



**SMUD**

SACRAMENTO MUNICIPAL UTILITY DISTRICT ☐ 6201 S Street, P.O. Box 15830, Sacramento, CA 95813; (916) 452-3211  
AN ELECTRIC SYSTEM SERVING THE HEART OF CALIFORNIA

RJR 85-555

November 15, 1985

DIRECTOR OF NUCLEAR REACTOR REGULATION  
ATTENTION HUGH L THOMPSON JR DIRECTOR  
DIVISION OF LICENSING  
U S NUCLEAR REGULATORY COMMISSION  
WASHINGTON D C 20555

DOCKET 50-312  
RANCHO SECO NUCLEAR GENERATING STATION  
UNIT NO 1  
UPDATED PROGRAM PLAN TO RESOLVE ITEMS FROM TRANSIENT OF OCTOBER 2, 1985

In several letters during the period of October 14 thru 25, 1985, the District supplied the NRC staff with an "Action List". The "Action List" describes the District's program plan to resolve concerns stemming from the transient of October 2, 1985. The District committed to provide a status of the short term items and a completion schedule for those items designated as long term by November 18, 1985. Attached to this letter is the latest revision to the "Action List". It is important to note that the District has completed all of the "startup required" items and will have completed all of the "power escalation" items by full power operation.

If you have any questions concerning any of the above items, contact Jerry Delezenski of my staff.

R. J. RODRIGUEZ  
ASSISTANT GENERAL MANAGER,  
NUCLEAR

Attachment

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PDR ADOCK 05000312  
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LEGEND: SU = Startup Required  
 LT = Long Term  
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OCTOBER 2, 1985 TRANSIENT

STATUS DATE 11-14-85  
 TIME 1200

- ACTION LIST -

	DESCRIPTION	RESPONSIBILITY	SCHEDULE	STATUS	WR No./NCR/ ETC.	COMMENTS
I	Post Trip Report	J. Field	SU	Completed	NA	
II	Root Cause Analysis	S. Crunk	SU	Completed *	NA	Reviewed by Management Review Team.*
III	Aux FW ICS Control					
	a. Verify calibration of appropriate modules.	N. Brock	SU	Completed	104969, 104972 104973, 104974 104975	
	b. Reset of Aux FW Valves on MFWP Reset.	B. Spencer	SU	Completed	S0-20-85	Crews were trained.
	c. Revise procedures for III.b.	B. Spencer	SU	Completed	NA	Temporary change to Operating Procedure A.51.
	d. Evaluate design of AFW valve reset on restart of MFW Pump or RCP.	V. Lewis	ST	To be Completed 11/22/85	NA	
	1. Revise AFW valve control logic for loss of MFW pumps.	N. Brock	SU	Completed	R-0196	

\* October 14 commitment for review by MRT completed. Finalized Root Cause Analysis still in progress.

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IV	HPI "A" Inject Line flow indication					
	a. Write and perform Special Test Procedure.	J. Field	SU	Completed	STP-180	
	b. Perform calibration check of FT-23807.	N. Brock	SU	Completed	105228	
	c. Resolve flow anomaly and prepare Summary Report.	J. Field	SU	Completed	S-5103, S-5150, Rev. 2	
	d. Write and perform a 2nd Special Test Procedure.	J. Field	SU	Completed	STP-184	
	e. Inform operators of characteristic of flow indication.	M. Hieronimus	SU	Completed	SO 22-85	
	f. Recalibrate HPI flow transmitters so actual flow is greater than indicated.	N. Brock	SU	Completed	105422, 105424 105478, 105421	
V	Pegging Steam Controls					
	a. Determine adequacy of pegging steam setpoints and FW heater relief valve setpoints.	J. Field	SU	Completed	NA	

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V	b. 1. Verify setpoints of 2nd and 4th Point heater shell relief valves.  2. Reset 4th point heater shell reliefs to new setpoint values.	R. Lawrence	SU	Completed	104541, 104544 104542, 104543 104562, 104563	All setpoints as per Process Standards.
	c. Verify setpoints of all secondary system relief valves which could cause rapid cooldowns/ other FW heater shell reliefs.	R. Lawrence	PE	To be Completed 11/19/85	104573, 104575 104574, 104576	Will require use of hydro assist on valves without recent setpoint history.
	d. Determine appropriate periodic test program (i.e., either PM or SP Program) and implement same for all secondary relief valves.	R. Lawrence	LT	To be Completed 6/1/86		To be done as part of PM program upgrade.
	e. Resolve report of MSR Reliefs lifting after Rx/Turbine trip.	J. Field	SU	Completed	NA	Resolved that MSR Reliefs did not lift.
	f. Establish criteria for process setpoint determination.	V. Lewis	LT	To be Completed 2/1/86		

