area related technical reviewer

Andrew Pessin – general counsel (or either Susan Uttal or Daniel Straus, OGC. They were all at the January meeting)

Call in information is below:

800-857-5160, pass code

(b)(6)

If issues crop up, and you can't get me in the office, my cell is

(b)(6)

Tx greg

Greg Casto

Chief, Division of Safety Systems/Balance of Plant

United States Nuclear Regulatory Commission

Washington, DC 20555-0001

Greg.casto@nrc.gov

(301)415,0565

From: Houlihan, Damien [<mailto:houlihan.damien@epa.gov>]
Sent: Wednesday, April 08, 2015 10:36 AM
To: Casto, Greg
Subject: RE: Pilgrim follow-up

Thanks. Greg. We're are confirmed for Tuesday, 4/14, from 2:30 – 4.

We'll be calling in, so we will need to arrange conferencing. Thanks.

Damien

From: Casto, Greg [<mailto:Greg.Casto@nrc.gov>]
Sent: Wednesday, April 08, 2015 9:51 AM
To: Houlihan, Damien
Subject: RE: Pilgrim follow-up
Importance: High

Just making sure that you know our meeting has been postponed to Tuesday at 230p here at the NRC. This will be a firm meeting and we should discuss what will be needed to support travel by EPA R1 staff (conf call). Tx greg

From: Casto, Greg
Sent: Tuesday, April 07, 2015 11:45 AM
To: 'Houlihan, Damien'
Subject: RE: Pilgrim follow-up
Importance: High

Sorry, left you a voice message to try to not continue to go back and forth on the date/time. I'm having some people who would be beneficial to have at the meeting not

able to attend on Thursday, but they could attend next week. Give me a call or respond by email. We should be able to do Tuesday, 230 – 4p (rest of week does not look good for most). I would propose to make the next week meeting firm (and can do so on my end). Sorry again, and let me know. Tx greg

From: Houlihan, Damien [<mailto:houlihan.damien@epa.gov>]
Sent: Monday, April 06, 2015 11:40 AM
To: Casto, Greg
Subject: RE: Pilgrim follow-up

Hi Greg –

We have conflicts on Wednesday. Let's do Thursday 1-2:30. Thanks.

Damien

From: Casto, Greg [<mailto:Greg.Casto@nrc.gov>]
Sent: Monday, April 06, 2015 11:36 AM
To: Houlihan, Damien
Subject: RE: Pilgrim follow-up
Importance: High

Damien,

Please let me know when you can whether the Wednesday afternoon meeting day/time work. If not, then we could make it the same time on Thursday. Tx greg

From: Houlihan, Damien [<mailto:houlihan.damien@epa.gov>]
Sent: Thursday, April 02, 2015 3:03 PM
To: Casto, Greg
Subject: RE: Pilgrim follow-up

Thanks, Greg. What you propose looks great.

I'm out tomorrow. Let's try for early next week. I'm pretty available. From EPA we'll include myself, George Papadopoulos, Dave Webster, and hopefully Marcus Zobrist (from HQ). Possibly include our attorney, Mark Stein.

If you could send me some potential times, I'll coordinate with EPA folks.

Damien

From: Casto, Greg [<mailto:Greg.Casto@nrc.gov>]
Sent: Thursday, April 02, 2015 10:31 AM
To: Houlihan, Damien
Subject: RE: Pilgrim follow-up
Importance: High

Sorry, I just saw this. I was out until yesterday, and am out again this afternoon. I am in tomorrow and currently next week. I'll work on an early next week meeting with people to talk on the following specific to Pilgrim, if this works for you:

- 1) Discussion on the 10 CFR 50.59 process relative to applying to crafting Pilgrim permitting questions
 - a. Overview of 50.59 and NEI 96-07 information
 - b. Examples where current permitting responses (from Pilgrim) appear to fit and do not appear to fit 50.59 approach
- 2) Re- discussion for areas where the EPA has permitting questions

- a. Review of July 2014 request letter and initial request
 - b. Agreement of definition for 'conflict with an NRC safety requirement'
 - c. Recommended requests for further information to accommodate informational needs to perform consultation
 - d. Discuss NRC perception of what may be needed for future consultation (ie – what information we'd expect to be able to conclude a 'conflict')
- 3) Discussion of EPA proposed approach to interface with Pilgrim, and identify anything else needed for discussion or investigation for future meetings

