Non-concurrence by Joseph Williams, et al.
Safety Evaluation Associated with License Amendment Request 17-037
Vogtle Electric Generating Plant Units 3 and 4
Docket Nos. 52-025 and 52-026
Combined License Numbers NPF-91 and NPF-92

1.0 INTRODUCTION

This attachment describes the basis for non-concurrence in the NRC staff's safety evaluation (ADAMS accession number ML18207A262) which seeks to approve a license amendment and exemption associated with a proposed process revising the change process associated with Tier 2* AP1000 certified design information, as requested by Southern Nuclear Company (SNC) for Units 3 and 4 at the Vogtle Electric Generating Plant. This licensing action was designated by the licensee as License Amendment Request (LAR) 17-037, and was originally submitted on December 21, 2017, with several supplements including August 10, 2018.[1] It is our understanding that an additional supplement is pending.

The principal issues which need to be resolved are:

- The licensee's request is an unprecedented licensing action that is inconsistent with Commission policy.
- The licensee's request has significant generic implications, and circumvents the rulemaking process, inappropriately reducing opportunities for public involvement.
- The staff's safety evaluation is not based on a well-described and thoroughly vetted regulatory framework. The staff's conclusions do not align with the framework described in the safety evaluation.
- Resistance to addressing these issues has created a chilling effect that has inhibited addressing issues in a timely fashion and adversely affected the free and open discussion of possible issues and challenges associated with this first-of-a-kind LAR.

In raising these issues, an opinion is not expressed about whether or not the Vogtle combined licenses can ultimately be amended as proposed by the licensee. Rather, the issues are raised to ensure that the process NRC uses to take its actions is consistent with NRC regulations, policy, and values.

2.0 POLICY AND GENERIC ISSUES NEED TO BE PRESENTED FOR COMMISSION DECISIONS

The proposed LAR is a first-of-a-kind licensing action that has no approved precedent, introducing policy issues that have not been adequately evaluated and presented for consideration by the Commission. The proposal substantially deviates from the fundamental structure of a design certification rule approved by the Commission, and is a substantial deviation from the Commission-approved change process for safety significant information. Examination of the regulatory history demonstrates that these controls and their implementation in a design certification rule were the result of extensive efforts by the NRC staff with

[1] Supplement to Request for License Amendment and Exemption: Changes to Tier 2* Departure Evaluation Process, August 3, 2018 (LAR-17-037S4), Agencywide Documents Access and Management System (ADAMS) accession number ML18215A461. This document was the proposed final supplement to the LAR, consolidating information from previous submittals.

consideration of detailed input from external stakeholders. Results of the staff's efforts were documented in a number of Commission papers throughout the early to mid-1990s, leading up to issuance of the first design certification rules. Staff Requirements Memoranda document Commission decisions on a wide variety of topics, including organizing information in a Design Control Document (DCD) by tiers, designated as Tier 1, Tier 2, and Tier 2*, with explicit Commission decisions regarding the change process to be applied to each tier. These decisions were reaffirmed in the update of 10 CFR Part 52 in 2007, with their continued relevance confirmed by staff correspondence with the Commission in 2017 and 2018, as described below.

2.1 Similar License Amendment Withdrawn In 2014

These policy considerations informed staff feedback on a previous SNC license amendment request in 2014.[2] That LAR, designated as LAR 14-008 by the licensee, sought to apply the "50.59-like" process described in the 10 CFR 52 design certification rules to all changes to Tier 2* information. The "50.59-like" process is applied to Tier 2 information to determine if NRC approval is required prior to implementing changes, so the effect of LAR-008 would be equivalent to reclassifying Tier 2* information as Tier 2.

NRC staff provided feedback in an October 23, 2014 public meeting that "Because of implications on other AP1000 COL holders and applicants as well as other certified designs, the rulemaking process may be a more appropriate regulatory tool. In addition[,] the request touches on significant policy and safety questions."[3]

Subsequent to that meeting, the NRC staff drafted a letter stating "…that the application failed to adequately address the significant policy issues raised and did not provide sufficient technical information addressing the safety issues raised. Accordingly, the NRC staff finds the application incomplete and unacceptable for docketing for NRC review pursuant to 10 CFR Section 2.101, "Filing of Application."[4] The letter also stated that "…a more appropriate regulatory venue may be one that more fully engages all stakeholders, especially other AP1000 COL holders and applicants referencing the AP1000 certified design, other reactor vendors, and the public." The staff's rationale for this decision was further explained as follows:

> Regarding the proposal in your exemption request, the staff notes that it would be a significant change to established Commission policy and would have clear implications for both current and future design certification rules and combines [sic, "combined"] licenses. The proposal is a site-specific permanent exemption from Commission requirements for all Tier 2* information, including that information which remains Tier 2* after the finding under Title 10 of the *Code of Federal* Regulations (10 CFR) Section 52.103(g). The nature of any review of such a request warrants a deliberate and detailed look at myriad technical topics and engagement with the public and internal and external stakeholders including the Commission. There are also implications for the content and form of existing regulations (Appendices A through E of 10 CFR Part 52). These kinds of issues are more appropriate for consideration through the rulemaking process, where all stakeholders have the

[2] Request for Exemption and License Amendment Regarding Changes to Tier 2* Information (LAR 14-008), August 7, 2014, ADAMS accession number ML14219A579.
[3] Summary of Public Meeting with Southern Nuclear Company and South Carolina Electric & Gas on October 23, 2014, December 8, 2014, ADAMS accession number ML14324A046.
[4] Acceptance Review of Southern Nuclear Operating Company's Request for Exemption and License Amendment (LAR 14-008) for the Vogtle Electric Generating Plant Units 3 And 4: Changes to Tier 2* Information (TAC NO. RP9497), undated draft letter, ADAMS accession number ML14314A941.

opportunity to participate in a generic change in NRC's regulatory policy with respect to the control of Tier 2* information.

The staff's feedback had been vetted with senior management, including briefings for Commission staff, and the letter was being processed through concurrence, and had received "no legal objection" from the Office of General Counsel (OGC). The licensee was informed of the staff's intent to not accept the LAR for review, and elected to withdraw the request instead. The licensee's withdrawal letter acknowledged the staff's feedback, and indicated an intent to address the issue via a petition for rulemaking.[5]

There are significant similarities between LAR-008 and LAR 17-037. Both LARs propose to revise the Commission-approved change process associated with Tier 2* information. For several Tier 2* topics, the LARs are equivalent, proposing to apply only the "50.59-like" change process to some Tier 2* items, which essentially converts a set of Tier 2* information into Tier 2. The screening criteria proposed for other topics do not obviate policy issues, as they still introduce a new change process beyond that approved by Commission, delegating review of Tier 2* information to the licensee instead of the NRC staff. Concerns expressed regarding the generic and rulemaking implications of LAR-008 still apply to LAR 17-037. There is nothing about the somewhat different approach in LAR 17-037 that clearly limits its application to the Vogtle COLs, so it still has significant generic implications. Broad generic changes to the fundamental structure of a major aspect of the AP1000 design certification have obvious rulemaking implications.

