

**N. Technical Specification Changes**

10 Pages Attached

Ameren Missouri implemented the following process for determining which Technical Specification (TS) or Technical Specification Bases (TSB) were required to be either revised or superseded to implement the new fire protection program which meets the requirements in 10 CFR 50.48(a) and 10 CFR 50.48(c).

- A review of the Callaway Plant Technical Specifications was performed by the Callaway Plant licensing staff and the NFPA 805 Transition Team. The review was performed by reviewing the Technical Specifications and performing electronic searches using the Callaway Plant Licensing Research System (LRS). The Callaway Plant LRS contains Callaway Plant licensing documents, correspondence, and regulatory and guidance materials, including those documents pertaining to the operating license, the TS, the fire protection program, the FSAR and subsequent revisions, correspondence sent to the NRC, and correspondence received from the NRC. The correspondence sent to the NRC includes any outstanding license amendment request submittals.

Ameren Missouri determined that the following changes to the Callaway Plant TSs and TSBs are necessary for adoption of the new fire protection licensing basis for the following reasons:

(1) Revise TS paragraph 5.4.1.d as shown below:

5.4.1.d ~~Fire Protection Program implementation~~ Not Used; and

TS 5.4.1.d is being deleted because, after completion of the transition to NFPA 805, the requirement for establishing, implementing, and maintaining fire protection procedures will be contained in 10 CFR 50.48(a) and 10 CFR 50.48(c), as specifically outlined in Section 3.2.3, "Procedures," of NFPA 805.

(2) The Applicable Safety Analysis and References sections for TSB 3.3.4 are being revised to include reference to 10 CFR 50.48(c).

The current Applicable Safety Analysis section for TSB 3.3.4, states in part:

"... The criteria governing the design and specific system requirements of the Remote Shutdown System are located in 10 CFR 50, Appendix A, GDC 3 and GDC 19 (Ref. 1)."

The Applicable Safety Analysis for TSB 3.3.4 should be revised to state:

"... The criteria governing the design and specific system requirements of the Remote Shutdown System are located in 10 CFR 50, Appendix A, GDC 3 and GDC 19 (Ref. 1), and 10 CFR 50.48(c) (Ref. 2)."

The References section for TSB 3.3.4 lists the following references:

1. 10 CFR 50, Appendix A, GDC 3 and GDC 19.
2. Callaway OL Amendments No. 45 dated May 16, 1989 and 108 dated March 11, 1996.

The References section for TSB 3.3.4 should be revised to include an additional reference, as follows:

1. 10 CFR 50, Appendix A, GDC 3 and GDC 19.
2. 10 CFR 50.48(c).
3. Callaway OL Amendments No. 45 dated May 16, 1989 and 108 dated March 11, 1996.

**Technical Specification Markup**

2 Pages Attached

**LDCN 11-0012**

**TECHNICAL SPECIFICATION MARKUP**

**TS 5.4.1.d**

LDCW 11-0012

Procedures  
5.4

5.0 ADMINISTRATIVE CONTROLS

5.4 Procedures

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5.4.1 Written procedures shall be established, implemented, and maintained covering the following activities:

- a. The applicable procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978;
  - b. The emergency operating procedures required to implement the requirements of NUREG-0737 and NUREG-0737, Supplement 1, as stated in Generic Letter 82-33;
  - c. Quality assurance for effluent and environmental monitoring;
  - d. ~~Fire Protection Program implementation~~, and
  - e. All programs specified in Specification 5.5.
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Not Used

~~Fire Protection Program implementation~~

**Technical Specification Retype**

1 Page Attached

5.0 ADMINISTRATIVE CONTROLS

5.4 Procedures

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- 5.4.1 Written procedures shall be established, implemented, and maintained covering the following activities:
- a. The applicable procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978;
  - b. The emergency operating procedures required to implement the requirements of NUREG-0737 and NUREG-0737, Supplement 1, as stated in Generic Letter 82-33;
  - c. Quality assurance for effluent and environmental monitoring;
  - d. Not Used; and
  - e. All programs specified in Specification 5.5.
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**LDCN 11-0012**

**TECHNICAL SPECIFICATION BASES MARKUPS  
(FOR INFORMATION ONLY)**

**TSB 3.3.4 Applicable Safety Analyses**

**TSB 3.3.4 SR 3.3.4.2**

**TSB 3.3.4 References**



LDCW 11-0012

Remote Shutdown System  
B 3.3.4

**BASES**

**BACKGROUND**  
(continued)

	<u>FUNCTION</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>READOUT LOCATION</u>
5.	RCS Hot Leg Temperature	2	Auxiliary Shutdown Panel
6.	RCS Cold Leg Temperature	4	Auxiliary Shutdown Panel
7.	SG Pressure	2/SG	Auxiliary Shutdown Panel
8.	SG Level	2/SG	Auxiliary Shutdown Panel
9.	AFW Flow Rate	4	Auxiliary Shutdown Panel
10.	Reactor Coolant Pump Breaker Position	1/pump	13.8-kV Switchgear
11.	AFW Suction Pressure	3	Auxiliary Shutdown Panel
12.	Pressurizer Level	2	Auxiliary Shutdown Panel

**APPLICABLE SAFETY ANALYSES**

The Remote Shutdown System is required to provide equipment at appropriate locations outside the control room with a capability to promptly shut down and maintain the unit in a safe condition in MODE 3.

