

**From:** Chawla, Mahesh  
**Sent:** Tuesday, March 29, 2022 5:51 PM  
**To:** 'Elwood, Thomas B'  
**Cc:** Kleeh, Edmund; Morton, Wendell; Brown, Adrienne; Dixon-Herrity, Jennifer; Sun, Summer; Russell, Andrea; Circle, Jeff; Wu, De; Tetter, Keith; Hsu, Kaihwa; Li, Ming; Roggenbrodt, William; Scully, Derek; Pulvirenti, April; Khan, Nadim; Li, Chang  
**Subject:** Callaway Plant, Unit 1 - LAR to Adopt TSTF-505 and TSTF-439 - Follow up clarifications for the audit questions - EPID L-2021-LLA-0197  
**Attachments:** Callaway TSTF 505 -Electrical Follow-up Audit Questions.docx; Follow-up Clarifications for Callaway\_Table.docx

Dear Mr. Elwood,

By application dated October 21, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21294A393), as supplemented by letter dated November 24, 2021 (ADAMS Accession No. ML21328A182), Union Electric Company, dba Ameren Missouri (the licensee), submitted a license amendment request (LAR) for Callaway Plant, Unit No. 1 (Callaway). The proposed amendment would modify the Callaway Technical Specifications (TSs) to implement risk-informed completion times and the Risk-Informed Completion Time Program in accordance with Technical Specifications Task Force (TSTF) Traveler TSTF-505, "Provide Risk-Informed Extended Completion Times – RITSTF [Risk- Informed TSTF] Initiative 4b," Revision 2. In support of the adoption of TSTF-505, the licensee also would adopt TSTF-439, Revision 2, "Eliminate Second Completion Times Limiting Time from Discovery of Failure to Meet an LCO [Limiting Condition for Operation]," which involves the elimination of second completion times currently specified in the TSs. In addition, the proposed amendment would remove obsolete one-time completion times contained in the Callaway TSs.

On February 18, 2022 (ADAMS Accession No. ML22048A002), the U.S. Nuclear Regulatory Commission (NRC) staff issued an audit plan that conveyed intent to conduct a regulatory audit to support its review of the subject license amendment. On March 7, 2022 (ADAMS Accession No. ML22061A004), NRC issued audit questions for the regulatory audit. The regulatory audit virtual meeting was conducted from March 22 through March 24, 2022. During the audit meeting, the NRC staff from the electrical branch discussed 11 audit questions with the licensee. After the discussion it was deemed necessary by the NRC staff to provide further clarification on some of the audit questions in order to remove any ambiguity in the write up provided in the submittal. The purpose of the following update is to provide NRC staff's understanding of the as-built electrical distribution at Callaway as shown on the drawings. The NRC staff would like the licensee to provide update in the supplemented information on the docket.

***In case of any further clarification is needed on the updated audit questions, you can contact me. 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

