

**CHRISTOPHER E. EARLS**  
Senior Director, Engineering and Licensing

1201 F Street, NW, Suite 1100  
Washington, DC 20004  
P: 202.739.8078  
cee@nei.org  
nei.org



NUCLEAR ENERGY INSTITUTE

4/4/2014  
79 FR 18933

June 16, 2014

5

RECEIVED

2014 JUN 16 PM 12:46

RULES AND DIRECTIVES  
BRANCH  
USNRC

Ms. Cindy K. Bladey  
Chief, Rules, Announcements and Directives Branch  
Office of Administration, Mail Stop 3WFN-06-44M  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**Subject:** NEI Comments on Draft Regulatory Issue Summary 2014-XX, "Tornado Missile Protection"  
(*Federal Register* 79 FR 18933, dated April 4, 2014) Docket ID: NRC-2014-0071

**Project Number: 689**

Dear Ms. Bladey:

On behalf of the nuclear industry, the Nuclear Energy Institute (NEI)<sup>1</sup> offers the attached comments on the staff's draft Regulatory Issue Summary (RIS) 2014-XX, "Tornado Missile Protection"<sup>2</sup> and the proposed "Enforcement Discretion for Tornado Missile Protection Nonconformance"<sup>3</sup> which accompanied the draft RIS. Comments on the draft RIS are provided in Attachment 1; comments on the proposed enforcement discretion are provided in Attachment 2. NEI appreciates the opportunity to provide the industry's views on this matter. NEI urges the NRC to withdraw the proposed RIS or, in the alternative, substantially revise it for the reasons provided below.

First, from NEI's perspective, the draft RIS adds no value to the industry's understanding of requirements for tornado missile protection. As discussed in Attachment 1, the NRC and the industry have worked

<sup>1</sup> NEI is the organization responsible for establishing unified nuclear industry policy on matters affecting the nuclear energy industry, including the regulatory aspects of generic operational and technical issues. NEI's members include all utilities licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect/engineering firms, fuel fabrication facilities, materials licensees, and other organizations and individuals involved in the nuclear energy industry.

<sup>2</sup> ADAMS Accession Number ML13094A421, dated February 20, 2014.

<sup>3</sup> ADAMS Accession Number ML14142A293, dated May 22, 2014.

NUCLEAR. CLEAN AIR ENERGY

SUNSI Review Complete  
Template = ADM - 013  
E-RIDS= ADM-03

J. Keene (JTK1)

together for decades to analyze and provide appropriate protection against tornado missiles. The draft RIS fails to recognize these efforts. In fact, the draft RIS itself lists a multitude of established regulatory guidance documents which provide various pathways towards compliance.

Second, the draft RIS appears to redefine the current licensing basis (CLB) in a manner contrary to the definition in 10 CFR §54.3. Page 2 of the draft RIS refers to “[tornado missile protection] requirements contained in the current licensing bases documents”, but then explicitly mentions only the “Updated Final Safety Analysis Report (UFSAR) or for a combined license referencing a standard design certification, the Final Safety Evaluation Report and referenced design control document.” Thus, the language in the draft invites readers to conclude that the CLB consists solely of the UFSAR. In so doing, the draft RIS appears not to recognize that the NRC safety evaluation report (SER) for plants subject to the Systematic Evaluation Program (SEP), and the reports on results of the Individual Plant Examination of External Events (IPEEE), are part of the licensing basis for tornado missile protection. At the same time, the draft RIS sweeps into the CLB the tornado missile protection guidance presented in Regulatory Guide 1.117 and Standard Review Plan 3.5.2 that are not part of the CLB unless the licensee specifically committed to meet those positions. This change in the meaning of CLB would, in NEI’s view, constitute a backfit requiring analysis in accordance with 10 CFR §50.109. Since there are potential backfit issues associated with this RIS, we request that it be reviewed by the Committee to Review Generic Requirements (CRGR). Further, we request that the industry be allowed to participate in the CRGR review process.

Third, from NEI’s perspective, the RIS represents a change in the staff’s view of the SEP and the IPEEE program. As explained in Attachment 1, the NRC previously considered the matter of tornado missile protection closed by the SEP SER and the IPEEE reports. The new view of the SEP and IPEEE presented in the draft RIS would, in NEI’s view, constitute a backfit requiring analysis in accordance with 10 CFR §50.109.

Fourth, the draft RIS makes statements about the use of physical separation of redundant or alternative structures or components as not normally an acceptable method of tornado missile protection. These statements appear to deny or diminish the fact that the NRC has previously approved physical separation as a basis for tornado missile protection, particularly in plants licensed before the issuance of Regulatory Guide 1.117 and Standard Review Plan 3.5.2. Additionally, these statements appear to be inconsistent with the NRC’s approval of the use of the TORMIS methodology, as mentioned on page 2 of the draft RIS.

Finally, if the NRC wishes to re-open the issue of tornado missile protection on plants licensed before the General Design Criteria were promulgated, the agency should use other regulatory processes intended for this purpose (e.g., 10 CFR §50.109), not a RIS and an interim enforcement policy.

Ms. Cindy K. Bladey

June 16, 2014

Page 3

We appreciate the agency's consideration of these comments and the opportunity to exchange views with the staff at the May 28, 2014 public meeting. If you have any questions in this matter, please contact either James Slider (202.739.8115; jes@nei.org) or me.

Sincerely,

A handwritten signature in black ink that reads "Chris Earls". The signature is written in a cursive, flowing style with a long horizontal stroke at the end.

Christopher E. Earls

Attachments

c: Mr. Mark A. Satorius, Executive Director for Operations, NRC  
Ms. Margaret M. Doane, OGC, NRC  
Mr. Eric Leeds, Director, NRR, NRC  
Mr. Edward T. Smith, NRR, NRC  
Dr. Jennifer Uhle, Deputy Director, NRR, NRC  
Mr. Daniel Dorman, Deputy Director, NRR, NRC

**NEI Comments on  
Draft Regulatory Issue Summary 2014-XX, "Tornado Missile Protection"**

EXECUTIVE SUMMARY

NRC Regulatory Issue Summary (RIS) 2014-XX<sup>1</sup>, "Tornado Missile Protection," (referred to as the "draft RIS") addresses a design issue previously analyzed at length by the NRC and the industry and adds no value to understanding the issue. On this basis alone, the draft RIS should be withdrawn or, in the alternative, substantially revised.

