

PLANNING MEETING

0900 5/4/79

1. Agenda, 0900, 5/4/79, Task Management/Schedule Meeting
2. Review Top Priorities List
3. Review Action Items from "1800", 5/3/79, Technical Review Meeting
4. Review Tasks Lists

5/4/79

A G E N D A

Task Management/Schedule Meeting

0900 5/4/79

1. Radioactive Releases
 - a) Reason for release at 1715 5/3
 - b) 748, 219 readings
 - c) Auxiliary Building fans
2. Plant Status - RCS profile
3. Analytical
 - a) B&W flow test
 - b) RCS leakage water/steam split
 - c) Methods of mixing pressurizer and RCS water
4. Containment sump level
 - a) Level measurement
 - b) DHV-2 operation
 - c) DHV-6 operation
 - d) Other options/concerns
 - d) Alternate methods of drawing water from the containment sump
5. Water to be stored in tank farm - proposals/schedules
6. Pressurizer level
 - a) Solid pressurizer level benchmark test
 - b) Davis-Besse test/implementation at TMI-2
7. Mini-flow test of existing DHR system
8. Construction Status:
 - a) Tank Farm in Unit 2 Spent Fuel Pool
 - b) Alternate System for solid circulation of OTSG
 - c) EPICOR (CAP-GUN II)
 - d) Reactor Coolant Pressure/Volume Control
 - e) Auxiliary Building roof ventilation system
 - f) Alternate Decay Heat Removal System

5/4/79

TOP PRIORITIES

Development of plan for management of radioactivity in Auxiliary and Containment Buildings.	A-1
Identify and isolate sources of iodine leakage.	A-1
Complete tank farm in Unit 2 spent fuel pool.	A-1
Complete roof-top Stack Filtration System.	A-2
Complete contingency plan for emergency cross-tie between the Auxiliary Building and Reactor Building Filtration System.	A-2
Completion of EPICOR (CAP-GUN II) System.	A-2
Development of plan for treatment of Auxiliary Building liquid waste.	B-1
Complete "B" OTSG cooling and modification (long-term).	C-1
Upgrade Decay Heat Removal System.	C-1
Develop and calibrate alternate pressurizer level transmitter.	C-1
Development of alternate system for pressure/volume control system.	C-1
Complete "A" OTSG cooling modification (long-term).	C-2
Complete external valve pit for ADHR System.	C-2

CATEGORY

- A Control (i.e., containment) of radioactivity in Auxiliary and Containment Buildings.
- B Recovery of Auxiliary Building to near normal operations.
- C Place the plant in a cold condition suitable for depressurization with long-term pressure/volume control.

5/4/79

ACTION ITEMS

Technical Group Meeting

1800

5/3/79

- | | <u>ACTION</u> |
|--|----------------------------|
| 1. Check monitors at outlet of Auxiliary Building roof ventilation system for proper operation. | Kunder |
| 2. Raise Reactor Building closed loop cooling water system temperature to 85°. | Herbein |
| 3. Pressurizer sample will be taken at 0900 5/5. This sample test will include sodium and gross activity. | B&W |
| 4. Review plant data to find pressurizer heat loss. Use this data and the current heater rate to calculate the amount of steam leaking from the pressurizer. | Wilson/
Toole |
| 5. Continue to look for the best way to provide mixing of pressurizer/RCS liquid. Look at spraying in through the pressurizer steam space sample line, let down through the pressurizer liquid sample line and spraying in through the DHR line. | Wilson |
| 6. Collect data and prepare analyses and recommendations for 0900 5/4 whether to open DHV2. | All |
| 7. Set up jog control for DHV6. | Herbein |
| 8. Check line up downstream of DHV6. This section of piping should be isolated. | Herbein |
| 9. The test of the upgraded DHR system must ensure there will be no leakage if the system is used. Rewrite test procedure. | Herbein/
Keston/
NRC |
| 10. Resolve NRC review problems with the procedure for taking the pressurizer solid. | Wilson/
NRC |
| 11. Find alternate flow paths out of the containment sump. | Wilson |
| 12. Determine setpoint of relief valve DH-R1. Assess capability to pressurize piping upstream of DH-V-3 through pressure switch DH-10-PS connection to leak test DE-V-3. | Kunder |
| 13. Provide remote fire alarm in control room for Auxiliary Building roof ventilation filters. | B&R |
| 14. Review Base Case Summary Rev. 03 for adoption 0900 5/4. | All |
| 15. Determine status of on-site DG installation for alternate power to selected loads. | First |