It should be noted that DLSE working level staff has acknowledged the policy and generic implications in a draft document being prepared for a Deputy Executive Director for Reactor and Preparedness Programs (DEDR) briefing. A July 23, 2018 DLSE staff email[6] forwarding this document included these statements:

- "Under current regulation, such changes would require a LAR, including an opportunity for a public hearing. This sort of change is arguably a policy issue, as the proposal modifies a Commission-approved process."
- "Other COL licensees may find it advantageous to adopt a similar approach. For example, the AP1000 licensees (e.g., Turkey Point, Lee) may propose a similar LAR with similar criteria."
- "COL licensees using other designs (e.g., Fermi, South Texas) may also consider similar LARs, but with possibly different criteria (those COLs have different Tier 2* information)"

These DLSE statements are contrary to claims made in the draft safety evaluation that LAR 17-037 applies only to the Vogtle COLs. It cannot be plausibly claimed that LAR 17-037 does not involve policy questions, or does not have generic impacts, including rulemaking.

[5] Withdrawal of Request for Exemption and License Amendment Regarding Changes to Tier 2* Information (LAR 14-008), December 15, 2014, ADAMS accession number ML14349A624.
[6] ADAMS accession number ML18247A034.

2.2 Regulatory Policy History

The structure of design certification rules, including Tier 2*, was the subject of Commission decisions as the Part 52 process was developed in the early 1990s, as documented in several Commission papers and associated SRMs. The "Regulatory History Package on Design Certification"[7] consolidates documentation of this work. Key documents from this history are summarized below.

The Tier 2* designation and the associated change process were developed during the initial design certification reviews in the early to mid-1990s. The NRC staff, with stakeholder support, previously proposed the Tier 1 and Tier 2 designations as part of an effort to define the form of a certified design rule.[8] As staff and vendor efforts proceeded with the first design certification reviews for the Advanced Boiling Water Reactor (ABWR) and System 80+ reactors, the NRC staff requested Commission approval for the staff's implementation of the two-tiered design certification rule structure, including identification of Tier 2* information.[9] The paper characterized Tier 2* as safety significant information, stating that "In general, the staff believes that Tier 2* information is more appropriate for inclusion in Tier 1 than Tier 2 if the Tier 2* category is eliminated." The staff determined that changing Tier 2* information would require NRC review and approval of a license amendment. The Commission approved the staff's proposal, including authorizing the use of Tier 2* in a June 30, 1994, staff requirements memorandum (SRM).[10]

The origins of Tier 2* were discussed further in SECY-96-077, as follows:[11]

> During the development of the Tier 1 information, the applicant for design certification requested that the amount of information in Tier 1 be minimized to provide additional flexibility for an applicant or licensee who references this design certification. Also, many codes, standards, and design processes, which were not specified in Tier 1, that are acceptable for meeting inspection, test, analysis, and acceptance criteria [ITAAC] were specified in Tier 2. The result of these actions is that certain significant information only exists in Tier 2 and the NRC does not want this significant information to be changed without prior NRC approval. This Tier 2* information is identified in the generic DCD with italicized text and brackets and the change restriction has compensated for industry's desire to minimize the amount of information in Tier 1.

The Commission approved the proposed ABWR and System 80+ rules in a December 6, 1996, SRM.[12] Similar text regarding Tier 2* appears in the final design certification rules for the ABWR and System 80+.[13]

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[7] Regulatory History Package on Design Certification, April 26, 2000, ADAMS accession number ML003761550.
[8] SECY-90-377, Requirements for Design Certification under 10 CFR Part 52, November 8, 1990, ADAMS Accession Number ML003707889).
[9] COMSECY-94-024, Implementation of Design Certification and Light-Water Reactor Design Issues, May 31, 1994 ADAMS Accession No. ML003708079.
[10] SRM-SECY-94-084 – Policy and Technical Issues Associated with the Regulatory Treatment of Non-Safety Systems and COMSECY-94-024 – Implementation of Design Certification and Light-Water Reactor Design Issues, June 30, 1994, ADAMS Accession No. ML003708098.
[11] SECY-96-077, Certification of Two Evolutionary Designs, April 15, 1996 (ADAMS Accession No. ML003708129).
[12] SRM-SECY-96-077 – Certification of Two Evolutionary Designs, December 6, 1996, ADAMS Accession No. ML003708181.
[13] 62 FR 25800, Standard Design Certification for the U.S. Advanced Boiling Water Reactor Design - Final

More recently, the staff described Tier 2* information in the 2007 update of 10 CFR Part 52:

> Tier 2* information has the same safety significance as Tier 1 information and would have received the Tier 1 designation, except that NRC decided to provide more flexibility for this type of information.[14]

The 2007 update reaffirmed the Commission's decisions regarding the expected importance of Tier 2* information, along with the associated change process.

The staff recently confirmed that modifying Tier 2* change process is a policy issue in the so-called "Transformation Paper," SECY-18-0060.[15] Enclosure 5 of that Commission paper states that "One of the driving factors behind the decision to implement distinct change processes in Parts 50 and 52 was the Commission's goal of maintaining standardization. Revising the Part 52 change process would be a policy shift away from standardization." The Tier 2* change process requested by LAR 17-037 is clearly within the scope of this text.

2.3 Generic Implications Should Be Considered by the Commission

LAR 17-037 also has generic implications which should be considered by the Commission. While the staff's safety evaluation claims that the amendment and exemption are only applicable to Vogtle Units 3 and 4, this licensing action obviously represents a significant precedent for any AP1000 COL. NRC routinely relies on previous precedents when reviewing licensing actions, so if LAR 17-037 is approved, NRC would not have any obvious basis to deny an equivalent request from another AP1000 licensee. Therefore, if this LAR is approved, the precedent it sets would circumvent the rulemaking process, as any other AP1000 COL could adopt the same amendment without rulemaking, effectively reducing the scope of public participation. This negative effect is the same concern described by the staff and acknowledged by the licensee for LAR-008.

In its safety evaluation, the staff argues that the Statements of Consideration for the Advanced Boiling Water Reactor design certification addresses circumstances such as LAR 17-037. However, there is an obvious and significant distinction between a facility change affecting a narrow scope of Tier 2* information such as might arise over the course of construction and operations (e.g., an individual licensee installs equipment with slightly different capability), and a wholesale change to the entire set of Tier 2* information and the associated change process. The SECY-18-0060 text quoted above supports the view that the licensee's LAR represents a precedent-setting proposal with significant generic standardization implications, as opposed to an action with narrower scope with much lower generic impact.

