



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

August 21, 2014

Mr. Richard L. Anderson
Site Vice President
NextEra Energy Duane Arnold, LLC
3277 DAEC Road
Palo, IA 52324-9785

SUBJECT: DUANE ARNOLD ENERGY CENTER - SCREENING AND PRIORITIZATION RESULTS REGARDING INFORMATION PURSUANT TO TITLE 10 OF THE *CODE OF FEDERAL REGULATIONS* PART 50, SECTION 50.54(f) RELATED TO SEISMIC HAZARD RE-EVALUATIONS FOR RECOMMENDATION 2.1 OF THE NEAR-TERM TASK FORCE REVIEW OF INSIGHTS FROM THE FUKUSHIMA DAI-ICHI ACCIDENT (TAC NO. MF3783)

Dear Mr. Anderson:

The purpose of this letter is to inform Duane Arnold Energy Center (DAEC) of the final results of the U.S. Nuclear Regulatory Commission's (NRC) screening and prioritization review. The NRC staff has had additional time to review and evaluate the information contained in the re-evaluated seismic hazard report submitted by DAEC. The NRC concludes that consistent with the industry guidance, the DAEC should be "screened-out" of performing the seismic risk evaluation, spent fuel pool evaluation, and expedited approach evaluation requested per the 50.54(f) letter. DAEC, however, is to perform a high frequency evaluation for those structures and components susceptible to high frequency accelerations because the re-evaluated ground motion response spectra (GMRS) exceeds the current safe shutdown earthquake above 10 Hz. This is consistent with the information DAEC submitted by letter dated March 28, 2014 (Agencywide Documents Access and management System (ADAMS) Accession No. ML14092A331).

This letter transmits the NRC staff's result of the screening and prioritization of the seismic hazard submittal for DAEC. It does not convey the staff's final determination regarding the adequacy of any plant's calculated hazard. As such, the NRC staff will continue its review of the March 28, 2014 seismic hazard re-evaluation submittal, and may request additional plant-specific information to support this review. The NRC staff's current plans are to issue a staff assessment on the re-evaluated seismic hazard once each review is completed by mid-year 2015.

BACKGROUND

On March 12, 2012, the NRC issued a request for information pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50, Section 50.54(f) (hereafter referred to as the 50.54 (f) letter) (ADAMS Accession No. ML12053A340). The purpose of the request was to gather information concerning, in part, the seismic hazards at each operating reactor site and to enable the NRC staff to determine whether licenses should be modified, suspended, or revoked. Further, the 50.54(f) letter stated that the NRC would provide the results of the screening and

prioritization indicating deadlines for individual plants to complete seismic risk evaluations that assess the total plant response to the re-evaluated seismic hazard.

In response to the 50.54(f) letter, NextEra Energy Duane Arnold, LLC, by letter dated March 28, 2014, submitted the Seismic Hazard Evaluation and Screening Report for the DAEC. Subsequently, by letter dated May 9, 2014 (ADAMS Accession No. ML14111A147), the NRC staff informed all licensees of operating reactors in the central and eastern United States (CEUS) of the screening and prioritization results to support a timely completion of the seismic risk evaluations as described in Enclosure 1 of the 50.54(f) letter.

The May 9, 2014 letter identified a number of plants, including DAEC, as "conditional screen-in" for the purposes of the screening and prioritization review, since a final staff determination could not be made within the screening time period. The NRC staff indicated that the results of the NRC staff's independent GMRS assessment appeared to be different from the GMRS provided in the individual plant response submittals, including DAEC. For "conditional screen-in" plants, these differences needed additional evaluation before a final determination could be made on whether a plant would screen out from evaluation.

SCREENING PROCESS

As discussed in the May 9, 2014 letter, the NRC staff's screening review was performed using the Electric Power Research Institute (EPRI) Report, "Seismic Evaluation Guidance: Screening, Prioritization and Implementation Details (SPID) for the Resolution of Fukushima Near-Term Task Force [NTTF] Recommendation 2.1: Seismic¹," guidance. For the purposes of the licensees' analyses and NRC staff's review, the SPID identified three frequency ranges of particular interest: 1-10 Hz, a low frequency range of < 2.5 Hz, and a high frequency range of >10 Hz. The frequency range 1-10 Hz was the focus of the screening review for performing a risk evaluation, as this range has the greatest potential effect on the performance of equipment and structures important to safety. Additional information and specific details related to the staff's focus and scope of the review are contained in the May 9, 2014 letter.

FINAL SCREENING AND PRIORITIZATION:

| Plant Name | Screening Result | Expedited Approach Evaluation | Seismic Risk Evaluation (Prioritization Group) | Limited-scope Evaluations | | |
|----------------------------|------------------|-------------------------------|--|---------------------------|--------------------------|----------------------------|
| | | | | High Frequency Evaluation | Low Frequency Evaluation | Spent Fuel Pool Evaluation |
| Duane Arnold Energy Center | Out | | | X | | |

¹ The SPID guidance document is found in ADAMS under Accession No. ML12333A170. The staff endorsement letter for the SPID guidance is found in ADAMS under Accession No. ML12319A074.

R. Anderson

- 3 -

If you have any questions on this matter, please contact Nicholas DiFrancesco, Senior Project Manager for the Japan Lessons-Learned Division at 301-415-1115 or at Nicholas.DiFrancesco@nrc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Daniel H. Dorman". The signature is fluid and cursive, with a long horizontal stroke at the end.

Daniel H. Dorman, Acting Director
Office of Nuclear Reactor Regulation

Docket No. 50-331

cc: Listserv

R. Anderson

- 3 -

If you have any questions on this matter, please contact Nicholas DiFrancesco, Senior Project Manager for the Japan Lessons-Learned Division at 301-415-1115 or at Nicholas.DiFrancesco@nrc.gov.

Sincerely,

/RA/

Daniel H. Dorman, Acting Director
Office of Nuclear Reactor Regulation

Docket No. 50-331

cc: Listserv

DISTRIBUTION:

PUBLIC

JLD R/F

RidsNrrDorlLpl3-1 Resource

RidsNrrOd

RidsOgcMailCenter

MChawla, NRR

RidsNrrPMDuaneArnold

RidsNrrLASLent Resource

RidsOgcRp Resource

RidsAcrsAcnw_MailCTR Resource

RidsRgn3MailCenter Resource

RidsEdoMailCenter Resource

ADAMS ACCESSION No.: ML14198A070

*via email

| | | | | |
|--------|-----------------|--------------|-----------------|------------------|
| OFFICE | NRR/JLD/JHMB/PM | NRR/JLD/LA | NRR/JLD/JHMB/BC | NRO/DSEA/RGS2/BC |
| NAME | NDiFrancesco | SLent | SWhaley | DJackson |
| DATE | NRR/JLD/D | 07/21/14 | 08/18/14 | 08/07/14 |
| OFFICE | JDavis | NRR/DORL/PM* | OGC | NRR/D (A) |
| NAME | 08/15/14 | MChawla | BHarris | DDorman |
| DATE | NRR/JLD/D | 8/20/14 | 07/31/14 | 08/21/14 |

OFFICIAL RECORD COPY