

NRR-PMDA-ECapture Resource

From: Evans, Michele
Sent: Wednesday, July 09, 2014 10:11 PM
To: Thadani, Mohan; Beasley, Benjamin
Cc: Lund, Louise
Subject: Fw: Comments on draft director's decision on FitzPatrick c nde ser tube petition
Attachments: 20140709-jaf-ucs-nrc-condenser-tube-directors-decision.pdf

Mohan and Ben,

Please make sure this gets into the right process.

Michele

Sent via My Workspace for iOS

----- Forwarded Message -----

From: "Dave Lochbaum" <DLochbaum@ucsusa.org>
Date: Wednesday, July 9, 2014 at 2:21:53 PM
Subject: Comments on draft director's decision on FitzPatrick c nde ser tube petition
To: "Evans, Michele" <Michele.Evans@nrc.gov>
"jessica@allianceforagreenecconomy.org" <jessica@allianceforagreenecconomy.org>, "timj@nirs.org" <timj@nirs.org>, "Gunter, Paul" <paul@beyondnuclear.org>, "Dean, Bill" <Bill.Dean@nrc.gov>
Dear Ms. Evans:

Attached are our comments on the proposed director's decision regarding the petition we submitted in July 2013. I don't plan on also sending in a hard copy via regular mail, but will do so upon request.

Diane Vaughan described a behavior pattern in her The Challenger Launch Decision book something she termed the normalization of deviance. It explained how NASA observed a deviant condition - clear signs of O-ring failure where segments of the external fuel tanks were connected - a total of twelve times before the tragic Challenger disaster. Such O-ring failures were not supposed to happen. But because they happened without significant consequence, NASA's senior managers dismissed it as merely annoying. Seven Americans were later "annoyed" to death when Challenger blew up shortly after launch when failed O-rings ignited the external fuel tanks. The shuttle's fuel tanks were then re-designed to eliminate the O-rings. Seven lives too late, but the problem was fixed.

The NRC should not pass up this great chance to protect against declining performance trends at Fitzpatrick.

Thanks,
Dave Lochbaum
UCS

July 9, 2014

Michele G. Evans, Director
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

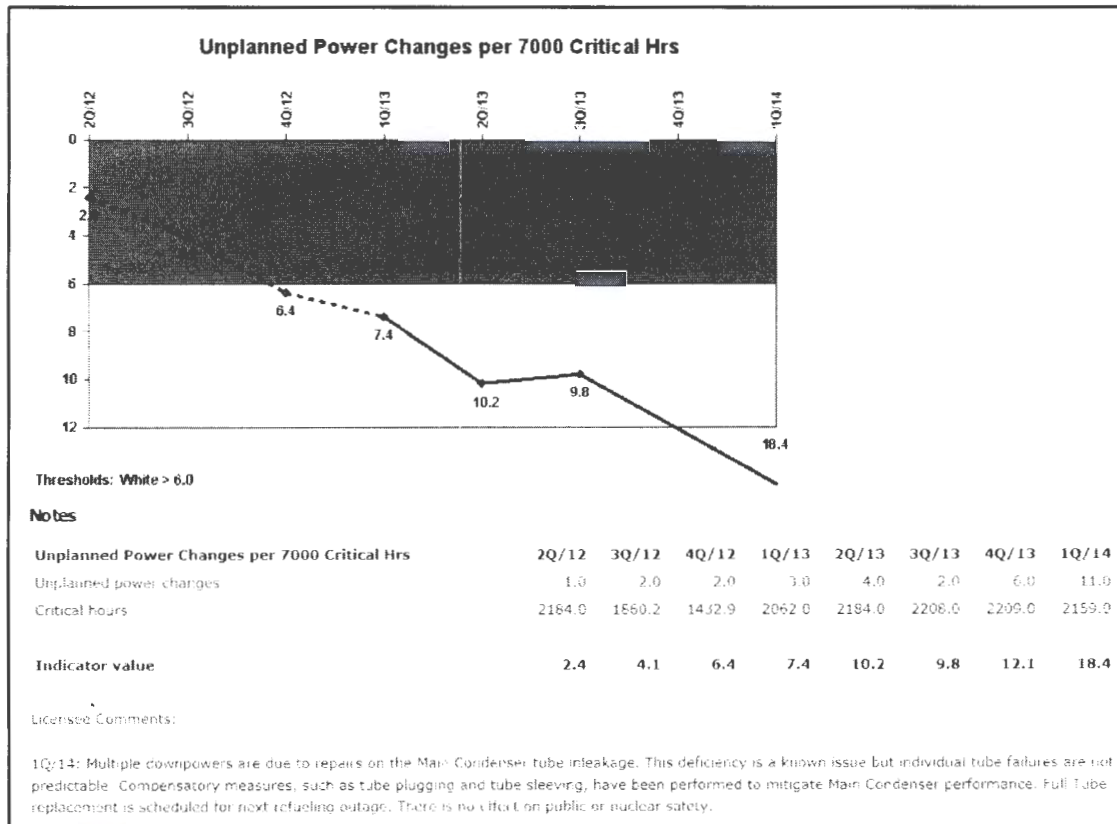
**SUBJECT: Comments on Proposed Director's Decision on 10 CFR §2.206
for the James A. FitzPatrick Nuclear Power Plant**