2.4 Management Actions

The NRO Director has indicated that he has discussed LAR 17-037 with the Commissioners, and that no objection has been expressed. It is not clear if these conversations were fully informed by or addressed the regulatory policy history, the staff's feedback on LAR-008, or the

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Rule, May 12, 1997 (ADAMS Accession No. ML003711745). 62 FR 27840, Standard Design Certification for the System 80+ Design – Final Rule, May 21, 1997, ADAMS Accession No. ML003711752.

[14] 72 FR 49352, Licenses, Certifications and Approvals for Nuclear Power Plants, p.49365, August 28, 2007.

[15] SECY-18-0060, "Achieving Modern Risk-Informed Regulation," May 23, 2018, ADAMS accession number ML18110A186.

generic issues. These conversations took place before the staff's safety evaluation was completed, so they were not informed by knowledge of the SE content, and could create the impression of a pre-determined outcome. These informal communications also do not provide a well-documented basis that current and future staff can refer to so that they can understand the rationale for the approach being taken, particularly given the similar implications of LAR-008 and LAR 17-037.

2.5 Conclusion – Policy and Generic Issues

The licensee's proposal in LAR 17-037 deviates from the policy decisions described above. Therefore, Joseph Williams, Denise McGovern, and Christopher Van Wert believe the policy issues introduced by LAR 17-037 must be thoroughly evaluated by the staff and presented to the Commission, seeking a decision confirming deviation from establish policies is authorized. Furthermore, Joseph Williams, Denise McGovern, and Christopher Van Wert believe the generic and rulemaking issues must be thoroughly evaluated by the staff and presented to the Commission.

3.0 SAFETY EVALUATION DEFICIENCIES NEED TO BE ADDRESSED

This discussion is based upon the version of the safety evaluation circulated for concurrence on August 21, 2018. The proposed final version of the SE was not made available in a timely fashion to support milestones established for this non-concurrence. A discussion of these circumstances is provided in Section 4.6 below.

Two marked up versions of the August 21, 2018 SE are incorporated into this non-concurrence. Attachment 3 provides Joseph Williams comments on that version of the SE, providing a redline/strikeout comparison to an earlier draft that was provided for his review. The comments in this document are consistent with feedback provided to LB4 staff, et al., on July 27, 2018. Attachment 4 provides comments by John Segala that Joseph Williams finds to be generally consistent with his views, and so provides a reasonable starting point for an evaluation that could be found acceptable, assuming the policy and generic issues discussed in Section 2 are appropriately dispositioned. Inclusion of the markup in Attachment 4 should not be construed as Segala joining this non-concurrence. As Williams' branch chief, Segala will have an opportunity to present his position when he completes Section B of NRC Form 757 for this non-concurrence.

3.1 General Comments

These comments are consistent with Joseph Williams' feedback on an earlier draft safety evaluation.

- The SE does not adequately address policy issues.
- The SE does not clearly describe the regulatory basis or framework being applied to determine if the proposed amendment is acceptable.
    - The appropriate standard should be based on the principle that Tier 2* information is intended to be equivalent to Tier 1. Therefore, the proposed process should guarantee that changes to Tier 1-equivalent information are clearly identified as such always receive prior NRC review and approval.
    - The overall conclusion is murky and is not clearly related to the pertinent framework.

- Conclusions regarding individual topics are not consistent amongst themselves or with an overall framework.
- It is irrelevant if the staff finds the licensee's proposed process acceptable if the framework for making that decision is inappropriate.
- Many staff evaluations inappropriately rely on the 50.59-like process to ensure potentially safety significant changes are reviewed and approved by NRC prior to implementation.

- Staff should review completed Tier 2* amendments to determine what insights can be gleaned regarding the adequacy of the proposed criteria.

3.2 Description of the Appropriate Regulatory Standard

As described above, the LAR 17-037 proposes a process to screen changes to Tier 2* information with the intent of avoiding the need for NRC approval before those changes are implemented.

Joseph Williams was the principal author of SECY-17-0075,[16] which provides an extensive discussion of the intended purpose of Tier 2* information, demonstrating that "Tier 2* information has the same safety significance as Tier 1 information and would have received the Tier 1 designation, except that NRC decided to provide more flexibility for this type of information."[17] SECY-17-0075 acknowledges that some portion of Tier 2* information for AP1000 is not equivalent to Tier 1, which leads to the issues the Vogtle licensee is trying to address in LAR-17-037. However, SECY-17-0075 also states that there is also some portion of Tier 2* information that is properly defined. Therefore, any process that seeks to authorize a licensee to change any Tier 2* information must clearly and reliably identify and discriminate between Tier 1-equivalent and less significant information. Any change to Tier 1-equivalent information must be identified as such and receive NRC approval prior to implementation.

It should be noted that the change process described in 10 CFR 52 Appendix D, Section VIII.5.b (the so-called "50.59-like" process) are not an appropriate means to identify Tier 1-equivalent information. The change process applied to Tier 2 information is essentially equivalent to the process described by 10 CFR 50.59, and intended as a means to identify facility changes which require prior NRC review and approval. Applying the "50.59-like" process to Tier 2* information effectively converts that information to Tier 2. If the staff believes the "50.59-like" process can be applied to a set of Tier 2* information, then the associated safety evaluation must conclude that the information being subjected to that test is Tier 2-equivalent, not Tier 1-equivalent.

It is also important to understand that it was a conscious decision by the staff and Commission to apply an additional change process beyond the "50.59-like" process to Tier 2* information. The documentary record shown in the Regulatory History Package on Design Certification cited above clearly demonstrates that application of the "50.59-like" criteria to Tier 2* changes would likely yield a result calling for NRC approval prior to implementation. It was nonetheless decided that an additional level of control would be applied such that any Tier 2* change would result in prior NRC review and approval. This history also demonstrates that the "50.59-like"

[16] SECY-17-0075, "Planned Improvements in Design Certification Tiered Information Designations," July 24, 2017, ADAMS accession number ML16196A321.
[17] 72 FR 49352, Licenses, Certifications and Approvals for Nuclear Power Plants, p.49365, August 28, 2007, cited in SECY-17-0075.

process should not be relied upon to ensure NRC review and approval of Tier 1-equivalent changes.

The August 21, 2018 version of the staff safety evaluation does not adequately address these points in its description of the regulatory framework for the staff's evaluation. Some staff evaluations of individual topics in SE Section 3.1, such as fuel, include elements that touch upon Tier 1-equivalence. However, the various conclusions on individual topics do not align with an appropriate overall framework as described above or with one another in this version of the safety evaluation.

The safety evaluation also does not adequately address the policy, generic, and rulemaking issues discussed in Section 2 above. These issues must be properly addressed to provide the appropriate framework for a regulatory decision on LAR 17-037.