PLANT MODIFICATIONS

Task	Description	Priority	Expected Completion	Status	Task Coord.
WG-1	Install AB/FHB Filter system.	A-1	Units 3 and 4 - 5/5.	Building complete by 5/5.	Gunn/ Thorpe/ Bachofer
WG-2 (L-1)	Decon. water in AB using EPICOR ion exchange process.	A-1	Operational 5/13.		Cobean
WG-6 (L-2)	Install storage vessels in Fuel Pool "A".	A-1	Operational by 5/9.	Schedule slipping.	Cobean/ Gunn
WG-11	Water Chemistry Lab for use with CAP-GUN (WG-2).	A-1	System complete by 5/6.		Cobean
WG-12	Ventilation filtration system for decay heat pits.	A-1	System operational 5/5.		
TS-13	Install elec. heaters on Aux. Bldg. intake ducts.	A-2	Turn over for test 5/4.		
TS-3C	Develop complete package for long-term cooling of OTSG "B". Use Unit #2 Demins for long-term system.	C-1	System operation - 5/13.	Surge tank delivery is expected 5/9.	Wilson/ Cobean
TS-6B	RCS pressure control system.	C-1	Turn over for test 5/11.		Miller/ Lilly
TS-6C	Evaluate letdown capabilities for mod. to RCS.	C-1	Complete 5/4.	Valve delivery 5/4.	
TS-11	Develop electrical distribution system for (2) 2500 kw diesel generators - 13.2 kv line.	C-1	Operational 5/10.	Schedule slipping.	Cobean
TS-14	Shielding for decay heat pump.	C-2	5/6		Cobean
TS-18	Temporary cart-mounted demineralizers.	C-2	To be scheduled.		Cobean

PLANT OPERATION STAFF

Task	Description	Priority	Expected Completion	Status	Task Coord.
1.	Obtain RCS sample.	C-1		To be scheduled.	Thorpe/ Hetrick
2.	Boron Concentration: Take PZR sample.	C-1	Obtain sample 5/5, 0900.		Kunder
3.	Obtain MEC approval (Tie-in approval only).	C-1		Need ECM's 035, 109, 131, 132, 133, 141, 148, 170, 179, 180, 181, 182, 185, 189, 228, 238, 239, 240.	Porter/ Faulkner/ Seelinger
4.	SSRW pumps.	C-1	"A"-In Service "B"-Available "C"-Under Repair	Parts 5/04/79. Run "B" on 5/4.	
5.	AB "Roof" filters and fans.	A-1	Install filters 5/4. Test fans 5/5.		
6.	Be prepared to run Existing Decay Heat Pumps on Recirc.	C-1	Expect to hydro 5/4.		Toole
7.	Repair secondary plant leaks and clean up water around cond. pumps.	B-1	In progress.	FW-V4B (Furmanite)	Shovlin/ Kunder
8.	Get sec. plant sump levels down.				Kunder
9.	Isolate Unit #1 and #2 sample stations.			Need new sample sink.	Limroth/ McGoey
10.	Training on Diesel.		In progress.		Troffer/ Kunder/ Toole
11.	Training on Decay Heat.	C-1	In progress.	Resolve NRC comments.	Troffer/ Kunder/ Toole
12.	Complete AB airlock.	A-1	Awaiting approval.		Kunder/ Porter

PLANT OPERATION STAFF

Task	Description	Priority	Expected Completion	Status	Task Coord.
13.	Calibrate Aux. Bldg. vent monitors.	A-1	Working on #3 and #4.		Kunder/ Shovlin
14.	Develop fan balancing scheme for Aux. Bldg. HVAC.	B-1			Kunder
15.	Set up alarm system on PZR Htrs. for low-level detection.				Kunder/ Shovlin
16.	Take continuity reading of electrical equip. in RB to try and determine water levels.				Porter/ Kunder
17.	Cooling water has been shut off to seal return cooler and makeup. Tank pressure and temperature are up.	A-1		Need engineer direction.	Broughton
18.	Insure HP-R-222 and 228 are calibrated and take 12-hour cartridge samples.		Ongoing	Lower sample rates. Sample HP-R-221 A and B.	Kunder
19.	Sample AB/FHB charcoal beds.				Kunder

