

# SNUPPS

Standardized Nuclear Unit  
Power Plant System

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May 23, 1983

SLNRC 83- 028 FILE: 0491.10.2  
SUBJ: Final Report: DS-416 Reactor  
Trip Switchgear Undervoltage  
Attachment (SDR 83-07)

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U.S. Nuclear Regulatory Commission  
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Docket Nos. STN 50-482 and STN 50-483

Gentlemen:

On April 21, 1983, NRC Region III and Region IV representatives were informed by SNUPPS Staff (R. White, M. Fletcher) of a deficiency in Callaway and Wolf Creek Type DS-416 Reactor Trip Switchgear breakers manufactured by Westinghouse (Switchgear Division, East Pittsburgh). In the April 21 notifications, it was explained that due to a design discrepancy, a retaining ring may become disengaged from a pivot shaft in the DS-416 undervoltage attachment. Refer to the attached sketch for details. Disengagement of the retaining ring allows the pivot shaft to move axially such that one end of the shaft may come out of the shaft guide hole in the frame of the undervoltage attachment. Under these circumstances the undervoltage attachment may fail to operate and the reactor trip breaker might not open on automatic demand from the reactor protection system. The deficiency was also reported by Westinghouse on April 20, 1983 pursuant to the requirements of 10CFR21.

The cause of the problem has been reported by Westinghouse as follows: the design width of the retaining ring was increased in 1972, but the width of the mating groove in the pivot shaft was not similarly widened to be consistent with the retaining ring modification; consequently the wider retaining rings do not seat properly in the existing pivot shaft grooves.

To correct the problem, all DS-416 reactor trip breaker undervoltage attachments at Callaway and Wolf Creek will be replaced. The replacement DS-416 attachments will have modified (widened) grooves to accommodate the new retaining rings. The DS-416 undervoltage attachments will

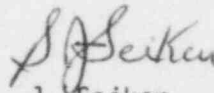
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be replaced at each site prior to fuel loading. Westinghouse also reports that, in addition to revising manufacturing drawings, quality control procedures have been modified to assure that critical design dimensions are maintained during manufacture of the replacement DS-416 undervoltage attachments. It will be verified by inspection that the replacement undervoltage attachments meet part number and critical dimensional requirements.

This report should be considered the final report concerning the DS-416 reactor trip breaker undervoltage attachment deficiency. The NRC will be informed should there be any new developments concerning this issue.

Very truly yours,



S. J. Seiken  
Manager, Quality Assurance

RPW/dck/9b9

Attachment: Sketch, Undervoltage Attachment

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# DS-416 Undervoltage Attachment