3.3 Additional Observations

3.3.1 Need to Address Experience from Completed Tier 2* Amendments

The staff's safety evaluation cites statements in the licensee's application regarding examples of completed license amendments involving Tier 2* information. The licensee claims that these amendments did not involve safety significant changes, and so were unnecessary. The staff does not provide any assessment of whether it agrees with the licensee's characterization of these amendments.

Furthermore, the licensee and staff have experience with over 30 completed licensing actions involving Tier 2* information. It would be highly informative to test the licensee's proposed process against the changes made in these amendments. If the licensee can demonstrate the proposed process yields an appropriate outcome and NRC staff agrees, the confidence in the licensee's proposal increases. On the other hand, if an example yields an inappropriate outcome, a gap or deficiency in the proposed process has been identified.

Taking advantage of any lessons learned from this experience is good regulatory practice. Such an approach is similar to what was done when Tier 2* was formulated, [18] as well as during the development of the guidance for implementation of the "50.59-like" process.[19]

A request for additional information was drafted to gather information to permit such an evaluation. However, that request was never forwarded to the licensee for a response.

3.3.2 Inadequate Evaluation of Public Comments

A member of the public who served for several years as the NRC lead project manager for the Vogtle combined licenses submitted comments on LAR 17-037. This individual is a highly experienced licensing engineer, with deep knowledge of NRC's licensing processes and the Vogtle COLs, including the withdrawn LAR 14-008.

[18] Workshop on Certification of Evolution Light-Water Reactor Designs, November 23, 1993, ADAMS accession number ML003708102.
[19] NEI 96-07, Appendix C, Guideline for Implementation of Change Processes for New Nuclear Power Plants Licensed under 10 CFR Part 52, March 2014, ADAMS accession number ML1409A739.

The public comments align with aspects of this non-concurrence. In particular, the member of the public noted that the proposal is similar to LAR-008, and expressed a view that LAR 17-037 involves policy issues. The staff's August 21, 2018 draft safety evaluation claims that the policy issues are obviated because LAR 17-037 proposes a different approach. This claim does not withstand scrutiny, as it is apparent from the discussion in Section 2 above that policy issues are a factor because the licensee is proposing to deviate from Commission-approved processes for Tier 2* changes.

The staff also claims that this licensing action does not apply to other licensees or plants. While it is true that the licensing action does not apply to any other licensee until those licenses are also modified, it is also true, as discussed in Section 2.3, that there would be no basis to deny such modifications to any other AP1000 licensee, as well as setting a precedent for all certified designs. Just stating the action "does not apply to other licenses or plants" does not make it so. The staff is merely making a claim without any justification.

The member of the public also raised questions regarding examples from the set of completed Tier 2* amendments. The staff's response only describes the licensee's claims without providing any substantive evaluation.

The member of the public also cited text from SECY-17-0075 which he believes supports his views. The staff's response states that SECY-17-0075 "has only limited applicability to the current decision." This statement is belied by the fact that the body of the staff's safety evaluation refers multiple times to SECY-17-0075.

It should also be noted that DLSE was unaware that public comments had been submitted until they were informed by Joseph Williams on July 16, 2018. It appears that DLSE would have issued the licensing action without addressing these comments if they had not been informed.

4.0 CHILLING EFFECT CONCERNS

NRC's non-concurrence process described in Management Directive 10.158[20] defines a chilling effect as

> A condition that occurs when an event, interaction, inaction, decision, or policy change results in a reasonable perception that the raising of a mission-related concern or differing view to management is being suppressed, is discouraged, or will result in reprisal (harassment, intimidation, retaliation, or discrimination).

Joseph Williams' experience in the course of this review meets this definition, as he has a reasonable perception that the issues he has raised in the course of this review have been suppressed and discouraged. The basis for this view is given below.

Mr. Williams initially identified potential policy and regulatory framework concerns with LAR 17-037 before the amendment was submitted, as demonstrated by a December 5, 2017 email.[21] This email stated that "We need to carefully consider the generic implications of this proposal, both for AP1000 licensees, and other current and future Part 52 licensees." It also pointed out that, given the generic implications, the issue should be addressed via rulemaking.

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[20] Management Directive 10.158, NRC Non-concurrence Process, March 14, 2014, ADAMS accession number ML13176A371.

[21] ADAMS accession number ML18241A218.

The message also noted that the proposal could involve policy issues that need to be considered by the Commission. Mr. Williams expressed a view that the proposal did not clearly differentiate between Tier 2* information that is Tier 1-equivalent and other less significant information. He also noted that it would be helpful if the licensee described how it envisioned the proposed process would apply to existing Tier 2* amendments. In short, this message identified many of the predominant issues which have led to this non-concurrence.

Williams also identified the need for a clear regulatory framework several months ago. For example, in a January 15, 2018 email,[22] he stated that "Branch chiefs and staff have not yet been [given] clear guidance on standards to be applied to the review." The project management organization, Licensing Branch 4 (LB4), did not provide any information regarding the regulatory framework for several months. A framework was not even outlined until after reviewers had been required to identify their requests for additional information, and was still poorly defined and incomplete when the safety evaluation was circulated for concurrence. This approach contrasts strongly with typical licensing reviews, where tools like the Standard Review Plan provide a framework for the staff's activities. In this case, the regulatory framework is being established at the end of the review, rather than at the beginning.

Despite his well-founded views on the various issues associated with this licensing action, it has been very difficult to persist in pushing for their resolution. Pertinent to the definition quoted above, the behavior and actions of staff and management responsible for administering the review effort have suppressed or discouraged addressing Williams' concerns.

There is also objective evidence that Williams' views have been suppressed and discounted over the course of the review. This evidence of a chilling effect calls into question the objectivity of staff and management responsible for administering the review, and reduces confidence that a well-founded and defensible evaluation has been developed.

An extensive record exists in emails and other documentation describing Williams' continuing efforts to have policy and generic issues acknowledged and addressed, as well as his efforts to describe a defensible regulatory framework for the review. Attachment 2 provides a chronology outlining his efforts beginning in September 2017. A collection of email correspondence providing further documentation can be found in ADAMS at accession number ML18248A099. Some specific messages identified here are referenced by a specific accession number.

4.1 Resistance to Addressing Policy Issues in Acceptance Review

As noted above, Mr. Williams raised the need to address policy issues, including rulemaking and generic implications, during pre-submittal discussions in fall 2017. The Director of the Division of New Reactor Licensing (DNRL, later the Division of Licensing, Siting, and Environmental Analysis or DLSE), made it clear at that time that he did not share Williams' views.

The need to address policy questions was subject of discussion during the LAR acceptance review. On January 16, 2018, Mr. Williams participated in an NRO program meeting (a routine division-level meeting addressing topics of interest across the office) where he described his concerns. During the discussion that followed, a representative of the Office of General

[22] ADAMS accession number ML18241A262.

