

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

2018-000499

1

RESPONSE
TYPE☐

INTERIM

☒

FINAL

REQUESTER:

Jack Kolar

DATE:

06/26/2018

DESCRIPTION OF REQUESTED RECORDS:

ML18019A140, EOC OE Note-2018; all records pertaining to the authoring of, review of, and response to ML18019A140; and all records pertaining to NRC-2018-000304

PART I. -- INFORMATION RELEASED

- ☒ The NRC has made some, or all, of the requested records publicly available through one or more of the following means: (1) <https://www.nrc.gov>; (2) public ADAMS, <https://www.nrc.gov/reading-rm/adams.html>; (3) microfiche available in the NRC Public Document Room; or FOIA Online, <https://foiaonline.regulations.gov/foia/action/public/home>.
- ☒ 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 Part I.D -- Comments) for a disclosure determination and direct response to you.
- ☐ We are continuing to process your request.
- ☒ See Part I.D -- Comments.

PART I.A -- FEES**AMOUNT**☐

You will be billed by NRC for the amount indicated.

☐

You will receive a refund for the amount indicated.

☒

Fees waived.

☐

Since the minimum fee threshold was not met, you will not be charged fees.

☐

Due to our delayed response, you will not be charged fees.

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"). See 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 90 calendar days of the date of this response. If you submit an appeal by mail, address it to the FOIA Officer, at U.S. Nuclear Regulatory Commission, Mail Stop T-2 F43, Washington, D.C. 20555-0001. You may submit an appeal by e-mail to FOIA.resource@nrc.gov. You may fax an appeal to (301) 415-5130. Or you may submit an appeal through FOIA Online, <https://foiaonline.regulations.gov/foia/action/public/home>. Please be sure to include on your submission that it is a "FOIA Appeal."

PART I.C -- REFERENCES AND POINTS OF CONTACT

You have the right to seek assistance from the NRC's FOIA Public Liaison by submitting your inquiry at <https://www.nrc.gov/reading-rm/foia/contact-foia.html>, or by calling the FOIA Public Liaison at (301) 415-1276.

If we have denied your request, you have the right to seek dispute resolution services from the NRC's Public Liaison or the Office of Government Information Services (OGIS). To seek dispute resolution services from OGIS, you may e-mail OGIS at ogis@nara.gov, send a fax to (202) 741-5789, or send a letter to: Office of Government Information Services, National Archives and Records Administration, 8601 Adelphi Road, College Park, MD 20740-6001. For additional information about OGIS, please visit the OGIS website at <https://www.archives.gov/ogis>.



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PART I.D -- COMMENTS

Please note that, upon receipt of your request, we conducted another review of ML18019A140, and it was determined that additional information could be released than what had been released in the final response to FOIA request, NRC-2018-000304, which is publicly available at ML18057A007.

Signature - Freedom of Information Act Officer or Designee

Stephanie A. Blaney

Digitally signed by Stephanie A. Blaney
Date: 2018.06.26 07:01:45 -04'00'

**RESPONSE TO FREEDOM OF
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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
- ☐ Other:
- ☐ 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 of 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 any 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	personally identifiable, foreign-sourced, proprietary and predecisional/deliberative information	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Select Title/Office from drop-down list		<input type="checkbox"/>	<input type="checkbox"/>
	Select Title/Office from drop-down list		<input type="checkbox"/>	<input type="checkbox"/>
	Select Title/Office from drop-down list		<input type="checkbox"/>	<input type="checkbox"/>

Robles-Alcaraz, Jesse

From: Thompson, John
Sent: Thursday, April 26, 2018 11:22 AM
To: Robles-Alcaraz, Jesse
Subject: FW: End of Cycle OpE Note

In response to the FIOA.

john

From: Thompson, John
Sent: Thursday, January 11, 2018 3:29 PM
To: Robles-Alcaraz, Jesse <Jesse.Robles-Alcaraz@nrc.gov>
Subject: RE: End of Cycle OpE Note

Made a few edits on the test box article (in red).

john

From: Robles-Alcaraz, Jesse
Sent: Thursday, January 11, 2018 3:09 PM
To: Thomas, Eric <Eric.Thomas@nrc.gov>; Thompson, John <John.Thompson@nrc.gov>; Sigmon, Rebecca <Rebecca.Sigmon@nrc.gov>; Carneal, Jason <Jason.Carneal@nrc.gov>; Pannier, Stephen <Stephen.Pannier@nrc.gov>
Subject: RE: End of Cycle OpE Note

I haven't received any comments. Please provide comments by COB on Monday. I hope to get the note out next Wednesday.

Thanks,

Jesse E. Robles
U.S. Nuclear Regulatory Commission
Reactor Systems Engineer
NRR/DIRS/IOEB
301-415-2940
301-415-3061 (fax)
Jesse.Robles@nrc.gov

From: Thomas, Eric
Sent: Monday, January 08, 2018 4:23 PM
To: Robles-Alcaraz, Jesse <Jesse.Robles-Alcaraz@nrc.gov>; Thompson, John <John.Thompson@nrc.gov>; Sigmon, Rebecca <Rebecca.Sigmon@nrc.gov>; Carneal, Jason <Jason.Carneal@nrc.gov>; Pannier, Stephen <Stephen.Pannier@nrc.gov>
Subject: End of Cycle OpE Note

Please see attached and provide any comments to Jesse.

It's located under G:\ADRO\DIRS\IOEB\Subject Folders\OpE Products\OpE Notes\End of Cycle Feb 2018

Thanks. Eric

Eric Thomas
NRR/DIRS/IOEB
301-415-6772

(b)(6)

(mobile)

DRAFT

~~OFFICIAL USE ONLY - SENSITIVE INTERNAL INFORMATION~~

DO NOT FORWARD ANY EXCERPTS OUTSIDE OF NRC WITHOUT FIRST OBTAINING PERMISSION FROM ORIGINATOR

Operating Experience Note

No. 19

January 2018

(b)(5)

From: Sigmon, Rebecca
To: Elliott, Robert; Robles-Alcaraz, Jesse
Cc: Thomas, Eric
Subject: RE: OpE End of Cycle Input
Date: Thursday, January 18, 2018 9:51:39 AM

How's this?

(Updated bullets with questions to ask)

- Does the procedure meet the code requirements?
- Are the personnel performing the examinations following the procedure?
- Are contractors/vendors adequately trained on licensee expectations for procedure adherence?
- Is there an adequate level of independence between data analysts comparing examination results to acceptance criteria?
- Are indications appropriately characterized and compared to previous examination results?
- Is the licensee providing adequate, knowledgeable oversight of examinations performed by contractors?

From: Elliott, Robert
Sent: Thursday, January 18, 2018 8:58 AM
To: Sigmon, Rebecca <Rebecca.Sigmon@nrc.gov>; Robles-Alcaraz, Jesse <Jesse.Robles-Alcaraz@nrc.gov>
Cc: Thomas, Eric <Eric.Thomas@nrc.gov>
Subject: RE: OpE End of Cycle Input

I wasn't focused on the takeaways as much as I was on the relevant inspection procedures. In that section, we provide some suggested questions the inspector might ask. I was thinking we should ask some questions about contractor oversight (if it's applicable to the procedure listed).

From: Sigmon, Rebecca
Sent: Thursday, January 18, 2018 8:43 AM
To: Elliott, Robert <Robert.Elliott@nrc.gov>; Robles-Alcaraz, Jesse <Jesse.Robles-Alcaraz@nrc.gov>
Cc: Thomas, Eric <Eric.Thomas@nrc.gov>
Subject: RE: OpE End of Cycle Input

There were two main takeaways from the (b)(4) report.

One is that the licensee is responsible for providing effective oversight of contractor activities – the procedures they use, the performance of the job, and the documentation of the results. (b)(4),(b)(5)

(b)(4),(b)(5)

(b)(4),(b)(5)

I'll tweak the write-up a bit so it's clear and make sure the language conforms with IP 71111.08.

Rebecca

From: Elliott, Robert
Sent: Thursday, January 18, 2018 8:33 AM
To: Robles-Alcaraz, Jesse <Jesse.Robles-Alcaraz@nrc.gov>
Cc: Thomas, Eric <Eric.Thomas@nrc.gov>; Sigmon, Rebecca <Rebecca.Sigmon@nrc.gov>
Subject: RE: OpE End of Cycle Input

Should we spell it out more completely in the suggestions for the inspector? To me, an independent review means you have someone outside the organization review the work. In this case, it appears to be more of a lack of adequate contractor oversight by the licensee.

From: Robles-Alcaraz, Jesse
Sent: Thursday, January 18, 2018 8:11 AM
To: Elliott, Robert <Robert.Elliott@nrc.gov>
Cc: Thomas, Eric <Eric.Thomas@nrc.gov>; Sigmon, Rebecca <Rebecca.Sigmon@nrc.gov>
Subject: FW: OpE End of Cycle Input

Rob,

The answer to your question is yes. We've pulled the thread on licensee's inadequate oversight of contractors and vendors in the past (e.g., [IN 2016-07](#), although this was focused on electrical issues). See Rebecca's (who authored the article) more detailed answer below.

Thanks,

Jesse

From: Sigmon, Rebecca
Sent: Thursday, January 18, 2018 7:10 AM
To: Robles-Alcaraz, Jesse <Jesse.Robles-Alcaraz@nrc.gov>
Subject: RE: OpE End of Cycle Input

I would say yes.

(b)(4),(b)(5)

(b)(4),(b)(5)

From: Robles-Alcaraz, Jesse
Sent: Thursday, January 18, 2018 6:53 AM
To: Sigmon, Rebecca <Rebecca.Sigmon@nrc.gov>
Subject: FW: OpE End of Cycle Input

See Rob's question on the (b)(4) write-up. Thoughts?

From: Elliott, Robert
Sent: Wednesday, January 17, 2018 7:28 PM
To: Robles-Alcaraz, Jesse <Jesse.Robles-Alcaraz@nrc.gov>
Cc: Thomas, Eric <Eric.Thomas@nrc.gov>
Subject: RE: OpE End of Cycle Input

Jesse,

This looks good. I only have one question/comment. On the (b)(4) we suggest that the inspector consider whether there is sufficient independent review of the contractor's work. Is this the same as asking if the licensee is maintaining adequate oversight of the contractor's work (e.g., did the licensee evaluate the contractor's procedure, watch the contractor perform some of their weld inspections (spot check), or review any of the contractor's results?

Thanks!
Rob

From: Robles-Alcaraz, Jesse
Sent: Wednesday, January 17, 2018 10:53 AM
To: Elliott, Robert <Robert.Elliott@nrc.gov>
Cc: Thomas, Eric <Eric.Thomas@nrc.gov>
Subject: OpE End of Cycle Input

Rob,

Attached is the OpE Input for the End of Cycle assessment meetings. The topics in the OpE Note are what the branch briefed during the inspector counterpart meetings. Please review and let me know if you have any comments or changes by Friday, since I'd like to

have this out to the regions soon to allow them some time to review before the EOC meetings in early February.

