

August 21, 2000

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Stop P1-137
Washington, DC 20555-0001

ULNRC-4298



Gentlemen:

**SUPPLEMENTAL INFORMATION
INSPECTION REPORT NO. 50-483/2000-012
CALLAWAY PLANT
UNION ELECTRIC CO.**

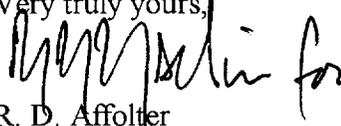
Ref: NRC Inspection Procedure 71121.02, ALARA Planning & Controls

This letter provides supplemental information regarding "apparent significant findings" identified during an inspection conducted at Callaway Plant the week of August 7, 2000. The findings were identified during performance of NRC Inspection Procedure 71121.02, ALARA Planning and Controls. Management briefings determined documentation of our position would facilitate completion of the inspection. Our position is presented in the attachment.

None of the material in this letter is considered proprietary by Union Electric.

If you have any questions regarding this position, or if additional information is required, please contact me or Mr. Mark A. Reidmeyer, Regional Regulatory Affairs Supervisor at phone 573/676-4306, or e-mail: mareidmeyer@cal.ameren.com.

Very truly yours,


R. D. Affolter
Manager, Callaway Plant

^{and}
RDA/MAR/JWH/RRR/slk
Attachment: 1) Supplemental Information

IE01

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NRC Inspection Manual, Manual Chapter 0609, Section 08.03 discusses the process for resolving "apparent significant findings". The process provides avenues for licensees to present further information or perspectives regarding the significance of the findings. This letter provides Callaway Plant's perspectives pertinent to the findings identified during the ALARA Planning and Controls Inspection.

Foremost, Callaway Plant has identified through self-assessment and documented in the corrective action system the need to improve performance in the ALARA Planning and Controls area. Callaway Plant also endorses the Revised Reactor Oversight Program (RROP), because we believe that a "risk informed" oversight process is a key element of maintaining plant safety. We further believe the success of the RROP depends on a disciplined approach to implementation of all aspects of the oversight process.

Based on our current understanding of the "apparent significant findings", we have reviewed the issues with respect to the guidance provided by NRC Inspection Manual, Manual Chapter 0609 and Manual Chapter 0610*.

The following perspectives are provided to facilitate a mutual understanding of the RROP as it applies to the Occupational Radiation Exposure Cornerstone and the Significance Determination Process (SDP).

A. Change in Assessment/Enforcement of 10 CFR 20.1101(b)

The ALARA Planning and Controls inspection identified issues that occurred during Refuel 10 in October/November 1999, prior to the April 2000 implementation of the Revised Reactor Oversight Process (RROP). Decisions at various outage meetings and a special Outage Review Board during Refuel 10 were made without the foreknowledge that these decisions would be subject to scrutiny under the RROP. During Refuel 10, Callaway Plant staff identified several factors affecting original dose projections. However, within the discretion of the ALARA program, the decision was made not to revise dose projections. This was done to avoid worker let down as work progressed toward achieving the original goal. With respect to the issues under consideration, it is known the dose projections are inaccurate due to the mid-outage decision to maintain the original projections without revision. However, this decision most likely would have been different had the RROP and SDP guidance been in effect at the time.

B. The Use of the Term "Job" in the SDP.

A definition for the term "job" or bounds on the scope of what is considered to be a job needs to be determined. This determination needs to be generally applicable across the industry so that it may be applied consistently. Furthermore, the use of this term needs to facilitate assessment results which are consistent with the intent of the SDP and consistent from site-to-site.

Callaway has always controlled work activities with a Work Authorizing Document (WAD) which is considered to be the document that classifies a particular activity as a "job". Using the Steam Generator (S/G) project as an example, the project coordinator generates individual WADs for the S/G project during pre-outage planning. These WADs are unique to the S/G and the particular job; e.g., eddy current testing (ECT), electro-sleeving, tube plugging and remote tube stabilization. Callaway Plant Health Physics (HP) Staff would assign these WADs by job (one WAD for each of the following jobs: ECT, electro-sleeving, tube plugging and tube stabilization). Prior to 1998, these jobs would each have a Pre-Job ALARA Review and be controlled under an RWP for the individual job. In 1998, Callaway Plant HP Staff decided to combine these jobs under a single RWP for two reasons:

1. To simplify Radiological Controlled Area in-processing and to ease worker confusion with the various numbers (WAD and RWP) they had to remember to access the plant Radiological Controlled Area (RCA).
2. To minimize the unwarranted administrative burden of maintaining four separate RWPs for these jobs. These jobs are worked in the same location, with the same radiological conditions and essentially the same protective requirements. Each job continues to be analyzed as a distinct job in the Pre-Job ALARA Review and the individual reviews are combined for the RWP. Each job's dose is listed separately in the Pre-Job and Post-Job ALARA Reviews and tracked separately versus the individual job goal.