Counsel made statements supportive of Williams' views, which should have been a clear indication that a more thorough evaluation was appropriate.

DNRL staff put great emphasis on completing the acceptance review expeditiously. Williams encountered considerable resistance in having text added to the acceptance letter regarding potential policy issues and the need to clearly differentiate between Tier 2* information that is equivalent to Tier 1, and other less significant information. Williams was aware that an earlier amendment with similar effect (LAR 14-008) had not been approved by NRC, but he was not familiar with the details of the staff's position as described above. DNRL personnel did not share information that the basis for the withdrawn LAR 14-008 included policy issues which align very closely with the issues Williams was identifying. If Williams had been aware of the basis for LAR-008 withdrawal, it is likely he would not have concurred in the acceptance letter unless clear distinctions could have been identified.

4.2 Failure to Fulfill Agreement for Management Briefing on Policy Issues

On February 14, 2018, Williams participated in a meeting with his branch chief, the branch chief and staff from Licensing Branch 4, the DNRL Director and Deputy Director, and representatives of the Office of General Counsel. An outcome of that meeting was an agreement to brief the NRO Director to seek a decision on whether a Commission paper would be written regarding LAR 17-037 policy issues.

The agreed-upon briefing never took place. Following the February 14 meeting, Williams occasionally contacted LB4 staff to inquire when the briefing would be scheduled. In response, LB4 staff indicated one milestone or another (e.g., requests for additional information) were their focus, and that a briefing would take place at some later date. In mid-May 2018, about 3 months after the February agreement, LB4 scheduled a briefing for mid-June 2018.

Shortly after the briefing was scheduled, Williams was informed that the NRO Director had already reached a decision, concluding that no Commission paper was needed. It is Williams' understanding that this decision was reached after discussion with between the NRO Director and OGC staff. Mr. Williams contacted OGC staff who had participated in the February 14 meeting, inquiring about the basis for the feedback given to the NRO Director. One of the OGC staff replied that he was unaware that any decision had been made. When Williams followed up to this reply to determine the rationale for OGC's feedback, no further reply was forthcoming.

Williams had two "Open Door" meetings with the NRO Director in mid-May 2018. One meeting was focused on process concerns, specifically the failure to fulfill agreements from the February 14 meeting. Williams informed the NRO Director that he had had experienced considerable resistance to thoroughly discussing the issues, and that he perceived that DNRL/DLSE's focus had been on completing the review as rapidly as possible, so that schedule was pre-eminent over a thorough and thoughtful evaluation of a precedent-setting first-of-a-kind licensing action, regardless of technical or policy issues that might be encountered.

Williams described policy questions in the second meeting. The NRO Director made it clear in that meeting that he was comfortable with his decision, and so did not plan to change the course of action. Williams' contemporaneous notes from that discussion state his view that the Open Door meeting was largely for the sake of appearances, rather than any real prospect of changing the NRO Director's mind. If the NRO Director had already communicated his decision at the Commission level, that action would lend additional support to Williams' view.

While Open Door meetings can be useful, employees forced to use those tools are at a disadvantage in cases such as this where managers have already made decisions after discussions with other staff. Episodes such as this represent a lost opportunity for a collaborative and interactive discussion amongst all interested parties.

In summary, Williams' views regarding the policy, rulemaking, and generic implications of LAR 17-037 were consciously suppressed by DNRL/DLSE management and staff. This suppression is most obvious in the failure to fulfill agreements made to fully brief NRO management on the issues in an open and collaborative fashion. DNRL/DLSE staff blocked and delayed efforts to discuss these topics, and obtained an NRO management decision favorable to their pre-determined preferred course of action without fully engaging all cognizant staff or thoroughly vetting issues. These actions are entirely inconsistent with NRC's stated values, including openness, cooperation, and respect, and contrary to the "Speed of Trust" principles the agency is supposedly embracing. The result of these actions has been highly discouraging, and has severely strained Mr. Williams' working relationships.

4.3 Resistance to Establishing Clear Regulatory Framework

Williams has also encountered significant resistance in his efforts to clarify and communicate an appropriate regulatory framework for reviewing LAR 17-037.

LAR 17-037 is an unprecedented first-of-a-kind licensing action. Ordinarily, licensees and staff can take advantage of precedent and regulatory guidance to develop and review licensing actions. Tools such as the Standard Review Plan and Regulatory Guides provide at least a starting point for an objective basis for most licensing decisions. In contrast, for LAR 17-037, there are no examples of previously-approved actions that can be used to inform the current review. Indeed, the only relevant previous example is the withdrawn LAR 14-008, though that example does not clearly support the current review. Given the lack of relevant precedent or guidance, emphasis should have been placed on establishing a clear regulatory framework early in the review so that staff would have a firm basis to review the licensee's proposal, identify gaps where additional information would be required, and complete a well-founded safety evaluation.

The approach followed in this case is contrary to standard practice. For example, LAR 17-037 schedule milestones for completing requests for additional information (RAI) were established without a well-defined regulatory framework for the review. Little or no emphasis was given to developing guidance for the content of the staff's safety evaluation until after RAI milestones had passed. While some guidance was provided to staff regarding the need to protect Tier 1-equivalent information, this standard was not reflected in later guidance regarding expectations for SE content.

Initially, staff were told to base their evaluations on their RAIs. Such an approach is illogical, as it implies no evaluation is necessary if there are no questions. Given that the regulatory framework for the review had still not been established, there was no reason for project management personnel to be confident that deficiencies in the licensee's application had all been identified so a thorough review could be completed.

An example of communications with DLSE regarding the need to establish the review framework is shown by a June 18, 2018 email[23] from the DSRA Deputy Division Director to his

[23] ADAMS accession number ML18248A040.

counterpart in DLSE. This message stated that "We still need alignment on the overall basis for the staff's regulatory finding on the LAR," and noted that Williams could contribute to an effort to define the framework. There are many additional examples of messages describing efforts to define an appropriate review framework from the time the submittal was received nearly to the present day. It was only in late June 2018, over 6 months after receipt of the application, that DLSE began to describe its proposal for how the safety evaluation should be constructed. The inconsistencies in the staff's safety evaluation as discussed in Section 3 and Attachment 3 provide further evidence this effort was not timely.