Thanks,

Jesse E. Robles
U.S. Nuclear Regulatory Commission
Reactor Systems Engineer
NRR/DIRS/IOEB
301-415-2940
301-415-3061 (fax)
Jesse.Robles@nrc.gov

Robles-Alcaraz, Jesse

From: Sigmon, Rebecca
Sent: Thursday, January 18, 2018 9:54 AM
To: Robles-Alcaraz, Jesse
Subject: OpE Note

Just the two noted changes at the bottom of the last page.

Rebecca Sigmon
Reactor Systems Engineer
NRR/DIRS/IOEB
(301) 415-0895 (M,W,F)
(b)(6) (T,Th)

Robles-Alcaraz, Jesse

From: Robles-Alcaraz, Jesse
Sent: Friday, January 19, 2018 10:09 AM
To: Bell, Keyona
Cc: Thomas, Eric
Subject: Document for ADAMS
Attachments: EOC OE Note-2018.pdf; NRC 665.pdf

Keyona,

Can you please add the attached document to ADAMS? Let me know if you have any questions.

Thanks,

Jesse E. Robles
U.S. Nuclear Regulatory Commission
Reactor Systems Engineer
NRR/DIRS/IOEB
301-415-2940
301-415-3061 (fax)
Jesse.Robles@nrc.gov

Operating Experience Note

No. 19

January 2018

Contacts:

Jesse Robles: 415-2940

Jesse.Robles@nrc.gov

Eric Thomas: 415-6772

Eric.Thomas@nrc.gov

Inside (click to view)

[Lube Oil Sight Glasses](#)

[RPS Test Box](#)

[Waterford LOOP—
Commercial Grade Dedic-
ation](#)

[EDG Diode Failures](#)

[Weld Inspections \(Int'l\)](#)

Let us know what you think
Provide feedback to:

Eric.Thomas@nrc.gov or
301-415-6772

End of Cycle Operating Experience Update, 2018

Introduction and Philosophy

The purpose of this report is to provide the regions with insights into recent themes that have been noted by Headquarters Operating Experience (OpE) staff and our regional points of contact. This report focuses issues that are tied to recent trends in OpE and have a nexus to one or more inspection modules. This report is intended to provide information that will better inform the inspection program.

Additional Operating Experience Branch staff observations and event summaries can be found in our [Periodic Operating Experience](#) newsletters, which we circulate every few months; in other [Operating Experience Notes](#), which we produce in response to specific inquiries; and in [Operating Experience Communications](#). All of our products are located on the [OpE Sharepoint Portal](#).

We encourage recipients and users of this report to provide feedback directly to Jesse Robles or Eric Thomas.

Oil Sight Glass Events

Eric Thomas and John Thompson

Summary

On September 13, 2017, during an auxiliary feedwater pump (AFW) quarterly surveillance run, the licensee at Davis Besse noted high temperatures on the AFW turbine inboard bearing. Operators tripped the pump, and investigation revealed bearing damage, which was attributed to a lack of lubrication caused by insufficient level in the oil reservoir. The staff issued an Operating Experience [OpE Communication](#) (COMM) describing the event at Davis Besse. The COMM includes discussions of other similar events where oil levels in various components were inaccurately indicated on sight glasses for a variety of different reasons.

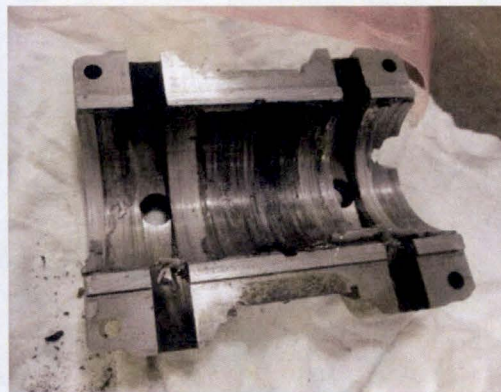


Figure 1: Davis Besse Failed Inboard Bearing

The staff's investigation of the AFW turbine bearing event at Davis Besse revealed that the event most likely occurred because of operator workarounds and inadequate application of vendor guidance for properly measuring oil level. The minimum level mark on the sight glass was lower than what was described in the vendor manual. Operators had recently drained 10-11 ounces from the oil reservoir for a sample. Since level was still above the low level mark on the sight glass, they did not replenish the oil. This caused oil level to remain below that required for the turbine's slinger rings to effectively lubricate the inboard bearing, and resulted in excessive bearing damage (see figure 1).

A review of the vendor guidance for the AFW pump and turbine revealed specific instructions for setting the oil sight glass minimum and maximum levels. The band described in the guidance required oil level to read higher on the sight glass, and required oil level to be maintained within a tighter band than what the licensee was using. There were marks that had been painted on the turbine casing that showed a narrower band, but the as-found oil level was significantly below these marks (see figure 2).

Discussion

Operating Experience

Page 2 of 8

Oil Sight Glass Events (cont'd)

After performing an OpE search, the staff uncovered other instances of performance issues related to oil sight glasses. These are discussed in detail in the OpE COMM:

- ANO-2 (2016) - EDG inboard generator bearing failed from lack of lubrication. The sight glass was inverted by workers during post-surveillance reinstallation which led to low oil level.
- Hope Creek (2009) - HPCI booster pump outboard bearing oil level was below the minimum level mark with oil leaking from the sight glass housing threaded connection. Procedural guidance and other operator aids were insufficient to ensure proper oil level was maintained.
- Beaver Valley (2001) - AFW pump outboard bearing oil level sight glass did not have sufficient markings for high/low oil level.



Figure 2: Davis Besse As-Found Oil Level

Inspector Takeaways

The OpE COMM contains several tips for inspectors as they perform plant walkdowns or inspections of systems using oil sight glasses or bubblers. In summary, inspectors should look for:

- Evidence that the licensee's methods for assuring proper oil level using a sight glass is based on procedural guidance and vendor recommendations, and limits reliance on skill of the craft or other operator workarounds.
- Potential leaks from oil sight glasses.
- Sight glasses that may have been installed upside down, rendering the level markings inaccurate.
- Air flow in the vicinity of sight glass vents which can cause erroneous level readings.

Previous Operating Experience

- [Information Notice \(IN\) 81-24](#), "Auxiliary Feed Pump Turbine Bearing Failures"
- [IN 2008-09](#), "Turbine-Driven Auxiliary Feedwater Pump Bearing Issues"

Relevant Inspection Procedures

- [IP 71111.12](#), "Maintenance Effectiveness"
- [IP 71111.21M](#), "Design Basis Assurance Inspections"
- [IP 71152](#), "Problem Identification and Resolution"

Additional Actions

The staff is in the process of writing an information notice to communicate this issue to stakeholders.

RPS Test Box

John Thompson

Summary

In recent months, there have been several instances where Boiling Water Reactor (BWR) licensees did not enter the correct Technical Specification (TS) Action Statement during quarterly surveillance testing of the reactor protection system (RPS) logic. These issues (b)(5) Oyster Creek in August of 2017, and Fermi in September of 2016) involved surveillance testing of RPS logic strings for the closure function of the Turbine Stop Valves (TSVs) and Main Steam Isolation Valves (MSIVs).

Link to OpE COMM:
["Fermi - RPS Test Box"](#)

RPS Test Box (cont'd)

Discussion

Most BWR designs have four RPS trip channels (A1, A2, B1, and B2) and two RPS trip systems (A and B). Each channel is capable of producing a half scram by satisfying the one out of two logic required to actuate a trip system. A reactor trip (full scram) occurs if the one out of two logic is satisfied on each of the two trip systems (i.e., at least one MSIV in 3 of 4 main steam lines close, or 3 of 4 TSVs close). During typical RPS quarterly surveillance testing, one channel is placed in test in order to conduct the surveillance test. Placing any one of the four channels in test generates a half scram, leaving any of the other three channels available to generate a full scram. While this arrangement is conservative, the practicality of this situation means a licensee is at heightened risk of experiencing a full scram during the surveillance activity. In order to reduce this risk, industry-based initiatives by the Boiling Water Reactor Owners Group (BWROG) have been underway since 2008 to reduce the number of preventable scrams. One solution resulting from this initiative is the use of a device that prevents generation of a half scram during RPS logic testing. Specifically, a "RPS Test Box" is used in similar fashion as an electrical jumper, but is designed to allow monitoring of the contact state while maintaining electrical continuity across the contact(s) being tested. This configuration thus prevents the generation of a half-scram signal when the contacts are opened (de-energized) during surveillance testing.

When used in MSIV and TSV RPS logic surveillances, the RPS Test Box is installed across contacts that are arranged in parallel (see Figure 3). Doing so removes multiple contacts from the circuit, and impacts the ability to meet the TS requirement for both trip systems to have each channel associated with the MSIVs in 3 main steam lines either operable or in trip, or for both trip systems associated with the TSVs to have 3 channels either operable or in trip. With the RPS Test Box installed across multiple contacts, 2 of 4 main steam lines become inoperable, rendering the MSIV closure function (and similarly for the TSV closure function) not maintained. This requires the licensee to enter a TS Condition requiring action to restore trip capability within one hour.

In the case of Fermi, the test box was installed for less than an hour, but the licensee did not enter the TS Condition. At Oyster Creek, the licensee had the RPS Test Box installed for greater than the one hour allowed by TS.

For most BWRs, use of the RPS Test Box is a change in testing that requires a formal 10 CFR 50.59 evaluation. Following its realization that use of the RPS Test Box would require entry into a TS action statement for trip functions involving parallel logic strings, Fermi-2 revised its procedures to discontinue use of the RPS Test Box. IOEB staff is drafting an information notice on this issue.

