



# RESPONSE TO FREEDOM OF INFORMATION ACT (FOIA) REQUEST

2017-0638

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RESPONSE TYPE

INTERIM

FINAL

REQUESTER:

David Lodhbaum

DATE:

09/01/2017

**DESCRIPTION OF REQUESTED RECORDS:**

"Digital copy of the response from Troy Pruett to William Dean's DPO letter (ML17178A311 is the ADAMS number for Mr. Dean's letter)"

### 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

#### NO FEES

AMOUNT\*

\*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.

- 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](mailto: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)

Signature - Freedom of Information Act Officer or Designee

Nina Argent

Digitally signed by Nina Argent  
DN: c=US, o=U.S. Government, ou=NRC-SW, cn=Nina Argent, 0.9.2342.19203300.100.1.1=200013425  
Date: 2017.09.01 08:31:37 -0400

SUBJECT: RESPONSE TO DIRECTOR OF NRR MEMORANDUM REGARDING DPO-2017-01 and DPO-2017-02

I am submitting my response to the Director of the Office of Nuclear Reactor Regulation's (NRR's) memorandum regarding DPO's 2017-01/02 dated June 28, 2017. I request my response be made publically available, in its entirety, as part of the DPO 2017-01/02 package.

The Director of NRR's transmittal letter undermines the credibility of NRC regulation and interferes with the ability of inspection staff to ensure licensees maintain minimum standards of safety as prescribed by Technical Specifications. The approval of the Palo Verde licensing actions to extend emergency diesel generator allowed outage times by 600 percent is, in my view, a major failure of the agency; and demonstrates a failure to understand and consistently implement regulatory precedent. Based on first-hand discussions with senior managers from NRR, I believe the staff were pressured into approving the amendments by the Director NRR ("XXXX is really pushing approval of these amendments." "XXXX really wants this approved." "XXXX is pushing hard on risk informed changes and wants this case to be an example.")

At the time the DPO's were submitted I verbally and in writing expressed concern regarding the ability to obtain an unbiased response given the person pushing for approval of the amendments (Director NRR) also served as the deciding official for the DPOs. The bias is clearly evident in the Director NRR's response (self-congratulatory, does not address inherent failures in the license amendment review process, and continues to push an agenda of less oversight through a dangerously broad application of mostly licensee controlled risk informed decision making process).

The belief by Office of Enforcement (OE) staff that the Director NRR would be able to overturn his decision regarding approval of the licensing actions demonstrates a lack of understanding of human behaviors and is disrespectful to the person submitting the DPO. OE stated the DPO process dictated the Director NRR be the deciding official even though the bias existed. This is not entirely correct, as NRC Management Directive (MD) 10.159 allows for the assignment to a different office director. During the submittal of the DPO's, OE suggested I file a DPO appeal following the Director NRR's decision, in order to have the Office of the Executive Director for Operations (OEDO) address the likely biased outcome.

The timeliness of the DPO's review failed to meet standards of excellence. The licensee received prompt attention to the licensing actions. However, immediate safety concerns submitted by NRC staff were set aside. NRC staff worked days, nights, weekends and holidays to rush the approval of the Palo Verde amendments. At the time I attempted to submit a nonconcurrency to ensure an appropriate safety review was performed. I was instructed by OE staff that the nonconcurrency process did not apply and that I could use the DPO process to have the concerns reviewed. MD 10.159 states the DPO should be resolved in 120 days. No allowance is made in MD 10.159 for escalating the timeliness goals for immediate safety concerns (Note: the DPO form has the submitter indicate if an immediate safety concern is present). NRR never attempted to process the DPO during the period the amendments were in effect. Working non-stop to satisfy the needs of a licensee and ignoring immediate safety concerns of the staff is disrespectful and fails to ensure safety is an over-riding priority.

A parallel 10 CFR 2.206 petition request was submitted by a technical reviewer in NRR. The individual also stated an immediate safety concern existed. Once again, NRR never attempted to process the petition request during the period the amendments were in effect. The delay in review of the petition allowed the amendment time-period to expire; and then the petition review

was canceled. Once again, this tactic is disrespectful to NRC staff and fails to ensure safety is an over-riding priority.