The draft RIS appears to redefine the "current licensing basis" (CLB) in a manner contrary to the definition codified in 10 C.F.R. §54.3. On the one hand the draft RIS appears to exclude from the CLB everything but the Updated Final Safety Analysis Report (excluding, for example, NRC safety evaluation reports and docketed reports from the licensee). On the other hand, the draft RIS appears to sweep into the CLB the NRC's positions on tornado missile protection presented in Regulatory Guide 1.117<sup>2</sup> and Standard Review Plan 3.5.2,<sup>3</sup> even for licensees that did not specifically commit to the positions presented in those documents. The change in CLB appears to constitute a backfit requiring analysis in accordance with 10C.F.R. §50.109 and rulemaking to revise 10C.F.R. §54.3.

The draft RIS appears to deny or diminish the importance of the Systematic Evaluation Program (SEP) and the Individual Plant Examination of External Events (IPEEE) in resolving questions about tornado missile protection requirements for plants subject to those two programs. This is a fundamental change in the NRC's view of these programs and appears to constitute a backfit requiring analysis in accordance with 10C.F.R. §50.109.

The draft RIS makes statements about the use of physical separation of redundant or alternative structures or components as not normally an acceptable method of tornado missile protection. These statements appear to deny or diminish the fact that NRC has previously approved physical separation as a basis for tornado missile protection, particularly for plants licensed before issuance of Regulatory Guide 1.117 and Standard Review Plan 3.5.2. These statements appear to be inconsistent with the NRC's approval of the use of the TORMIS methodology, as mentioned in the draft RIS itself.

Finally, despite the staff's assertions that the RIS requires no action by the licensee, the proposed Enforcement Discretion that accompanies the draft RIS would compel licensees to perform extensive reviews and analyses based on the RIS. The staff's own analysis indicates that potential gaps in tornado missile protection required by the staff's expanded definition of CLB at affected sites are of low risk significance. Thus, the RIS and its associated Enforcement Discretion would divert plant engineering and management resources from matters of greater safety significance for little or no gain in safety. Based on the foregoing, NEI urges the NRC to withdraw the proposed RIS or, in the alternative, substantially revise it to address industry's concerns.

---

<sup>1</sup> NRC Regulatory Issue Summary 2014-XX, "Tornado Missile Protection," page 2, ADAMS Accession No. ML13094A412.

<sup>2</sup> NRC Regulatory Guide 1.117, "Tornado Design Classification", first published June 1976. The current edition is Revision 1, dated April 1978, ADAMS Access No. ML003739346.

<sup>3</sup> NRC NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition", Chapter 3.5.3, "Structures, Systems, and Components to be Protected from Externally-Generated Missiles". Revision 0 was published in November 1975. The current edition is Revision 3, dated March 2007.

**NEI Comments on  
Draft Regulatory Issue Summary 2014-XX, "Tornado Missile Protection"**

REDEFINING CURRENT LICENSING BASIS (CLB) IS INAPPROPRIATE.

*CLB is Defined in the Code of Federal Regulations.*

Current licensing basis ("CLB") is defined in the Code of Federal Regulations, Title 10, Section 54.3, as:

the set of NRC requirements applicable to a specific plant and a licensee's written commitments for ensuring compliance with and operation within applicable NRC requirements and the plant-specific design basis (including all modifications and additions to such commitments over the life of the license) that are docketed and in effect. The CLB includes the NRC regulations contained in 10 C.F.R. parts 2, 19, 20, 21, 26, 30, 40, 50, 51, 52, 54, 55, 70, 72, 73, 100 and appendices thereto; orders; license conditions; exemptions; and technical specifications. It also includes the plant-specific design-basis information defined in 10 C.F.R. 50.2 as documented in the most recent final safety analysis report (FSAR) as required by 10 C.F.R. 50.71 and the licensee's commitments remaining in effect that were made in docketed licensing correspondence such as licensee responses to NRC bulletins, generic letters, and enforcement actions, as well as licensee commitments documented in NRC safety evaluations or licensee event reports. (Emphasis reflected in underlined text added.)

The definition of CLB has not changed in more than 20 years.<sup>4</sup> Indeed, prior NRC staff rejected redefining the CLB on the grounds that doing so "would not be expected to be justified on the basis of the evaluation criteria of 10 CFR 50.109 [the Backfit Rule],"<sup>5</sup> and then NRC Chairman Ivan Selin concurred, writing that a new definition of the CLB "for current plants will likely not pass the backfit analysis."<sup>6</sup>

The NRC staff's new position in the draft RIS appears to impose a significant narrowing of the scope of CLB by limiting the CLB to "the Updated Final Safety Analysis Report (UFSAR) or for a combined license referencing a standard design certification, the Final Safety Evaluation Report and referenced design control document..."<sup>7</sup> This position ignores the plain meaning of CLB as defined 10 C.F.R. §54.3, which clearly encompasses not only the UFSAR and Final Safety Evaluation Report, but also licensee written commitments and licensee correspondence such as responses to NRC bulletins, generic letters, enforcement actions, and commitments documented in safety evaluations or licensee event reports. The generic implications of redefining the CLB as implied by the draft RIS extend far beyond the issue of tornado missile protection as CLBs form the basis of each station's specific licensing basis. If the NRC wishes to redefine CLB, it should do so through rulemaking to revise 10 C.F.R. §54.3, not through issuance of a RIS.

The narrowed definition propounded in the draft RIS disregards decades of NRC Safety Evaluation Reports (SERs), licensee regulatory commitments, and other essential docketed correspondence that, by definition, are a part of the CLB.<sup>8</sup> Unilaterally narrowing the definition of the CLB eliminates

<sup>4</sup> 56 FR 64943-01, "Nuclear Power Plant License Renewal; Final Rule," December 13, 1991.

<sup>5</sup> SECY-94-066, "Evaluation of Issues Discussed in SECY-92-314, "Current Licensing Basis for Operating Plants," March 15, 1994.

<sup>6</sup> SECY-94-066 Notation Vote – Response Sheet, "SECY-94-066 – Evaluation of Issues Discussed in SECY-92-314, "Current Licensing Basis for Operating Plants," April 29, 1994.

<sup>7</sup> NRC Regulatory Issue Summary 2014-XX, "Tornado Missile Protection," page 2, ADAMS Accession No. ML13094A412.