Inspector Takeaways

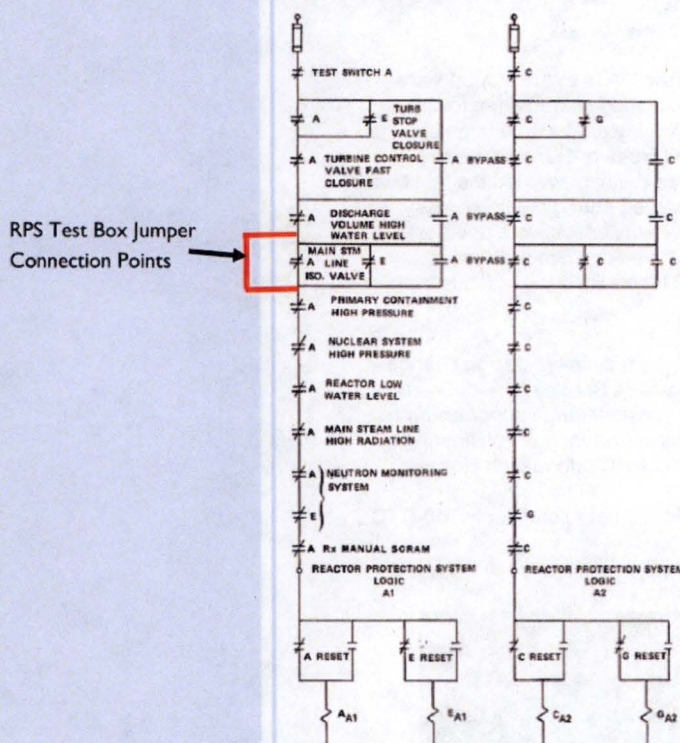
Inspectors should maintain a questioning attitude if they become aware that their licensee is using a RPS Test Box during surveillance testing. If the licensee is using the RPS Test Box, inspectors should determine:

- Did the change require a 50.59 evaluation and was the evaluation performed?
- Whether use of the RPS Test Box involves bypassing any contacts that are arranged in parallel.
- Whether the plant should be entering any TS conditions when using the RPS Test Box
- Whether the licensee is aware of BWROG Recommendation 30, along with existing industry OpE related to use of the RPS Test Box.

Relevant Inspection Procedure

- [71111.18](#), "Plant Modifications"

Figure 3: Fermi-2 RPS Trip System Logic Showing Location of RPT Test Box for MSIV Surveillance Testing



Additional Staff Actions

Staff is in the process of drafting an IN to communicate this issue with stakeholders.

Operating Experience

Page 4 of 8

Waterford 3 Loss of Offsite Power (LOOP) Event

By Steve Pannier

Summary

On July 17, 2017, during a rain and lightning event, plant operators at Waterford 3 manually tripped the main turbine and generator based on a report of arcing being observed from a main transformer isophase bus duct. This resulted in an automatic reactor cutback. After the main turbine and generator trip, the circuit breakers associated with the unit auxiliary transformers (UATs) automatically opened, but the circuit breakers for the startup transformers failed to automatically close as designed. This resulted in the de-energization of all safety and non-safety AC buses. The reactor coolant pumps tripped, causing an automatic reactor trip on a loss of forced circulation. Both emergency diesel generators (EDGs) started as designed and reenergized the safety buses. Waterford 3 declared an Unusual Event (UE) based on a loss of offsite power lasting longer than 15 minutes (See [EN 52863](#)). Four hours later, the licensee exited the UE after successfully shifting loads from the EDGs to the startup transformer.

Discussion

The licensee determined an apparent cause of the initiating event to be loose bolted connections associated with laminated flex links, which resulted in high electrical currents and the eventual failure of the isophase bus duct. During the ensuing special inspection, NRC inspectors found that the licensee did not perform adequate preventive maintenance consistent with site requirements to identify the loosening connections prior to failure. The NRC has also issued previous generic communications on the importance of maintaining tight bolted connections.

- [Information Notice \(IN\) 2010-25](#), "Inadequate Electrical Connections"
- [IN 2000-14](#), "Non-Vital Bus Fault Leads to Fire and Loss of Offsite Power"

The root cause for the failure of the fast transfer of electrical loads from the UATs to the startup transformers was the failure of the installed Struthers-Dunn time-delay relays in the fast transfer circuitry. When the UATs lost power, the subsequent de-energization of the 152X relay produced a large change in voltage that, because surge suppression was not utilized, caused the Struthers-Dunn relays to instantaneously time out and open their contacts. The absence of any time-delay prevented the fast bus transfer to the startup transformers. The Struthers-Dunn relays were installed during the licensee's April 2017 refueling outage. Prior to their installation, Allen Bradley time-delay relays were used, which contained integrated surge suppression. The surge suppression allowed the Allen Bradley time-delay relays to mitigate the voltage transient produced by the 152X relay, which permitted the fast bus transfer to operate successfully.

The licensee considered the root cause of the fast bus transfer failure to be a deficient design change modification implemented on the fast bus transfer circuitry to replace the Allen Bradley time-delay relays with Struthers-Dunn time-delay relays. That design change did not consider surge suppression as a critical relay characteristic. Commercial grade dedication, including the importance of considering all of a component's critical design characteristics, is discussed in two recent NRC Information Notices:

- [IN 2016-01](#), "Recent Issues Related to the Commercial Grade Dedication of Allen-Bradly 700-RTC Relays"
- [IN 2016-09](#), "Recent Issues Identified When Using Reverse Engineering Techniques in the Procurement of Safety-Related Components"

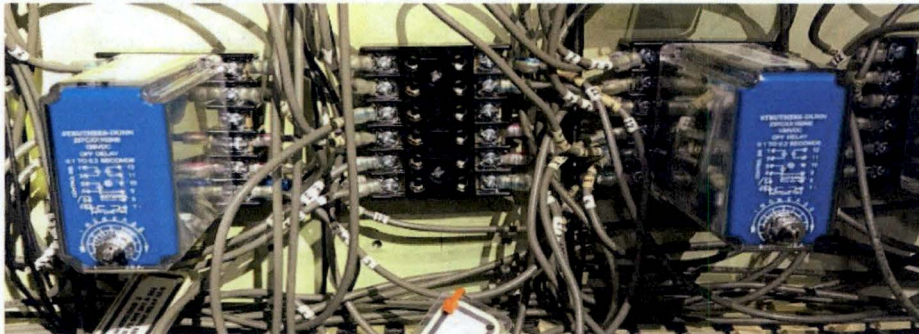


Figure 4: Image of Struthers-Dunn Relays Installed at Waterford 3

[Link to Waterford 3
OpE COMM](#)

[Link to Waterford 3
Licensee Event Report](#)

[Link to Waterford 3
Special Inspection Report](#)

Operating Experience

Page 5 of 8

Waterford 3 Loss of Offsite Power (LOOP) Event (cont'd)

Inspector Takeaways

The root and contributing causes for this event are both issues that are well-known and have been focused on by NRC's operating experience and quality assurance centers of expertise in the past few years. The event initiator was a loose electrical connection which caused a fault. Loose electrical connections have been covered in recent NRC generic communications and event inspections. Likewise, commercial grade dedication is a vulnerability that has been the root or contributing cause of several events recently.

- Inspectors can follow up on their licensee's disposition of industry operating experience and NRC generic communications pertaining to electrical connections.
- Inspectors can review their licensee's commercial grade dedication program. A good question to ask is how does the licensee ensure that they are including all critical characteristics when performing like for like piece-part replacements.

Previous Operating Experience (see NRC information notices listed on previous page)

Relevant Inspection Procedures

- IP [71111.18](#), "Plant Modifications"
- IP [43004](#), "Inspection of Commercial-Grade Dedication Programs"

Additional Actions

(b)(5)

(b)(5)

EDG Voltage Regulator Diode Failures

By Jason Carneal

Summary

Operating Experience staff recently published an OpE COMM summarizing a number of diode failures since 2010 which have adversely impacted the operability of EDGs. These diodes are located in the generator excitation system, which monitors generator output, and varies the strength of the magnetic field to maintain proper voltage. Most recently, in April 2017, diode CR4 in the EDG excitation circuit of the 2A EDG at Catawba Unit 2 short-circuited, causing the EDG to trip during a monthly surveillance test. The design of the generation excitation circuit, combined with numerous instances of operating experience pointing to the potential for early failure of the diode, should have prompted the licensee to have a more rigorous monitoring and replacement program in effect for these components.

Discussion

Catawba

Following the short-circuit of the diode at Catawba Unit 2, the licensee replaced all 6 of the diodes in along with 3 shunting thyristors in the rectifier circuit and power-driven potentiometer. Further analysis of the issue by NRC inspectors revealed a known design issue wherein certain diodes in the generator excitation circuit remain in an energized state for long periods of time, and are therefore subjected to elevated operating temperatures (as much as 60 deg F higher than other diodes in the circuit). These conditions can shorten diode life and lead to premature failures if the diodes are not replaced on a more frequent basis. Catawba had experienced previous failures of the CR4 diode, along with other diodes subjected to the elevated temperatures. In addition, the licensee had screened other operating experience related to diode failures into its corrective action program, including:

- [NRC IN 2005-15](#), "Three Unit Trip and Loss of Offsite Power at Palo Verde Nuclear Generating Station"

(b)(4)

Link to OpE COMM on
[EDG Excitation System Diodes](#)

Operating Experience

Page 6 of 8

EDG Voltage Regulator Diode Failures (cont'd)

The IN briefly mentions an EDG failure that occurred due to an excitation system diode failure following a major LOOP event at Palo Verde. (b)(4)

(b)(4)

(b)(4) Catawba last experienced failure and replacement of the CR4 diode in 2005. (b)(4)

(b)(4) Catawba received a White inspection finding under TS 5.4.1, "Procedures" for not establishing a preventive maintenance program for the EDG excitation system, and an associate violation of Appendix B Criterion XVI for failure to correct a condition adverse to quality associated with elevated operating temperatures of EDG excitation system diodes.

Wolf Creek

In October 2014, during a 24-hour surveillance test, Wolf Creek's 'B' EDG tripped due to a fire in the electrical excitation control cabinet. The source of the fire was the power potential transformer (PPT). The PPT became overloaded because of two failed diodes in the EDG's current transformer (CT). When these diodes failed, the current boost to the EDG excitation field was reduced, and the voltage regulator compensated by increasing the output of the PPT. This exceeded the load capability of the PPT, and over time it eventually failed. The CT diodes had likely failed during a previous surveillance run in June 2014. Operators had noticed smoke coming from the PPT during interim monthly runs, but it wasn't until the 24-hour endurance run that conditions worsened to the point of PPT overheating and failure. The licensee had planned to replace the PPT in August 2014, but the replacement was delayed until February 2015.

The staff intends to issue an Information Notice summarizing these and other similar events.

Inspector Takeaways

Our domestic fleet of nuclear reactors includes many plants operating near or beyond their original 40-year licenses. These plants have numerous components installed that were either designed for the 40-year life of the plant or do not have a defined service life. These realities make it increasingly important for licensees to 1) follow up on operating experience regarding the reliability of safety-related components, and 2) take timely corrective action when they discover equipment that is at or near end of life. Continuous review of the licensee's corrective action program, along with periodic inspections of problem identification and resolution are two main methods inspectors can use to ensure licensees are identifying and fixing conditions adverse to quality.



Figure 5: Failed PPT at Wolf Creek

Previous Operating Experience (see NRC information notice, OpE COMMs, and INPO's Event Report listed above.