TECHNICAL SUPPORT

Task	Description	Priority	Expected Completion	Status	Task Coord.
LS.2	Tech. Spec. and Surveillance and Bases Changes to those left deletions, additions.	1	No status.	Active: NRC interactions under negotiation.	L. W. Hardin
TM.21	Closed cooling system for S.G. "B"				
	b) Long-term high pressure system using new HX, HP pump to be installed.	1	Completed	Revised criteria document TSG095 issued 4/29.	Capodanno/ Langenbach
TM.23a	Passive system for pressure and volume control of RCS (N ₂ Bubble in water tank).	1	Completed	Revised criteria docu. issued 4/28.	Capodanno/ Langenbach
TM.23b	RCS active pressure/volume control system (New M/U pump to N ₂ tank system).	1	Completed	Revised criteria docu. issued 4/28.	Capodanno/ Langenbach
TM.30	Determine what BOP loads need backup electrical power.	1	Continuing	Draft criteria document issued 4/24.	Capodanno/ Langenbach
TM.35	Long-term plant instrumentation requirements (criteria).	1	On hold.	Criteria docu. being revised.	Capodanno/ Langenbach
AA 66.	D. How to maintain primary boron conc.	1.	No status.	Active.	GFUSC/MPR
AA 69.	Define all plant mods needed for long-term operations.	1	No status.		Croneberger
AA 77.	Analysis and summary of 4/28 natural circulation mode. Evaluate stability and equilibrium.	1	Comp. 4/28.	Data summary continuing based on control room data.	
AA 78.	Evaluate options for mid-term continued operation.	1		New base plan for R. C. A. signature prepared.	
	a) Steam B to get nat. circ.				
	b) Take B solid, get nat. circ.				

TECHNICAL SUPPORT

Task	Description	Priority	Expected Completion	Status	Task Coord.
AA 78.	c) Dynamics of switching from A to B, B to A; combinations of steaming and solid cond.		No status.	Active.	
AA 79.	Define "alert levels" for various parameters.	1		Complete in EP-34.	J. A. Daniel
AA 80.	Analytical and Tech. Planning Support for updated procedures (EP-32, etc.).	1	Complete graph of water level.		J. A. Daniel
AA 81.	Estimate sump water level in reactor building.	1	No status.	Active.	
AA 82.	Determine which electrical shorts in containment could give an indication of containment sump level.	1	Completed.	Measurements being made 5/3.	
AA 83.	Identify critical valves and instruments which may be damaged by high sump levels.	1	5/4	Active.	
AA 84.	Identify flow paths from the containment sump.	1	B&R investigating.	Active.	
AA 63.	Report on nat. circ. other analyses besides B&W.	1	Completed.	Report issued 5/3.	Crimmins/ Raber/ Cunningham
AA 64.	Report for Cooldown on "B" S/G Report for Solid on "A".	1	Cancelled.		

WASTE MANAGEMENT GROUP

Task	Description	Priority	Expected Completion	Status	Task Coord.
L-1	Design, installation, and operation of EPICOR for Unit 2.	B-1	5/14	a. Design - 97% b. Construction - 50% c. Licensing - NRC concurrence d. Operation - est. 5/14. Pipe fab. and welding crit.; approximately 50% of welds complete.	Snider/ Garman/ McCutcheon/ *Weller *Collins
L-2	Design, installation, and operation of emergency surge tanks (tank farm) in Unit 2 "A" Fuel Pool.	B-1	5/7	Fabbing of control panels is complete; continuing at approximately 24 welds/day.	Reinmann/ Snider/ *Weller/ *Collins
L-10	Pursue activities on processing Unit 1 water through CAP-GUN to both provide support to insure available freeboard for Unit 2 and to develop resin formulations for Unit 2 water.	A-1		In progress.	Garman/ *Weller
L-14	Evaluate waste gas vent header leakage problems and recommend fixes depending on results.	A-1		Working per J. Seelinger's waste gas plan of 4/17/79.	McConnell/ Arthur/ *Barrett
L-36	Investigate the effects which the operations associated with reactor plant long-term cool-down will have on discharge to the waste systems. Related to L-6.	C-1		In progress.	McGoey/ Ross/ *Collins
L-42	Development recommendations and procedure for draining and disposition of RCBT water to support plant needs to make up with degassed demin. water.	C-1			McGoey/ Ross
	* NRC contact				