Let me know if this looks like the right direction, and feel free to propose anything different or additional. I'm not sure this could be completed in an hour, but we could try. Suggest no more than a 90 minute bite for this meeting. I think that our outcome for this meeting would be to give you an understanding of the kind of documentation that we would need to see to conclude a 'conflict' exists. Tx greg

Greg Casto

Chief, Division of Safety Systems/Balance of Plant

United States Nuclear Regulatory Commission

Washington, DC 20555-0001

Greg.casto@nrc.gov

(301)415,0565

From: Houlihan, Damien [<mailto:houlihan.damien@epa.gov>]
Sent: Thursday, March 26, 2015 7:32 AM
To: Casto, Greg

Cc: Zobrist, Marcus; Webster, David
Subject: RE: Pilgrim follow-up

Thanks, Greg. Let's set something up for next week. If you could send me some proposed times, I'll coordinate with other EPA folks.

Damien

From: Casto, Greg [<mailto:Greg.Casto@nrc.gov>]
Sent: Wednesday, March 25, 2015 4:35 PM
To: Houlihan, Damien
Cc: Zobrist, Marcus; Webster, David
Subject: RE: Pilgrim follow-up

Thanks Damien. Sorry but I am out of the office until next Tuesday. We have been working to schedule our next physical meeting (to further work on the action items from the January meeting) and it appears that the week of April 20th will be the next opportunity. I'll be able to call mid to late next week to generally discuss questions you might have on 50.59 and other options for Pilgrim. Let me know and we can set that up if you like. Tx greg

From: Houlihan, Damien [<mailto:houlihan.damien@epa.gov>]
Sent: Wednesday, March 25, 2015 2:28 PM
To: Casto, Greg
Cc: Zobrist, Marcus; Webster, David
Subject: RE: Pilgrim follow-up

Hi Greg –

I'm wondering if you have any time to touch base tomorrow? It could be a quick check-in where we can discuss status and next steps. Please let me know. Thanks.

Damien

From: Casto, Greg [<mailto:Greg.Casto@nrc.gov>]
Sent: Monday, March 16, 2015 4:30 PM
To: Houlihan, Damien
Cc: Zobrist, Marcus; Webster, David
Subject: RE: Pilgrim follow-up

Thanks, and we have done work on these topics since the meeting, but it was about a month ago. I'm getting with the other NRC meeting attendees now on recent work on this. I am probably not available this week to discuss in detail, so I'd say next week would be a good target to generally re-visit the bullets. Another overall follow-up meeting might be possible the following week, I'll need to check with our participants. To discuss Pilgrim path forward specifically, that might be able to happen as early as next week, but again I'd need to check with the staff. Tx greg

From: Houlihan, Damien [<mailto:houlihan.damien@epa.gov>]
Sent: Monday, March 16, 2015 3:30 PM
To: Casto, Greg
Cc: Zobrist, Marcus; Webster, David
Subject: Pilgrim follow-up

Hi Greg –

I wanted to follow-up with you on the consultation process for the Pilgrim draft NPDES permit. As you know, we continue to work on selecting the CWA 316(b) best technology available for the facility, and we believe working with NRC is a very important part of the process in terms of determining whether a technology is "available."

Specifically, I'm wondering about items c, d, and e from your 1/16 email to Marcus. They're listed below:

c. NRC will further deliberate on how our processes may be adapted to support EPA's desire to consult with us. (As example, B. above)

d. NRC will consider whether it can issue a letter to Pilgrim requesting additional information on why certain technologies conflict with NRC safety requirements. (more discussion internally on this in progress, but appears to be in conflict with OMB policy if Pilgrim does not formally send correspondence to NRC, as no apparent direct basis for fee recovery)

e. NRC will review Pilgrim's assertion to EPA that certain technologies conflict with NRC safety requirements. We informed EPA that our initial review indicated there was insufficient information for NRC to make a conclusion one way or the other. However, NRC would come prepared to discuss conceptually our views on Pilgrim's assertions. We were very clear that any perspectives provided would not constitute official NRC positions. (Will use work on (b) above to see how it applies to Pilgrim. Believe that at a minimum, will result in basis for EPA follow up questions to Pilgrim that will illicit better regulatory based justification for conflicts.)

