TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

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SEP 23 1988

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Gentlemen:

In the Matter of	)	Docket Nos. 50-259
Tennessee Valley Authority	)	50-260
	)	50-296

BROWNS FERRY NUCLEAR PLANT (BFN) UNITS 1, 2, AND 3 - SAFETY SYSTEM FUNCTIONAL INSPECTION (SSFI) REPORT NO. BFA 88811

TVA is submitting the subject report as requested by G. E. Gears, TVA Project Manager, NRC Office of Special Projects.

SSFI Report No. BFA 88811 considers the emergency equipment cooling water (EECW) and the residual heat removal service water (RHRSW) to be functional. The inspection was a TVA managed task with joint participation by TVA and ERC International.

Currently, affected BFN organizations are preparing recommendations for each inspection observation. These recommendations and subsequent corrective actions should provide confidence in the functional readiness and restart of BFN.

The enclosures contain proprietary information and should be withheld from public disclosure as provided in 10 CFR 2.790. They are, therefore, deemed to be commercial or financial information with the meaning of 10 CFR 9.5(a)(4) and shall be subject to public disclosure only in accordance with the provisions of 10 CFR 9.12.

If you have any questions, please telephone Wayne Ivey at (205) 729-2071.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

R. L. Gridley, Manager
Nuclear Licensing and
Regulatory Affairs

Enclosures
cc: See page 2

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U.S. Nuclear Regulatory Commission

SEP 23 1988

cc: (Enclosures)
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BROWNS FERRY SSFI [redacted]CTION OBSERVATIONS (7/28/88)
SUMMARY

			OLD CAQR	NEW CAQR	OTHER
I.		**Mechanical Maintenance**			
OBSERVATION/ITEM					
WCS-1	(67-32)	Nonperformance of preventive maintenance on equipment, Rev. 1		880515	
WCS-2	(23-46)	Discrepancies in preventive maintenance for MOVs, Rev. 0		880514	
WCS-3	(23-47)	Weak housekeeping and maintenance practices, Rev. 1		880508	
WCS-4	(23-61)	Failure analysis not adequate to determine root causes, Rev. 0		880510	
WCS-5	(67-69)	Method for upgrading maintenance procedure may be too narrowly focused, Rev. 1			U/R
WCS-6	(23-64)	Control and documentation of postmaintenance testing is weak, Rev. 1		880509	
WCS-7	(23-72)	Upper torque limits for service water pumps mounting bolts., Rev. 1		880501	
II.		**Mechanical Design**			
SMK-1	(67-31)	EECW may not be capable of providing required flows, Rev. 1		880505	
SMK-2	(23-38)	Traveling screens could become inoperable affecting RHRSW flow, Rev. 0			D/B P/L 2-1273
SMK-3	(23-37)	Safety related boundary valve not installed on U-3 heat exchanger, Rev. 0	880419		
SMK-4	(67-54)	Isolation valves FCV-67-50 and 51 may not close on demand, Rev. 2	871058		
SMK-5	(67-53)	Inadequacies in design analyses and testing for EECWs, Rev. 1	870872		
SMK-6	(23-59)	RHR heat exchanger relief valve may not be adequately sized, Rev. 0		880491	
SMK-7	(23-69)	Platforms,railings,and other equipment in the RHRSW pump rooms are not seismically anchored,Rev. 0		880506	
WAP-1	(23-30)	Incorrect relief valve settings for system piping, Rev. 0			D/B P/L 2-1264
WAP-2	(67-74)	Design pressure limitations for EECW components can be exceeded, Rev. 0			D/B P/L 2-1313
III.		**Electrical Design**			
SFK-1	(67-59)	Adequacy of Q-list as a controlled document, Rev. 0	870018		
SFK-2	(23-49)	D/G derating on high outside ambient temperature, Rev. 0		*	
SFK-3	(23-60)	Inadequate motor OL heater selection for MOVs, Rev. 1			PIR # BFN-EEB-8816
SFK-4	(23-63)	Lack of surveillance testing of motor thermal OL relays, Rev. 0		880516	
SFK-5	(67-72)	Weaknesses in dynamic load study for standby D/Gs, Rev. 0			PIR # BFN-EEB-8820
SFK-6	(23-70)	Inadequacy of motor thermal OL calculation methodology, Rev. 0	880447		PIR # BFN-EEB-8817
IV.		**Instrumentation and Controls**			
BL-1	(67-58)	Logic diagrams are not under configuration control, Rev. 1	870657		
BL-2	(23-48)	Flow instruments are not qualified consistent with safety importance, Rev. 0			U/R
BL-3	(67-61)	Flow transmitters installed in a harsh environment, Rev. 0		*	PIR # BFN-EEB-8815
BL-4	(67-62)	Press switches for EECW strainer start not seismically qualified, Rev. 1	880099		
BL-5	(23-73)	Process instrumentation instructions do not provide for complete channel/loop calibration, Rev. 0		880511	

			OLD CAQR	NEW CAQR	OTHER
V.		Testing			
OBSERVATION/ITEM					
RB-1	(67-64)	Surveillances do not adequately verify EECW pump auto start, Rev. 1		880472	
RB-2	(67-63)	No test to verify remote indicating lights for 67-50, 51, and 53, Rev. 0		880507	
RB-3	(67-73)	Inadequacies in the flow balance of the EECW system, Rev. 0	870872		
RB-4	(23-68)	Lack of adequate testing in the restart program for RHRSW and EECW, Rev. 0		880472	
VI.		Operations			
JJB-1	(67-41)	Weakness in operating instruction OI-67, Rev. 0			COTS
JJB-2	67-55)	Failure to follow requirements of PHI 8.1, Temporary Alterations, Rev. 0		880420	
JJB-3	(23-62)	Failure to identify number of sump pumps for LCO, Rev. 0			D/B P/L 2-0638
JJB-4	(23-67)	Failure to follow PHI 12.12, Conduct of Operations, Rev. 0			I
VII.		Management Systems			
JLT-1	(67-60)	Drawings are not being updated, Rev. 0	870657		
JLT-2	(23-65)	Weakness in plant valve identification labels, Rev. 0			I
JLT-3	(23-66)	System status file is not being maintained current, Rev. 0		880479	
JLT-4	(67-71)	Failure to notify operations personnel of D/G load study calculations, Rev. 0		*	

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* – Indicates plant agreement with CAQR, but number not yet issued.
D/B P/L – Indicates design baseline punchlist item.
U/R – Indicates observation still under review by plant.
I – Indicates area for improvement.
COTS – Indicates item corrected on the spot.
PIR – Problem Investigation Report