<sup>8</sup> 10 C.F.R. § 54.2. *See also*, RG 1.189 which emphasizes the importance of commitments and other requirements on a facility's docket: "The licensing basis is a set of NRC requirements applicable to a specific plant and a licensee's written commitments for ensuring compliance with and operation within applicable NRC requirements and the plant-specific design basis (including all modifications and additions to such commitments over the life of the license) that are docketed and in effect." Regulatory Guide

**NEI Comments on  
Draft Regulatory Issue Summary 2014-XX, "Tornado Missile Protection"**

countless NRC-written evaluations and all actions committed to by licensees on their dockets. NRC SERs not only provide transparency into the NRC's technical analysis and regulatory decision-making, but also provide design analysis which the licensee must consider to operate within the NRC's intended safety evaluation. Similarly, regulatory commitments play a vital role in the NRC's ability to regulate and enforce actions committed to by a licensee. In SECY-98-224, the NRC staff describes the hierarchy of licensing basis documents needed to address identified licensee problems, enhance internal NRC processes, and improve the NRC's interactions with licensees.<sup>9</sup> The hierarchy was designed to "ensure that the most risk-significant licensing basis information is controlled by the most restrictive process and the least risk-significant licensing basis information is controlled by the most flexible process."<sup>10</sup> The hierarchy includes Obligations, Mandated Licensing Basis Documents, Regulatory Commitments, and Non-Licensing Basis Information.<sup>11</sup>

The NRC staff's proposed new definition of CLB does not fully encompass any of these categories. Although the NRC staff identifies procedures and repairs as sources external to the UFSAR that are included in the CLB, the NRC staff arbitrarily excludes all other information external to the UFSAR that also comprises the CLB, including "explicit, written, docketed statements by a licensee agreeing or volunteering to take specific actions that change the licensing basis of a nuclear power plant."<sup>12</sup> It is unclear why, while the NRC staff proposes to look beyond the UFSAR for CLB documents, the NRC staff arbitrarily includes procedures and repairs and not docketed NRC-licensee safety evaluations, reports, and commitments.

*NRC Safety Assessments and Evaluation Reports are an Integral Part of a Plant's Licensing Basis.*

The NRC's codified and controlling definition of CLB in 10 C.F.R. §54.3, first promulgated in 1991,<sup>13</sup> encompasses a greater number of regulatory controls and commitments. Specifically, docketed licensee responses to "NRC bulletins, generic letters, and enforcement actions, as well as licensee commitments"<sup>14</sup> play a crucial role in the industry's historical response to evolving design basis criteria and issues. As the NRC identifies significant generic issues that require licensee response, licensees understand and expect their responses, which are memorialized on the facility's docket, to be subject to NRC review. For example, Fukushima-related generic communications between the NRC and licensees established Beyond Design Basis requirements which each licensee is expected to maintain as a part of their licensing basis. The definition of CLB as provided in 10 C.F.R. §54.3 does not except NRC positions taken in SERs or other docketed communications, including those taken as a part of the SEP or the IPEEE program. These programs represent deliberate, Commission-sanctioned approaches towards generic industry issues. Through these extensive and detailed

---

1.189, Revision 2, "Fire Protection for Nuclear Power Plants," October 2009 (*available at*: <http://pbadupws.nrc.gov/docs/ML0925/ML092580550.pdf>).

<sup>9</sup> SECY-98-224, "Staff and Industry Activities Pertaining to the Management of Commitments Made by Power Reactor Licensees to the NRC," dated September 28, 1998 (*available at*: <http://www.nrc.gov/reading-rm/doc-collections/commission/secys/1998/secy1998-224/1998-224scy.pdf>).

<sup>10</sup> SECY-98-224, "Staff and Industry Activities Pertaining to the Management of Commitments Made by Power Reactor Licensees to the NRC," dated September 28, 1998 (*available at*: <http://www.nrc.gov/reading-rm/doc-collections/commission/secys/1998/secy1998-224/1998-224scy.pdf>).

<sup>11</sup> SECY-98-224, "Staff and Industry Activities Pertaining to the Management of Commitments Made by Power Reactor Licensees to the NRC," dated September 28, 1998 (*available at*: <http://www.nrc.gov/reading-rm/doc-collections/commission/secys/1998/secy1998-224/1998-224scy.pdf>).

<sup>12</sup> SECY-98-224, "Staff and Industry Activities Pertaining to the Management of Commitments Made by Power Reactor Licensees to the NRC," dated September 28, 1998 (*available at*: <http://www.nrc.gov/reading-rm/doc-collections/commission/secys/1998/secy1998-224/1998-224scy.pdf>).

<sup>13</sup> 56 FR 64943-01, "Nuclear Power Plant License Renewal; Final Rule," December 13, 1991.

<sup>14</sup> 10 C.F.R. § 54.3

**NEI Comments on  
Draft Regulatory Issue Summary 2014-XX, "Tornado Missile Protection"**

programs, the NRC published their docketed evaluations with the expectation that licensees would operate within the NRC's expectations. Indeed, in the cases of the SEP and IPEEE program, the NRC published lengthy NUREGs and SERs to establish the basis of their findings and directives. Both the public and the industry have relied upon the NRC's use of generic communications and docketed correspondence as a means of understanding and adhering to NRC regulations and expectations.

The basis for the NRC staff's assertion in the draft RIS that the "SEP and IPEEE do not supersede any part of a plant's licensing bases, absent further action on the part of the NRC or the licensee (i.e., a license amendment application)"<sup>15</sup> is unclear. Docketed safety assessments and evaluation reports are a part of a plant's licensing basis. While inconsistencies between SEP and IPEEE documents and previous licensing basis documents must be reconciled, both positions are part of the licensing basis. In Generic Letter 95-04, the NRC confirmed that the IPEEE program would resolve the tornado missile issues identified in the SEP lessons learned.<sup>16</sup> Indeed, the following excerpt from NRC Office Instruction LIC-100, Section 6.11, which cites Generic Letter 95-04, appears to contradict the aforementioned assertion in the draft RIS:

"Generic Letter 95-04, 'Final Disposition of the Systematic Evaluation Program,' documented the final disposition of the 27 lessons-learned issues found in the Systematic Evaluation Program (SEP). The program is discussed here because (1) the SEP did result in some changes to the licensing bases for operating reactors (i.e., some issues that were resolved led to a revision to one or more elements of the licensing bases) and (2) the reports generated by the SEP can be a valuable reference regarding the licensing bases for older plants."<sup>17</sup>

It is also important to note the staff's view of the impact of the resolution of generic issues on the CLB presented in NUREG-1412:

"The licensing basis of individual plants includes changes that have resulted from resolution of generic issues determined to be applicable and will include applicable generic-issue-derived changes in the future."<sup>18</sup>

NUREG-0823 and other SEP-related NUREGs state that the SEP "program objectives were later interpreted by the NRC to ensure that the SEP also provides safety assessments adequate for conversion of provisional operating licenses (POLs) to full - term operating licenses (FTOLs). The final version of this report [NUREG-0823] and a POL conversion safety evaluation report that will address the status of all applicable generic activities (TMI and USI), including those that formed the basis for deletion of specific SEP topics, will form a part of the basis for the Commission's consideration of the license conversion."<sup>19</sup> This conversion of a POL to a FTOL is clearly a licensing action and a published NRC position. In fact, SEP evaluations were reviewed in detail by the Advisory Committee on Reactor Safeguards, the results of which were provided to the Commission

<sup>15</sup> NRC Regulatory Issue Summary 2014-XX, "Tornado Missile Protection," page 5, ADAMS Accession No. ML13094A412.