WASTE MANAGEMENT GROUP

Task	Description	Priority	Expected Completion	Status	Task Coord.
L-44	Evaluate system designs with Technical functions and <u>W</u> to assess possible interference problems from standpoint of locations, operations, maintenance, etc.	B-1		Report being prepared; delayed by higher priority tasks.	Kraft
L-47	Resolve sample lab requirements versus capabilities to support EPICOR I and II operations.	B-1		Meeting held 5/1/79; resolution in progress.	Kraft
G-1	Install AB/FHB off-gas filter system to back-up plant system.	A-1		Phase I design complete. System description and start-up procedures are complete. Stack cut-in is made. Phase II and III lead to permanent system, schedule shows 5/5 operation. Decision required on charcoal treatment.	Montgomery/ Itschner/ *Collins
G-4	Vent stack monitoring system to replace HP-R219.	A-1		Eberline servicemen and SRI have calibrated on noble gas and iodine. Capping stack takes HP 219 out of service. Supplemental system monitors are calibrated.	Morton/ Cline/ Pelletier/ *Stoddart
	* NRC contact				

WASTE MANAGEMENT GROUP

Task	Description	Priority	Expected Completion	Status	Task Coord.
G-5	Change out AB/FHB HVAC vent filter train charcoal bed.	A-1		Long-term storage plan defined. 45 permanent storage/shipping containers in fabrication, delivery starts 4/25. "A" train of the AB filters and "A" train of FHB filters removed and replaced, units back in service. High radiation level in "B" train dictates delay "B" train change out. Deluge systems secured on all renewed filter trains. Spent filter tray removal scheduled to begin 5/2.	McConnell/ Edwards
G-31	Determine air flow paths in AB/FHB.	A-1		Operating matrix being developed- available 4/22. Update scheduled 4/28.	Nawaz/ Itchner/ Robison/ *Barrett
G-32	Determine that there are no unidentified air flow paths.	A-1		Examination of plant status/ configuration underway. First cust. review complete.	Nawaz/ Itchner/ Robison/ *Barrett
	* NRC contact				

WASTE MANAGEMENT GROUP

Task	Description	Priority	Expected Completion	Status	Task Coord.
G-34	Review overall Unit 1 and 2 AB and FHB ventilation requirements with a view towards minimum flow from Unit 2 to Unit 1.	B-1		Review underway; documentation completed.	Itschner/ Robison/ *Barrett/ *Collins
G-40	Criteria for and control tasks resulting in the evolution of contaminants that could poison charcoal filters.	A-1		20 "Red Devil" type local filtration systems on order to control welding fumes.	
L-3	Determination of leakage paths and flow rates in Unit 2 Aux. Bldg. and FHB and repair of leaks where possible. Plant has leakage ID and Status Board in Unit 2 Control Room. Pursue Plant activities associated with this.	2		Plant staff following.	Kraft/ Arthur/ *Cwalina
L-12	High level solid waste disposal investigation.	B-2		In progress.	Edwards/ *Waller/ *Collins
L-26	Perform assessment of the value and need for a closed circuit TV Monitor to provide remote indicator of radwaste panel data.	A-2		Price proposal being assessed versus decon. schedule of Aux. Bldg.	Kraft/ Lutz/ *Stoddart
L-29	Investigate reported water collection in the "B" fuel pool, obtain samples and make plans for disposition. Also investigate the preoperational condition of the fuel pool from a leakage standpoint.	B-2		Water from Unit 2 const. Sample needed.	Williams/ *Barrett
L-33	Develop a plan for tying in the tank farm to EPICOR 2.	B-2		System criteria sent to B&R on 5/1/79.	Snider/ *Weller/ *Collins
	* NRC contact				

