

**From:** Mahesh Chawla  
**Sent:** Monday, April 24, 2023 3:01 PM  
**To:** Elwood, Thomas B  
**Cc:** Jennifer Dixon-Herrity; Scott Krepel; Mathew Panicker; Ahsan Sallman; Diana Woodyatt; Santosh Bhatt; Jeremy Dean; Andrea Keim; Gerry Stirewalt; Donald Palmrose; Ravi Grover; Vic Cusumano  
**Subject:** Regulatory Audit Question - Callaway LAR and Exemption for Fuel Transition to Framatome GAIA Fuel - EPIDs - L-2022-LLA-0150 and L-2022-LLE-0030

Dear Mr. Elwood,

By application dated October 12, 2022 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22285A115), as supplemented by letter dated December 1, 2022 (ML22335A497), Union Electric Company, doing business as Ameren Missouri (the licensee), submitted a license amendment request (LAR) and an exemption request for Callaway Plant, Unit No. 1. The proposed amendment would revise the technical specifications to allow use of Framatome GAIA fuel with M5 as a fuel cladding material. Since the Framatome GAIA fuel will use M5 fuel rod cladding, a Title 10 of the Code of Federal Regulations (10 CFR) Section 50.46, "Acceptance criteria for emergency core cooling systems for light-water nuclear power reactors," and 10 CFR Part 50 Appendix K exemption request is included as part of this LAR.

On March 20, 2023, the U.S. Nuclear Regulatory Commission (NRC) staff issued a letter indicating their plans for a regulatory audit and setup of online reference portal request to the licensee. The audit plant included the request for documents and the audit questions from the NRC staff. The regulatory audit was conducted from April 4 through 6, 2023, during which licensee provided the pertinent information for the subject application. The NRC staff has developed following audit question which they would like the licensee to provide additional information.

### **AUDIT QUESTION**

Table 28 of FS1-0042400, "Mechanical compatibility of GAIA with co-resident fuel (VANTAGE)" lists spacer and mixing grid centerline elevations for GAIA and resident fuel in the Callaway core. Discuss the impact on mechanical compatibility between the two fuel assemblies because of the non-alignment of spacer and mixing grids of two fuels as per Table 28.

Please include the response to this request in addition to the previously discussed audit questions. Thanks

Sincerely,

Mahesh Chawla, Project Manager  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
ph: 301-415-8371  
Docket No. 50-483

	DORL/LPL4/PM	DORL/LPL4/BC
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	4/24/23	4/24/23

**Hearing Identifier:** NRR\_DRMA  
**Email Number:** 2047

**Mail Envelope Properties** (SA1PR09MB841510C51D0CD244E24AB6C0F1679)

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**Sent Date:** 4/24/2023 3:00:39 PM  
**Received Date:** 4/24/2023 3:00:40 PM  
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**Post Office:** SA1PR09MB8415.namprd09.prod.outlook.com

Files	Size	Date & Time
MESSAGE	2237	4/24/2023 3:00:40 PM

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**Priority:** Normal

**Return Notification:** No

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**Sensitivity:** Normal

**Expiration Date:**