

NUCLEAR UTILITY GROUP  
ON EQUIPMENT QUALIFICATION

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BY ELECTRONIC DELIVERY  
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U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Subj: Follow-Up Regarding July 31, 2018, Public Meeting Related to the Discussion of Nuclear  
Utility Group on Equipment Qualification (NUGEQ) Comment Letter of June 29., 2018

Mssrs. Miller, Miller and Isom:

We want to thank you for holding the meeting on July 31, 2018, to discuss the Nuclear Utility Group on Equipment Qualification (“NUGEQ”)<sup>1</sup> letter of June 29, 2018, which provided comments regarding the NRC’s Draft Questions and Answers related to the Unresolved Issues in the DBA Environmental Qualification (“EQ”) Program Inspections.<sup>2</sup> We appreciate the opportunity to continue the dialogue related to these topics as their resolution is important to the existing EQ programs.

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<sup>1</sup> The NUGEQ is a group of utilities which own and operate nuclear power reactors in the United States and Canada. The Group, founded in 1981, includes over 90 plants operating in the United States, and an additional 18 plants in Canada.

<sup>2</sup> The NRC staff responded to that letter on July 26, 2018.

As an immediate follow up to the meeting, we want to share a couple of key points for going forward in this process. Both of the points are important to facilitate a timely and consistent resolution of the generic EQ licensing basis issues the staff has raised in these inspections. In addition, we provide an overview of the Group's key comments at the meeting.

*First*, the Group continues to be available for further discussion on the topics presented in the Draft Q&A and our comments thereon. Our letter was intended to provide information that is useful to the full understanding of the EQ licensing bases from the inception of the NRC EQ reviews, including the licensing bases with respect to both applicable regulatory requirements and guidance and the established and accepted practices in performing EQ analyses that together form the licensing bases for operating plants. We consider that letter to be a resource for the staff as it examines and resolves the issues being raised. The Group is available at any time to discuss those issues.<sup>3</sup>

The Group proposes that we hold regular public calls, or perhaps meetings, with the NRC to discuss the resolution of the current draft Q&A, rather than wait for a final draft 'fact checking' of revised Q&A as proposed by the staff. It is our understanding that there is no person at the NRC who was involved in the initial EQ reviews by Franklin Research Center, or the NRC examination and acceptance of those reviews and their bases. The industry also has few people still involved in the industry who were part of those reviews.<sup>4</sup> These initial EQ program licensing reviews are reflected in voluminous Technical Evaluation Reports and Safety Evaluation Reports for 71 plants. Similar EQ program reviews were conducted for the next round of plants using Idaho National Engineering Laboratories rather than Franklin. As many of the questions raised by the NRC challenge those initial findings,<sup>5</sup> we urge a more active dialogue than suggested by the NRC staff at the July 31 meeting in revising the draft Q&A.<sup>6</sup>

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<sup>3</sup> In addition, the Group's comments provided insights as to the licensing accuracy of some of the draft Questions and the draft Answers themselves, e.g., mixing of qualification and dedication, as well as examining in Section IV some of the other generic issues that have been raised in the inspections but perhaps were not captured of the first group of Unresolved Issues that formed the Q&A. We trust this material will be useful to the Staff in that context as well.

<sup>4</sup> One of the Group members, Vince Bacanskas, Director/Chief Engineer at Entergy Operations, was on the Franklin Research Center review team and has been a valuable resource in presenting the EQ licensing process in that time frame.

<sup>5</sup> The Group provided comments on 8 of the 9 draft Q&A. As noted in the comments we believe those Q&A were either mis-framed and/or mis-evaluated in whole or in part.

<sup>6</sup> As noted at the July 31 meeting, the recent inspection at Surry, which was the first inspection following the June 29 NUGAQ letter, evidenced a greater effort by the NRC to understand and consider the initial licensing bases. However, the Group believes there is still uncertainty in going forward, as well as uncertainty in resolving the unresolved items identified to date, in a manner that provides adequate consideration of the original licensing bases.

We reiterate that the issues of concern here involve topics that the Group believes had been addressed in the original licensing bases. Those original reviews included detailed examinations of key elements in each vendor qualification report used to qualify equipment (equipment that is used across the industry). The reviews included key analytical approaches to qualification depending on the applicable standards. The Group considers the NRC Staff questions challenging the treatment of specific issues previously considered within the NRC review process to present generic backfit concerns, with potential significant impacts if the original licensing bases are disregarded.<sup>7</sup>

*Second*, we must reiterate the importance of continuing to identify and characterize any generic unresolved items from EQ Program inspections that challenge the EQ licensing bases, if any in the future, and allow for their resolution outside the docket-specific context. The improper resolution of those issues can result in the generic backfits described above, with significant implications for licensees' EQ programs. We reiterate that we are particularly concerned with the apparent disregard for that consideration where, in the recent Brunswick inspection, the staff elected to create a green non-cited site-specific violation out of particular issues previously considered during that inspection (and at other facilities' inspections) as falling in the unresolved items context for generic consideration.