Would you be available for a call this week to discuss? Please let me know if you have any availability. Thanks.

Damien

Damien Houlihan, Chief

Industrial Permits Section

Office of Ecosystem Protection

US EPA

617 918-1586

To: Casto, Greg[Greg.Casto@nrc.gov]
Cc: Zobrist, Marcus[Zobrist.Marcus@epa.gov]
From: Houlihan, Damien
Sent: Mon 7/20/2015 1:24:05 PM
Subject: RE: RE: Pilgrim and EPA / NRC review processes

Thanks, Greg. I look forward to meeting in a few weeks.

Damien

From: Casto, Greg [mailto:Greg.Casto@nrc.gov]
Sent: Thursday, July 16, 2015 5:00 PM
To: Houlihan, Damien
Cc: Zobrist, Marcus
Subject: RE: RE: Pilgrim and EPA / NRC review processes

Thanks Damien,

This is very helpful to work from in defining our role in the overall process. We are working on this now, and should be ready to meet in the next couple of weeks. In the next meeting, I'd like to do a better job with providing an (NRC senior mgt) approved and workable final plan forward, so we will work to that end.

Thanks again, and please call if you have specific questions in advance. Tx greg

Greg Casto

Chief, Division of Safety Systems/Balance of Plant

United States Nuclear Regulatory Commission

Washington, DC 20555-0001

Greg.casto@nrc.gov

(301)415,0565

From: Houlihan, Damien [<mailto:houlihan.damien@epa.gov>]

Sent: Thursday, July 16, 2015 11:04 AM

To: Casto, Greg

Cc: Zobrist, Marcus; Webster, David; Curley, Michael; Papadopoulos, George

Subject: [External_Sender] RE: Pilgrim and EPA / NRC review processes

Greg –

See attached memo, as previously discussed, that outlines the NPDES process (generally) from draft to finalization, and also includes some specific question related to nuclear safety concerns raised by Entergy with regard to certain potential Best Technology Available (BTA) options under consideration.

We look forward to discussing this memo with you and others at NRC in the near future. I'll be in touch to set something up.

Please feel free to call with questions. Thanks.

Damien Houlihan, Chief

Industrial Permits Section

Office of Ecosystem Protection

US EPA

617 918-1586

From: Casto, Greg [mailto:Greg.Casto@nrc.gov]
Sent: Tuesday, May 19, 2015 11:04 AM
To: Houlihan, Damien
Cc: Zobrist, Marcus
Subject: RE: Pilgrim and EPA / NRC review processes

Damien,

Just following up for scheduling our next meeting. I've been thinking on how we can push this forward on our end, and believe that if we have the template examples for how EPA envisions a pre-draft permit consultation, and a post-draft permit consultation, then we can use those to provide to our senior management with our recommended definition for 'conflict' and how that will interface with the consulting process. Given that approval, then we may be able to proceed.

I believe that from the last meeting, your staff got an understanding of where we might consider alternatives within our understanding of 'conflict', given our regulatory process. After the meeting, we discussed this further among our group and we ended up with a common picture of how that definition could generally work with licensee justifications, and how they would enhance those justifications from the current example provided by Pilgrim.

If we had the templates in advance of the next meeting, then we should be able to talk to those and work through an example using Pilgrim. That should help our explanation to senior management to get acceptance and/or comments on our path forward. Feel free to call if questions or to discuss path forward. Tx greg

Greg Casto

Chief, Division of Safety Systems/Balance of Plant

United States Nuclear Regulatory Commission

Washington, DC 20555-0001

Greg.casto@nrc.gov

(301)415,0565

From: Houlihan, Damien [<mailto:houlihan.damien@epa.gov>]

Sent: Tuesday, April 14, 2015 8:48 AM

To: Casto, Greg

Subject: RE: Pilgrim follow-up

Good morning, Greg.

Looking forward to our call at 2:30 today. I've attached a draft agenda based on what you proposed in earlier email and some follow up from our meeting in January. Let me know if it's o.k. and I can then circulate to you and EPA folks. Thanks.