<sup>16</sup> "The NRC staff determined that the 21 issues remaining in categories 3 and 4 did not require immediate action to protect public health and safety, and incorporating them into the established NRC regulatory process for determining the safety importance of generic safety issues. The 20 issues in category 3 are covered by existing regulatory programs described in NUREG-0933." Generic Letter 95-04, "Final Disposition of the Systematic Evaluation Program Lessons-Learned Issues," page 2, dated April 28, 1995. See also, Attachment 2, page 1 for tornado missiles categorized as Category 3 and covered by the IPEEE program.

<sup>17</sup> NRR Office Instruction LIC-100, "Control of Licensing Bases for Operating Reactors", Revision 1, January 7, 2004, ADAMS Accession Number ML072000067.

<sup>18</sup> NUREG-1412, "Foundation for the Adequacy of the Licensing Bases – A Supplement to the Statement of Considerations for the Rule on Nuclear Power Plant License Renewal (10 C.F.R. Part 54)", Section 1.3.4, page 1-4, published December 1991.

<sup>19</sup> NUREG-0823, "Integrated Plant Safety Assessment, Systematic Evaluation Program," page 1-2 (February 1983).

**NEI Comments on  
Draft Regulatory Issue Summary 2014-XX, "Tornado Missile Protection"**

for each SEP review.<sup>20</sup> The NRC's documented review of SEP issues was thorough and considered by many levels of NRC management; therefore, reopening this issue is unnecessary and inappropriate. The NRC, licensees, and public all benefit from the depth and detail provided in a facility's lengthy licensing basis beyond the UFSAR, especially considering the complex growth and technical change the industry has undergone since initial licensing.

NRC guidance that was promulgated after the NRC licensed a plant would not be an acceptable basis for assessing the licensing basis of any specific plant, since that guidance could not have been considered during NRC's review of the plant's operating license. In the natural course of regulation, NRC requirements for the level of detail required in FSARs have changed. As explained in the SEP-related NUREGs, the FSARs of older plants would not have the same level of detailed discussion as currently expected. The absence of such detail does not mean that the NRC is free to apply its subsequent technical positions to those plants.

The draft RIS states that, in the absence of "specific descriptions of protective features for tornado missile protection...the staff relies on NRC regulations and guidance provided in regulatory guides and the standard review plans to interpret any generalities in a plant's licensing basis"<sup>21</sup> and refers to Regulatory Guide 1.117 and SRP 3.5.2.<sup>22</sup> Any details, however, that this process may add to the "generalities" in a plant's licensing basis would change that licensing basis. Regulatory Guides provide an example of acceptable means of complying with NRC regulations, but do not rise to the level of a regulation. Licensees may, but are not required to, commit to a Regulatory Guide. Conversely, licensees may comply with NRC regulations without following a Regulatory Guide. Similarly, the SRPs were prepared for the NRC staff to use when reviewing construction and operation license applications. The SRPs are not regulatory requirements with which a licensee must comply (although they may establish positions upon which the staff bases its licensing actions). Nor do these documents (Regulatory Guides or SRPs) themselves constitute licensee commitments (without the licensee making a conscious decision to adopt the Regulatory Guide as its compliance with the regulatory requirements). There is no basis for including the Regulatory Guides and SRPs themselves in a licensee's CLB. The NRC staff's inclusion of these documents in the CLB, to the exclusion of all other documents which actually constitute a licensee's CLB as defined in 10 C.F.R. §54.3, highlights the significant departure of the description of the CLB in the draft RIS from the regulatory definition of CLB.

*CLBs are Exceptionally and Appropriately Facility-Specific, Therefore, One Licensee's Action or Enforcement is Not Indicative of a Necessary Industry Action.*

The use of NRC generic guidance documents and review plans as part of the CLB is inappropriate when considering the unique nature of each plant's CLB. One plant's CLB may differ from that of a similarly designed plant because of its age, construction, location, historical decision-making, ownership, and many other facility-specific factors. As such, one licensee's action or inspection finding is not indicative of the need for an industry-wide action. The NRC staff's references to Point Beach Nuclear Plant, Surry Power Station, and Fermi-2<sup>23</sup> as evidence that tornado missile non-conformances require license amendment requests are improper. The Point Beach Inspection Report states that Point Beach committed to have all components protected from tornado missiles,

<sup>20</sup> See, e.g., Letter from P. Shewmon (ACRS Chairman) to N. J. Palladino (Commission Chairman), "ACRS Report on the Systematic Evaluation Program Review of the Dresden Nuclear Power Station, Unit 2," dated December 13, 1982.

<sup>21</sup> NRC Regulatory Issue Summary 2014-XX, "Tornado Missile Protection," page 2, ADAMS Accession No. ML13094A412.

<sup>22</sup> NRC Regulatory Issue Summary 2014-XX, "Tornado Missile Protection," pages 3-4, ADAMS Accession No. ML13094A412.

<sup>23</sup> NRC Regulatory Issue Summary 2014-XX, "Tornado Missile Protection," page 2, ADAMS Accession No. ML13094A412.

**NEI Comments on  
Draft Regulatory Issue Summary 2014-XX, "Tornado Missile Protection"**

but that the NRC discovered unanalyzed structures requiring protection.<sup>24</sup> Though the draft RIS implies that Point Beach subsequently submitted a license amendment request to address these unanalyzed structures, in fact, Point Beach did not submit a license amendment request, but rather modified the plant and clarified the CLB to address the issues. Similarly, the Surry Inspection Report details a finding for a design change that conflicted with UFSAR design guidance. This is a design control issue, not one indicating the need for a license amendment request in response to tornado missile design non-conformances. Finally, the Fermi-2 license amendment request, which has not yet been granted, signifies one licensee's desire to amend its license and reflects a decision by that licensee to change its design basis. The decision-making of one licensee in a plant-specific situation is not evidence that the industry as a whole must react to a generic issue with a license amendment request. The citations of inspection reports and a license amendment request do not prove a need for all licensees to address a generic issue in the same manner. While NRC-required license amendments to address unanalyzed conditions may be appropriate for some plants, requiring the reanalysis of issues previously evaluated and closed on a licensee's docket is not appropriate.