Submitted electronically to Michele.Evans@nrc.gov

Dear Ms. Evans:

On behalf of the Alliance for a Green Economy, Beyond Nuclear, and the Union of Concerned Scientists, I am responding to the proposed director's decision you transmitted by letter dated June 27, 2014, regarding the petition we submitted on July 25, 2013 pursuant to 10 CFR §2.206. If the 337 days it took the NRC to respond to our safety petition is any indication, we appreciate the careful, deliberate consideration the NRC staff gave to the issues we raised. We also appreciate the compliment about our competence and capabilities you have implicitly conveyed by only giving us 30 days to review and comment on information it took the larger NRC staff nearly eleven times longer to prepare. I re-read our petition to refresh my recollection of the safety issues we had raised a year ago.

The proposed director's decision states on page 3 that Entergy informed the NRC on January 21, 2013, that the unplanned power change performance indicator crossed the green to white threshold. As shown in this snapshot from the NRC's Reactor Oversight Process webpages, this performance indicator continued to trend downward. In fact, it is now three times worse than the green-to-white threshold of six unplanned power changes per 7,000 critical hours. It has literally dropped off the chart. When the NRC developed this chart back in 2000, the agency did not contemplate any reactor experiencing more than 12 unplanned power changes per 7,000 critical hours. Yet FitzPatrick reached 18.4 unplanned power changes per 7,000 critical hours by the first quarter of 2014.



Thus, FitzPatrick's performance has literally dropped off the charts—far, far below that ever envisioned by the NRC staff in designing this safety measure.

The proposed director's decision on page 4 states that Entergy determined the root cause of the condenser tube failures causing the repetitive unplanned power changes "to be failure to include inner-diameter condenser-tube wear in any component or system monitoring plan" and that the NRC staff further determined that the root cause "included Entergy's failure to incorporate applicable operating experience from the 1995 condenser-tube replacement in an appropriate system or program." In other words, the recurring problems were within Entergy's control to prevent, but they utterly failed to do so.

Page 4 of the proposed director's decision also describes how Entergy implemented corrective actions to reduce the number of unplanned power changes by "sleeving the outlet of the condenser tubes as a temporary measure until the condenser tubes could be replaced." Not only did these corrective actions utterly fail to reduce the number of unplanned power changes, the performance indicator shows that Entergy's efforts have failed to even slow down the steadily rising number of unplanned power changes.

Thus, Entergy's inability to have prevented the condenser-tube degradation problem was matched by its inability to implement an effective interim remedy. Two wrongs still don't make a right.