Damien

From: Casto, Greg [<mailto:Greg.Casto@nrc.gov>]

Sent: Friday, April 10, 2015 1:32 PM

To: Houlihan, Damien

Subject: RE: Pilgrim follow-up

Importance: High

We are firm for our Tuesday meeting at 230P. We will have the following on the call:

Myself

Tim Collins – senior technical regulatory expert

Fred Lyons – project manager for site specific licensing activities

Dave Beaulieu (bow-yer) – senior 10 CFR 50.59 expert

Brian Harris – environmental area related technical reviewer

Andrew Pessin – general counsel (or either Susan Uttal or Daniel Straus, OGC. They were all at the January meeting)

Call in information is below:

800-857-5160, pass code

(b)(6)

If issues crop up, and you can't get me in the office, my cell is

(b)(6)

Tx greg

Greg Casto

Chief, Division of Safety Systems/Balance of Plant

United States Nuclear Regulatory Commission

Washington, DC 20555-0001

Greg.casto@nrc.gov

(301)415,0565

From: Houlihan, Damien [<mailto:houlihan.damien@epa.gov>]
Sent: Wednesday, April 08, 2015 10:36 AM
To: Casto, Greg
Subject: RE: Pilgrim follow-up

Thanks, Greg. We're are confirmed for Tuesday, 4/14, from 2:30 - 4.

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Damien

From: Casto, Greg [<mailto:Greg.Casto@nrc.gov>]
Sent: Wednesday, April 08, 2015 9:51 AM
To: Houlihan, Damien
Subject: RE: Pilgrim follow-up
Importance: High

Just making sure that you know our meeting has been postponed to Tuesday at 230p here at the NRC. This will be a firm meeting and we should discuss what will be needed to support travel by EPA R1 staff (conf call). Tx greg

From: Casto, Greg
Sent: Tuesday, April 07, 2015 11:45 AM
To: 'Houlihan, Damien'
Subject: RE: Pilgrim follow-up
Importance: High

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date/time. I'm having some people who would be beneficial to have at the meeting not able to attend on Thursday, but they could attend next week. Give me a call or respond by email. We should be able to do Tuesday, 230 – 4p (rest of week does not look good for most). I would propose to make the next week meeting firm (and can do so on my end). Sorry again, and let me know. Tx greg

From: Houlihan, Damien [<mailto:houlihan.damien@epa.gov>]
Sent: Monday, April 06, 2015 11:40 AM
To: Casto, Greg
Subject: RE: Pilgrim follow-up

Hi Greg –

We have conflicts on Wednesday. Let's do Thursday 1-2:30. Thanks.

Damien

From: Casto, Greg [<mailto:Greg.Casto@nrc.gov>]
Sent: Monday, April 06, 2015 11:36 AM
To: Houlihan, Damien
Subject: RE: Pilgrim follow-up
Importance: High

Damien,

Please let me know when you can whether the Wednesday afternoon meeting day/time work. If not, then we could make it the same time on Thursday. Tx greg

From: Houlihan, Damien [<mailto:houlihan.damien@epa.gov>]
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If you could send me some potential times, I'll coordinate with EPA folks.

Damien

From: Casto, Greg [mailto:Greg.Casto@nrc.gov]
Sent: Thursday, April 02, 2015 10:31 AM
To: Houlihan, Damien
Subject: RE: Pilgrim follow-up
Importance: High

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- 1) Discussion on the 10 CFR 50.59 process relative to applying to crafting Pilgrim permitting questions
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Greg Casto

Chief, Division of Safety Systems/Balance of Plant

United States Nuclear Regulatory Commission

Washington, DC 20555-0001

Greg.casto@nrc.gov

(301)415,0565

From: Houlihan, Damien [<mailto:houlihan.damien@epa.gov>]
Sent: Thursday, March 26, 2015 7:32 AM
To: Casto, Greg

Cc: Zobrist, Marcus; Webster, David
Subject: RE: Pilgrim follow-up

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Sent: Wednesday, March 25, 2015 4:35 PM
To: Houlihan, Damien
Cc: Zobrist, Marcus; Webster, David
Subject: RE: Pilgrim follow-up

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c. NRC will review Pilgrim's assertion to EPA that certain technologies conflict with NRC safety requirements. We informed EPA that our initial review indicated there was insufficient information for NRC to make a conclusion one way or the other. However, NRC would come prepared to discuss conceptually our views on Pilgrim's assertions. We were very clear that any perspectives provided would not constitute official NRC positions. (Will use work on (b) above to see how it applies to Pilgrim. Believe that at a minimum, will result in basis for EPA follow up questions to Pilgrim that will illicit better regulatory based justification for conflicts.)