In that instance, as described by a Group member at the July 31 meeting, the NRC had held several issues open as unresolved items at the time of completion of the inspection at Brunswick. The licensee concurred with those categorizations. However, the Staff subsequently rescinded that classification, and instead converted two of those unresolved items into a green non-cited violation (two elements) and so characterized them in the inspection report. As a result, the NRC has forced the licensee into a position of addressing industry generic topics as site-specific issues, including forcing the application of the corrective action processes at that facility.<sup>8</sup> This will occur even though the items are being treated as unresolved at other plants. Ignoring the generic applicability of such issues that constitute challenges to the underlying process and substance of EQ conformance, prevents both the consistent consideration of these items across the industry, but equally as significant places a

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<sup>7</sup> At the meeting the Group provided a specific example of an activation energy for a particular material, which activation energy has been used in many qualification reports, and applied to many different types of equipment each with respect to that specific material. That specific activation energy has been challenged by the NRC staff in these inspections *several* times (becoming one of the URIs) *because* it is used throughout the industry. This particular licensee researched its licensing basis to find the staff specific review and approval of that activation energy. This is a good illustration of the broad implications of the Staff question because that number has been used by numerous manufacturers in their qualification reports for their different types of equipment. As it has been shown to have been accepted by the NRC, we believe that on a generic basis the Staff's prior acceptance of that figure for that material has been demonstrated, for all equipment using that material.

<sup>8</sup> This has implications for the licensee's current obligations with respect to site-specific resolution of generic issues, but also places the licensee in a negative posture under the oversight process in the event of future violations at the site.

substantial burden on the individual licensee involved with no significant safety impact, i.e., green violation levels.

Accordingly, the Group reiterates its request to hold the inspections in abeyance until the process for consideration of such issues is reaffirmed. We believe that the URI process as used in the past is reasonable, and urge that it be continued in the event future generic issues challenging the original licensing bases are raised.<sup>9</sup> If the NRC is able to reach that determination promptly, then our request would be limited to holding in abeyance those EQ generic issues that were converted to a non-cited violation at Brunswick in that those issues addressed topics already determined on other dockets to be potential generic challenges to the original EQ licensing bases and subject to consideration in that context.<sup>10</sup>

A final note which we discussed at the July 31 meeting. The Group observes that while the original pilot inspections seemed to focus on program adequacy for the future, and elements of assurance of program maintenance going forward, certain aspects of the later inspections have delved into questioning of the original licensing bases, resulting in large impacts on licensees and the NRC in seeking disposition of those broad, generic issues. We urge, in consideration of the larger picture and what it seems was the original intent of these inspections, that there be a refocus on the ultimate purposes of the program inspections, and for there to be a reaffirmation of the emphasis on program adequacy for future program implementation and maintenance.<sup>11</sup>

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<sup>9</sup> We note that the types of generic unresolved items involved here are not licensee-specific topics, or evaluations, but broad determinations of either qualification bases, or methodologies, that apply across the industry and in some respects establish EQ boundaries for particular materials and equipment. Of course, whether a specific licensee properly implements those boundaries, e.g., properly considers the plant-specific environments, or properly evaluates the bases to make changes to those boundaries, at their plant is separate from the underlying adequacy of the particular EQ program bases originally approved and which are the subject of the unresolved items of concern here.

<sup>10</sup> The characterization of the rationale for this approach at Brunswick, reflected in the Staff's July 26, 2018, letter as "there was sufficient information and clarity to characterize the issues as NCVs" is irrelevant to the question of the consistent treatment of those generic items.

<sup>11</sup> The Group does not suggest here that the NRC may not review a plant's licensing bases or other program indicators. But we note that in this instance the challenges of concern are issues/topics that were originally the subject of review and acceptance generically, such as the applicable EQ analysis methodologies (based upon DOR Guidelines, NUREG-0588, etc., or the adequacy of particular test reports and the data used therein. Those determinations applied across the industry, and in some instances, as noted, across numerous types of equipment. Changes in interpretation of those areas are the principal focus of the Group comments.

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We look forward to further discussions with the NRC on these matters. And we re-emphasize that the Group is available at any time to provide input regarding the pending draft Q&A or unresolved items.

Respectfully submitted,

A handwritten signature in black ink that reads "William A. Horin". The signature is written in a cursive style with a large initial 'W' and a distinct 'A' and 'H'.

William A. Horin  
Counsel to the Nuclear Utility Group  
on Equipment Qualification

cc: Shana R. Helton (NRC)  
Thomas R. Hipschman (NRC)  
Michael F. King (NRC)

All Addressees by Electronic Delivery