*License Amendment Requests are Required for Plant License Design Changes.*

Typically, unless a plant changes its licensed design, it is not required to apply for a license amendment. In fact, 10 C.F.R. §50.59 describes when license amendments are required to authorize certain changes, tests, and experiments. There is no requirement to request a license amendment to address the acceptability of plant features that have not changed since initial licensing. When the NRC granted the initial license, it also *de facto* stated that the existing plant design was compliant with then-existing regulations (to the extent that the NRC reviewed the related design). FSAR changes to enhance the description of designs that existed since initial licensing would not constitute a change, within the meaning of 10 C.F.R. §50.59, which defines change as: "a modification or addition to, or removal from, the facility or procedures that affects a design function, method of performing or controlling the function, or an evaluation that demonstrations that intended functions will be accomplished" as the change related to a description in the FSAR.<sup>25</sup> The NRC cannot summarily state that plants that had their tornado missile design evaluated and accepted in the SEP and/or IPEEE program, and that are not proposing any change to those designs, must enter into the 10 C.F.R. §50.59 process and require a license amendment.<sup>26</sup> These plants have been reviewed by NRC staff through systematic and focused programs and do not need to seek amendments to their licenses.

THE DRAFT RIS CONSTITUTES A CHANGE IN NRC STAFF POSITION AND CONSTITUTES A BACKFIT.

It appears that the NRC staff is proposing to change the codified definition and regulatory strength of the CLB, and in doing so, is attempting to backfit the industry. As discussed, this change requires rulemaking and a backfit analysis. Additionally, the NRC also is backfitting its revisionist view of the regulatory usefulness of SEP and IPEEE program documents issued by the NRC to licensees. In SECY-76-545, the NRC staff proposed the SEP<sup>27</sup> to deal with the disparity between then-current technical positions and Atomic Energy Commission (the NRC's predecessor) positions taken at the time of licensing, to facilitate balanced decisions regarding backfit requirements, to decrease the amount of NRC staff time spent documenting justification for existing reactors, and to identify the

<sup>24</sup> Point Beach Nuclear Power Plants, Unit 1 and 2, "NRC Integrated Inspection Report 05000266/2011004; 05000301/2011004," November 2, 2011, page 13, ADAMS Accession No. ML11306A264.

<sup>25</sup> 10 C.F.R. § 50.59.

<sup>26</sup> NRC Regulatory Issue Summary 2014-XX, "Tornado Missile Protection," page 5, ADAMS Accession No. ML13094A412.

<sup>27</sup> SECY-76-545, "The Systematic Evaluation of Operating Nuclear Power Plants," page 2, dated November 12, 1976.

**NEI Comments on  
Draft Regulatory Issue Summary 2014-XX, "Tornado Missile Protection"**

need for additional analysis and equipment.<sup>28</sup> During the SEP, NRC teams identified plant-specific issues<sup>29</sup> and presented backfit decisions to NRR and NRC management for review.<sup>30</sup> In general, the NRC's position after evaluating the issues within these topics fell into one or more of the following categories: (1) equipment modification or additions, (2) procedure development or technical specification changes, (3) refined engineering analysis or continuation of ongoing evaluations, and (4) no modification necessary.<sup>31</sup>

With the SEP ongoing, the NRC issued Generic Letter 88-20, "Individual Plant Examination for Severe Accident Vulnerabilities – 10 C.F.R. §50.54(f)."<sup>32</sup> Generic Letter 88-20 (GL 88-20) sought to implement the Commission's 1985 Severe Accident Policy and use plant-specific probabilistic risk assessments (PRAs) to evaluate plant-specific vulnerabilities from severe accidents.<sup>33</sup> The Commission was aware that both SEP lessons learned and GL 88-20 implementation were in progress.<sup>34</sup> In response to the Commission's request to report on these processes, the NRC staff issued SECY-90-343 on October 4, 1990.<sup>35</sup> In this communication, James M. Taylor, Executive Director for Operations of the NRC, wrote that the NRC staff had examined SEP issues at 41 older plants that had not taken part in the SEP.<sup>36</sup> Through this examination, the NRC staff placed each SEP issue into one of the following categories: (1) issues that have been completely resolved; (2) issues which are of such low safety significance so as to require no further regulatory action; (3) issues which are unresolved, but for which the staff has identified existing regulatory programs that would cover the scope of the technical concerns and whose implementation would resolve the specific SEP issue; and (4) issues which are unresolved, and regulatory actions to resolve the issue have not been identified.<sup>37</sup> The NRC staff categorized Tornado Missiles, the subject of the draft RIS, under Category 3, stating that the plant-specific evaluations initiated by GL 88-20 and implemented through the IPEEE program would resolve this issue.<sup>38</sup> This closeout of Tornado Missiles as an SEP issue to the IPEEE program was again documented in NUREG-0933<sup>39</sup> and SECY-90-0343.<sup>40</sup>

It is also important to note that in SRM-92-223,<sup>41</sup> the Commission determined that, "While compliance with the intent of the GDC is important, each plant licensed before the GDC were formally adopted was evaluated on a plant specific basis, determined to be safe, and licensed by the Commission. Furthermore, current regulatory processes are sufficient to ensure that plants continue to be safe and comply with the intent of the GDC. Backfitting the GDC would provide little or no

<sup>28</sup> *Id.* at page 1.

<sup>29</sup> SECY-76-545, page 3.

<sup>30</sup> *Id.* at page 4.

<sup>31</sup> *See, e.g.*, NUREG-0823, Supplement No. 1, page 1-1, dated October 1989.

<sup>32</sup> Generic Letter 88-20, "Individual Plant Examination for Severe Accident Vulnerabilities – 10 C.F.R. § 50.54(f)," dated November 23, 1988.

<sup>33</sup> *Id.* at page 1.

<sup>34</sup> Staff Requirements Memorandum M900516, dated May 25, 1990.

<sup>35</sup> SECY-90-343, "Status of the staff program to determine how the lessons learned from the Systematic Evaluation Program have been factored into licensing bases of operating plants," dated October 4, 1990.

<sup>36</sup> *Id.* at page 2.

<sup>37</sup> SECY-90-343, pages 2 and 3.

<sup>38</sup> SECY-90-343, Enclosure: Memorandum from T. E. Murley (Director of the Office of Nuclear Reactor Regulation) to E. S. Beckjord (Director of Nuclear Regulatory Research), Enclosure 2, page 6, memo dated October 2, 1990.