WASTE MANAGEMENT GROUP

Task	Description	Priority	Expected Completion	Status	Task Coord.
L-35	Investigate the need for a design and construction task to erect a barrier between the Unit 1 and Unit 2 Fuel Handling Bldg. to enable Unit 1 operations with Unit 2 in processing Mode.	B-2		Alternate design Unit 1 side to be submitted 4/27/79.	Williams/ *Barrett
L-37	Develop a plan for removing all radioactive gases from the systems in the AB and FHB.	B-2		Requires completion of L-14.	Ross
G-7	Condenser vacuum pump discharge filter system.	A-2		Filter operational. Investigating operating criteria. Will evaluate DF.	Robison/ Montgomer/ *Collins
G-30	Reactor Purge System Charcoal Filter Sample.	A-2		Radiation survey requested.	McConnell/ *Collins
G-33	Desensitize AB and FHB Filter Monitors.	A-2		Preliminary investigation - desensitization infeasible.	Sieg/ *Stoddart
G-36	Develop "standard" contaminated work area radiological protection system(s), including air supply, clothing, communications systems, etc., which permit best possible working conditions	B-2		Suggest tasking a Met-Ed HP, Met-Ed Maintenance, ALARA on WMG team to develop standard work package.	*Stoddart
	* NRC contact				

WASTE MANAGEMENT GROUP

Task	Description	Priority	Expected Completion	Status	Task Coord.
G-39	Develop and assess back-up gas filtration scheme to cross-connect the Auxiliary Building filters to the RB purge filters.	B-2		B&R has developed a concept. Second estimate scheduled shows 14 day + schedule. Heisman Co. has developed drawings. Exposure/schedule cost appears too high. Contingency plan is to open roughly filter manway if emergency ventilation of Auxiliary Building is needed.	McConnell
G-41	Develop filter management strategy.	B-2		Planning started	Morton/ Clure/ *Bland
L-11	Investigate/develop process for eliminating Unit 2 water in RCBT's. Process planning for Unit 1 and 2. Design (conceptually) a waste processing system for Unit 2 High Level Liquid Wastes.	B-3		Proposal to be received from chem-nuclear 5/4/79.	Snider/ *Weller
L-16	Low level waste (paper, rags, wood, etc.) disposal.	B-3		In progress; second compactor ordered.	Edwards/ *Weller/ *Collins
L-17	Develop CAP-GUN 3 System.	B-3		Initial planning only. Detail design scheduled to start 4/25/79.	Snider/ *Weller/ *Collins
L-20	Obtain a level measurement and a sample of water from the RB sump and basement.	B-3		Measurement using Heise gage being explored.	Ross/ *Cvalina
	* NRC contact				

WASTE MANAGEMENT GROUP

Task	Description	Priority	Expected Completion	Status	Task Coord.
L-22	Develop a plan for long-term cleanup to provide access to Auxiliary Bldg. for restoration activities.	B-3			Open/ *Collins
L-30	Develop plan for radiation survey in Auxiliary and Fuel Handling Bldg.	B-3			Open/ *Stoddart
G-15	Emergency RB Gas Purge Cleanup System.	A-3		On hold; no plan to implement.	Open/ *Collins
G-29	FHB Airlock.	B-3		Airlock unnecessary at this time.	Inactive/ *Barrett
	* NRC contact				

WESTINGHOUSE

Task	Description	Priority	Expected Completion	Status	Task Coord.
I.B.4	Install DHR remote ops. equip.	1	5/2	Completed	Siano
I.B.5	DHR flow/pressure tests.	1	5/3	Ongoing	Siano
II.A.1	ADHR (new) sys. design and approval.	1	5/2	Completed	Siano
II.A.1	Find ADHR test procedure.	1	5/3	Ongoing	Siano
II.A.1	Find ADHR installation procedure.	1	5/10	Ongoing	Siano
II.B	ADHR installation (note below).	1	5/18	Ongoing	Siano
<p><u>Note:</u> Drilling of twelve (12) holes in Aux. Bldg. for the ADHR to start 5/4/79.</p>					

INDUSTRIAL ADVISORY GROUP

Task	Description	Priority	Expected Completion	Status	Task Coord.
2.	Provide recommendation for alternate methods of P/V control.	1		In progress	Ackerman
11.	Instrument diagnostics.	1		Continuous	Ackerman
20.	Evaluate various alternatives to decontaminate plant; long-term.	1		Not started	Lawborski
25.	Instrument				
	a. 12 selected TC's on recorder or computer	1	Comp. 5/3	IA 26 a & b	Stroupe
	b. TH & TC on recorder	1		In progress	Stroupe
43.	Long-term cooling	1		In progress	Kolar
44.	Level of water in containment	1		In progress	Kendell
45.	When will natural circulation stop on the "B" loop?	1		In progress	Mayer
46.	Heat loss from pipe and reactor vs. temperature	1		In progress	Kolar
12.	Specifications for Reflux Boiler Test		Comp. 5/3	I.A. 12 a & b	
	a. Feasibility	2		In typing	Fornandoz
	b. Specific parameter	2		In typing	Fornandoz
14.	Model for boron/gas in primary system.	2		Being written	Kolar
19.	Time to core melt with no external cooling and removal through flooding of containment.	2	Comp. 5/3	I.A. 19	Fornandoz
22.	Plan Mod. - piping and equipment.	2		In progress	Lawborski
47.	Suggestion for going solid on "B" with the long-term system.	2	Comp. 5/3	I.A. 97	Tooker