Relevant Inspection Procedures

- [IP 71111.12](#), "Maintenance Effectiveness"
- [IP 71152](#), "Problem Identification and Resolution"

Additional Actions

(b)(5)

[Link to OpE COMM on Wolf Creek EDG Failure](#)

Operating Experience

Page 7 of 8

(b)(4)

and Contractor Oversight

Rebecca Sigmon

Summary

(b)(4)

Link to ObE COMM on

(b)(4)

Discussion

(b)(4)

Operating Experience

Page 8 of 8

(b)(4)

and Contractor Oversight (cont'd)

Inspector Takeaways

The OpE COMM linked on the previous page contains several examples of inspection reports with findings related to difficulties encountered by U.S. power reactor licensees when performing non-destructive examinations of pipes and welds. (b)(4)

(b)(4)

Link to INPO

(b)(4)

Previous Operating Experience

- [OpE COMM](#), "Arkansas Nuclear One Stator Drop"
- [OpE COMM](#), "Licensee Oversight of Contractor and Vendor Activities"
- [IN 2016-07](#), "Operating Experience Regarding Impacts of Site Electrical Power Distribution From Inadequate Oversight of Contractor Activities."

Relevant Inspection Procedures

- [IP 71111.08](#), "Inservice Inspection (ISI) Activities,"
- [IP 73054](#), "Part 52, Preservice And Inservice Inspection - Review Of Program"
- [IP 65001.3](#), "Inspection of ITAAC-Related Installation of Piping"

When performing inservice inspection activities, inspectors should consider the following questions:

- Does the procedure meet the code requirements?
- Are the personnel performing the examinations following the procedure?
- Are contractors/vendors adequately trained on licensee expectations for procedure adherence?
- Is there an adequate level of independence between data analysts comparing examination results to acceptance criteria?
- Are indications appropriately characterized and compared to previous examination results?
- Is the licensee providing adequate, knowledgeable oversight of examinations performed by contractors?



ADAMS DOCUMENT SUBMISSION

Instructions for completing NRC Form 665 - "Cheat Sheet" (ML15313A310)

Document Owner	Originated By	Phone No. (Enter 10 digits)	Mail Stop	LAN ID	Date
Jesse Robles	Jesse Robles	(301) 415-2940		jxr8	01/19/2018

If documents are to be put into a package and have the same release properties, list the Document Titles or Accession Numbers below in the order they should appear. Documents with different release properties and sensitivity levels should be listed on additional forms in the order they should appear. Examples (ML16035A181)

Note: Document Owner is solely responsible for setting the Availability, Document Sensitivity and Document Security Access Level.

Document No. Total Number of Documents in this package

Document Title(s) or Accession No.
2018 OpE Input for End-of-Cycles OEN

Package Title (if necessary):

Is this a brief title that can be changed by DPC according to template instruction?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
SUNSI Review has been completed (for Publicly Available Documents)	<input type="checkbox"/> Yes	<input type="checkbox"/> No Initials

Document AVAILABILITY (select one)

<input type="checkbox"/> Publicly Available (Indicate Release Date) <table border="1"><tr><td><input type="checkbox"/> Immediate Release</td></tr><tr><td><input type="checkbox"/> Normal Release</td></tr><tr><td><input type="checkbox"/> Delay Release Until <div>Date</div></td></tr></table> <table border="1"><tr><td><input type="checkbox"/> Non-Sensitive</td></tr><tr><td><input type="checkbox"/> Non-Sensitive Copyright</td></tr></table> Note: Package to be marked for release if two or more documents within the package are publicly available	<input type="checkbox"/> Immediate Release	<input type="checkbox"/> Normal Release	<input type="checkbox"/> Delay Release Until <div>Date</div>	<input type="checkbox"/> Non-Sensitive	<input type="checkbox"/> Non-Sensitive Copyright	<input checked="" type="checkbox"/> Non-Publicly Available MD 3.4 Non-Public Item Code (A.3-A.7, B1) Document SENSITIVITY (select one) <table border="1"><tr><td><input checked="" type="checkbox"/> A.7 Sensitive Internal Info - Periodic Review Required (all other sensitive internal info)</td><td><input type="checkbox"/> A.4 Sensitive - Proprietary</td></tr><tr><td><input type="checkbox"/> A.7 Sensitive Internal Info - No Periodic Review (attorney work product & client privilege, and pre-decisional enforcement)</td><td><input type="checkbox"/> A.3 Sensitive-Security Related - Periodic Review Required</td></tr><tr><td><input type="checkbox"/> A.6 Sensitive - Fed, State, Foreign Gov't, International Agency Controlled Info</td><td><input type="checkbox"/> B.1 Non-Sensitive</td></tr><tr><td><input type="checkbox"/> A.5 Sensitive - PA/PII (includes Personally Identifiable Information (PII))</td><td><input type="checkbox"/> B.1 Non-Sensitive - Copyright</td></tr></table>	<input checked="" type="checkbox"/> A.7 Sensitive Internal Info - Periodic Review Required (all other sensitive internal info)	<input type="checkbox"/> A.4 Sensitive - Proprietary	<input type="checkbox"/> A.7 Sensitive Internal Info - No Periodic Review (attorney work product & client privilege, and pre-decisional enforcement)	<input type="checkbox"/> A.3 Sensitive-Security Related - Periodic Review Required	<input type="checkbox"/> A.6 Sensitive - Fed, State, Foreign Gov't, International Agency Controlled Info	<input type="checkbox"/> B.1 Non-Sensitive	<input type="checkbox"/> A.5 Sensitive - PA/PII (includes Personally Identifiable Information (PII))	<input type="checkbox"/> B.1 Non-Sensitive - Copyright
<input type="checkbox"/> Immediate Release														
<input type="checkbox"/> Normal Release														
<input type="checkbox"/> Delay Release Until <div>Date</div>														
<input type="checkbox"/> Non-Sensitive														
<input type="checkbox"/> Non-Sensitive Copyright														
<input checked="" type="checkbox"/> A.7 Sensitive Internal Info - Periodic Review Required (all other sensitive internal info)	<input type="checkbox"/> A.4 Sensitive - Proprietary													
<input type="checkbox"/> A.7 Sensitive Internal Info - No Periodic Review (attorney work product & client privilege, and pre-decisional enforcement)	<input type="checkbox"/> A.3 Sensitive-Security Related - Periodic Review Required													
<input type="checkbox"/> A.6 Sensitive - Fed, State, Foreign Gov't, International Agency Controlled Info	<input type="checkbox"/> B.1 Non-Sensitive													
<input type="checkbox"/> A.5 Sensitive - PA/PII (includes Personally Identifiable Information (PII))	<input type="checkbox"/> B.1 Non-Sensitive - Copyright													

Document SECURITY ACCESS LEVEL

<input checked="" type="checkbox"/> Document Processing Center = Owner	<input type="checkbox"/> NRC Users = Viewer
<input type="checkbox"/> Limited Document Security (Defined by Group or User e.g., Joe Smith = Owner)	

Package Accession No.	ADAMS Template No.	RIDS Code (if applicable)	Other Identifiers
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Special Instructions

Submitted By	Phone No. (Enter 10 digits)	Mail Stop	LAN ID	Date Submitted to DPC
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

January 24, 2018

NRC 2018 000304

Paul M. Blanch

Dear Mr. Blanch:

We received your Freedom of Information Act (FOIA) request on January 24, 2018. Your request, which seeks access to ML18019A140, EOC OE Note-2018, has been assigned the following reference number that you should use in any future communications with us about your request: NRC 2018 000304.

To ensure the most equitable treatment possible of all requesters, the NRC processes requests on a first-in, first-out basis, using a multiple track system based upon the estimated time it will take to process a request. Based on your description of the records you are seeking, we estimate completion of your request will be on or before February 22, 2018.

Please know that this date roughly estimates how long it will take us to close requests ahead of yours in the respective track and complete work on your request. The actual date of completion might be before or after this estimate, based on the complexity of all of the requests in the simple. We will advise you of any change in the estimated time to complete your request. In an effort to process your request promptly, you may wish to narrow the scope of your request to limit the volume of potentially responsive records.

For purposes of assessing fees in accordance with our regulations (10 CFR 9.33), we have placed your request in the following category: Non Excepted. If applicable, you will be charged appropriate fees for: Search & Duplication of Records.

A sheet has been enclosed that explains in detail the fee charges that may be applicable.
Please do not submit any payment unless we notify you to do so.

The following person is the Government Information Specialist who has been assigned responsibility for your request: Gabriele Chidichimo at 301-415-6968 or Gabriele.Chidichimo@nrc.gov.

If you have questions on any matters concerning your FOIA request, please feel free to contact the assigned Government Information Specialist or me at (301) 415-7169.

Sincerely,

Stephanie A. Blaney /s/

Stephanie A. Blaney
FOIA Officer
Office of the Chief Information Officer

Enclosures:
Explanation of Fees

EXPLANATION OF FEES

Requester Fee Categories

Commercial: Fees are charged for document search, duplication, and review, when records are requested for commercial purposes. Fees (above the minimum fee charge) cannot be waived for this category of requester.

Educational, Non-Commercial Scientific, News Media and Privacy Act: Fees may be charged only for document duplication when records are not sought for commercial use and the request is made by an Educational or Non-Commercial Scientific Institution, whose purpose is scholarly or scientific research; or a Representative of the News Media; or a person requesting his/her own records that are in a Privacy Act system of records. No fee is charged for the first one hundred pages of duplication for this category of requester.

Non-Excepted: For any request not described above (Non-Excepted), fees may be charged for document search and duplication. No fee is charged for the first two hours of search time or for the first one hundred pages of duplication for this category of requester.

Fee Schedules

Fee schedules provide only for the recovery of the direct costs of search, duplication, or review. Review costs include only the costs for initial examination of a document to determine whether it must be disclosed and to determine whether to withhold portions that are exempt from disclosure. The fee schedule is as follows:

Search & Review Conducted By

Rate

1 SES/COMMISSIONER	\$90.53/hour	(ES-maximum)
1 PROFESSIONAL	\$56.36/hour	(GG-13, Step 6)
1 CLERICAL	\$25.16/hour	(GG-7, Step 7)

Duplication Charges

\$.20 per page

Fees for non-standard search or duplication will be charged at the actual cost (e.g. providing copying of audio tapes or conducting computer searches).

Minimum Fee: No fee will be charged unless the fee is equal to or greater than \$25.00.

When to Pay Fees

If we estimate that fees will not exceed \$25.00 or you have stated in your request a higher amount that you are willing to pay, we assume your willingness to pay up to \$25 or the amount stipulated and you will be billed after we have completed your request.

If we estimate that fees will exceed \$25.00 or any amount that has been stated by you in your request, we will not proceed with your request until we have notified you and obtained your agreement to pay the estimated fees.