Entergy's inabilities have resulted in more and more unplanned power changes at FitzPatrick to allow more and more workers to fix more and more condenser tubes. FitzPatrick is a boiling water reactor (BWR). The condenser at BWRs receives radioactive steam produced directly within the reactor pressure vessel. This steam is exhausted directly into the condenser from the low pressure turbines. During reactor operation, concrete and masonry block walls protect worker from the radioactive steam flowing through the low pressure turbines. While the waterbox containing the leaking condenser tube(s) may be isolated, there is still radioactive steam entering the adjacent condenser waterboxes while the reactor continues to operate. The steadily degrading condenser tubes have exposed workers at FitzPatrick to steadily increasing amounts of radiation. And that radiation exposure counts, even though the condenser is classified as non-safety-related.

As noted in the email dated February 28, 2014, from the Entergy senior manager at FitzPatrick to all plant workers (provided in the enclosure to this letter), the repeated condenser tube repairs have repeated worker dose implications. While the radiation doses obtained by these workers might indeed be "low" as Mr. Sullivan writes, there would be zero need for condenser tube repairs and associated worker radiation exposures if the worn-out condenser tubes were replaced during the next refueling outage as we request.

We hope that the NRC is well aware of the fact that the recurring unplanned power changes at FitzPatrick are not merely to replace a leaking condenser this time and another next time. We hope the NRC is well aware of the fact that the recurring unplanned power changes sometimes result in lots of condenser tubes being plugged. As noted in the email dated March 18, 2014, from the Entergy senior manager at FitzPatrick to all plant workers (provided in the enclosure to this letter), workers planned "to plug 107 tubes identified as vulnerable to in-leakage." And as noted in the email dated March 23, 2014, from the Entergy senior manager at FitzPatrick to all plant workers (provided in the enclosure to this letter), workers plugged eight tubes.

The proposed director's decision would deny the actions requested in our petition to ensure Entergy replaces the worn-out condenser tubes at FitzPatrick during the refueling outage scheduled this fall. What would prompt the NRC to compel Entergy to replace the worn-out condenser tubes at FitzPatrick? The unplanned power changes performance indicator dropping all the way down to a zillion over the past 7,000 critical hours? Or would the NRC continue meekly watching as it dropped past two zillion, three zillion, ninety zillion, etc?

Page 6 of the proposed director's decision states that "Since the licensee's corrective actions have not been sufficient to reduce unplanned power changes, the NRC staff will keep the Supplemental Inspection 95001 open until additional actions are taken." Which of the following measures best protects the people living around FitzPatrick?

1. NRC keeping Supplement Inspection 95001 open.
2. NRC granting our petition by not allowing Entergy to restart the FitzPatrick reactor from its fall 2014 outage unless the worn out condenser tubes are replaced

There's only one honest answer to this question, and it's not the first one.

We emphasize that our petition did not seek to compel Entergy to change its plans and replace the condenser tubes during the fall 2014 refueling outage at FitzPatrick. Entergy had already announced plans to conduct the condenser tube replacement during this refueling outage. All we requested was that the NRC take steps to eliminate the option of Entergy reneging on its promise and deferring the replacement project to a later outage.

Hopefully the NRC has not yet forgotten an applicable lesson from the Davis-Besse debacle. We certainly have not forgotten. For several refueling outages in a row, that owner announced plans to modify the service platform above the reactor vessel head to facilitate inspections under the NRC-mandated boric acid corrosion control program. The owners of all other reactors like Davis-Besse had modified the service platform. But for several refueling outages in a row, Davis-Besse's owner changed its plans and opted NOT to modify the service platform. This series of decisions contributed to boric acid corrosion of the reactor vessel head and Davis-Besse coming closer to reactor core meltdown than any reactor since the 1979 partial meltdown at Three Mile Island Unit 2. The owner confessed to the NRC that it had placed production ahead of safety.

And the service platform at Davis-Besse is non-safety-related. That label did not prevent it from factoring in one of the worst nuclear safety related events of the past quarter century.

