



UNITED STATES
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February 26, 2018

Mr. Jonathan LaPlante
Director of Security
Entergy Nuclear
1340 Echelon Parkway
Jackson, MS 39286

SUBJECT: RESPONSE TO ENTERGY NUCLEAR'S QUESTION REGARDING THE
IMPLEMENTATION OF EARLY WARNING SYSTEMS

Dear Mr. LaPlante:

During a meeting on September 20, 2017, Entergy Nuclear posed a specific question to the U.S. Nuclear Regulatory Commission (NRC) staff concerning protection of unattended openings (UAOs). Specifically, Entergy asked about the use of an Early Warning System (EWS) to protect UAOs at the Entergy fleet in support of its physical protection program. The staff is providing the following information to address Entergy's question.

The NRC staff provided industry with information on the NRC's inspection approach to EWS in a May 26, 2016, letter entitled, "The U.S. Nuclear Regulatory Commission Inspection Approach Related to Industry Implementation of Early Warning Systems," (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16060A225). The May 26, 2016, letter specifically noted that an EWS can either be a "required EWS" if the licensee needs it to comply with a regulatory requirement, or a "voluntary EWS" if the licensee does not need it to comply with a regulatory requirement and only uses the voluntary EWS to provide an additional margin of protection. Subsequently, the NRC discussed the approach set forth in the May 26, 2016, letter with industry in a closed meeting held on August 31, 2016, and a follow up letter summarizing the meeting and the questions and answers addressed at that meeting.¹ This approach focuses on the use of EWS within a licensee's design of its physical protection program and the relationship of an EWS to protected area barrier requirements.

As stated in Title 10 of the *Code of Federal Regulations* (10 CFR) 73.55(b)(3)(i), licensee physical protection programs must ensure that the capabilities to detect, assess, interdict, and neutralize threats up to and including the design basis threat of radiological sabotage as stated in 10 CFR 73.1, are maintained at all times. Licensees accomplish this through the integration of systems, technologies, programs, equipment, security force personnel, supporting processes, and implementing procedures (defense-in-depth) needed to ensure the effectiveness of the physical protection program. Consistent with the regulatory requirements in 10 CFR 73.55(e)(6), licensees are required to establish and maintain physical barriers in the

¹ "The U.S. Nuclear Regulatory Commission Closed Meeting Question and Answer Summary Related to Industry Implementation of Early Warning Systems," ML16341A833, and "August 31, 2016 Summary of Closed Meeting on Early Warning Systems," ML16348A020.

owner controlled area (OCA) as needed, to satisfy the physical protection program design requirements of 10 CFR 73.55(b).

Consequently, if the licensee determines, based on a site-specific analysis, that an EWS in the OCA is required in order to meet the requirements of 10 CFR 73.55(b), the EWS cannot be considered a voluntary enhancement. Accordingly, the physical barriers utilized as a component(s) of a required EWS in the OCA must meet the applicable requirements in 10 CFR 73.55(e), including the specific requirements in 10 CFR 73.55(e)(1)-(4).

Entergy has indicated that it wishes to protect UAOs at nuclear power plants in its fleet utilizing existing EWS barriers. Consistent with 10 CFR 73.55(i)(5)(iii), "Unattended openings that intersect a security boundary such as underground pathways must be protected by a physical barrier and monitored by intrusion detection equipment or observed by security personnel at a frequency sufficient to detect exploitation."

Entergy must ensure that UAOs are adequately protected such that people granted access to the OCA cannot exploit a UAO. Accordingly, if Entergy wishes to use an EWS to protect a UAO, that EWS becomes necessary to meet the regulatory requirement in 10 CFR 73.55(i)(5)(iii). As such, the EWS is no longer voluntary and is therefore subject to the specific requirements for barriers identified in 10 CFR 73.55(e).

Should you or your staff have any questions, do not hesitate to contact F. Scot Sullivan, Senior Security Specialist at 301-287-3624, or at Frederick.Sullivan@nrc.gov.

Sincerely,

/RA/

Doug G. Huyck, Chief
Nuclear Security Oversight and Support Branch
Division of Security Operations
Office of Nuclear Security and Incident Response

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