Would you be available for a call this week to discuss? Please let me know if you have any availability. Thanks.

Damien

Damien Houlihan, Chief

Industrial Permits Section

Office of Ecosystem Protection

US EPA

617 918-1586

To: Casto, Greg[Greg.Casto@nrc.gov]; Houlihan, Damien[houlihan.damien@epa.gov]
From: Zobrist, Marcus
Sent: Mon 10/19/2015 6:50:22 PM
Subject: RE: RE: Pilgrim and EPA / NRC review processes

Greg and Damien,

I can't do 3pm today, but suggest you go ahead without to discuss Pilgrim related issues.

Though Pilgrim has moved to a different long term status, I think we will need to think about these issues generally for the rest of nuclear facilities. Programmaticaly, Pilgrim is likely the easiest case example we have as, unlike all other nuclear facilities, its NPDES permit is issued by EPA. For all the other nuclear facilities, the NPDES permits are issued by various State agencies. This brings in a number of other permitting agencies, and shifts EPA into an indirect coordination / oversight role. I'm happy to discuss further.

From: Casto, Greg [mailto:Greg.Casto@nrc.gov]
Sent: Monday, October 19, 2015 2:06 PM
To: Houlihan, Damien
Cc: Zobrist, Marcus
Subject: RE: RE: Pilgrim and EPA / NRC review processes

Thanks for the prompt response. I can do a call at 3p. Would you like me to set up a bridge on this end or would you just like to call me. Tx greg

From: Houlihan, Damien [mailto:houlihan.damien@epa.gov]
Sent: Monday, October 19, 2015 1:18 PM
To: Casto, Greg <Greg.Casto@nrc.gov>
Cc: Zobrist, Marcus <Zobrist.Marcus@epa.gov>
Subject: [External_Sender] RE: Pilgrim and EPA / NRC review processes

Greg --

Thanks for your email. We were just discussing the need to reach out to you on Pilgrim, given the recent announcement. We intend to move forward on the draft permit, but have lots to think about in terms of what a permit looks like for the period of time while Pilgrim's still operating, and then post-closure.

How does your week look for a quick call? After 3 would work for me today, and then I'm out tomorrow, back the rest of week.

Damien

From: Casto, Greg [<mailto:Greg.Castof@nrc.gov>]
Sent: Monday, October 19, 2015 12:35 PM
To: Houlihan, Damien <houlihan.damien@epa.gov>
Cc: Zobrist, Marcus <Zobrist.Marcus@epa.gov>
Subject: RE: Pilgrim and EPA / NRC review processes

Damian and Marcus,

Following up on the status for our meeting to further align on NPDES permitting consultations. With the now announced Pilgrim closure, is there still an urgency on your part to continue to address their NPDES permit? We are still interested in an agency-wide alignment, as this still will need an understanding by States and EPA Regions that are responsible for the permit reviews. Please let me know where you see moving on this in the future. Tx greg

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United States Nuclear Regulatory Commission

Washington, DC 20555-0001

Greg.casto@nrc.gov

(301)415,0565

From: Houlihan, Damien [<mailto:houlihan.damien@epa.gov>]
Sent: Tuesday, April 14, 2015 8:48 AM
To: Casto, Greg
Subject: RE: Pilgrim follow-up

Good morning, Greg.

Looking forward to our call at 2:30 today. I've attached a draft agenda based on what you proposed in earlier email and some follow up from our meeting in January. Let me know if it's o.k. and I can then circulate to you and EPA folks. Thanks.