We are therefore unimpressed with the proposed director's decision relying so heavily on the condenser at FitzPatrick being non-safety-related. That fact was irrelevant when NRC dispatched a team to FitzPatrick to conduct the Supplement Inspection 95001 that is still "open." It is equally irrelevant in determining whether to take effective measures to protect the public around FitzPatrick from continued reactor operation with worn-out condenser tubes. And we hasten to remind the NRC staff now that a past NRC director's decision dismissed all the circumstantial evidence of pending disaster and allowed Davis-Besse to continue operating closer and closer to that outcome. Two wrongs still don't make a right.

As we have stated, Entergy has already announced plans to replace the condenser tubes during the fall 2014 refueling outage at FitzPatrick. It would be an appallingly poor decision for Entergy to opt instead for more band-aid fixes and defer the long overdue replacements to another outage. The NRC must not enter into an appallingly poor decision competition by deciding to provide Entergy with this unacceptable option. We urge the NRC to grant our petition and compel Entergy to implement its planned replacement of the condenser tubes at FitzPatrick this fall.

If FitzPatrick restarts from its fall 2014 outage without having replaced the worn out condenser tubes, the NRC will have failed the community and the work force.

Sincerely,

A handwritten signature in black ink, reading "David A. Fubler". The signature is written in a cursive, flowing style with a large initial "D".

David Lochbaum
Director, Nuclear Safety Project
Union of Concerned Scientists
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Enclosure:

Transmittal letter and emails extracted from Entergy's submittal dated April 30, 2014, of first quarter 2014 information to the New York State Department of Public Service.



**Entergy Nuclear Northeast
Entergy Nuclear Operations, Inc.**

James A. FitzPatrick NPP
P.O. Box 110
Lycoming, NY 13093
Tel 315-342-3840

Chris M. Adner
Regulatory Assurance Manager - JAF

JLIC-14-0003
April 30, 2014

Bridget Frymire
Electric Division
New York State Department of Public Service
3 Empire State Plaza, 10th Floor
Albany, NY 12223

Subject: State of New York Public Service Commission
First Quarter 2014 – Lightened Regulation Reporting

James A. FitzPatrick Nuclear Power Plant
Docket No. 50-333
License No. DPR-59

Dear Ms. Frymire:

Pursuant to New York State Public Service Commission's Lightened Regulation reporting requirements, Entergy's James A. FitzPatrick Nuclear Power Plant hereby submits the required documents for the 1st Quarter 2014.

Enclosed is a listing and a copy of the required documents with the exception of the On-site Safety Review Committee meeting minutes, Safety Review Committee meeting minutes, Corrective Action Program monthly reports, and the one NRC Performance Indicator listed in the Physical Protection Cornerstone. Those documents are being submitted separately to Donna Giliberto, with a request for business confidentiality.

Should you have any questions concerning this report, please contact me at (315) 349-6766.

Sincerely,

A handwritten signature in black ink, appearing to read "C. Adner", written in a cursive style.

Chris M. Adner
Regulatory Assurance Manager

CA:mh
Enclosure

From: JAFNEWS
Sent: Friday, February 28, 2014 10:17 AM
To: JAF_ALL
Subject: Message from GMPO Brian Sullivan - Station Downpower Commenced to Address Condenser In-leakage

Message from GMPO Brian Sullivan

Station Downpower Commenced to Address Condenser In-leakage

At approximately 8:50 this morning operations announced over the Gaitronics that they were initiating a reactor downpower. Station operators will reduce reactor power to approximately 70 percent.

We have been closely monitoring indications of increased in-leakage in the 'B' main condenser. Based on current conditions we are preparing to perform tube plugging. Once the suspected water box is identified, station operators will reduce reactor power to approximately 50 percent to allow for the necessary repairs. The reduction in reactor power allows for the isolation or closing of the contributing waterbox and maintains a safe working environment for our workers performing the plugging activities.

The Outage Control Center has been activated and will coordinate the associated work activities.

I know I've said this before, but it's so important that I must say it again – we can't get complacent with the work at hand. We have become very good at addressing our condenser challenges safely and with low dose exposure. Let's remain focused on that same level of commitment by demonstrating good oversight and faithfully using our human performance tools.