Many technical staff and senior managers in regional offices and headquarters believed the actions to approve the Palo Verde amendments were inappropriate. However, only two staff were willing to formally challenge the agency decisions. Based on conversations with NRC staff, I believe the staff feared retribution and retaliation if they formally opposed approval of the amendments. I myself was unable to participate in the review of the DPO's because of the Chilling Effect placed on me by referral of the DPO's to the Office of the Inspector General. Additionally, I believe senior NRC managers retaliated against me in April 2017, following the submittal of a third DPO involving a different site. The retaliation resulted in a continuing Chilling Effect for participating in the DPO process. I believe senior NRC staff need to rethink how DPO's are viewed. Statements from senior executives that "DPO's are nuclear bombs" and "Managers submitting DPO's cause staff to not trust management" and "The NRC receives too much negative public and media attention when DPOs are submitted" reflect poorly on agency values.

As a reminder, Nuclear Safety Culture is defined as, "*The core values and behaviors resulting from a collective commitment by leaders and individuals to emphasize safety over competing goals to ensure protection of people and the environment.*" The Director of NRR admitted in the transmittal letter that, "...guidance documents are unclear or don't seem to support the actions taken by the NRC..." The DPO Panel's transmittal letter described disagreement regarding approval of the amendments, "The principle bases for some DPO Panel members concluding the license amendment requests (LARs) should not have been approved... involve the staff not strictly adhering to available guidance, not documenting the basis for the deviations from this guidance, and inconsistently applying the guidance based upon past staff approval or denial of similar LARs. The letters indicate NRC staff in NRR failed to meet many nuclear safety culture principles:

**Resources:** Leaders ensure that personnel, equipment, procedures, and other resources are available and adequate to support nuclear safety.

**Change Management:** Leaders use a systematic process for evaluating and implementing change so that nuclear safety remains the overriding priority.

**Design Margins:** The organization operates and maintains equipment within design margins. Margins are carefully guarded and changed only through a systematic and rigorous process. Special attention is placed on maintaining fission product barriers, defense-in-depth, and safety related equipment.

**Procedure Adherence:** Individuals follow processes, procedures, and work instructions

**Challenge the Unknown:** Individuals stop when faced with uncertain conditions.

**Consistent Process:** Individuals use a consistent, systematic approach to make decisions.

**Conservative Bias:** Individuals use decision making-practices that emphasize prudent choices over those that are simply allowable. A proposed action is determined to be safe in order to proceed, rather than unsafe in order to stop.

The Director NRR stated, "The Panel incorrectly notes that the D.C. Cook emergency LAR was denied (the licensee withdrew the request prior to a formal action by the staff). While the staff had created a draft denial of the LAR, this had not received senior management review and thus did not reflect a formal agency position." This is an example of double-speak. The agency rarely, if ever, denies a license amendment request. Instead, the agency verbally communicates the intent to deny the request, at which time the licensee "volunteers" to

withdraw the amendment request. Additionally, the comparisons made between Palo Verde and D.C. Cook by the Director of NRR are misrepresented. Numerous similarities existed in the requests from D.C. Cook and Palo Verde to extend EDG allowed outage times. The primary difference in the disapproval of D.C. Cook's request and the approval of Palo Verde's request was not addressed. Staff supporting a broad application of licensee dominated risk informed decision making were unavailable and staff supporting upholding defense in depth provisions associated with emergency core cooling systems during loss of coolant accidents were present during the D.C. Cook review. Accordingly, the defense in depth argument prevailed and the amendment was withdrawn by the licensee at the agency's verbal request. In the Palo Verde case, staff supporting a broad application of licensee dominated risk informed decision making were present and staff supporting upholding defense in depth provision associated with emergency core cooling systems during loss of coolant accidents were unavailable. Accordingly, the licensee's view prevailed and the amendment approved. The dependency on who happens to be in-office during an emergent/emergency licensee amendment request on the agency decision has not been assessed.