Callaway routinely assigns multiple jobs to work under an RWP; however, that is not to say an RWP will not be written to encompass a single job. This would be evaluated on an individual case basis. Callaway's position is that RWPs govern a project and the "jobs" as described in the Significance Determination Process (SDP) are the individual work documents within the RWP. Therefore each job under this RWP should be analyzed and evaluated separately within the hierarchy of the SDP.

C. Initial Assessment of Inspection Findings for SDP Entry: Group 1 Questions
(Reference NRC Inspection Manual Chapter 0609, Attachment 0609.02)

The following perspectives are offered regarding the criteria for when an ALARA finding could reasonably pass the Group 1 Questions for further evaluation.

Question 1: Does the issue have an actual or credible impact on safety?

In the context of ALARA findings, Callaway is not aware of any rulemaking decisions, Branch Technical Positions or other endorsed publications, that now place a statistically acceptable risk limit on occupational population dose, above which would be considered a violation of regulation. The statistically significant dose levels impacting safety, therefore, appear to remain at the occupational dose limits for an individual. Consequently, an actual or credible impact on safety would be bounded by the criteria for an actual or credible occupational exposure to an individual above regulatory limits.

Question 2: Does the issue suggest a programmatic problem that has a credible potential to impact safety and is more than an isolated case?

Under the previous assessment process, the existing program used at Callaway for ALARA work controls has been inspected and found to be in compliance with applicable regulations. During Refuel 10, these work controls were implemented within the allowable discretion provided under the ALARA program. With respect to the issues being considered, there were no programmatic problems identified regarding implementation of the ALARA program. In addition, there was not a "credible potential to impact safety" identified due to the implementation of this program (refer to the interpretation of "impact on safety"- question 1).

Question 3: Could the issue be viewed as a precursor to a significant event?

"Administrative limits are limits that licensees impose upon themselves that are more conservative than regulatory limits, such that exceeding an administrative limit does not exceed an NRC requirement or limit and are considered minor violations"¹. This statement and its tie to the SDP screening process are considerations relative to the interpretation of what is significant. As used in the screening process, our position on what is a "significant event" includes events which exceed or have a substantial potential to exceed an administrative limit. Each of the items being considered was

¹ Ref. NRC Inspection Manual, Manual Chapter 0610*, Appendix D (Draft)

within licensee administrative limits. In addition, there were no issues identified indicating the potential for or any exposure in excess of regulatory limits, an unintended exposure on the order of magnitude specified under the PI program or exposures exceeding administrative limits.

Question 4: If left uncorrected would the same issue become a more significant safety concern?

See comments under questions 1 and 3.

Question 5: Are there any associated circumstances that add regulatory or safety concerns, (e.g. apparent willfulness, licensee refusal to comply)?

No apparent issues related to this question were identified.

Question 6: Does the issue relate solely to NRC limits and not licensee administrative limits?

There were no administrative limit violations and no regulatory limit violations identified.

Question 7: Does the issue relate to performance indicators and causes a threshold to be exceeded?

There were no performance indicator issues identified and no thresholds were exceeded.

D. Accuracy of Dose Projections.

The most important element of the SDP entry criteria, accurate dose projections, is also an important ALARA technique. Various factors affect the accuracy of dose projections. Therefore it may be necessary to provide guidance on what factors affecting dose projections are considered appropriate. In the absence of regulatory requirements on this subject, guidance developed for this purpose should be carefully evaluated and properly justified since this guidance would in effect define the practical extent to which procedures and engineering controls are to be used as well as delimit "sound radiation protection principles".

E. Significance Level of SDP Findings Relative to Performance Indicator (PI) Significance.

A foundation of the SDP is that it is a mechanism by which the significance of individual events can be normalized and combined with PI results to arrive at an overall cornerstone performance assessment. It is important that screening criteria be appropriately applied to facilitate the normalization process. Assuming that the issues under consideration enter the SDP, it appears that the significance of these issues does not normalize to the level consistent with PIs under the Occupational Radiation Safety Cornerstone. The PIs are based on violations of regulatory requirements, events which pose a significant potential for overexposure and events resulting in individual unintended dose consequences above a threshold. Within the ALARA SDP the significance of the identified issues does not appear to have the same regulatory bases, but instead relies heavily on the accuracy of dose projections. With respect to the issues under consideration, an inaccurate dose projection indicates a potential for, but does not constitute a failure to implement the requirements of 10 CFR 20.1101(b).