We should expect that members of the WANO team will take the opportunity to observe our FitzPatrick team in action. Do not let that distract us on the tasks at hand. We must stay focused.

Additional updates will be communicated. Thank you for your continued focus and dedication.

Our Site Focus Areas:

Developing People **Individual Excellence** **Work Implementation Culture**

From: JAFNEWS
Sent: Tuesday, March 18, 2014 7:53 AM
To: JAF_ALL
Subject: Message from GMPO Brian Sullivan - Addressing Condenser In-leakage & Proactive Tube Plugging

Message from GMPO Brian Sullivan

Addressing Condenser In-leakage & Proactive Tube Plugging

Station operators commenced a reactor downpower at approximately 2:15 this morning to address indications of increased in-leakage in the 'A' main condenser waterbox. Reactor power was reduced to approximately 65 percent to allow us to secure one of the station's three circulating water pumps. As discussed in a previously communication and at last week's all hands meetings, securing the pump will decrease the velocity of the flow of water and reduce the stress on the tubes. Once the pump was secured and the contributing waterbox identified and isolated, 'A'1, reactor power was reduced to 50 percent to allow for the necessary repairs to be made. The reduction in reactor power allows for the isolation or closing of the contributing waterbox and maintains a safe working environment for our workers performing the plugging activities.

Following repairs to the contributing tube(s), workers will perform proactive tube plugging in the 'A' main condenser. A plan is in place to plug 107 tubes identified as vulnerable to in-leakage. The detailed plan was developed based on an assessment of past tube failures and with assistance from a condenser expert.

The Outage Control Center has been activated and will coordinate the associated work activities. Any questions or concerns must be communicated to the OCC.

As always please proceed through these activities with a safety first focus and lets execute the work with the same level of focus and determination as we have in the past.

Additional updates will be provided. Thank you.

From: JAFNEWS
Sent: Sunday, March 23, 2014 1:52 PM
To: JAF_ALL
Subject: Message from GMPO Brian Sullivan - Downpower to Address Condenser In-leakage

Message from GMPO Brian Sullivan

Downpower to address condenser in-leakage

The condenser continues to challenge us. At approximately 8:00 last night, station operators safely initiated a reactor downpower to allow us to address indications of increased in-leakage in the 'B' main condenser. Reactor power was reduced to approximately 65 percent to allow us to secure the 'C' circulating water pump. As I noted in a communication issued last week, securing one of the station's three circulating water pumps decreases the velocity of the flow of water and reduces the stress on the tubes.

Preliminary indications pointed towards the 'B'1 waterbox as the contributing box. Once the circulating pump was secured the 'B' 1 box was removed from service. The plan was to hold reactor power at 65 percent while maintenance resources were established. Recognizing it was the weekend and in the middle of the Syracuse basketball game, start time for entry into the waterbox was scheduled for 5 a.m. allowing us to ensure the appropriate resources.

Following the removal of the 'B'1 waterbox from service, chemistry parameters did not respond as expected indicating that the contributing waterbox was the 'B' 2 and not the 'B'1. The 'B'1 waterbox was returned to service and the 'B'2 was removed. Eight (8) tubes were plugged in 'B'2 this morning. Three (3) tubes contributing to the in-leakage and five (5) as preventative measures. Once the box is filled, vented and returned to the service the focus will go back to the 'B'1 waterbox. Tubes in the 'B'1 waterbox were identified for proactive plugging based on the assessment I discussed in last week's communication. Conservatively, it's the right thing to do while we are at reduced reactor power and our resources are in place.

The station's outage control center is coordinating all work activities. I've said it several times before and I must say it again – we can't become complacent with the tasks associated with the condenser. We have become very good and maneuvering the plant, locating the contributing tube(s), making the repairs and returning the station to full power operation. It's bittersweet that we've become so good. Let's not lose sight of our number one priority – safety first.

Thank you for your continued support and focus.