

January 13, 2000

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Mail Station P1-137  
Washington, D.C. 20555-0001

Gentlemen:

ULNRC-04176  
TAC No. MA 3954



**CALLAWAY PLANT  
UNION ELECTRIC COMPANY  
DOCKET NUMBER 50-483  
AMENDMENT NO. 132 (Approval of use of Electrosleeves)**

Reference: Amendment 132 to Callaway Facility Operating  
License NPF-30 dated May 21, 1999

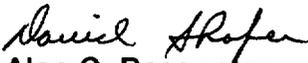
On May 21, 1999, Technical Specification Amendment No. 132 revised TS 4.4.5.4, Table 4.4-3, and the associated Bases to allow the repair of Callaway steam generator tubes with the Electrosleeve tube repair method. Technical Specification 4.4.5.4(a)(10), "Acceptable tube repairs will be performed by the following processes: Electrosleeving as described in Framatome Technical Report BAW-10219P, Revision 3, 10/98." Section 10.8 of this Technical Report briefly describes the Electrosleeve waste processing system and states that this system treats the spent process solutions and the rinse water to render them non-hazardous.

Because of the limited number of tubes that will be Electrosleeved at Callaway during Refuel 10, it has been determined that it is more economical to ship this spent process solution and rinse water offsite to be processed at a contractor's facility. The waste processing methodology that will be utilized by the contractor is different than that described in the Technical Report. Additionally, neither waste processing methodologies will render the spent process solutions and rinse water non-hazardous, as described in the Technical Report. These mixed solutions will be considered hazardous as defined in 40CFR261. Based on reviews performed by AmerenUE and Framatome, these minor deviations from the Technical Report do not impact the Environmental Conditions discussed in section 5.0 of Technical Specification Amendment No. 132, and Electrosleeving continues to be an acceptable and effective steam generator tube repair method.

The following wording more accurately describes the waste processing for Callaway during Refuel 10: "The spent solutions and chemical contaminated rinses generated by Electrosleeving will be processed using the best available technology. This processed waste will be considered as hazardous as defined in 40CFR261." The classification of the processed spent solutions and chemical contaminated rinses as hazardous does not result in a significant increase in the amounts or types of any effluents that may be released offsite, and there is no significant increase in individual or cumulative occupational radiation exposure.

Sixty (60) steam generator tubes were electrosleeved at Callaway Plant during Refuel 10. (Fifty-seven (57) electrosleeves were placed in service). The electrosleeving process generated 8,862 lb. of liquid mixed waste, which was placed in twenty (20) 55-gallon drums. This waste was determined to be a hazardous waste per 40 CFR 261 by testing performed by Mountain States Analytical, Salt Lake City, UT and the Callaway Plant Chemistry Department. A summary of the data on the mixed waste generated is provided in Attachment 1. The twenty (20) 55-gallon drums of mixed waste are currently stored on-site in a portable storage container located in the Radwaste South yard in accordance with an approved nuclear safety evaluation. Waste profiles are in the process of being established with ATG-Richland, WA. An electrosleeving mixed waste shipment is anticipated during the first quarter of 2000.

If you have any questions relating to this please contact us.

  
for Alan C. Passwater  
Manager, Corporate Nuclear Services

DS/mlo  
Attachment

## ATTACHMENT 1

### Steam Generator Electrosleeving Mixed Waste Generation RF10

Drum #	Weight (lb.)	EPA Waste Code <sup>1</sup>	Electrosleeve Process	LSA or Limited Quantity (LQ)
4161	435	D007	Rinse water	LQ
4164	490	D002, D007	Spent rinse water	LQ
4163	400	D002, D007	Woods, Watts, Strike, rinse water	LSA
4150	420	D002, D007	Woods, Watts, Strike, rinse water	LSA
4225	550	D007	Rinse water	LSA
4226	420	D002, D007	Woods, Strike, rinse water	LSA
4227	630	D002, D007	Woods, Strike, rinse water	LSA
4235	500	D002, D010, D011	Watts	LQ
4233	300	D002, D010, D011	Watts	LQ
4232	550	D002, D010, D011	Watts	LQ
4234	530	D002, D010, D011	Watts	LQ
4231	560	D002, D007	Woods, Strike, rinse water	LSA
4230	550	D007	Rinse water	LSA
4243	425	D010, D011	Watts, rinse water	LQ
4237	400	D010, D011	Watts, rinse water	LQ
4238	400	D010, D011	Watts, rinse water	LQ
4236	270	D010, D011	Watts, rinse water	LQ
4182	320	D002, D007, D010, D011	Lab waste	LQ
4148	320	D002, D007	Spent rinse water	LQ
4149	392	D002, D007	Spent rinse water	LSA

1. D002 indicates the pH was less than or equal to 2 which is the limit in 40 CFR 261.22. D007 indicates that the TCLP value for chromium is 10.5 mg/l, greater than 5 mg/l limit in 40 CFR 261.24. D010 indicates that the TCLP value for selenium is 5.8 mg/l, greater than the 1 mg/l limit in 40 CFR 261.24. D011 indicates that the TCLP value for silver is 8.36 mg/l, greater than the 5 mg/l limit in 40 CFR 261.24.

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