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V	g. Review plant for proper application of criteria.	V. Lewis	LT	To be Completed 5/1/86		
	h. Add setpoints for FSL-32243, 32244, and 32453 to Process Standards.	R. Colombo	LT	To be Completed 12/1/85		AP.152
VI	"A" Main Feedwater Pump seal water and controls					
	a. Repair linkage on controller.	N. Brock	SU	Completed	104965, 105378	
	b. Check common mode failure possibility on controller linkage.	N. Brock	LT	To be Completed 12/15/85	NA	Looking for common mode relations to VI a.
VII	Main Feed Pump Trip Event					
	a. Perform test to duplicate J. Field low vacuum condition.		NA	Deleted	STP-181	Test not required.
	b. Install monitoring instrumentation.	N. Brock	SU	Completed		
	c. Verify "as built" wiring of "A" FWP trip circuits.	C. Linkhart	SU	Completed	102722	Plant drawings accurately show "as built" configuration.

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VII	d. Check setpoints of trip devices.	N. Brock	PE	Completed	102716, 102721 102718, 103272 102720, 103273	
	e. Compile history of FW pump control problems.	N. Brock	ST	Completed	NA	
	f. Check end play on main shaft of "A" MFW Pump.	R. Lawrence	SU	Completed	102719	Acceptable.
	g. Obtain LO sample from "A" and "B" MFW Pump and have analysis performed.	R. Lawrence	SU	Completed	103269, 102719	Normal.
	h. Verify "as built" wiring of "B" FWP trip circuits.	C. Linkhart	SU	Completed	105686	Acceptable; elementaries are correct. S-5119 written.
	i. Install Trip Circuit Alarm Lights.	C. Linkhart	LT	To be Completed During Cycle 8 Refueling Outage		Requires pump out of service.
VIII	Main Condenser Loss of Vacuum Event					
	a. Update drawings to reflect "as built" conditions of MSR relief sealing steam.	R. Lawrence	SU	Completed	R-0177	



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VIII	b. Revise procedure(s) to show MSR relief sealing steam valves.	B. Spencer	SU	Completed	NA	Temporary change to Operating Procedure A.49 written.
	c. Determine whether sealing steam procedures are adequate and usable.	B. Spencer	SU	Completed	NA	Revision 12 to Operating Procedure A.49.
	d. Review/analyze performance of the gland steam condenser.	J. Field	LT	To be Completed 7/1/86	NA	
	e. Investigate when/why MSR sealing steam valve was closed.	B. Spencer	SU	Completed	NA	Investigation unable to ascertain when/why valve was closed.
	f. Determine whether MSR Relief Sealing Steam System works as designed.	R. Lawrence	LT	Completed	NA	Review shows adequate for restart.
	g. Initiate WR for rework of leaking MSR relief valve.	R. Lawrence	LT	Completed	104113	Work Request written to be reworked at the next refueling outage.
	h. Resolve setpoint error of main turbine low vacuum trip.	S. Carmichael	SU	Completed	105116	Reset to proper value.
	i. Correct/upgrade documentation for maintenance on turbine trip block.	R. Lawrence	LT	To be Completed 1/1/86		

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VIII	j. Include placement/ removal of MSR relief valve covers in procedures.	B. Spencer	SU	Completed		Temporary change to Operating Procedure B.3 written.
	k. Fabricate new MSR relief valve covers.	R. Lawrence	ST	To be Completed 12/15/85		
	l. Include main turbine trip setpoints in Process Standards.	R. Colombo	ST	To be Completed 12/1/85		
	m. Develop design improve- ment to reduce leakage of MSR relief valves.	V. Lewis	LT	To be Included in Living Schedule by 1/1/86		Living Schedule will determine final completion date.
IX	Condensate/FW Oscillation	J. Field	SU	Completed	NA	
X	ICS Tuning					
	a. Prepare ICS/Feedpump tuning STP.	N. Brock	PE	Completed	STP-657	Approved by PRC 10/18/85.
	b. Perform tuning as plant conditions permit.	N. Brock	PE	To be Completed 12/1/85		Based upon achieving full power prior to this date and allowing 2 days of tuning at 100 percent power.