The criteria governing the design and specific system requirements of the Remote Shutdown System are located in 10 CFR 50, Appendix A, GDC 3 and GDC 19 (Ref. 1) and 10 CFR 50.48(e) (Ref. 2).

The Remote Shutdown System satisfies Criterion 4 of 10CFR50.36(c)(2)(II).

**LCO**

The Remote Shutdown System LCO provides the OPERABILITY requirements of the instrumentation and required ASP controls necessary to place and maintain the unit in MODE 3 from a location other than the control room. The instrumentation required is listed in Table 3.3.4-1 in the accompanying LCO. The required ASP controls are described in FSAR Section 7.4.3.1.1 and are listed in FSAR Table 7.4-1. The remote shutdown controls not located at the ASP are described in FSAR Section 7.4.3.1.2 and are excluded from the requirements of this LCO.

(continued)

CALLAWAY PLANT

B 3.3.4-2

Revision 6

Remote Shutdown System  
B 3.3.4

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BASESSURVEILLANCE  
REQUIREMENTSSR 3.3.4.1 (continued)

and readability. If the channels are within the criteria, it is an indication that the channels are OPERABLE. If a channel is outside the criteria, it may be an indication that the sensor or the signal processing equipment has drifted outside its limit. For the RTB Position and the RCP Breaker Position Functions, this surveillance requirement is met by verifying the actual position at the associated switchgear to the main control board indications.

As specified in the Surveillance, a CHANNEL CHECK is only required for those channels which are normally energized. The Westinghouse NIS source range neutron flux channel is not normally energized.

The Frequency of 31 days is based upon operating experience which demonstrates that channel failure is rare. The CHANNEL CHECK supplements less formal, but more frequent, checks of channels during normal operational use of the displays associated with the LCO required channels.

SR 3.3.4.2

SR 3.3.4.2 verifies each required Remote Shutdown System ASP control circuit and transfer switch performs the intended function. This verification is performed from the auxiliary shutdown panel. Operation of the equipment from the auxiliary shutdown panel is not necessary. The Surveillance can be satisfied by performance of a continuity check. This will ensure that if the control room becomes inaccessible, the unit can be placed and maintained in MODE 3 from the auxiliary shutdown panel. The 18 month Frequency is based on the need to perform this Surveillance under the conditions that apply during a plant outage and the potential for an unplanned transient if the Surveillance were performed with the reactor at power. (However, this Surveillance is not required to be performed only during a unit outage.) Operating experience demonstrates that auxiliary shutdown controls usually pass the Surveillance test when performed at the 18 month Frequency.

The Note allows entry into and operation in MODE 3 prior to performing the SR for the turbine driven AFW pump (Ref. 2). This allows testing the associated ASP controls in MODE 3.

(Ref. 3).

(continued)

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B 3.3.4-5

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Remote Shutdown System  
B 3.3.4

**BASES**

**SURVEILLANCE  
REQUIREMENTS**  
(continued)

**SR 3.3.4.3**

CHANNEL CALIBRATION is a complete check of the instrument loop and the sensor. The test verifies that the channel responds to a measured parameter within the necessary range and accuracy.

The Frequency of 18 months is based upon operating experience and consistency with the typical industry refueling cycle.

The Notes exclude the source range neutron flux detectors and reactor trip breaker and RCP breaker position indications from the CHANNEL CALIBRATION. Neutron detectors are excluded from the CHANNEL CALIBRATION because it is impractical to set up a test that demonstrates and adjusts neutron detector response to known values of the parameter (neutron flux) that the channel monitors. Depending on which source range channel is used to satisfy the LCO, Note 1 applies to the source range proportional counter in the Nuclear Instrumentation System (NIS) associated with indicator SENI0031C or to the Gamma-Metrics fission chamber associated with indicator SENI0061X. As discussed in the Bases for SR 3.3.1.11, the CHANNEL CALIBRATION of the Westinghouse NIS source range channel consists of obtaining an integral bias curve, evaluating that curve, and comparing it to previous data.

Whenever an RTD is replaced in Function 5 or 6, the next required CHANNEL CALIBRATION of the RTDs is accomplished by an in-place cross calibration that compares the other sensing elements with the recently installed sensing element.

**REFERENCES**

1. 10 CFR 50, Appendix A, GDC 3 and GDC 19.

Callaway OL Amendments No. 45 dated May 16, 1989 and 108 dated March 11, 1996.



2. 10 CFR 50.48(c).

CALLAWAY PLANT

B 3.3.4-6

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