An additional example of resistance to describing the regulatory framework is illustrated by the failure to issue a request for additional information drafted by Williams and approved by his management. The RAI reads as follows:

> LAR Enclosures 6 and 7 discuss how SNC envisions the proposed criteria could have been applied to two completed license amendments affecting Tier 2* information. Pages 4 and 5 of Enclosure 1 describe other completed license amendments which SNC claims involved non-safety significant changes which should not have required prior NRC review. The discussions in Enclosure 1 do not explicitly describe how the proposed criteria would apply to those specific examples, or how the criteria would have successfully identified information appropriately designated as Tier 2*. Discussing specific examples could illustrate the potential advantages and challenges associated with future application of the proposed criteria. Therefore, SNC is requested to provide a discussion similar to Enclosures 6 and 7 of the results of applying the criteria to the specific examples cited in LAR Enclosure 1.
>
> The amendments described in Enclosures 1, 6, and 7 represent a subset of all completed Tier 2* amendments. SNC is requested to describe how these amendments were selected and why other amendments affecting Tier 2* information were excluded. Alternatively, SNC can provide a discussion similar to Enclosures 6 and 7 for all completed amendments affecting Tier 2* information.

This RAI was never forwarded to the licensee for a response. When that failure was brought to the attention of DLSE staff, Williams was informed that the milestone for issuing RAIs had already passed, so the RAI would not be issued.

Problems arising from an ill-defined regulatory framework are unforced errors. Similar to his efforts to have policy issues addressed, Williams identified the need to define an appropriate regulatory framework before LAR 17-037 was submitted. When he was first informed that a licensing action submittal affecting Tier 2* information was pending in late September 2017, he wrote an email to DNRL division management that "any alternative to the LAR process to change Tier 2* information must clearly and objectively demonstrate that the information being changed would not otherwise be considered Tier 1." Williams also raised the issue during pre-submittal discussions in early December 2017, as noted above. After receipt of LAR 17-037, Williams encountered resistance to describing an appropriate regulatory framework during the acceptance review, as discussed above. Thereafter, he continued interactions with project management staff in an attempt to define a framework, with very limited success.

In summary, Williams' efforts to define an appropriate regulatory framework for the review were consciously suppressed by DNRL/DLSE management and staff. This suppression is apparent from the failure to define the regulatory framework in a timely manner which would ensure review staff would be able to identify gaps in the licensee's proposal so that a basis for any

requests for additional information could be described, leading to completion of an objectively sufficient safety evaluation supporting the licensing action. Williams' experience here is similar to the resistance and obstacles encountered in his efforts to address policy issues, contributing to his discouragement and strained working relationships.

Overall, the outcome of Williams' experience in raising mission-related concerns associated with LAR 17-037 clearly meets the MD 10.158 definition of a chilling effect.

4.4 General Working Environment Concern

Feedback has been received from some staff associated with the review that suggests that a broader cultural problem might also be reflected in this review. In the words of one reviewer, "This is a strange process that has been shoved down our throats." Several reviewers have spoken to Mr. Williams about their concerns with the lack of a clear regulatory framework, along with the negative effect of pursuing their individual reviews in isolation, without communication or coordination by LB4 across the organization to ensure any cross-cutting issues were identified or addressed.

4.5 Management Interactions and Response

On July 11, 2018, Williams met with the Deputy Executive Director for Reactor and Preparedness Programs (DEDR) to discuss concerns with the process followed for review of LAR 17-037 up to that time. Williams told the DEDR that the review process had not yet adequately defined the target framework for completing the staff safety evaluation, and that policy issues had not been properly addressed, even though RAIs had been issued and responded to and safety evaluation input solicited. Williams said that he had raised these issues early in the LAR review, but he perceived considerable resistance and reluctance to address them. Williams contrasted the approach followed for this LAR with more routine licensing actions, noting the significant distinctions between a first-of-a-kind action with policy implications where a regulatory framework needs to be established, and more ordinary reviews where a robust framework already exists. Williams also said that he was concerned that the unorthodox approach being followed had created a chilling effect, indicating cultural issues that might need management attention. The DEDR indicated he would follow up with NRO management regarding these concerns.

After Williams' meeting with the DEDR, the NRO Director met with Williams, along with representatives of DLSE, OGC, and DSRA to review Williams' concerns regarding LAR 17-037 on July 19, 2018. In this meeting, Williams relayed his view that the framework for the LAR had not been clearly established, so there could be no reason to expect that there was a consistent understanding or alignment on the findings needed in the safety evaluation. Williams reiterated that the appropriate standard for the review should acknowledge the need to ensure Tier 2* information that is equivalent to Tier 1 is clearly identified, that policy issues need to be presented to the Commission for a decision, and that a chilling effect had affected the review.

The initial draft safety evaluation was circulated for comment shortly after the July 19 meeting. Williams provided extensive comments on this draft in a July 27, 2018 email to DLSE, et al. Williams reiterated yet again the need to address policy issues. The draft SE did not provide a clear regulatory framework for the review, nor was there consistency between staff findings on various technical topics. In Williams' view, it was an unacceptable product.

In this timeframe, Williams was informed that the NRO Director had decided to inform Commission staff of the planned issuance of the licensing action via a note to the Commissioners' assistants (a "CA Note").

On August 10, 2018, Williams met again with the NRO Director, along with the NRO Deputy Director, representatives of NRO division management, and OGC. Denise McGovern also participated in this meeting, providing her perspectives on the policy issues, as well as sharing her experiences regarding LAR-008. Williams outlined his feedback on the draft SE, and indicated at that meeting that he was considering use of the non-concurrence process, noting that MD 10.158 provides means to make non-concurrence documentation public. MD 10.158 also requires non-concurrence documentation follow the source document throughout the approval process, including circulating the information back to any party that previously concurred. For his part, the NRO Director stated his plan to forward the completed SE and non-concurrence to the Commission via the CA Note as soon as possible, with the intent of issuing the amendment and exemption three working days later.

After the August 10 meeting, NRO division managers were tasked with checking in with the reviewers assigned to this LAR to determine if they were satisfied with the outcome of their review. It is Williams' understanding that NRO division managers all indicated they were satisfied with the feedback from their staff. However, it is Williams' view that, while the managers may have gotten the answers they were looking for, that is not the same as saying the right questions were being asked, especially given that the regulatory framework for the SE was still in flux.

After being informed of an aggressive schedule for the CA Note and impractical expectations for completing this non-concurrence documentation, Williams was forced to reach out once again to the DEDR to request assistance in establishing a more realistic schedule. It is Williams' understanding that only due to the DEDR's intervention was an attainable schedule for completing this non-concurrence defined. However, it is also his understanding that the current plan is to complete evaluation of the non-concurrence and circulate information to all parties within the three-day window planned for the CA Note, and issue the amendment. This timing strongly suggests an emphasis on schedule over thorough evaluation of issues.

It is reasonable to conclude from this history that NRO management has been persistently reluctant to address the process problems encountered over the course of this review. These challenges have received office-level management attention only after Williams brought the issues to the attention of higher level management outside NRO, which suggests that issues had not been clearly communicated from DLSE to NRO office management, or that office management was unconcerned by the issues. Regardless, issues have been suppressed over many months. While Williams persisted, he was clearly discouraged from continuing this effort. The challenges Williams faced nearly led to a decision to walk away from the effort altogether. These factors clearly meet the MD 10.158 definition of a chilling effect.