Damien

From: Casto, Greg [<mailto:Greg.Casto@nrc.gov>]
Sent: Friday, April 10, 2015 1:32 PM
To: Houlihan, Damien
Subject: RE: Pilgrim follow-up
Importance: High

We are firm for our Tuesday meeting at 230P. We will have the following on the call:

Myself

Tim Collins – senior technical regulatory expert

Fred Lyons – project manager for site specific licensing activities

Dave Beaulieu (bow-yer) – senior 10 CFR 50.59 expert

Brian Harris – environmental area related technical reviewer

Andrew Pessin – general counsel (or either Susan Uttal or Daniel Straus, OGC. They were all at the January meeting)

Call in information is below:

800-857-5160, pass code

(b)(6)

If issues crop up, and you can't get me in the office, my cell is

(b)(6)

Tx greg

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Greg.casto@nrc.gov

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From: Houlihan, Damien [<mailto:houlihan.damien@epa.gov>]

Sent: Wednesday, April 08, 2015 10:36 AM

To: Casto, Greg

Subject: RE: Pilgrim follow-up

Thanks, Greg. We're are confirmed for Tuesday, 4/14, from 2:30 – 4.

We'll be calling in, so we will need to arrange conferencing. Thanks.

Damien

From: Casto, Greg [<mailto:Greg.Casto@nrc.gov>]
Sent: Wednesday, April 08, 2015 9:51 AM
To: Houlihan, Damien
Subject: RE: Pilgrim follow-up
Importance: High

Just making sure that you know our meeting has been postponed to Tuesday at 230p here at the NRC. This will be a firm meeting and we should discuss what will be needed to support travel by EPA R1 staff (conf call). Tx greg

From: Casto, Greg
Sent: Tuesday, April 07, 2015 11:45 AM
To: 'Houlihan, Damien'
Subject: RE: Pilgrim follow-up
Importance: High

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Damien Houlihan, Chief

Industrial Permits Section

Office of Ecosystem Protection

US EPA

617 918-1586

Curley, Michael

From: Casto, Greg <Greg.Casto@nrc.gov>
Sent: Monday, October 19, 2015 2:53 PM
To: Zobrist, Marcus; Houlihan, Damien
Subject: RE: RE: RE: Pilgrim and EPA / NRC review processes

Thanks, so Damien, do you want me to call you at 3p at 617 918-1586? Tx greg

From: Zobrist, Marcus [mailto:Zobrist.Marcus@epa.gov]
Sent: Monday, October 19, 2015 2:50 PM
To: Casto, Greg ; Houlihan, Damien
Subject: [External_Sender] RE: RE: Pilgrim and EPA / NRC review processes

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Greg.casto@nrc.gov
(301)415,0565

From: Houlihan, Damien [<mailto:houlihan.damien@epa.gov>]
Sent: Thursday, March 26, 2015 7:32 AM
To: Casto, Greg
Cc: Zobrist, Marcus; Webster, David
Subject: RE: Pilgrim follow-up

Thanks, Greg. Let's set something up for next week. If you could send me some proposed times, I'll coordinate with other EPA folks.

Damien

From: Casto, Greg [<mailto:Greg.Casto@nrc.gov>]
Sent: Wednesday, March 25, 2015 4:35 PM
To: Houlihan, Damien
Cc: Zobrist, Marcus; Webster, David
Subject: RE: Pilgrim follow-up

Thanks Damien. Sorry but I am out of the office until next Tuesday. We have been working to schedule our next physical meeting (to further work on the action items from the January meeting) and it appears that the week of April 20th will be the next opportunity. I'll be able to call mid to late next week to generally discuss questions you might have on 50.59 and other options for Pilgrim. Let me know and we can set that up if you like. Tx greg

From: Houlihan, Damien [<mailto:houlihan.damien@epa.gov>]
Sent: Wednesday, March 25, 2015 2:28 PM
To: Casto, Greg
Cc: Zobrist, Marcus; Webster, David
Subject: RE: Pilgrim follow-up

Hi Greg –

I'm wondering if you have any time to touch base tomorrow? It could be a quick check-in where we can discuss status and next steps. Please let me know. Thanks.