The DPO 2017-01/02 review failed to fully consider: (1) the risk associated with the license amendment request, (2) single failure impacts, and (3) other related NRC decisions. Specifically:

### Risk

One of the two NRC Qualitative Safety Goals is, "Individual members of the public should be provided a level of protection from the consequences of nuclear power plant operation such that individuals bear no significant additional risk to life and health." The supporting NRC Quantitative Health Objectives (QHO's) are, (1) "The risk to an average individual in the vicinity of a nuclear power plant of prompt fatalities that might result from reactor accidents should not exceed one-tenth of one percent (0.1 percent) of the sum of prompt fatality risks resulting from other accidents to which members of the U.S. population are generally exposed, and (2) "The risk to the population in the area near a nuclear power plant of cancer fatalities that might result from nuclear power plant operation should not exceed one-tenth of one percent (0.1 percent) of the sum of cancer fatality risks resulting from all other causes."

For a majority of risk informed decisions, core damage frequency provides a reasonable method of assuring the QHO's are maintained. However, there are occasions where the use of core damage frequency is inappropriate in assuring the QHO's are met.

For the Palo Verde case, the amendment relied on mitigation credit from portable equipment to offset the core damage frequency estimate. In reality, the risk from the plant remaining at full power without an emergency diesel generator substantially increased the consequence element of risk. As noted in NRC guidance documents, the risk associated with Large Early Release Frequency (LERF) can be dismissed 8 days following a plant shutdown. The NRC uses LERF as a means of assuring the QHO for prompt fatality is met. While the total radioactivity released is still large after 8 days, the quantity of radioisotopes released does not result in a prompt fatality. Given the Technical Specifications required a plant shutdown that would have lasted far more than 8 days, the risk comparison that should have been considered is "zero risk" to the public for prompt fatality compared to the prompt fatality risk from an event initiated from full power with one emergency diesel generator inoperable. The NRR staff responsible for the license amendment approval ignored the agency's QHO's and qualitative safety goals.

Transient risk considerations are not a factor for extended shutdowns (shutdowns expected to last more than 8 days). Additionally, the NRC has not established reliable guidance on the degree to which transient risk concerns should be used in decision making.

### **Single Failure**

The DPO Panel report states: "The DPO Panel notes that design basis accident requirements could not be met if a single failure is assumed during the 3B DG CT (e.g., in the event of a failure of the 3A DG, the portable diesels could not be aligned in time to meet LOCA accident analysis assumptions during a LOOP). However, as discussed under Concern #6, single failure considerations are temporarily relaxed while operating under a TS AOT; therefore, the DPO Panel concluded that it is not necessary to demonstrate that manual actions associated with defense-in-depth considerations be accomplished in the same time frame required of the normal Class 1E onsite power system for design basis accidents." "For short duration CTs, the reduction in safety is minimal and likely offset by the avoidance of the risk arising from unnecessary plant transients and shutdowns. However, very long CTs may allow a plant to operate for an extended time without the same level of safety normally afforded by the plant licensing basis. As further discussed under Concern #5 and highlighted as a DPO Panel recommendation, additional guidance should be evaluated with respect to defense-in-depth, the adequacy of long duration CTs (one-time AOT extensions), and whether there should be a backstop (maximum AOT) even with supporting risk information."

NRR staff ignored single failure considerations by stating they can be relaxed during the allowed outage time. Single failure vulnerabilities are explicitly addressed for the time windows allowed by Technical Specifications. When requests to extend allowed outage times are submitted by licensees, the added risk from single failure vulnerabilities must be explicitly accounted for in the submittal and review process. For Palo Verde, the single failure vulnerability was purposefully dismissed by NRR staff without any analysis or consideration.

### **Related NRC Decisions**

The Union of Concerned Scientists is correct in their June 30, 2017, assessment regarding the Palo Verde approval and the agency decision to not support rule making for loss of coolant accidents. The agency's reversal of opinion (Palo Verde allowance to not meet safety criterion versus the D.C. Cook disapproval and termination of rulemaking) is disturbing and not reflective of nuclear safety principles.