If we estimate fees will exceed \$250, you will be required to pay the estimated fees in advance before we proceed further with your request. If, while processing your request, we find that the actual fees exceed the estimated fee, we will obtain your consent to pay the additional fees before continuing to process your request. If the actual fees to process your request are less than any advance payment you have made, you will be refunded the overpayment amount.

Fee Waivers

A waiver or reduction of fees may be granted for furnishing documents if a requester, by fully addressing the eight factors in 10 CFR 9.41, clearly demonstrates that disclosure of the information is in the public interest because it is likely to contribute significantly to public understanding of the operations or activities of the government and is not primarily in the commercial interest of the requester.

From: Robles-Alcaraz, Jesse
To: Elliott, Robert
Cc: Thomas, Eric
Subject: FW: ACTION: FOIA NRC-2018-000304 - estimate due 1/30/18
Date: Wednesday, January 24, 2018 3:31:00 PM
Importance: High

FYI. Somebody FOIA'd the End of Cycle Note.

From: Kauffman, Lisa
Sent: Wednesday, January 24, 2018 3:28 PM
To: Jones, Heather <Heather.Jones@nrc.gov>
Cc: Robles-Alcaraz, Jesse <Jesse.Robles-Alcaraz@nrc.gov>; Thomas, Eric <Eric.Thomas@nrc.gov>
Subject: ACTION: FOIA NRC-2018-000304 - estimate due 1/30/18
Importance: High

Hi Heather,

A FOIA came in requesting ML18019A140. At this time I only need an estimate for how long it would take staff to review the record for FOIA release. The estimate is due back to me by **January 30th**.

Below is the link to the document in ADAMS:

[View ADAMS Properties ML18019A140](#)
[Open ADAMS Document \(EOC OE Note-2018\)](#)

Thanks,
Lisa

Lisa Kauffman, FOIA Coordinator
Reactor Information Services Branch
Division of Mission and Program Support
Office of Nuclear Reactor Regulation
301-415-8199 / Lisa.Kauffman@nrc.gov

From: Chidichimo, Gabriele
Sent: Wednesday, January 24, 2018 2:45 PM
To: RidsNrrMailCenter Resource <RidsNrrMailCenter.Resource@nrc.gov>
Cc: Kauffman, Lisa <Lisa.Kauffman@nrc.gov>
Subject: FW: FOIA Assignment for NRC-2018-000304- please provide fee estimate for non excepted requester by 1/30/18

Dear Lisa, no incoming attached since the requester submitted this FOIA electronically. We just tasked in Foia Online.
The ML was created by NRR and is non public
Thanks

Gaby

From: foia@regulations.gov [mailto:foia@regulations.gov]
Sent: Wednesday, January 24, 2018 10:53 AM
To: Chidichimo, Gabriele <Gabriele.Chidichimo@nrc.gov>
Subject: [External_Sender] FOIA Assignment for NRC-2018-000304

You have been assigned to the FOIA request NRC-2018-000304. Additional details for this request are as follows:

- Assigned By: Stephanie Blaney
- Request Tracking Number: NRC-2018-000304
- Due Date: N/A
- Requester: Paul M. Blanch
- Request Track: Simple
- Short Description: N/A
- Long Description: ML18019A140, EOC OE Note-2018.

Robles-Alcaraz, Jesse

From: Robles-Alcaraz, Jesse
Sent: Thursday, January 25, 2018 9:43 AM
To: Elliott, Robert
Cc: Thomas, Eric
Subject: RE: ACTION by 1/30: FOIA NRC-2018-000304

Got it.

(b)(5)

(b)(5)

From: Elliott, Robert
Sent: Thursday, January 25, 2018 9:41 AM
To: Robles-Alcaraz, Jesse <Jesse.Robles-Alcaraz@nrc.gov>
Cc: Thomas, Eric <Eric.Thomas@nrc.gov>
Subject: ACTION by 1/30: FOIA NRC-2018-000304

Jesse,
Can you take the lead on this one for the branch?

Thanks!
Rob

From: Jones, Heather
Sent: Thursday, January 25, 2018 8:58 AM
To: Elliott, Robert <Robert.Elliott@nrc.gov>
Cc: Thomas, Eric <Eric.Thomas@nrc.gov>
Subject: ACTION by 1/30: FOIA NRC-2018-000304
Importance: High

Rob,

Please see the FOIA below and respond to Lisa.

Thanks!
Heather

From: Kauffman, Lisa
Sent: Wednesday, January 24, 2018 3:28 PM
To: Jones, Heather <Heather.Jones@nrc.gov>
Cc: Robles-Alcaraz, Jesse <Jesse.Robles-Alcaraz@nrc.gov>; Thomas, Eric <Eric.Thomas@nrc.gov>
Subject: ACTION: FOIA NRC-2018-000304 - estimate due 1/30/18
Importance: High

Hi Heather,

A FOIA came in requesting ML18019A140. At this time I only need an estimate for how long it would take staff to review the record for FOIA release. The estimate is due back to me by **January 30th**.

Below is the link to the document in ADAMS:

View ADAMS Properties ML18019A140
Open ADAMS Document (EOC OE Note-2018)

Thanks,
Lisa

Lisa Kauffman, FOIA Coordinator
Reactor Information Services Branch
Division of Mission and Program Support
Office of Nuclear Reactor Regulation
301-415-8199 / Lisa.Kauffman@nrc.gov

From: Chidichimo, Gabriele
Sent: Wednesday, January 24, 2018 2:45 PM
To: RidsNrrMailCenter Resource <RidsNrrMailCenter.Resource@nrc.gov>
Cc: Kauffman, Lisa <Lisa.Kauffman@nrc.gov>
Subject: FW: FOIA Assignment for NRC-2018-000304- please provide fee estimate for non excepted requester by 1/30/18

Dear Lisa, no incoming attached since the requester submitted this FOIA electronically.
We just tasked in Foia Online.
The ML was created by NRR and is non public
Thanks
Gaby

From: foia@regulations.gov [<mailto:foia@regulations.gov>]
Sent: Wednesday, January 24, 2018 10:53 AM
To: Chidichimo, Gabriele <Gabriele.Chidichimo@nrc.gov>
Subject: [External_Sender] FOIA Assignment for NRC-2018-000304

You have been assigned to the FOIA request NRC-2018-000304. Additional details for this request are as follows:

- Assigned By: Stephanie Blaney
- Request Tracking Number: NRC-2018-000304
- Due Date: N/A
- Requester: Paul M. Blanch
- Request Track: Simple
- Short Description: N/A
- Long Description: ML18019A140, EOC OE Note-2018.

From: Robles-Alcaraz, Jesse
To: Thompson, John; Sigmon, Rebecca; Cameal, Jason; Pannier, Stephen
Cc: Thomas, Eric
Subject: FW: ACTION by 1/30: FOIA NRC-2018-000304
Date: Thursday, January 25, 2018 9:47:00 AM

Hi,

The EOC OpE Note was requested to be released under FOIA (b)(5)

(b)(5)

Thanks,

Jesse

From: Elliott, Robert
Sent: Thursday, January 25, 2018 9:41 AM
To: Robles-Alcaraz, Jesse <Jesse.Robles-Alcaraz@nrc.gov>
Cc: Thomas, Eric <Eric.Thomas@nrc.gov>
Subject: ACTION by 1/30: FOIA NRC-2018-000304

Jesse,
Can you take the lead on this one for the branch?

Thanks!
Rob

From: Jones, Heather
Sent: Thursday, January 25, 2018 8:58 AM
To: Elliott, Robert <Robert.Elliott@nrc.gov>
Cc: Thomas, Eric <Eric.Thomas@nrc.gov>
Subject: ACTION by 1/30: FOIA NRC-2018-000304
Importance: High

Rob,

Please see the FOIA below and respond to Lisa.

Thanks!
Heather

From: Kauffman, Lisa
Sent: Wednesday, January 24, 2018 3:28 PM
To: Jones, Heather <Heather.Jones@nrc.gov>
Cc: Robles-Alcaraz, Jesse <Jesse.Robles-Alcaraz@nrc.gov>; Thomas, Eric <Eric.Thomas@nrc.gov>
Subject: ACTION: FOIA NRC-2018-000304 - estimate due 1/30/18

Importance: High

Hi Heather,

A FOIA came in requesting ML18019A140. At this time I only need an estimate for how long it would take staff to review the record for FOIA release. The estimate is due back to me by **January 30th**.

Below is the link to the document in ADAMS:

[View ADAMS Properties ML18019A140](#)

[Open ADAMS Document \(EOC OE Note-2018\)](#)

Thanks,
Lisa

Lisa Kauffman, FOIA Coordinator
Reactor Information Services Branch
Division of Mission and Program Support
Office of Nuclear Reactor Regulation
301-415-8199 / Lisa.Kauffman@nrc.gov

From: Chidichimo, Gabriele

Sent: Wednesday, January 24, 2018 2:45 PM

To: RidsNrrMailCenter Resource <RidsNrrMailCenter.Resource@nrc.gov>

Cc: Kauffman, Lisa <Lisa.Kauffman@nrc.gov>

Subject: FW: FOIA Assignment for NRC-2018-000304- please provide fee estimate for non excepted requester by 1/30/18

Dear Lisa, no incoming attached since the requester submitted this FOIA electronically.
We just tasked in Foia Online.
The ML was created by NRR and is non public
Thanks
Gaby

From: foia@regulations.gov [<mailto:foia@regulations.gov>]

Sent: Wednesday, January 24, 2018 10:53 AM

To: Chidichimo, Gabriele <Gabriele.Chidichimo@nrc.gov>

Subject: [External_Sender] FOIA Assignment for NRC-2018-000304

You have been assigned to the FOIA request NRC-2018-000304. Additional details for this request are as follows:

- Assigned By: Stephanie Blaney
- Request Tracking Number: NRC-2018-000304
- Due Date: N/A

- Requester: Paul M. Blanch
- Request Track: Simple
- Short Description: N/A
- Long Description: ML18019A140, EOC OE Note-2018.

Robles-Alcaraz, Jesse

From: Robles-Alcaraz, Jesse
Sent: Monday, January 29, 2018 12:24 PM
To: Thomas, Eric
Subject: Fw: REMINDER: ACTION: FOIA NRC-2018-000304 - estimate due 1/30/18

Importance: High

(b)(5)



From: Jones, Heather
Sent: Monday, January 29, 2018 9:58 AM
To: Thomas, Eric; Robles-Alcaraz, Jesse
Cc: Elliott, Robert
Subject: REMINDER: ACTION: FOIA NRC-2018-000304 - estimate due 1/30/18

FYI

From: Kauffman, Lisa
Sent: Monday, January 29, 2018 9:56 AM
To: Jones, Heather <Heather.Jones@nrc.gov>
Subject: FW: ACTION: FOIA NRC-2018-000304 - estimate due 1/30/18
Importance: High

Good Morning,

Just a reminder that this estimate is due tomorrow.

