



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

July 26, 2018

PLEASE RESPOND BY:
August 10, 2018

COMSECY-18-0013

MEMORANDUM TO: Chairman Svinicki
Commissioner Baran
Commissioner Burns
Commissioner Caputo
Commissioner Wright

FROM: Margaret M. Doane *Margaret M. Doane*
Executive Director for Operations

SUBJECT: USING NATIONAL SAFER RESPONSE CENTER RESOURCES
DURING EXIGENT SITUATIONS

This memorandum seeks Commission alignment regarding the staff's position that allows the use of Strategic Alliance for FLEX¹ Emergency Response (SAFER) resources during a non-nuclear exigent situation.

By way of background, nuclear industry licensees contracted the SAFER team,² which owns and maintains these resources, to support compliance with the U.S. Nuclear Regulatory Commission's (NRC's) Mitigation Strategies Order EA-12-049³ following the events at the Fukushima Dai-ichi nuclear power plant. The Mitigation Strategies Order directed addressees to develop, implement, and maintain guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities in the event of a beyond-design-basis external event (BDBEE), using a phased approach. The initial phase requires the use of installed plant equipment and resources. The transition phase requires providing sufficient portable onsite equipment and consumables to maintain or restore these functions until they can be accomplished with resources brought from offsite. The final phase requires obtaining sufficient offsite resources to sustain those aforementioned functions indefinitely; the SAFER team provides the equipment portion of these offsite resources and coordinates their transportation, as needed.

To fulfill the requirements of the Mitigation Strategies Order, the Nuclear Energy Institute (NEI) outlined a strategy in NEI 12-06, "Diverse and Flexible Coping Strategies (FLEX) Implementation Guide," issued August 2012 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML12242A378).

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¹ FLEX is not an acronym, but refers to Diverse and Flexible Coping Strategies, the nuclear industry's response to the Mitigation Strategies Order, EA-12-049.

² The SAFER team consists of Pooled Equipment Inventory Company and AREVA, Inc., now ORANO USA.

³ This order applies to all then-operating power reactor licensees, all holders of construction permits for power reactors, and Vogtle Electric Generating Plant, Units 3 and 4. The NRC has imposed parallel requirements by license condition on holders of all subsequently issued combined licenses.

The NRC endorsed this strategy via Japan Lessons-Learned Division (JLD)-Interim Staff Guidance (ISG)-2012-01, "Compliance with Order EA-12-049, Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," dated August 29, 2012 (ADAMS Accession No. ML12229A174).

On September 11, 2014, NEI submitted "National SAFER Response Center White Paper" (ADAMS Package Accession No. ML14259A221; the SAFER White Paper), which provided the necessary programmatic aspects and implementation plans for the SAFER program to conform to the applicable portions of NEI 12-06. It addressed the offsite resource requirements of the Mitigation Strategies Order. The SAFER team established two National SAFER Response Centers (NSRCs), in Memphis, TN, and Phoenix, AZ; procured the offsite equipment that licensees needed; and developed procedures to maintain and deliver the equipment to any U.S. nuclear power plant in response to a BDBEE.

By letter dated September 26, 2014 (ADAMS Accession No. ML14265A107), the staff informed NEI that it had assessed the SAFER White Paper and concluded that SAFER had sufficiently procured equipment, implemented appropriate processes to maintain the equipment, and developed plans to deliver the equipment needed to support site responses to BDBEES. These activities were performed consistent with guidance in NEI 12-06, as endorsed in JLD-ISG-2012-01. The staff also concluded that addressees of the Mitigation Strategies Order could reference the SAFER program and implement their SAFER response plans in order to meet the offsite resource requirements. All operating power reactor licensees have incorporated the SAFER program into their overall integrated plans.

On September 20, 2017, Hurricane Maria struck Puerto Rico, causing widespread damage and power outages. After the hurricane, the Commonwealth's Government, and the U.S. Federal Government began the effort to restore electrical power, drinking water, and other basic necessities. As a result, Federal agencies and the nuclear industry discussed the potential use of SAFER resources from an NSRC to support recovery efforts following a hurricane or other exigent situation that does not involve a nuclear emergency. To date, however, no request has been made to use SAFER resources for this purpose. While the NSRCs are equipped and prepared to support such a request, neither the SAFER team nor the NRC has formally addressed the use of these resources in this capacity. In preparation for such a contingency, the staff has been working with the nuclear industry to assess how the resources could be used with minimal adverse impact to nuclear safety.

To this end, on May 16, 2018, the staff held a public teleconference with representatives from NEI, the SAFER team, and other licensee representatives to discuss a proposed draft addendum to the SAFER White Paper (ADAMS Accession No. ML18078A265). This addendum addresses the use of SAFER resources to support exigent situations during a non-nuclear emergency and the time needed to replenish these resources while remaining in compliance with the Mitigation Strategies Order. A SAFER representative addressed several staff concerns and committed to submit a revised document for staff assessment (ADAMS Accession No. ML18131A078).

A revised document, submitted on May 24, 2018 (ADAMS Accession No. ML18150A658), contains an addendum describing the deployment of SAFER resources for an emergency

declaration (e.g., natural disaster relief).⁴ It stipulates that the equipment will be drawn from only one of the redundant NSRCs and the other NSRC's capabilities will be maintained to support additional deployments should an emergency occur that impacts a nuclear plant. The addendum further notes that due to the potential long-lead times for acquisition of replacement equipment, a 3-year replacement period for the equipment would apply, and documents that such a replacement period would be appropriate because of the availability of additional spare portable equipment with standardized connectors at all of the licensed U.S. nuclear power plant facilities should appropriate substitute equipment be necessary to support an emergency impacting a nuclear plant.

The staff has reviewed this May 24, 2018, addendum to the original SAFER White Paper and updated its assessment (ADAMS Accession No. ML18157A014). The NRC staff considered the potential benefits to overall health and safety of the potential use of the equipment for a non-nuclear event as compared to the benefits of retaining the capabilities of a single NSRC backed up with spare equipment from other licensed sites for a limited 3-year period of time. In summary, the addendum stipulates that equipment utilized for recovery efforts during a non-nuclear emergency declaration, will be drawn from only one of the redundant NSRCs and the other NSRC's capabilities will be maintained to support additional deployments should an emergency occur that impacts a nuclear plant. Moreover, the staff concludes that there is reasonable assurance that the contracts established between the SAFER team and Federal Express Custom Critical will provide the necessary logistics and transportation services to also allow the sharing of spare onsite equipment located at any nuclear power site as backup capability to the remaining one fully equipped NSRC, should equipment be deployed from the other NSRC for a non-nuclear purpose.

As discussed in the staff's updated assessment, the staff has concluded that, taking into account the use of SAFER resources for an exigent situation arising from a non-nuclear emergency, SAFER has procured equipment, implemented appropriate processes to maintain that equipment, and developed plans to deliver the equipment needed to support site responses to BDBEEs. As such, licensees can continue to reference the SAFER program and implement their SAFER Response Plans for plant-specific compliance with the final phase requirements of Order EA-12-049. Accordingly, the staff plans to issue the updated assessment following the Commission's action on this paper.

SECY, please track.

cc: SECY
OGC

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The initial and revised submittals also contained a second addendum describing the deployment of SAFER resources if requested by a nuclear power plant licensee, as well as a schedule for replenishing equipment following deployment.

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EXIGENT SITUATIONS DATED: July 26, 2018

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ADAMS ACCESSION Number ML18164A242

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