<sup>39</sup> NUREG-0933, "Resolution of Generic Safety Issues: Issue 156: Systematic Evaluation Program (Rev. 8)"; Issue 156.1.5: Tornado Missiles, through Supplement 34 issued in 2011, available at [www.nrc.gov](http://www.nrc.gov).

<sup>40</sup> Generic Letter 95-04, "Final Disposition of the Systematic Evaluation Program Lessons-Learned Issues," page 2 of Attachment 2, dated April 28, 1995. For the NRC staff's 2002 reiteration of SEP issue closure to IPEEE program. *See also*, page 5-4 in NUREG-1742 for the NRC staff's review process, which "assess[ed] the acceptability of the licensees' conclusions regarding the USIs and GSIs in the IPEEE submittals" and verified issue closure. NUREG-1742, "Perspectives Gained From the Individual Plant Examination of External Events (IPEEE) Program," Volume 1, published April 2002.

<sup>41</sup> SRM-92-223, "Resolution of Deviations Identified During the Systematic Evaluation Program", September 18, 1992, ADAMS Accession number ML12256B290.

**NEI Comments on  
Draft Regulatory Issue Summary 2014-XX, "Tornado Missile Protection"**

safety benefit while requiring an extensive commitment of resources... The SEP should be closed. The staff should, however, continue the generic review of the SEP lessons learned and prioritize the issues in the Generic Safety Issues program."

The NRC did not require license amendments to reflect the configurations that it accepted in its SEP/IPEEE program review conclusions. At the time, these conclusions did not also come with a requirement for a licensee to submit a license amendment to codify the as-evaluated plant configuration. To do so now, more than twenty years after the fact, is a change in regulatory position and requires consideration under the Backfit Rule. In fact, statements in SEP or IPEEE program documents issued by the NRC and related to a specific issue at a specific facility clearly establish a regulatory position on that licensee's docket. In addition, the position presented in the draft RIS could lead to submittal of more license amendment requests to review SEP or IPEEE results. This would add to the backlog of licensing actions at NRC at a time when the staff is already unable to meet its targets for review of existing license amendment requests that are much more significant to risk reduction and reliability improvement.<sup>42</sup>

Page 5 of the draft RIS erroneously states that the NRC's regulatory positions and standard review plan have "remained essentially constant over the past 20 to 30 years."<sup>43</sup> As discussed, via the SEP and IPEEE program, licensees had various configurations and approaches reviewed and approved by the NRC. As an aside, the NRC's stated objectives for the SEP and IPEEE program are dicta and do not demonstrate any relevance to whether their published opinions are a part of the licensing basis. In some cases, plants that relied on separation as a basis for tornado missile protection since initial licensing were deemed not to require modification, generally because of the *de minimus* associated risk. In addition, the SEP was mostly concerned with the gap that resulted from how the NRC's interpretation of the General Design Criteria changed over time. The NRC had determined that each plant was compliant when it issued the operating license. It should be recognized that the SEP was focused on assessing plant safety, not compliance. Licensees supported, complied with, and financed these lengthy and expensive processes with the expectation that the NRC would identify deficiencies and gaps in compliance via review, inspection, and enforcement action, where necessary. Should the draft RIS be published as it stands, it is a clear change in the NRC's position on tornado missile protection acceptance criteria as well as a change in the NRC's view of previously issued NRC approval, review, and evaluation documents. Not only would publication call into question every non-license amendment request-based safety evaluation report, but it would also discourage licensee and public confidence in future NRC positions. If a licensee cannot rely on NRC statements in SER-type documents, docketed correspondence, or specific NRC reviews of compliance issues that are documented in issuances such as inspection reports, the foundation of licensee-NRC documented interactions fails and becomes a useless exercise of technical information exchanges with no real value. Furthermore, if the NRC can disregard previous reviews and approvals and change design basis standards without a backfit analysis, licensees can no longer rely on NRC reviews to be focused on a long-term, permanent improvement. It also invalidates the purpose of the Backfit Rule and its associated required analysis.

The RIS itself is an inappropriate forum for the NRC's new position. Per NRC Management Directive 8.18, a RIS may:

"...communicate NRC endorsement of an industry-developed resolution of a matter on which the staff has interacted with the industry; communicate NRC endorsement of industry

<sup>42</sup> Congressional Budget Justification: NRC FY 2015 (NUREG-1100, Volume 30), Operating Reactor Output Indicators, pgs 40-41: "The metric for number of license actions [and other licensing tasks] is challenged due to Fukushima related work competing for the same critical area skill sets/branches in NRR."

<sup>43</sup> NRC Regulatory Issue Summary 2014-XX, "Tornado Missile Protection," page 5, ADAMS Accession No. ML13094A412.

**NEI Comments on  
Draft Regulatory Issue Summary 2014-XX, "Tornado Missile Protection"**

guidance on technical or regulatory matters; provide the status of staff interaction with the nuclear industry on a matter; request the voluntary participation of the nuclear industry in staff-sponsored pilot programs; inform the nuclear industry of opportunities for regulatory relief; communicate staff technical or policy positions on matters that have not been communicated to or are not broadly understood by the nuclear industry; provide guidance to applicants and licensees on the scope and detail of information that should be provided in licensing applications to facilitate staff review; communicate administrative procedure changes in the implementation of regulations or staff positions, the issuance and availability of regulatory documents (topical reports, NUREG-type documents, regulatory guides, and memoranda documenting the closeout of generic safety issues), and changes in NRC internal procedures and organization; and request the voluntary submittal of information which will assist NRC in the performance of its functions.<sup>44</sup>

Management Directive 8.18 adds that a RIS may not "provide guidance for the implementation of rules and regulations, provide guidance to NRC staff on regulatory or technical matters, and be used in lieu of other established agency products."

The draft RIS does not accomplish any of the stated RIS goals. In fact, the NRC's position on tornado missile protection has been thoroughly discussed, documented, and understood throughout the industry. Previous NRC and licensee communications (e.g., inspection reports, SERs, IPEEE program reports) have indicated a consensus between the parties. Because the draft RIS' new position requires licensee action, a RIS should not be used for this communication.