Thanks!

From: Kauffman, Lisa
Sent: Wednesday, January 24, 2018 3:28 PM
To: Jones, Heather <Heather.Jones@nrc.gov>
Cc: Robles-Alcaraz, Jesse <Jesse.Robles-Alcaraz@nrc.gov>; Thomas, Eric <Eric.Thomas@nrc.gov>
Subject: ACTION: FOIA NRC-2018-000304 - estimate due 1/30/18
Importance: High

Hi Heather,

A FOIA came in requesting ML18019A140. At this time I only need an estimate for how long it would take staff to review the record for FOIA release. The estimate is due back to me by **January 30th**.

Below is the link to the document in ADAMS:

[View ADAMS Properties ML18019A140](#)
[Open ADAMS Document \(EOC OE Note-2018\)](#)

Thanks,
Lisa

Lisa Kauffman, FOIA Coordinator
Reactor Information Services Branch
Division of Mission and Program Support
Office of Nuclear Reactor Regulation
301-415-8199 / Lisa.Kauffman@nrc.gov

From: Chidichimo, Gabriele
Sent: Wednesday, January 24, 2018 2:45 PM
To: RidsNrrMailCenter Resource <RidsNrrMailCenter.Resource@nrc.gov>
Cc: Kauffman, Lisa <Lisa.Kauffman@nrc.gov>
Subject: FW: FOIA Assignment for NRC-2018-000304- please provide fee estimate for non excepted requester by 1/30/18

Dear Lisa, no incoming attached since the requester submitted this FOIA electronically.
We just tasked in Foia Online.
The ML was created by NRR and is non public
Thanks
Gaby

From: foia@regulations.gov [<mailto:foia@regulations.gov>]
Sent: Wednesday, January 24, 2018 10:53 AM
To: Chidichimo, Gabriele <Gabriele.Chidichimo@nrc.gov>
Subject: [External_Sender] FOIA Assignment for NRC-2018-000304

You have been assigned to the FOIA request NRC-2018-000304. Additional details for this request are as follows:

- Assigned By: Stephanie Blaney
- Request Tracking Number: NRC-2018-000304
- Due Date: N/A
- Requester: Paul M. Blanch
- Request Track: Simple
- Short Description: N/A
- Long Description: ML18019A140, EOC OE Note-2018.

Ennis, Tina

From: Chidichimo, Gabriele
Sent: Tuesday, January 30, 2018 11:24 AM
To: Kauffman, Lisa
Cc: RidsNrrMailCenter Resource
Subject: RE: FOIA Assignment for NRC-2018-000304, please provide responsive records by 2/13/18

Thank you Lisa, we also just tasked via FOIA online.
We are unable to provide a copy of the incoming request since this requester provided his info via FOIA online
Please let us know if you have any questions and thank you for your help
Gaby

From: Kauffman, Lisa
Sent: Tuesday, January 30, 2018 9:37 AM
To: Chidichimo, Gabriele <Gabriele.Chidichimo@nrc.gov>
Subject: RE: FOIA Assignment for Fee Estimate for Request NRC-2018-000304

Hi Gaby,

The estimate for this FOIA is:

Search time: 1 minute
Review time: 1 hour
Pages: 8

Thanks,

Lisa Kauffman, FOIA Coordinator

Reactor Information Services Branch
Division of Mission and Program Support
Office of Nuclear Reactor Regulation
301-415-8199 / FOIA CAC: ZF0000

From: foia@regulations.gov [mailto:foia@regulations.gov]
Sent: Wednesday, January 24, 2018 2:41 PM
To: RidsNrrMailCenter Resource <RidsNrrMailCenter.Resource@nrc.gov>
Subject: [External_Sender] FOIA Assignment for Fee Estimate for Request NRC-2018-000304

Your office has been assigned FOIA request task - Fee Estimate. Additional details for this item are as follows:

- Tracking Number: NRC-2018-000304
- Requester: Paul M. Blanch
- Request Track: Simple
- Assigned By: Gabriele Chidichimo
- Submitted Date: 01/24/2018
- Due Date: 01/30/2018

- Description: please provide a fee estimate for non excepted requester since the requester submitted his request online, we are unable to send you the incoming request. the ML number he is seeking is non publicly available and was created by NRR. Thank you for your help Gaby

Robles-Alcaraz, Jesse

From: Robles-Alcaraz, Jesse
Sent: Monday, February 12, 2018 9:00 AM
To: Kauffman, Lisa
Cc: Thomas, Eric
Subject: RE: ACTION: FOIA NRC-2018-000304 - Record due on 2/31/18

Hi Lisa,

I'll be sure you get our input by tomorrow.

Thanks,

Jesse

From: Kauffman, Lisa
Sent: Monday, February 12, 2018 8:58 AM
To: Robles-Alcaraz, Jesse <Jesse.Robles-Alcaraz@nrc.gov>
Cc: Thomas, Eric <Eric.Thomas@nrc.gov>
Subject: FW: ACTION: FOIA NRC-2018-000304 - Record due on 2/31/18
Importance: High

Just a reminder that redacted records are due tomorrow.

Thanks,
Lisa

From: Kauffman, Lisa
Sent: Tuesday, January 30, 2018 11:37 AM
To: Robles-Alcaraz, Jesse <Jesse.Robles-Alcaraz@nrc.gov>; Jones, Heather <Heather.Jones@nrc.gov>
Cc: Thomas, Eric <Eric.Thomas@nrc.gov>
Subject: ACTION: FOIA NRC-2018-000304 - Record due on 2/31/18
Importance: High

Thanks Jesse,

Per the assignment below, you may resume the search. The due date to provide the redacted record to me is **February 13th**. You can do redactions on paper using post its (do not write on the document itself except to mark areas in pencil), or you can do electronic marking in Adobe.

I have attached the FOIA exemptions that you may use in your review. If using exemption 5 or 7F, you must also provide a harm statement.

Let me know if you have any questions.

Your office has been assigned FOIA request task - Other. Additional details for this item are as follows:

- Tracking Number: NRC-2018-000304
- Requester: Paul M. Blanch
- Request Track: Simple

- Assigned By: Gabriele Chidichimo
- Submitted Date: 01/30/2018
- Due Date: 02/13/2018
- Description: please resume search

Thanks,

Lisa Kauffman, FOIA Coordinator
Reactor Information Services Branch
Division of Mission and Program Support
Office of Nuclear Reactor Regulation
301-415-8199 / FOIA CAC: ZF0000

From: Robles-Alcaraz, Jesse
Sent: Tuesday, January 30, 2018 9:29 AM
To: Kauffman, Lisa <Lisa.Kauffman@nrc.gov>; Jones, Heather <Heather.Jones@nrc.gov>
Cc: Thomas, Eric <Eric.Thomas@nrc.gov>
Subject: RE: ACTION: FOIA NRC-2018-000304 - estimate due 1/30/18

Lisa,

The document contains some information that needs to be redacted. I estimate the review to take about 8 hours.

Thanks,

Jesse E. Robles
U.S. Nuclear Regulatory Commission
Reactor Systems Engineer
NRR/DIRS/IOEB
301-415-2940
301-415-3061 (fax)
Jesse.Robles@nrc.gov

From: Kauffman, Lisa
Sent: Wednesday, January 24, 2018 3:28 PM
To: Jones, Heather <Heather.Jones@nrc.gov>
Cc: Robles-Alcaraz, Jesse <Jesse.Robles-Alcaraz@nrc.gov>; Thomas, Eric <Eric.Thomas@nrc.gov>
Subject: ACTION: FOIA NRC-2018-000304 - estimate due 1/30/18
Importance: High

Hi Heather,

A FOIA came in requesting ML18019A140. At this time I only need an estimate for how long it would take staff to review the record for FOIA release. The estimate is due back to me by **January 30th**.

Below is the link to the document in ADAMS:

View ADAMS Properties ML18019A140
Open ADAMS Document (EOC OE Note-2018)

Thanks,
Lisa

Lisa Kauffman, FOIA Coordinator
Reactor Information Services Branch
Division of Mission and Program Support
Office of Nuclear Reactor Regulation
301-415-8199 / Lisa.Kauffman@nrc.gov

From: Chidichimo, Gabriele
Sent: Wednesday, January 24, 2018 2:45 PM
To: RidsNrrMailCenter Resource <RidsNrrMailCenter.Resource@nrc.gov>
Cc: Kauffman, Lisa <Lisa.Kauffman@nrc.gov>
Subject: FW: FOIA Assignment for NRC-2018-000304- please provide fee estimate for non excepted requester by 1/30/18

Dear Lisa, no incoming attached since the requester submitted this FOIA electronically.
We just tasked in Foia Online.
The ML was created by NRR and is non public
Thanks
Gaby

From: foia@regulations.gov [<mailto:foia@regulations.gov>]
Sent: Wednesday, January 24, 2018 10:53 AM
To: Chidichimo, Gabriele <Gabriele.Chidichimo@nrc.gov>
Subject: [External_Sender] FOIA Assignment for NRC-2018-000304

You have been assigned to the FOIA request NRC-2018-000304. Additional details for this request are as follows:

- Assigned By: Stephanie Blaney
- Request Tracking Number: NRC-2018-000304
- Due Date: N/A
- Requester: Paul M. Blanch
- Request Track: Simple
- Short Description: N/A
- Long Description: ML18019A140, EOC OE Note-2018.