Damien

From: Casto, Greg [<mailto:Greg.Casto@nrc.gov>]
Sent: Monday, March 16, 2015 4:30 PM
To: Houlihan, Damien
Cc: Zobrist, Marcus; Webster, David
Subject: RE: Pilgrim follow-up

Thanks, and we have done work on these topics since the meeting, but it was about a month ago. I'm getting with the other NRC meeting attendees now on recent work on this. I am probably not available this week to discuss in detail, so I'd say next week would be a good target to generally re-visit the bullets. Another overall follow-up meeting might be possible the following week, I'll need to check with our participants. To discuss Pilgrim path forward specifically, that might be able to happen as early as next week, but again I'd need to check with the staff. Tx greg

From: Houlihan, Damien [<mailto:houlihan.damien@epa.gov>]
Sent: Monday, March 16, 2015 3:30 PM
To: Casto, Greg
Cc: Zobrist, Marcus; Webster, David
Subject: Pilgrim follow-up

Hi Greg –

I wanted to follow-up with you on the consultation process for the Pilgrim draft NPDES permit. As you know, we continue to work on selecting the CWA 316(b) best technology available for the facility, and we believe working with NRC is a very important part of the process in terms of determining whether a technology is "available."

Specifically, I'm wondering about items c, d, and e from you 1/16 email to Marcus. They're listed below:

- c. NRC will further deliberate on how our processes may be adapted to support EPA's desire to consult with us. (As example, B. above)
- d. NRC will consider whether it can issue a letter to Pilgrim requesting additional information on why certain technologies conflict with NRC safety requirements. (more discussion internally on this in progress, but appears to be in conflict with OMB policy if Pilgrim does not formally send correspondence to NRC, as no apparent direct basis for fee recovery)
- e. NRC will review Pilgrim's assertion to EPA that certain technologies conflict with NRC safety requirements. We informed EPA that our initial review indicated there was insufficient information for NRC to make a conclusion one way or the other. However, NRC would come prepared to discuss conceptually our views on Pilgrim's assertions. We were very clear that any perspectives provided would not constitute official NRC positions. (Will use work on (b) above to see how it applies to Pilgrim. Believe that at a minimum, will result in basis for EPA follow up questions to Pilgrim that will illicit better regulatory based justification for conflicts.)

Would you be available for a call this week to discuss? Please let me know if you have any availability. Thanks.

Damien

Damien Houlihan, Chief
Industrial Permits Section

Office of Ecosystem Protection
US EPA

617 918-1586

Curley, Michael

From: Casto, Greg <Greg.Casto@nrc.gov>
Sent: Thursday, February 25, 2016 4:50 PM
To: Houlihan, Damien; Zobrist, Marcus
Subject: Update on NPDES discussions

Importance: High

Follow Up Flag: Follow up
Flag Status: Flagged

Damien and Marcus,

Just following up on the status of additional meeting(s) for consultation protocol between EPA and NRC. I will be moving to another division within the next month, and plan to transfer this responsibility to a new branch chief, so if you have insight on activities moving forward and schedules, then I'll be sure to pass that along. I will likely also attend the next meeting so that we will have a good transition on our end.

Please let me know when we can expect to re-engage. Tx greg

Greg Casto

Chief, Division of Safety Systems/Balance of Plant

United States Nuclear Regulatory Commission

Washington, DC 20555-0001

Greg.casto@nrc.gov

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Additional Pilgrim specific questions from EPA:

Topics below may be discussed during informal early consulting sessions; however, formal NRC conclusions in regard to "conflicts" would only occur following licensee submittal of challenges in accordance with directions provided in the preamble to 125.94 (f).

II. Potential Nuclear Safety Conflicts at PNPS as Identified by Entergy

A. Closed Cycle Cooling (CCC)

Entergy evaluated the availability of closed-cycle cooling to reduce cooling water intake and discharge volumes at PNPS using a PEPSE model. According to Entergy, the limiting parameters for operation of a closed-cycle system at PNPS are the steam turbine backpressure and hotwell temperature. In its analysis, Entergy assumed a continuous operational hotwell temperature limit of 118°F to provide an allowance against the required administrative hotwell average temperature limit of 120°F. The steam turbine backpressure is 4 in-Hg. In the simulation, the hotwell temperature is the bounding limit.

Based on the use of modeling to calculate the effects of a closed-loop configuration on operations at PNPS under the Station's existing operational guidelines and standards, Entergy concludes that converting PNPS to closed-loop cooling is technologically infeasible because it is inconsistent with the licensed operation of PNPS's approved condenser/turbine configuration. In particular, Entergy maintains that, with closed-cycle cooling, the Station's net thermal load would have to be reduced to less than 80% for at least 242 calendar days a year. The facility is required to insert control rods at less than 80% net thermal power, and as such, this value presents a threshold beyond which nuclear safety concerns would render the Station completely inoperable and would result in a shutdown of the facility.

