



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

August 7, 2025

Mr. Kent Scott  
Senior Vice President and  
Chief Nuclear Officer  
Ameren Missouri  
Callaway Energy Center  
8315 County Road 459  
Steedman, MO 65077

**SUBJECT: CALLAWAY PLANT, UNIT NO. 1 – STAFF ASSESSMENT OF UPDATED  
SEISMIC HAZARDS FOLLOWING THE NRC PROCESS FOR THE ONGOING  
ASSESSMENT OF NATURAL HAZARDS INFORMATION**

Dear Mr. Scott:

The purpose of this letter is to document the U.S. Nuclear Regulatory Commission (NRC) staff's assessment of seismic hazards at the Callaway Energy Center, Unit 1 (Callaway) following the process for the ongoing assessment of natural hazards information.

The enclosed seismic hazards report provides the NRC staff's updated seismic hazard curves and response spectra for Callaway that are based on the implementation of (1) a new seismic ground motion model for the central and eastern United States and (2) recent advances in site response analysis. The NRC staff's updated hazard curves (i.e., tables A 1 through A 30) are included in appendix A in the enclosed seismic hazard report. report.

Although the NRC staff is taking no further action at this time, the control point seismic hazard curves developed by the NRC staff for these reports may be considered in the context of potential future evaluations of Callaway by the NRC staff (e.g., future license amendment requests) consistent with agency policy procedures (e.g., NRC Management Directive 8.4, "Management of Backfitting, Forward Fitting, Issue Finality, and Information Requests").

K. Scott

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The NRC staff plans to make the enclosed Seismic Hazard Report publicly available five working days from the date of this letter. If you have any questions, please contact me at 301-415-8371 or via email at [Mahesh.Chawla@nrc.gov](mailto:Mahesh.Chawla@nrc.gov).

Sincerely,

**/RA/**

Mahesh Chawla, Project Manager  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-483

Enclosure:  
Seismic Hazard Report

cc: Listserv

**ENCLOSURE**

**CALLAWAY PLANT, UNIT NO. 1**

**SEISMIC HAZARDS REPORT**

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ASSESSMENT OF NATURAL HAZARDS INFORMATION  
DATED AUGUST 7, 2025

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**ADAMS Accession Nos.:**

**ML25205A077 (Package)**

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