Robles-Alcaraz, Jesse

From: Robles-Alcaraz, Jesse
Sent: Tuesday, February 13, 2018 8:24 AM
To: Thompson, John
Subject: RE: FOIA NRC-2018-000304
Attachments: EOC_proposed redactions.pdf

Here is an updated version with

(b)(5)

From: Thompson, John
Sent: Tuesday, February 13, 2018 8:22 AM
To: Robles-Alcaraz, Jesse <Jesse.Robles-Alcaraz@nrc.gov>
Subject: RE: FOIA NRC-2018-000304

ok

From: Robles-Alcaraz, Jesse
Sent: Tuesday, February 13, 2018 8:11 AM
To: Sigmon, Rebecca <Rebecca.Sigmon@nrc.gov>; Thompson, John <John.Thompson@nrc.gov>; Carneal, Jason <Jason.Carneal@nrc.gov>; Blusius, Brian <Brian.Blusius@nrc.gov>
Subject: FOIA NRC-2018-000304

(b)(5)

Thanks,

Jesse E. Robles
U.S. Nuclear Regulatory Commission
Reactor Systems Engineer
NRR/DIRS/IOEB
301-415-2940
301-415-3061 (fax)
Jesse.Robles@nrc.gov

DRAFT

~~OFFICIAL USE ONLY - SENSITIVE INTERNAL INFORMATION~~

DO NOT FORWARD ANY EXCERPTS OUTSIDE OF NRC WITHOUT FIRST OBTAINING PERMISSION FROM ORIGINATOR

Operating Experience Note

No. 19

January 2018

(b)(5)

From: Kauffman, Lisa
To: Chidichimo, Gabriele
Subject: RE: FOIA NRC-2018-000304 NRR Response
Date: Thursday, February 15, 2018 12:33:20 PM

Hi Gaby,

(b)(5)

Thanks,
Lisa

From: Chidichimo, Gabriele
Sent: Thursday, February 15, 2018 11:19 AM
To: Kauffman, Lisa <Lisa.Kauffman@nrc.gov>
Subject: FW: FOIA NRC-2018-000304 NRR Response
Importance: High

Sorry for the confusion Lisa

Please see attachment:

This NRC letter (not on official letterhead) lists the ML numbers above the concurrence block

(b)(5)

Thank you
Gaby

From: Kauffman, Lisa
Sent: Tuesday, February 13, 2018 2:59 PM
To: Chidichimo, Gabriele <Gabriele.Chidichimo@nrc.gov>
Subject: FW: FOIA NRC-2018-000304 NRR Response
Importance: High

Hi Gaby,

See NRR's response to this FOIA below.

Let me know if you need anything else.

Thanks,
Lisa

From: Robles-Alcaraz, Jesse

Sent: Tuesday, February 13, 2018 12:49 PM

To: Kauffman, Lisa <Lisa.Kauffman@nrc.gov>

Cc: Thomas, Eric <Eric.Thomas@nrc.gov>

Subject: RE: ACTION: FOIA NRC-2018-000304 - Record due on 2/13/18

Lisa,

Attached is the redacted document. (b)(5)

(b)(5)

Thanks,

Jesse

April 19, 2014

Mr. George I. Hutcherson, Director
Suppliers and New Plant Deployment
Institute of Nuclear Power Operations
Suite 100
700 Galleria Parkway, SE
Atlanta, GA 30339-5943

Dear Mr. Hutcherson:

I am responding to your letter, dated February 5, 2014, which enclosed an affidavit from the Institute of Nuclear Power Operations (INPO) related to documents INPO voluntarily submits to the United States Nuclear Regulatory Commission (NRC). The NRC understands that the purpose of INPO submitting the affidavit is to ensure the NRC will protect from public disclosure INPO's trade secrets and its confidential and proprietary documents that are voluntarily submitted to the NRC.

The NRC reviewed the enclosed affidavit and finds it acceptable. The NRC acceptance is based, in part, on the understanding that INPO will be including "Proprietary" markings on each page of submitted documents containing trade secrets or other proprietary or confidential information rather than relying exclusively on other markings such as "General Distribution," "Limited Distribution" and/or "Restricted Distribution" as it has in the past.

In addition, the NRC assures INPO that the adoption of this new INPO marking practice for documents submitted to the NRC from this point forward does not change how the NRC intends to handle and protect previous INPO document submissions that were not marked as "Proprietary." Consistent with previous understandings between the NRC and INPO, the NRC will continue to treat as proprietary, and accord appropriate protections to, previously submitted INPO documents that INPO identified as containing trade secrets or other proprietary or confidential information, but did not explicitly mark as "Proprietary."

The affidavit will be distributed as necessary to any NRC office or NRC personnel that may come into contact with INPO documents and information to assure the protection of INPO's trade secrets and its confidential and proprietary information.

G. Hutcherson

-2-

If you have any questions regarding this letter, please contact Mr. F. Paul Peduzzi, Executive Technical Assistant, Office of the Executive Director for Operations at (301) 415-1167 or by email at francis.peduzzi@nrc.gov.

Sincerely,

/RA/

Michael R. Johnson
Deputy Executive Director for Reactor
and Preparedness Programs
Office of the Executive Director for Operations

G. Hutcherson

-2-

If you have any questions regarding this letter, please contact Mr. F. Paul Peduzzi, Executive Technical Assistant, Office of the Executive Director for Operations at (301) 415-1167 or by email at francis.peduzzi@nrc.gov.

Sincerely,

/RA/

Michael R. Johnson
Deputy Executive Director for Reactor
and Preparedness Programs
Office of the Executive Director for Operations

DISTRIBUTION: OEDO-14-00152

EDO r/f

OGC

ADAMS ACCESSION NO: Pkg: ML14072A230, Incoming: ML14072A233, Memo: ML14105A473 *Via email

OFFICE	OEDO/TCCM	OEDO/TCCM	OGC	OEDO/DEDR
NAME	F. Peduzzi	K. Brock	J. Adler*	M. Johnson
DATE	04/16 /14	04/16/14	04/18/14	04/19/14

OFFICIAL RECORD COPY

BEFORE THE U.S. NUCLEAR REGULATORY COMMISSION

AFFIDAVIT OF THE INSTITUTE OF NUCLEAR POWER OPERATIONS
PURSUANT TO 10 C.F.R. § 2.390

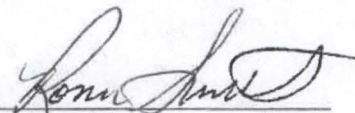
PERSONALLY APPEARED BEFORE ME, the undersigned officer duly authorized by law to administer oaths, RONN SMITH, who after being sworn stated of his personal knowledge as follows:

1. I am the Director of Communications for the Institute of Nuclear Power Operations ("INPO") in Atlanta, Georgia. I have held this position continuously since July 2007 and previous to that I was a section manager in Communications. In addition, I was the Manager of Corporate Communications at Wolf Creek from February 1986 through October 1994. In all, I have nearly thirty years of personal experience in the commercial nuclear power industry.
2. As Director of Communications for INPO, I have been specifically delegated by the Chief Executive Officer of INPO the function of protecting INPO's confidential and proprietary information and reports from public disclosure. I have similarly been specifically delegated the responsibility of designing and implementing procedures for ensuring that INPO's confidential and proprietary information and reports are held in confidence by INPO. Finally, I am authorized by INPO to apply on its behalf for confidential treatment of its confidential and proprietary information and reports under 10 C.F.R. § 2.390.
3. The information and reports that INPO voluntarily submits to the U.S. Nuclear Regulatory Commission (the "NRC") include INPO Operating Experience products,

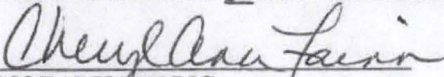
INPO Event Reports (IERs); other INPO documents and reports; and information in the INPO Consolidated Events (ICES) Database (collectively, "Confidential INPO Documents").

4. The Confidential INPO Documents include trade secrets and are confidential commercial information that INPO does not customarily make available to the public, are held in confidence by INPO, are submitted voluntarily by INPO to the NRC, are not available in public sources, and whose disclosure would cause substantial harm to INPO's competitive position. INPO voluntarily submits the Confidential INPO Documents to the NRC in confidence, and with the expectation and understanding that they will be maintained as confidential.
5. The Confidential INPO Documents other than the ICES database are marked with one of four distribution categories: "Open Distribution," "General Distribution," "Limited Distribution," or "Restricted Distribution." Documents designated as "Open Distribution" contain no INPO proprietary information and are available for release to the general public. Documents marked as "General Distribution," "Limited Distribution," or "Restricted Distribution" contain trade secrets or other confidential and proprietary information that INPO does not customarily release to the public and maintains in confidence. The ICES database is marked "Proprietary Commercial Information," or "ICES Proprietary Information," and also contains trade secrets or other information that INPO does not release to the public and maintains in confidence. The NRC should not release to the public any Confidential INPO Documents marked as "General Distribution," "Limited Distribution," or "Restricted Distribution," or any data from the ICES database.

6. INPO also voluntarily submits to the NRC Performance Indicator data, including certain data that are trade secrets and/or are confidential commercial information, which INPO does not customarily release to the public, are held in confidence by INPO, are not available in public sources, and whose disclosure would cause substantial harm to INPO's competitive position. INPO voluntarily submits the confidential Performance Indicator data to the NRC in confidence, and with the expectation and understanding that it will be maintained as confidential. The file name of each file in the Performance Indicator data that contains trade secrets or is otherwise confidential contains the word "proprietary." The NRC should not release to the public any information in the Performance Indicator data that is contained in a file with the word "Proprietary" in the file name.
7. The public disclosure of any of the documents, information, reports, and data described above would cause substantial harm to the competitive position of INPO, taking into account the fact that it would be extremely difficult to obtain the same information elsewhere, and considering the amount of effort and resources expended by INPO in developing such materials.


Ronn Smith

SUBSCRIBED & SWORN TO
BEFORE ME THIS 5 DAY OF FEBRUARY 2014


NOTARY PUBLIC



Ennis, Tina

From: Paul <pmblanch@comcast.net>
Sent: Wednesday, February 21, 2018 2:36 PM
To: Chidichimo, Gabriele
Cc: Paul Blanch
Subject: [External_Sender] Re: status update NRC 2018 000304

Thanks for the update

Paul Blanch

(b)(6)

Cell

(b)(6)

On Feb 21, 2018, at 1:56 PM, Chidichimo, Gabriele <Gabriele.Chidichimo@nrc.gov> wrote:

Good afternoon Mr. Blanch,

We are pleased to inform you that your FOIA request has been processed and is presently undergoing legal review.

The requested records will be provided to you in the near future

Thank you,

Gaby

Gabriele Chidichimo
Government Information Specialist
OCIO-FOIA
US NRC
Tel: 301-415-6968
Mailbox stop TWFN-2-F43
Gabriele.Chidichimo@nrc.gov

RESPONSE TO FREEDOM OF
INFORMATION ACT (FOIA) REQUEST

2018-000304

1

RESPONSE
TYPE☐

INTERIM

☒

FINAL

REQUESTER:

Paul Blanch

DATE:

2/23/2018

DESCRIPTION OF REQUESTED RECORDS:

ML18019A140, EOC OE Note-2018.

Final response publicly
available at ML18057A007

PART I. - INFORMATION RELEASED

You have the right to seek assistance from the NRC's FOIA Public Liaison. Contact information for the NRC's FOIA Public Liaison is available at <https://www.nrc.gov/reading-rm/foia/contact-foia.html>

- ☐ Agency records subject to the request are already available on the Public NRC Website, 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*

\$0.00

*See Comments for details

- ☐ You will be billed by NRC for the amount listed.
- ☐ You will receive a refund for the amount listed.
- ☐ Fees waived.

NO FEES

- ☒ Minimum fee threshold not met.
- ☐ Due to our delayed response, you will not be charged fees.