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X	c. ΔTc Control	N. Brock	LT	To be Completed 12/15/85		
XI	Valve Identification Program					
	a. Develop list of selected systems for Operations walkdown.	B. Spencer	SU	Completed		To include Operating Procedures A.37, A.49, A.41, A.42, A.50, A.46, A.34, A.38, A.40, A.51, A.47, A.28, A.39, A.53, A.6.
	b. Operations crew to walk down systems to identify valves not on prints.	B. Spencer	SU	Completed		
	c. Prepare NCRs on findings, revise procedures as necessary, and tag valves.	B. Spencer	SU	Completed		NCRs written. Temporary changes to procedures written. Valves tagged.
	d. Update drawings (P and IDs).	D. Abbott	LT	To be Completed 4/1/86		
	e. QA Surveillance	H. Canter	SU	Completed	No's. 492, 488	

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XII	"B" Feedwater Line Leak Reactor Building.	R. Lawrence	SU	Completed	104548, 104564 104560, 104572 102095, 104569 104567, S-5090 S-5111, S-5093	Report addressing the cause and the repair done. Material meets applicable code.
XIII	P-319 Bearing Failure					
	a. Pump Repair	R. Lawrence	SU	Completed		
	b. Maintenance History Cause of Failure/ Corrective Action	R. Lawrence	SU	Completed		Surveillance History and Post Repair Test
	c. QA Surveillance	J. Jewett	SU	Completed	No. 485	
	d. Provide oiling instructions	B. Rausch	SU	Completed	TS 85-1033	To include safety related pumps. How to determine level. How to maintain oil level. Pump specific instructions.
	e. Past practice on LO Level.	B. Spencer	SU	Completed		
	f. Investigate whether "Normal" level was changed.	R. Lawrence	SU	Completed	HLC 85-067	No level change was made.
	g. 48-Hour Endurance Run	J. Field	SU	Completed	STP-182	

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XIII	h. Identify all safety related pumps which utilize slinger rings.	R. Lawrence	SU	Completed	NA	
	i. Oil level indication for P-318, 319, 482 A and B, and 261 A and B.	V. Lewis	SU	Completed	S-5120, S-5124 S-5114, S-5115 S-5117, S-5118	
	j. Root Cause	S. Crunk	SU	Completed *		Reviewed by Management Review Team.
	k. Inspect rings in pumps which have been previously disassembled.	R. Lawrence	SU	Completed	102096, 102097 102099	
XIV	Loss of Aux Steam Event					
	a. Prepare Report	M. Nickerson	SU	Completed	TS 85-1021	
	b. Root Cause	S. Crunk	LT	To be Completed 12/15/85	NA	Included in RC 85-021.
	c. Investigate Aux Boiler Power Supply.	C. Linkhart	SU	Completed	NA	
	d. I and C analysis of XIV c.	N. Brock	LT	Completed		

\* Review by MRT completed. Finalized Root Cause Analysis still in progress.

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XV	Training					
	a. Lessons Learned	F. Thompson	LT	To be Completed 4/1/86	NA	Review and if determined necessary, revise lesson plans.
	b. Training on Item III.b	B. Spencer	SU	Completed	NA	SO 20-85 (Instructions/Recommendation)
	c. Training on pumps/motor oiling	M. Hieronimus	SU	Completed	SO 24-85	
	d. Training on Item III.d.1.	B. Spencer	SU	Completed	SO 23-85	Crews trained prior to going on shift.
XVI	Procedure Adequacy					
	a. EOPs	D. Comstock	SU	Completed	NA	Rule 4 and E.05 revised.
	b. Normal Procedures	D. Comstock	LT	To be Completed 3/1/86	NA	To include Operating Procedures B.1, B.2, B.3, and B.4.
	c. Identify operator actions not specifically addressed in procedures.	M. Hieronimus	LT	Active Program	NA	Problem Feedback Report System initiated by Operations 10/10/85.
	d. Monitor operation procedures during SU.	D. Comstock	PE	Completed	NA	
	e. Evaluate operator performance during the trip.	D. Comstock	SU	Completed	NA	

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XVII	Health Physics/Emergency Plan					
	a. Health Physics aspects.	F. Kellie	SU	Completed	FWK 85-202	No Health Physics impact.
	b. Emergency Plan utilization.	B. Spencer	SU	Completed	NA	Emergency Plan did not require activation.
XVIII	RCS Overcooling					
	a. Tech Spec Review	R. Colombo	SU	Completed	NA	
	b. B and W Evaluation	J. Field	SU	Completed	NA	B and W letter, SMUD-85-222, dated Oct. 4, 1985, "Structural Integrity of Pressure Boundary Components are Suitable for Continued Power Operation.
XIX	Preventive Maintenance Program for Non-safety Related Equipment					
	a. Description of existing program.	R. Lawrence	SU	Completed	NA	
	b. Planned improvements.	R. Lawrence	LT	Requires 11/30/85 response to NRC.	NA	