Entergy
Operations

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1CAN039106

U. S. Nuclear Regulatory Commission
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SUBJECT: Arkansas Nuclear One - Unit 1
Docket No. 50-313
License No. DPR-51
Information Concerning the
Special Mid-Cycle Outage

Gentlemen:

Entergy Operations provided the NRC with information concerning modifications that were scheduled to be completed in the ninth refueling outage (1R9) for Arkansas Nuclear One, Unit 1 (ANO-1) but were deferred. This information was provided in letter 1CAN119016, dated November 30, 1990, and supplemented by letter 1CAN129004, dated December 17, 1990. A special mid-cycle outage (1M91) was scheduled as stated in letter 1CAN119016.

The objective and scope of 1M91 was discussed with Region IV personnel, the NRR Project Managers and NRR Staff on February 27, 1991. The purpose of this letter is to provide information concerning the scope of 1M91.

Attachment 1 provides a listing of those Design Change Packages (DCPs) or Limited Change Packages (LCPs) scheduled for completion during 1M91. Information concerning two maintenance activities scheduled to be completed in 1M91 is provided in Attachment 2. These two activities are VSF-9 noise reduction and installation of heavier PORV block valve springs.

Should you have any questions regarding this issue, please contact me.

Very truly yours,

James J. Fisicaro
Manager, Licensing

JJF:RWC:sgw

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cc: Mr. Robert Martin
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ATTACHMENT 1

1991 DESIGN OR LIMITED
CHANGE PACKAGES

85-1050	Remote Operation of MU-13
87-1022	Containment Isolation Valve for Air Particulate Monitor
89-1023/1023A	Hydrogen Sampler System Modifications
89-1039	ICW Piping Penetration
89-1040	Chilled Water Piping Penetration
89-1045	Service Water Return Line Code Compliance
90-1006	Isolation Valve on Reactor Building Drain
90-1020	LP Turbine Seal Regulators
90-1025	MFW Pump Recirculation
90-1032	Evaluate AOV CV-3814 and 3815
90-1035	E2A and 2B Startup Boiler Controls
90-1043	LPI/Reactor Building Spray Indication
90-5015	Flush Connection Lube Oil Coolers
90-5019	Pressurizer Discharge Piping
90-5021	Quench Tank Drain Line
90-5027	Firewater System Inside Reactor Building

ATTACHMENT 2

ADDITIONAL INFORMATION CONCERNING
VSF-9 NOISE REDUCTION AND INSTALLATION
OF HEAVIER PORV BLOCK VALVE SPRINGS

VSF-9 NOISE REDUCTION

In letter 1CAN088504 (August 14, 1985), Entergy Operations submitted the Control Room Design Review (CRDR) Final Summary Report to the NRC. Several human engineering discrepancies (HEDs) were identified in that report. HED QS:A5.2-1.065 identified the concern that the emergency ventilation air handling unit (VSF-9) in the control room was noisy and interferes with speech and hearing audible alarms associated with the annunciators. This HED was classified as a Category I HED. (Category I HEDs are defined as those HEDs that could affect or has substantially affected a safety system or operator response during an emergency situation.) In letter 1CAN048607 (April 29, 1986), Entergy Operations informed the NRC that this HED would be resolved during or before the seventh refueling outage for Arkansas Nuclear One, Unit 1 (ANO-1) (1R7).

In letter 1CAN068805 (June 30, 1988), Entergy Operations stated that modifications to address this HED (sealing the fire register) were unsuccessful. Additional actions were being evaluated to determine if further modifications will reduce the noise level. Entergy Operations also stated that final resolution of this HED would be completed by the end of the 1R9 refueling outage. However, due to resource constraints leading up to and during the course of 1R9, the resolution of this HED was not accomplished and was deferred until 1M91. Work on this system has shown to be very difficult due to the constraints associated with its duct work location in the control room ceiling.

INSTALLATION OF HEAVIER PORV BLOCK VALVE SPRINGS

The NRC requested additional information concerning NUREG-0737, Item II.D.1, "Performance Testing of Relief and Safety Valves" in letter 1CNA018702 (January 8, 1987). In this letter the NRC asked that Entergy Operations verify that the heavier springs are installed in the PORV, consistent with the vendor's recommendations.

Entergy Operations responded to this request for additional information in letter 1CAN068802 (June 12, 1987). In reference to the subject of the heavier springs for the PORV, Entergy Operations stated that efforts were underway to procure the new springs for both the pilot and main disks. These springs were scheduled for installation during the next refueling outage.

The heavier springs were received in January 1990. During a Quality Control inspection in March 1990, the pilot valve disk and bushing were rejected due to improper tolerances. These components were returned to the vendor. In discussions with the vendor, Entergy Operations was informed that the components would not be available for 1R9; thereby, causing this activity to be deferred until 1M91.

ATTACHMENT 2

ADDITIONAL INFORMATION CONCERNING
VSF-9 NOISE REDUCTION AND INSTALLATION
OF HEAVIER PORV BLOCK VALVE SPRINGS

VSF-9 NOISE REDUCTION

In letter 1CAN088804 (August 14, 1988), Entergy Operations submitted the Control Room Design Review (CRDR) Final Summary Report to the NRC. Several human engineering discrepancies (HEDs) were identified in that report. HED QS:A5.2-1.065 identified the concern that the emergency ventilation air handling unit (VSF-9) in the control room was noisy and interferes with speech and hearing audible alarms associated with the annunciators. This HED was classified as a Category I HED. (Category I HEDs are defined as those HEDs that could affect or has substantially affected a safety system or operator response during an emergency situation.) In letter 1CAN048607 (April 29, 1986), Entergy Operations informed the NRC that this HED would be resolved during or before the seventh refueling outage for Arkansas Nuclear One, Unit 1 (ANO-1) (1R7).

In letter 1CAN068805 (June 30, 1988), Entergy Operations stated that modifications to address this HED (sealing the first register) were unsuccessful. Additional actions were being evaluated to determine if further modifications will reduce the noise level. Entergy Operations also stated that final resolution of this HED would be completed by the end of the 1R9 refueling outage. However, due to resource constraints leading up to and during the course of 1R9, the resolution of this HED was not accomplished and was deferred until 1M91. Work on this system has shown to be very difficult due to the constraints associated with its duct work location in the control room ceiling.

INSTALLATION OF HEAVIER PORV BLOCK VALVE SPRINGS

The NRC requested additional information concerning NUREG-0737, Item II.D.1, "Performance Testing of Relief and Safety Valves" in letter 1CNA018702 (January 8, 1987). In this letter the NRC asked that Entergy Operations verify that the heavier springs are installed in the PORV, consistent with the vendor's recommendations.

Entergy Operations responded to this request for additional information in letter 1CAN067802 (June 12, 1987). In reference to the subject of the heavier springs for the PORV, Entergy Operations stated that efforts were underway to procure the new springs for both the pilot and main disks. These springs were scheduled for installation during the next refueling outage.

The heavier springs were received in January 1990. During a Quality Control inspection in March 1990, the pilot valve disk and bushing were rejected due to improper tolerances. These components were returned to the vendor. In discussions with the vendor, Entergy Operations was informed that the components would not be available for 1R9; thereby, causing this activity to be deferred until 1M91.