**THE DRAFT RIS CONTAINS OVERREACHING STATEMENTS.**

As a matter of record and in addition to objections related to the NRC's redefinition of CLB and violations of the Backfit Rule, the industry would like to object to the following statements as overreaching and misleading. On page 3, the draft RIS states that the "physical separation of redundant or alternative structures or components required for safe shutdown of the plant is generally not considered acceptable by itself for protecting against tornado effects, including tornado-generated missiles."<sup>45</sup> Again, on page 4, the draft RIS states that "physical separation alone is not normally an acceptable method of missile protection for redundant safety-related systems and components."<sup>46</sup> The Regulatory Guide and the SRP cited by the NRC were promulgated after many plants had been licensed, and the cited positions were not necessarily considered in the licensing basis of the older plants. While these statements may be true as generalities, in cases where the NRC previously approved physical separation of redundant or alternative structures, such designs were considered and are acceptable. Additionally, although the NRC may find in other cases that physical separation alone is not sufficient, the NRC has evaluated and approved physical separation, redundancy, and probability as a basis for tornado missile protection. In these cases, physical separation is a part of the NRC's approval basis. Furthermore, note that the quoted position is inconsistent with the NRC's approval of the use of the TORMIS methodology, as mentioned on page 2 of the RIS. The basis of NRC approval is an essential part of a plant's licensing basis and extends far beyond initial licensing and license amendment approval.

The statement in the draft RIS that "[t]he above staff regulatory positions and standard review plan have remained essentially constant over the past 20 to 30 years" overlooks a key point. Seventy-

<sup>44</sup> NRC Management Directive 8.18, "NRC Generic Communications Program", March 5, 2009, ADAMS Accession No. ML072070128.

<sup>45</sup> NRC Regulatory Issue Summary 2014-XX, "Tornado Missile Protection," page 3, ADAMS Accession No. ML13094A412.

<sup>46</sup> NRC Regulatory Issue Summary 2014-XX, "Tornado Missile Protection," page 4, ADAMS Accession No. ML13094A412.

**NEI Comments on  
Draft Regulatory Issue Summary 2014-XX, "Tornado Missile Protection"**

four of the 100 units operating today were licensed more than 30 years ago, and 99 of the 100 operating units were licensed more than 20 years ago.<sup>47</sup> Thus, the pertinent question is what were the requirements for tornado missile protection in the original plant licensing basis. It is irrelevant whether tornado missile protection requirements were "essentially constant" afterwards. The positions presented in the draft RIS do depart from the CLB of affected plants. It is inappropriate for the NRC to use staff positions developed after the pre-GDC plants were licensed to reinterpret the broadly worded text on tornado missile protection in the CLB of those plants. The historical information in the CLB met the documentation requirements at the time the bases were established. Yet throughout the plant's operating history, the plant was subject to reviews, audits and inspections based on the content of its CLB. When evaluating the plant for conformance to the CLB for tornado missile protection, the NRC should use the regulations and guidance in effect at the time the applicable portion of the CLB was established.

During the May 28, 2014 public meeting, the staff said several times that the draft RIS is intended to provide guidance to inspectors. If that is so, a RIS is not the proper vehicle for inspection guidance, which should be provided in Inspection Manual Chapters or Inspection Procedures. If inspection guidance is needed on tornado missile protection, the staff should provide that guidance in the appropriate inspection document and publish that document in lieu of, or concurrently with, the proposed RIS. The inspection guidance should reflect the understanding of CLB and the SEP and IPEEE described previously in these comments.

#### CONCLUSION

The draft RIS adds no value to industry's understanding of requirements for tornado missile protection. The draft RIS appears to redefine the CLB in a manner contrary to the definition in 10 C.F.R. §54.3. The definition inferred from the draft RIS would exclude staff safety evaluation reports and docketed correspondence and reports, yet add positions in Regulatory Guides and Standard Review Plans to which a licensee was not committed nor required to commit. This view would have significant ramifications far beyond the area of tornado missile protection.

The definition of CLB is not only a codified rule, but also the NRC has taken clear and published positions on the CLB in the past. The NRC's redefinition of CLB in the draft RIS is not only without justification, but also does not include the appropriate backfit analysis needed for this change in position. At the very least, a RIS, which purports to require no licensee action, is not the appropriate vehicle for a rule and regulatory position change.

Additionally, the draft RIS overlooks the unique nature of each nuclear power plant and licensee, which has been critical to the success and safety of the industry. Each nuclear power plant's CLB is distinctive and deserves the recognition of past plant-specific NRC reviews, reports, and analyses. Suggesting that a license amendment request is needed for plants that have been subject to these reviews and approvals is an inaccurate view of the license amendment process. License amendments are required when a facility desires to amend its license or licensing basis. Those plants that have already been reviewed and approved under NRC programs, such as the SEP and IPEEE program, are not seeking amendments to their licenses. Rather, they are seeking continued long-standing recognition of these deliberate analyses. Nullification of these detailed programs and evaluations is not only an unjustified slight to the NRC work that has already been performed, but also a backfit requiring backfit analysis.

---

<sup>47</sup> NEI analysis of plant license data, June 2014.

**NEI Comments on Draft Enforcement Discretion Accompanying  
the Draft Regulatory Issue Summary 2014-XX, "Tornado Missile Protection"**

EXECUTIVE SUMMARY

Accompanying the draft NRC Regulatory Issue Summary (RIS) 2014-XX<sup>1</sup>, "Tornado Missile Protection," (referred to as the "draft RIS") is a proposed Enforcement Discretion for Tornado Missile Protection Nonconformance<sup>2</sup> (referred to as the "draft IEP"). The draft IEP appears to create a new regulatory process where none is necessary. Furthermore, this process appears likely to drive the licensee and NRC to allocate resources to address risks that the staff acknowledges are low (i.e., on the order of 1E-06/year or less at most sites). Finally, if the NRC wishes to reopen the issue of tornado missile protection on plants licensed before the General Design Criteria were promulgated, the agency should use other regulatory processes intended for this purpose (e.g., 10 CFR 50.109), not a RIS and an IEP.

THE IEP, LIKE RIS 2014-XX, IS UNNECESSARY

As explained in Attachment 1, NEI fundamentally disagrees on the need for proposed RIS 2014-XX, and therefore considers the draft IEP unnecessary as well. The resolution of Generic Safety Issue (GSI) 156, "Systematic Evaluation Program (SEP)", and the Individual Plant Examination of External Events (IPEEE) closed the tornado missile concern for all pre-GDC plants. Furthermore, SRM-92-223, "Resolution of Deviations Identified during the Systematic Evaluation Program,"<sup>3</sup> states:

"While compliance with the intent of the GDC is important, each plant licensed before the GDC were formally adopted was evaluated on a plant specific basis, determined to be safe, and licensed by the Commission. Furthermore, current regulatory processes are sufficient to ensure that plants continue to be safe and comply with the intent of the GDC. Backfitting the GDC would provide little or no safety benefit while requiring an extensive commitment of resources...The Systematic Evaluation Program (SEP) should be closed. The staff should, however, continue the generic review of the SEP lessons learned and prioritize the issues in the Generic Safety Issues program."