4.6 Impediments Encountered in Non-concurrence Process

On August 21, 2018, DLSE staff circulated a proposed safety evaluation for concurrence. Williams examined this safety evaluation, and concluded that the comments he had previously provided had not been effectively addressed. In accordance with MD 10.158, via an August 22, 2018 email, he informed DLSE management and staff, along with his branch chief and division

management, of his intent to non-concur in the safety evaluation.[24] In that message, Williams requested a meeting of all involved parties to ensure understanding of respective responsibilities.

The requested meeting did not take place until August 28, 2018. At that meeting, Williams and McGovern were informed of management's intent to complete the safety evaluation review, including processing the non-concurrence on an expedited basis, so that the CA Note could be forwarded to the Commission staff by September 4, 2018, with the intent of issuing the licensing action three working days later. Williams indicated this schedule was not realistic, indicating that September 7 was an attainable date to complete the non-concurrence. Williams assumed that the non-concurrence would have a near-final version of the SE. Williams was taken to task not having already completing this non-concurrence, however that feedback was provided nearly a week after his meeting request, so that suggestions that he was not being timely was unjustified.

DLSE management indicated that they do not intend to respond to every point made in this non-concurrence. It should be noted that MD 10.158 requires that "The level of detail must be sufficient so that an independent reader can understand the basis for the decision and outcome." Rather than giving an affirmative statement of intent to complete a non-concurrence evaluation consistent with MD 10.158, what was described was what the NCP Approver will not do, setting bounds of minimum performance that does not clearly ensure thorough and objective assessment of the issues. The DLSE management statements could be construed as setting a standard below that required by MD 10.158.

It was also apparent to Williams and McGovern that DLSE intends to take advantage of any latitude provided in MD 10.158 for managing its own schedule and activities, but was going to take a hard line on setting expectations for the non-concurring staff. It was also apparent from the schedule discussion that DLSE management had already determined the outcome of the review, intending to issue the licensing action as soon as possible. At no point was there any acknowledgement that the non-concurrence review could result in a different conclusion.

In the immediate aftermath of this meeting, Williams met once more with the DEDR to request his intervention to obtain a more realistic schedule. The next day, Williams was informed that this non-concurrence input would be expected by noon, Friday, September 7, with the intent to process the CA Note that afternoon to forward the non-concurrence without a supervisory or management response along with the safety evaluation.

Williams was informed on September 4, 2018 that extensive comments had been received on the SE from OGC and other staff, and that the schedule for completing the SE had slipped several days. This slippage affected the assumptions made when Williams identified September 7 as a practical completion date. Therefore, he requested this schedule be revised, with a new schedule being established. NRO management denied that request on September 5, 2018, and directed Williams write the non-concurrence against the obsolescent August 21, 2018 SE, rather than an updated SE reflecting incorporated comments and any other adjustments. Williams acknowledged that September 7, 2018 remained the due date, and asked for confirmation that he will receive the revised SE when it is circulated for final concurrence.[25] This and other questions were intended to obtain written responses documenting management's intent to comply with procedural requirements. The fact that

[24] ADAMS accession number ML18248A199.
[25] ADAMS accession number ML18248A198.

Williams felt compelled to ask for such confirmation is an indication of the severely eroded trust between him and those responsible for processing this licensing action.

To expedite staff review and concurrence in the extensively revised safety evaluation, at the time of this writing (September 7, 2018), DLSE has scheduled several "chapter day" meetings with the various technical branches. A chapter day is a meeting tool used on key products associated with large projects, such as a safety evaluation chapter for a design certification or combined license. Staff involved in the review meet to discuss the proposed final version of a product to address comments with the goal of reaching agreement on the final content. These discussions are often cross-disciplinary for topics affecting multiple engineering and regulatory areas. In contrast to this typical model, DLSE has planned multiple meetings with individual branches to discuss their specific contributions. A separate meeting is planned for a discussion with a stated purpose as follows:

> The purpose of this meeting is for OGC and LB4 to resolve any comments to all sections of the SE except for Sections 3.1.1 through 3.1.9, that is, everything except the branch-specific sections, for those comments where LB4 needs assistance in closing the comment.
>
> Tech Staff should plan to attend this meeting only if [emphasis in the original] they have a question or concern about SE content outside of the branch-specific write-ups.[26]

MD 10.158 states that "The NCP Coordinator [a role defined in the procedure] must ensure the non-concurring employee is included in further discussions of an issue, when warranted, to maximize the understanding of the issues and improve the decisionmaking process." Consistent with the stated intent to "maximize the understanding of the issues," Williams requested that time be provided for him to present the non-concurrence issues to the review team. Contrary to MD 10.158 requirements, DLSE declined to provide this opportunity in the chapter day meetings. Williams was informed that he would only be able to discuss his non-concurrence issues if some aspect of those issues arises in the course of the chapter day discussion.

There are numerous flaws in the planned chapter day approach. Sections being discussed in the meeting cited above involve the overall regulatory framework, and so are of interest to the entire review team. Several reviewers have expressed dismay at the piecemeal approach followed throughout the LAR review, where individual disciplines have proceeded with their reviews in isolation, as opposed to a holistic team-oriented approach where staff could identify synergies in their respective subject areas and generate an internally-consistent product. However, the chapter day approach continues the isolationist model. In specific reference to the chapter day meetings, a staff member described the approach as "divide and conquer." Such an approach discourages and suppresses sharing of concepts, ideas, and experience amongst the reviewers, and so meets the definition of a chilling effect.

Furthermore, the approach violates the requirements of MD 10.158 quoted above. By not providing for an open discussion of the non-concurrence issues, DLSE is suppressing discussion of those perspectives in the chapter day meetings. While there may be opportunity to discuss aspects of the non-concurrence if they arise in the course of the discussion, such an approach ensures that those discussions will lack any context to the complete non-concurrence.

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[26] ADAMS accession number ML18250A070.

Contrary to MD 10.158, this approach does not "maximize understanding of the issues and improve the decisionmaking process," and so is an additional example of a chilling effect.

It has been suggested several times in this period that management is not bound to follow MD 10.158 in this timeframe because a non-concurrence form has not yet been provided before September 7, 2018. It has also been implied that Williams could choose to not follow through with his stated intent to non-concur. Williams informed management of his intent to non-concur in a timely fashion on August 22, 2018, per the expectations in MD 10.158, though management claims the non-concurrence process was not yet active. It is also unrealistic to think that Williams would fail to follow through. While considerable obstacles remain, he has persisted in the face of the impediments and resistance he has faced up to this time, so claims he will fail to follow through do not hold water, as reflected by the information presented herein. Williams views these suggestions as additional evidence of inappropriate management pressure on staff, along with evidence that management has misrepresented Williams' intent, suppressing his views.