(b)(5)

Questions on availability of CCC at PNPS

What specific technical specification in the plant's existing NRC license limits the hotwell and turbine backpressure at the administrative limits cited by Entergy? Is there any scenario, including under the plant's existing license or via a modification to that license, in which PNPS could operate at a higher hotwell temperature or turbine backpressure? If so, what is the maximum hotwell temperature and turbine backpressure that could be authorized by the NRC, and how would such an authorization come about? Can NRC confirm that the Station would be forced to shutdown during any period when the risk of operating at less than 80% net thermal power for more than one hour occurs? Finally, Ent's evaluation of closed-cycle cooling assumes the Station is limited to the existing condenser because, according to Entergy, replacing the condenser is not feasible due to its location inside the turbine building. Can NRC confirm that replacing the main condenser is not feasible at Pilgrim Station or, as the

permittee suggests, has never been undertaken at any nuclear facility? A couple of issues here. 1)

(b)(5)

(b)(5)

(b)(5)

B. Passive Intake Screening Systems

Entergy also evaluated the potential use of passive screening systems, either at the existing cooling water intake structure (CWIS) or at a new, offshore location, to reduce the impingement and entrainment of aquatic organisms at PNPS. According to Entergy the importance of uninterrupted cooling water flow to nuclear operations imposes restrictions on the use of screening and barrier technologies, and, to a lesser extent, mechanical flow reductions. In particular, Entergy references the Institute of Nuclear Power Operations (INPO) requirements on "Intake Cooling Water Blockage" that do not allow the use of screen systems that may compromise the requisite flows to an ultimate heat sink or otherwise impair water-based nuclear safety system. Entergy also mentions that it is currently preparing a response to a 2007 INPO "Significant Operating Experience Report" that requires evaluation of and implementation of measures to address factors that could lead to cooling water blockage.

Questions on availability of Screening Systems at PNPS

Passive screening systems designed to block the entrainment of marine organisms are potential BTA

technologies (for example, offshore wedgewire screens). However, any such screening technology has the potential for fouling (i.e., blockage) in the marine environment. As part of the requirements for Best Technology Available at PNPS, EPA could include a requirement to maintain operational control of the existing CWIS as an emergency backup cooling water intake system (in the event of blockage of a new passive screening system). Would such an emergency backup system be sufficient to address any potential conflict with nuclear safety posed by the blockage of the cooling water?.

1) With the limited description of the screening system and particularly placement to be effective (100 ft from intake structure or 1 mile away from plant), the question on screens would need more information to answer in terms of "conflict". Ultimately, the potential for a new accident resulting from the installation of the screens would appear to represent a potential to conflict with the current license. The licensee is correct to cite Operating Experience related to blockage events and current design and operational considerations to prevent blockage, so given a more specific description of the proposed BTA, a 50.59 based explanation could result in a conflict. 2) It appears that EPA is considering additional modifications to the plant justifiable (emergency backup system) to address a "conflict" with a proposed BTA. Once a conflict is identified with the current licensee that should be where applicability under the rule should apply. New construction of backup systems to address a determined conflict would still represent a conflict in 50.59 space.

Can NRC provide more information on the performance objectives, criteria, and guidelines for plant operations and safety related to cooling water blockage as set by the INPO or the NRC, either generally or specific to PNPS? What is the status of PNPS's "Significant Operating Experience Report" responsive to the 2007 request from the INPO? (b)(5)

(b)(5)

Dear FOIA Requester:

The FOIA Improvement Act of 2016, which was enacted on June 30, 2016, made several changes to the Freedom of Information Act (FOIA). Federal agencies must revise their FOIA regulations to reflect those changes by December 27, 2016. In addition to revising our regulations, we intend to update the Form 464, which we use to respond to FOIA requests.

In the interim, please see the comment box in Part I.C of the attached Form 464. The comment box includes information related to the recent changes to FOIA that is applicable to your FOIA request, including an updated time period for filing an administrative appeal with the NRC.

Sincerely yours,

Stephanie Blaney /S/

Stephanie Blaney
FOIA Officer