Thus, the Commission makes clear that further NRC concerns about tornado missile protection of the pre-GDC plants should be addressed through backfitting, not through a RIS and interim enforcement policy. The fact that a proposed interim enforcement policy must accompany the proposed RIS further demonstrates that a RIS is the wrong regulatory vehicle for NRC to use to reopen a previously closed issue. If NRC wishes to reopen the tornado missile protection issue on the dockets of the affected plants, the agency should perform the backfit analysis required by 10 CFR 50.109, then, for example, issue a 10 CFR 50.54(f) letter to compel the analysis it now seeks to obtain through issuance of RIS 2014-XX and the IEP.

THE IEP APPEARS TO ESTABLISH A NEW REPORTING PROCESS

To grant enforcement discretion, the IEP would require the licensee to identify nonconformances with the plant licensing basis within 12 months of the date of RIS 2014-XX.

<sup>1</sup> NRC Regulatory Issue Summary 2014-XX, "Tornado Missile Protection," page 2, ADAMS Accession No. ML13094A412.

<sup>2</sup> ADAMS Accession Number ML14142A293, dated May 22, 2014.

<sup>3</sup> NRC Memorandum from Samuel J. Chilk, Secretary of the Commission, to James M. Taylor, Executive Director for Operations, SECY-92-223, dated September 18, 1992.

**NEI Comments on Draft Enforcement Discretion Accompanying  
the Draft Regulatory Issue Summary 2014-XX, "Tornado Missile Protection"**

The IEP would also require the licensee to evaluate the nonconforming condition for reportability and enter the nonconformance into the corrective action process. Both actions are addressed by existing regulations (reportability by 10CFR 50.72(b)(3)(ii) and 10 CFR 50.73(a)(2)(ii); corrective action by 10CFR 50, Appendix B). Repeating the need for reportability evaluation and entry into the licensee's corrective action process (CAP) in the IEP is unnecessary and potentially confusing.

The IEP further requires the licensee to report specified information to their NRC Regional office within seven days of identification of the nonconformance. This constitutes a new reporting requirement that requires rulemaking to modify 10 CFR 50.72 and 50.73 and a change to NUREG-1022, which provides implementing guidance on the requirements of 10 CFR 50.72 and 50.73.

The IEP implies that NRC regional staff will review the licensee's report on the nonconformance to determine whether enforcement discretion should continue. The IEP gives no indication of the criteria on which the regional staff would make this determination (e.g., "If for some reason the NRC finds this information to be unacceptable...").<sup>4</sup> The decision criteria should be stated explicitly or the regional review eliminated.

On the top of page 2 of the draft IEP, the information expected from the licensee within seven days is described as "a description of the potential loss of safety related equipment..." and "an aggregate assessment of the combined effect of implementing any and all current enforcement discretion." The requirement to submit this information within seven days appears disproportionate to the risk significance of a tornado-related nonconformance. Additionally, the aggregate assessment should be limited to enforcement discretion granted under this IEP. Without this clarification, the IEP appears to require the aggregate assessment to address every example of enforcement discretion, including those unrelated to the tornado protection nonconformance.

The IEP requires the licensee to submit additional information within 30 days of identifying a nonconformance; still more information within 90 days and then other information within six months. As the IEP anticipates licensees may identify more than one nonconforming condition, this could lead to a large number of overlapping timeframes and reports. Such a multiplicity of reports is unwarranted by the low risk significance of tornado protection nonconformances. Tracking the number and variety of reports required, not to mention devoting the engineering resources necessary to produce the content required in those reports, threatens to divert vital plant resources from focusing on safe operation of the plants. With the tools available to inspect licensee actions on identified nonconformances, in addition to the existing reporting and corrective action requirements previously mentioned, it is unclear why the several special reports at 30 days, 90 days and six months are necessary to the regulatory process. In addition, it is unclear how the specific information required at 30 and 90 days differs. While we believe no additional reporting requirements are needed, any that would arise from the IEP

---

<sup>4</sup> IEP, page 2.

**NEI Comments on Draft Enforcement Discretion Accompanying  
the Draft Regulatory Issue Summary 2014-XX, "Tornado Missile Protection"**

should be simpler and fewer than what is specified in the draft IEP (e.g., a single report at 90 or 120 days following identification of the nonconformance).

The draft IEP proposes that licensees shall complete all corrective actions within three years from issuance of RIS 2014-XX. Depending on when the RIS is actually issued, three years could very likely be insufficient time for a licensee to complete all corrective actions. For example, if the licensee chooses to address tornado missile protection concerns using TORMIS, an NRC-accepted method, it can take up to a year for the licensee to complete the analysis and submit it to the NRC. (This does not consider potential delays that could be significant if a large number of licensees simultaneously seek TORMIS support from the small number of firms providing this specialized expertise to the nuclear industry.) If the current NRC backlog on license amendment requests is any indication of the future "pipeline" of licensing actions, the NRC review of a TORMIS submittal could easily take two years or more to complete. This means the NRC review would define the critical path to completion of the TORMIS approach and comprise the bulk of the three year interval for achieving compliance proposed in the draft IEP. The IEP should commit the NRC to complete its reviews within 12 months and grant an automatic extension of the compliance date day-for-day as the NRC review extends longer than 12 months.

The compressed timeframe of three years would also compel diversion of engineering and PRA resources away from more risk-significant projects to this less risk-significant effort. Considering the time needed to complete the engineering and design review, there would be little lead time to develop any required plant modifications and work them into the plant outage schedule. This could result in extending the outage nearest the end of the three-year window, driving up the resources needed to accomplish the work within the three-year window, or displacing outage projects that would be better for plant safety and reliability. A more realistic timeframe would be on the order of five years from the discovery of the nonconforming condition.

The IEP potentially would require the licensee to shut down the plant within three years from issuance of RIS 2014-XX if affected structures, systems or components (SSCs) are not returned to an operable status. As noted previously, this appears out of proportion to the risk significance of the underlying nonconformance. In our view, a longer period of time would be appropriate for bringing the affected SSCs into conformance with the licensing basis.

The IEP should also indicate how the NRC will treat open unresolved items (URIs) related to tornado missile protection.

Finally, the IEP is unnecessary unless the NRC continues with the backfits arising from issuance of the RIS without entering the backfit process.