These circumstances clearly demonstrate that NRO management is more concerned about schedule than due consideration of issues, as the process being followed does not ensure good alignment between the non-concurrence and the proposed final product so that there can be clear understanding of the relationship of the concerns to specific text. The approach is inconsistent with NRC's stated values of cooperation, openness, and respect. The net effect adds to the overall chilling effect, in that it is additional evidence of discouraging employee participation in thorough evaluation and interactive discussion of issues. It also suppresses information, due to the expected misalignment between in that the August 21, 2018 SE and the version to be forwarded with the planned CA Note.

4.7 Other Interactions

Several times over the course of this review, DLSE has scheduled meetings to discuss aspects of the LAR 17-037 review where it had advance knowledge that Williams had conflicts or would be unable to participate. It is not surprising that such conflicts occasionally arise in the ordinary course of doing business. However, this case does not appear to be ordinary, as such circumstances have arisen several times. Examples include an internal meeting in late June 2018 where the regulatory framework for the review was discussed. This meeting took place as a direct result of Williams' efforts in the weeks before to have that framework described so that reviewers could complete their safety evaluations. The meeting was scheduled when Williams was out of the office on annual leave. There are other examples where Williams was unable to participate in other activities, such as advanced reactor stakeholder meetings, because DLSE scheduled meetings despite being informed of these conflicts. These interactions demonstrate a lack of respect and regard for staff's other obligations and activities, both professional and personal, and indicate an excessive focus on schedule. Arguably, providing for full participation of all interested parties in key discussions could have resulted in alignment on a regulatory framework and other issues that could have avoided the need for this non-concurrence.

4.8 Management and Supervisory Support

Mr. Williams wishes to be clear that his branch chief and Division of Safety Systems, Risk Assessment, and Advanced Reactors (DSRA) division managers have provided strong support and helpful feedback. The chilling effect concerns he is raising here do not lie within DSRA. Rather, the chilling effect is the result of actions within the Division of Licensing, Siting, and Environmental Analysis, and the NRO office level.

4.9 Conclusion – Chilling Effect

A chilling effect has adversely affected the review of LAR 17-037. The LAR 17-037 review has been conducted in an ad hoc manner without an adequately defined regulatory framework ensuring alignment within existing Commission policy. The persistent resistance to addressing these clearly identified and communicated issues demonstrates these concerns have been discouraged and suppressed. This resistance calls into question the objectivity of staff and management responsible for administering the review, and reduces confidence that a well-founded and defensible evaluation has been developed. Though the resulting safety evaluation seeks to approve the licensee's proposal, it does not provide a clear basis for this decision. This outcome is a clear result of the chilling effect described above.

Denise McGovern endorses the chilling effect description given in Section 4.6.

Joseph Williams endorses the entire description of a chilling effect in this section. He notes that as a GG-15 Senior Project Manager near the end of his career and at the top of the pay scale, he is relatively immune from concerns that this non-concurrence will have any significant adverse effect on him. His circumstances provide a degree of freedom that is not available to staff at a different point in their careers. It is easy to see that others holding similar views could be discouraged from raising them as persistently, if at all.

Attachment 2

Chronology of Joseph Williams' Interactions on LAR 17-037

This chronology demonstrates that process and policy issues were raised early, but have not been addressed in a timely or open manner.

- Pre-submittal
    - September 28, 2017: Williams email to DNRL Division Director, et al.: "any alternative to the LAR process to change Tier 2* information must clearly and objectively demonstrate that the information being changed would not otherwise be considered Tier 1."
    - early December 2017 – initial identification of potential policy issues
- December 5, 2017 Williams email regarding policy issues, need to discriminate between Tier 1-equivalent and less significant Tier 2* information
- December 21, 2017 – LAR submitted
- January 16, 2018 – LAR discussed at program meeting, including policy issues
- January 25, 2018 – LAR accepted
    - "…the criteria and process described in the application do not clearly differentiate between Tier 2* information with safety significance commensurate with Tier 1, and any Tier 2* information which has lesser significance."
    - Acknowledged possible policy issues
- February 14, 2018 – internal alignment discussion with DNRL and OGC staff and management
    - Agreement to brief NRO Director regarding policy issues
    - Need for review guidance discussed
- February 16, 2018 – state consultation request email (ML18047A122) arguably misleads the state official, as it claims that "The NRC is in process of finalizing its review of this LAR."
    - Regulatory framework had not been established
    - RAIs had not been issued
- Requests comments by March 5, 2018, demonstrating DLSE schedule emphasis.
- March-April: no NRO Director briefing scheduled
- April 11 – proposed RAIs provided to DNRL
- May 1, 2018 – one ARPB RAI issued
- ~May 11, 2018 – informed that NRO Director had reached a decision regarding policy issues without briefing
- May 16, 2018 – discussed process concerns with NRO Director
- May 18, 2018 – discussed views regarding policy issues with NRO Director

- Early June 2018 – discovered that one RAI had not been issued (ARPB RAI 4 regarding examples). June 13, 2018 Williams email provides documentation after problem was identified.
- June 11, 2018 – DLSE issued proposed milestone schedule. Guidance for SE content not yet provided.
- June 19, 2018 – DLSE email: "…please proceed to prepare an SE input based on the major concerns of your RAI."
    - Logical result of direction: if there were no RAIs, there's no SE
    - Regulatory framework of review still undefined.
- June 21, 2018 – DLSE (Habib) informed Williams that guidance for the review will be developed and provided to staff the following week
- June 27, 2018 – DLSE provided proposed guidance for staff SE input
- July 11, 2018 – Williams meeting with DEDR to discuss review process concerns, including chilling effect.
- July 13, 2018 – SE inputs requested
- July 16, 2018 – Discovery of public comments from the former Vogtle COL lead project manager that DLSE was previously unaware of. Comments largely align with Williams' views on policy implications.
- July 19, 2018 – Williams briefing for NRO Director, et al.
- July 27, 2018 – Williams provided extensive comments on draft SE
- August 10, 2018 – Williams and McGovern briefing for NRO Director, et al.
- August 28, 2018
    - Williams and McGovern meeting with DLSE Deputy Director, et al., to discuss non-concurrence schedule.
    - Williams and McGovern informed the OEDO Assistant for Operations of CA Note plans.
    - Williams meeting with DEDR to request action to ensure adequate time to develop non-concurrence.
- September 5, 2018 – Williams request for extension to complete non-concurrence due to delays in completing safety evaluation is denied.
- September 6, 2018 – Williams request for time to address non-concurrence issues in "chapter day" meetings is denied.

Attachment 3

Markup of August 21, 2018 Draft Safety Evaluation

Joseph Williams

Attachment 4

Markup of August 21, 2018 Draft Safety Evaluation

By John Segala