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 90 calendar days of the date of this response by sending a letter or e-mail 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." You have the right to seek dispute resolution services from the NRC's Public Liaison, or the Office of Government Information Services (OGIS). Contact information for OGIS is available at <https://ogis.archives.gov/about-ogis/contact-information.htm>

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

Please note:

The requested record is being released in part

Signature - Freedom of Information Act Officer or Designee

Stephanie Blaney / 81

Distribution

NRR

OFFICE	ACTION OFFICER	FOIA OFFICER	OGC		
NAME	GChidichimo	SBlaney	Cqm		
DATE	02/21/2018	2/23/18	2/24/18		

☒ PUBLIC ADAMS
☐ NON-PUBLIC ADAMS

RESPONSE TO FREEDOM OF INFORMATION
ACT (FOIA) / PRIVACY ACT (PA) REQUEST

NRC 2018 000304

DATE

2/23/2018

PART II.A -- APPLICABLE EXEMPTIONS

GROUP

☒ X

Records subject to the request that are contained in the specified group are being withheld in their entirety or in part under the Exemption No.(s) of the PA and/or the FOIA as indicated below (5 U.S.C. 552a and/or 5 U.S.C. 552(b)).

☐

Exemption 1: The withheld information is properly classified pursuant to Executive Order 12958.

☐

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 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., Section 4702(b), prohibits the disclosure of contractor proposals in the possession and control of an executive agency to any person under section 552 of Title 5, U.S.C. (the FOIA), 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 commercial or financial information that is being withheld for the reason(s) indicated.

☒

The information is considered to be confidential business (proprietary) information.

☐

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 was submitted by a foreign source and received in confidence pursuant to 10 CFR 2.390(d)(2).

☐

Disclosure will harm an identifiable private or governmental interest.

☒

Exemption 5: The withheld information consists of interagency or intraagency records that are not available through discovery during litigation. Applicable privileges:

☒

Deliberative process: Disclosure of predecisional information would tend to inhibit the open and frank exchange of ideas essential to the deliberative process. Where records are withheld in their entirety, the facts are inextricably intertwined with the predecisional information. There also are no reasonably segregable factual portions because the release of the facts would permit an indirect inquiry into the predecisional process of the agency.

☐

Attorney work-product privilege. (Documents prepared by an attorney in contemplation of litigation)

☐

Attorney-client privilege. (Confidential communications between an attorney and his/her client)

☐

Exemption 6: The withheld information 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 enforcement proceeding (e.g., it would reveal the scope, direction, and focus of enforcement efforts, and thus could possibly allow recipients to take action to shield potential wrong doing or a violation of NRC requirements from investigators).

☐

(C) Disclosure could constitute an unwarranted invasion of personal privacy.

☐

(D) The information consists of names of individuals 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 (Specify)

PART II.B -- DENYING OFFICIALS

Pursuant to 10 CFR 9.25(g), 9.25(h), and/or 9.65(b) of the U.S. Nuclear Regulatory Commission regulations, it has been determined that the information withheld is exempt from production or disclosure, and that its production or disclosure is contrary to the public interest. The person responsible for the denial are those officials identified below as denying officials and the FOIA/PA Officer for any denials that may be appealed to the Executive Director for Operations (EDO).

DENYING OFFICIAL	TITLE/OFFICE	RECORDS DENIED	APPELLATE OFFICIAL		
			EDO	SECY	IG
Stephanie Blancy	FOIA/PA Officer	X	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appeal must be made in writing within 30 days of receipt of this response. Appeals should be mailed to the FOIA/Privacy Act Officer, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, for action by the appropriate appellate official(s). You should clearly state on the envelope and letter that it is a "FOIA/PA Appeal."

Robles-Alcaraz, Jesse

From: Thompson, John
Sent: Thursday, April 26, 2018 11:23 AM
To: Robles-Alcaraz, Jesse
Subject: FW: draft for OpE Note on RPS test boxes
Attachments: FermiRPS.testbox.docx

One more for EOC FOIA.

john

From: Thompson, John
Sent: Wednesday, June 28, 2017 11:37 AM
To: Sigmon, Rebecca <Rebecca.Sigmon@nrc.gov>; Robles-Alcaraz, Jesse <Jesse.Robles-Alcaraz@nrc.gov>
Subject: draft for OpE Note on RPS test boxes

Here is a draft of the RPS test box issue.

Feel free to comment (chop and dice).

(b)(5)

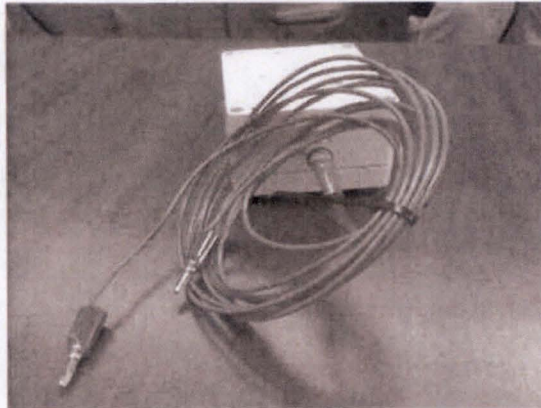


john

Fermi 2- Use of a RPS Test Box during Performance of Quarterly RPS Functional Channel Testing Results in the Inadvertent Loss of Two RPS Trip Functions.

In September of 2016, during at-power quarterly surveillance testing of the reactor protection system (RPS) instrumentation for the Main Steam Isolation Valves (MSIVs) and Turbine Stop Valves (TSV), the licensee inadvertently disabled two scram inputs associated with the Closure Functions for both MSIVs and TSVs.

More importantly, recently revised surveillance test procedures did not ensure that 3 out of the 4 steam lines closing in a trip remain available, as required by the plant's TS (See Fermi LER 2017-001-00 for additional information). This oversight was the result of a change in testing methodology via use of an "RPS test box."



BWROG Recommendation 30

The use of the RPS Test Box was a concept promoted by the Boiling Water Reactor Owner's Group (BWROG) in 2008 current version is Recommendation 30, BWROG-TP-09-026, Revision 7). The goal was to reduce unnecessary RPS actuations and unplanned half scrams. According to the BWROG, the primary benefit of using the RPS test box is "the ability to test end of channel function during Channel Functional Tests while preventing a half scram from occurring. Use of this test box also allows some corrective work without further exposure to inadvertent half scrams for a single failure on a different channel. This reduces exposure to single failure on the opposite division."

The RPS test box typically consists of a 3-ohm resistor in parallel with a 2.5 VAC lamp terminated with banana jacks. Electrically, the RPS Test box is a low resistance path in parallel with the trip logic relay contacts. When the RPS test box is connected in parallel with channel input, the circuit will not be broken when the channel under test is actuated (trip aux relay drops out). The circuit will continue to pass current through the test box, keeping the scram contactors energized. The current will drop sufficient voltage across the resistor to illuminate the lamp, indicating the opening of relay contact under test, while not de-energizing (actuating) the scram contactors.

Aside from stating that users should review their licensing basis and other commitments to ensure that use of the test box is acceptable. **BWROG Recommendation 30** (b)(4)

(b)(4)

Use of a RPS test box was recognized by the licensee as a change in testing methodology that required a formal 50.59 evaluation. However, the licensee's 50.59 evaluation appears not to adequately address the implications of using the RPS test box given the complexities created

when bypassing multiple (parallel) relay contacts in conjunction with the additional TS Bases requirement to maintain operable 3 of 4 steam line signals. This lack of understanding and coordination by the licensee was a significant factor that resulted in the loss of the two scram functions and non-compliance with TS 3.3.1.1. This error was introduced, in part, based on an apparent inadequate review resulting from a lack of appreciation of the complexities with bypassing parallel circuits and how these circuits interrelate to satisfy the TS operability requirements.

Attachment-7 Summary of Construction Experience (ConE)

Operating and construction experience was screened by the Operating Experience (OpE) Center of Expertise (COE) staff throughout the assessment period. **As a result, there was one proposed revision to inspection procedure (IP) 41501, "Review of Training and Qualification Programs"** during the assessment period that has been accepted and is currently being sent out for regional review. A copy of the proposed revision was sent out separately to Mr. George Khouri. If needed, please contact Michael Webb for a status update.

When planning construction inspections for the next assessment period, the following noteworthy Operating and Construction experience issues should be considered, as applicable:

1. Oil Sight Glass Issues (see first event in ML 18019A140). Please review the inspector takeaways in this article. Related to IP 65001.06, "Inspection of ITAAC-Related Installation of Mechanical Components";
2. (b)(4) and Contractor Oversight (see page 7 of ML 18019A140). Related to IP 65001.08, "Inspection of the ITAAC-Related Welding Program";
3. NRC Access was granted to the construction experience module of the Institute of Nuclear Power Operations (INPO) Consolidated Events System (ICES) (see page 4 of ML 17223A548). (b)(5)
4. Falsification of records by suppliers including CB&I Laurens, Le Creusot and Kobe Steel. When planning for construction inspections, inspectors should be aware of the multiple examples of record falsification problems by multiple suppliers;
5. (b)(4) Related to IP 65001.09, "Inspection of ITAAC-Related Installation of Electric and Fiber Optic Cable";
6. (b)(4)
7. EN 53167 – Duane Arnold- Insufficient design clearance to ground. This event covers the need to include sufficient design margin to account for dust accumulation and insect intrusion. For additional information, see INPO ICES Report 427646. Related to IP 65001.08, "Inspection of ITAAC-Related Installation of Electric Components and Systems" ;
8. Ibaraki nuclear plant used erroneous fuel rod data for over 40 years. Related to IP 35007, "Quality Assurance Program Implementation During Construction and Pre-Construction Activities" and IP 65001.A, "Inspection of the As-Built Attributes for Structures, Systems, and Components (SSCs) Associated with ITAAC";

9. (b)(4)
- (b)(4) Related to to IP 65001.08, "Inspection of ITAAC-Related Installation of Electric Components and Systems" ;
10. Point Beach Unit 1 LER 2017-003, "Degraded Condition" (see ML17347A773). The most likely cause of the degraded barrier was crater cracking at a weld stop point in the root valve to instrument tubing welded joint. Related to IP 65001.0B, "Inspection of the ITAAC-Related Welding Program";
11. LER 3972016002R01 - Columbia Generating Station - Valve Closure Results In Momentary Increase In Secondary Containment Pressure (LER Supplement), is an illustration of a latent consequence of an improper electrical termination. Related to IP 65001.09, "Inspection of ITAAC-Related Installation of Electric and Fiber Optic Cable";
12. EN 52619 - EN - VOGTLE - Automatic Actuation Of Emergency Diesel Generator. The licensee determined the cause for the loss of the 1BA03 bus was that in the Open Phase panel, the cables for the trip signal and alarm signal were reversed. Related to IP 65001.09, "Inspection of ITAAC-Related Installation of Electric and Fiber Optic Cable";
13. (b)(4)