C	DORL/LPL4/PM	DORL/LPL4/BC
M	MChawla	JDixon- Herrity
T	03/28/22	03/29 /22

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## CALLAWAY TSTF 505 – ELECTRICAL FOLLOW-UP AUDIT QUESTIONS

1. LCO 3.8.4, Condition A - Clarify in Columns 3 and 6 of LAR Table E1-1 that “subsystems” refers to Train A and Train B as stated on page B 3.8.4-1 and LCO 3.8.4.
2. LCO 3.8.1, Condition B - Clarify in Columns 3 and 6 of LAR Table E1-1 the two onsite standby power sources are for Train A and Train B as stated on pages B 3.8.1-1 and B 3.8.1-3 and page LCO 3.8.1.
3. Closed – With agreement that the Design Success Criteria for TS 3.8.1.D should be corrected to “one offsite circuit OR one of two EDGs.”
4. LAR Table E1-1 for TS 3.8.1.F
  - a. Closed – no supplement needed
  - b. Clarify in Columns 3 and 6 of LAR table E1-1 that Train A and Train B, each have an LSELS as stated on page B 3.8.1-4 and LCO 3.8.1.
5. Closed – no supplement needed
6. LCO 3.8.7, Condition A - Clarify in Columns 3 and 6 of LAR Table E1-1 that there are two inverters per Train A and Train B as stated on pages B 3.8.7-1 and B 3.8.7-3 and LCO 3.8.7. No supplement needed for remainder of items in original question.
7. LCO 3.8.9, Condition A - Clarify in Columns 3 and 6 of LAR Table E1-1 that “subsystems” refers to Train A and Train B as stated on page B 3.8.9-1 and LCO 3.8.9.
8. LCO 3.8.9, Condition B - Clarify in Columns 3 and 6 of LAR Table E1-1 that “subsystems” refers to Train A and Train B as stated on pages B 3.8.9-1 and B 3.8.9-9 and LCO 3.8.9 and that there are two vital AC buses per train.
9. LCO 3.8.9, Condition C - Clarify in Columns 3 and 6 of LAR table E1-1 that “subsystems” refers to Train A and Train B as stated on page B 3.8.9-1 and LCO 3.8.9.
10. Closed - no supplement needed
11. Closed – licensee response added to the supplement
12. New audit question - LCO 3.8.1, Condition A - Clarify in Columns 3 and 6 of LAR Table E1-1 the two offsite power circuits for preferred offsite source connection are for Train A and Train B as stated on pages B 3.8.1-1 and B 3.8.1-3 and page LCO 3.8.1.

## EEEB Follow-up Questions (Proposed Changes Highlighted in Red)

EEEB Question	LCO	Column 3 of Table E1-1	Column 6 of Table E-1	<u>Revise</u>
1	3.8.4 Condition A	Two DC electrical power subsystems ( <u>Trains A and B</u> ) each consisting of two DC batteries, two battery chargers, one swing battery charger, and all the associated control equipment and interconnecting cabling	One <del>of two</del> DC electrical power subsystems <u>available (Train A or B)</u>	
2	3.8.1 Condition B	Two EDGs ( <u>one each for Trains A and B</u> ) capable of supplying onsite 1E AC Electrical Power Distribution System	<del>1</del> <u>One of 2</u> EDGs <del>for (for Train A or B) capable of supplying onsite 1E AC Electrical Power Distribution System</del>	<u>LCO 3.8.1, Condition D accordingly including the OR connector about either offsite circuit or EDG</u>
4	3.8.1 Condition F	One Load Shedder and Emergency Load Sequencer ( <u>LSELS each per for 4-16kV Class 1E AC Bus for Trains A and B</u> )	One <del>of two</del> <u>LSELS for available Train A or B</u>	
6	3.8.7 Condition A	Two normal inverters and one swing inverter <u>for each train (A and B)</u>	<del>At least one of two inverters trains available. One train of inverters consists of either (two normal or one normal and one swing inverter) for Train A or B.</del>	
7	3.8.9 Condition A	Two AC electrical power distribution subsystems ( <u>Trains A and B</u> ) with associated buses and load centers energized to their proper voltages	One <del>of two</del> AC electrical power distribution subsystems <u>(Train A or B)</u>	
8	3.8.9 Condition B	Two AC vital bus subsystems ( <u>Trains A and B with two vital buses each</u> ) with associated buses energized to their proper voltage, each from its associated normal source inverter or swing inverter, via inverted DC voltage or the alternate AC source (i.e., bypass constant voltage transformer	One <del>of two</del> AC vital bus distribution subsystems <u>(Train A or Train B) with two vital buses each</u>	

9	3.8.9 Condition C	Two DC electrical power distribution subsystems <u>(Trains A and B)</u> with associated buses energized to their proper voltage from either the associated battery or charger.	One <del>of two</del> -DC electrical power distribution subsystems <u>(Train A or B)</u> .	
<u>New</u>	<u>3.8.1</u> <u>Condition A</u>	Two qualified circuits between the offsite transmission network and the onsite 1E AC Electrical Power Distribution System- <u>(one for Train A and the other one for Train B)</u> .	One qualified circuit between the offsite transmission network and the onsite 1E AC Electrical Power Distribution System. <u>(for Train A or B)</u> .	<u>LCO 3.8.1, Conditions C and D accordingly</u>