5/4/79

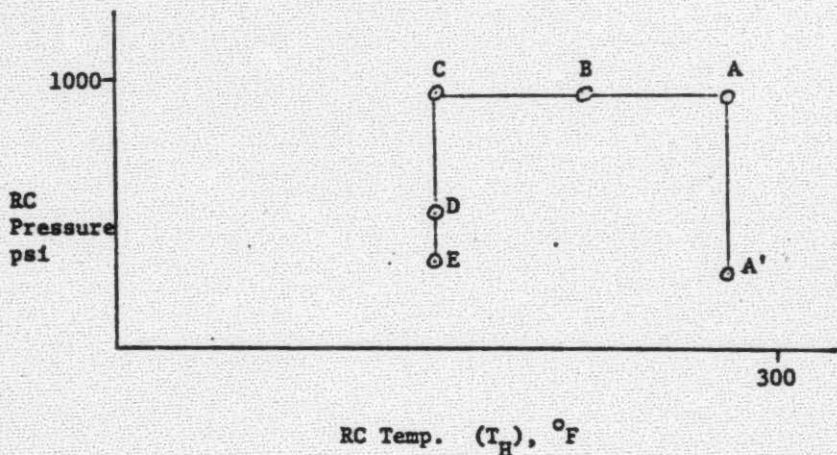
REACTOR COOLANT SYSTEM PROFILEPLANT STATUS

	<u>0900 (5/3/79)*</u>		<u>1800 (5/3/79)</u>		<u>0900 (5/4/79)</u>	
	A	B	A	B	A	B
Th	174.8	176.6	175.1	176.3	175.3	175.4
Tc	161.6	133.0*	162.2	116.0	161.9	101.9
ΔT	13.2	43.6	12.9	60.3	13.4	74
Tstm	160.8	133.7	160.8	135.3	166.8	132.2
PZR LEVEL	Cal.	161	137.5		125.9	
	DVM	Unstable Cond.	70" @ 1030			
	LT-3	251	254.3		319.2	
R.C. Press		945			900	
S/G Level	424"	92%	417"	92%	400	92%
Turb. B/P	84%	Closed	84%	Closed	84%	closed
I.C.T.	High	318	318		320	
	Avg.	-	198.6			
M.U. Temp.		96	95			128

* M.U. Tank Temp. Increased - Only Significant Operation

Bob Keaton

TMI-2 RECOVERY
BASE CASE SUMMARY (REVISION 3)



1. Degas at A. Lower pressure (A \rightarrow A') while degassing, then return to A. (Completed 4/12/79)
 2. Reduce temperature (A \rightarrow B) by steaming on "A" OTSG. (Completed 4/24/79)
 3. At B, trip RC Pump and establish natural circulation. (Completed 4/27/79)
 4. Continue temperature coastdown (B \rightarrow C) on natural circulation; with "A" OTSG steaming.
 5. Continue design/installation of the following reactor plant systems.
 - Closed Cooling System, B Loop
 - P/V Control System
 - Decay Heat Removal System Enhancements
 - Backup S/G Level Instrumentation
 - Air Ejector FILTER SYSTEM (complete)*
 6. Reduce RC pressure (C \rightarrow D) to 500 ± 50 psig.
 7. At D, identify and establish optimum PZR operational mode (Solid or Bubble) and identify optimum RC pressure.
 8. Adjust (D \rightarrow E) RC pressure as appropriate.
 9. Operate new RC P/V control system when available.
- End Point - Primary: Natural Circulation, long term pressure/volume control
Secondary: Steaming on "A", B in standby for steaming or for solid secondary mode of operation.

Approved for Issue

R. C. ARNOLD