

MRC

File

TECHNICAL WORKING GROUP  
1000 6/22/79

1. Agenda, 6/22/79 Technical Working Group
2. Radioactive Releases and RCS Profile
3. Top Priorities List
4. Action Items Technical Working Group 1000, 6/19/79
5. Task Lists

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A G E N D A

TECHNICAL WORKING GROUP

1000

6/22/79

1. Radioactive Releases

- a. 748, Auxiliary Building Fans
- b. Point Sources - Compressors
- c. Dome Monitor - Containment Survey (14" Penetration)

2. Plant Status

- a. RCS Profile
- b. Containment Water Level  
Reactor Building Pressure  
Elect Checks - Critical Equipment
- c. Plant Operations Schedule  
Sample Results -

3. Analysis

- a. Status of Columnated Aqua Scan

4. Pre-operational Testing

Estimated Completion

- |   |                               |
|---|-------------------------------|
| a. Tank Farm  | 6/22                          |
| b. OTSG "B" Long-Term Cooling<br>(Readiness to operate) | Completed (except insulation) |
| c. EPICOR (CAP-GUN II)                                  | 7/9                           |
| d. RCS Pressure/Volume Control<br>Turnover for Testing  | 6/25                          |

5. Construction Status

- a. Alternate Decay Heat Removal
  - System Tie-Ins 6/29
  - Available for Met-Ed Acceptance Test 7/15 (Currently under study)
  - Valve Pit Concrete Work 8/15

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6/22/79

<u>RELEASES</u>	<u>0500 6/20/79</u>	<u>0500 6/21/79</u>	<u>0500 6/22/79</u>
748	$3.33 \times 10^{-9}$	$2.75 \times 10^{-9}$	
HPR 220	$<5.73 \times 10^{-14}$	$<3.34 \times 10^{-14}$	
Inlet	$2.18 \times 10^{-10}$	$2.65 \times 10^{-10}$	
Train #1	$5.30 \times 10^{-13}$	$<1.59 \times 10^{-13}$	
Train #2	$<1.40 \times 10^{-13}$	$<1.02 \times 10^{-14}$	
Train #3	$6.88 \times 10^{-13}$	$<1.75 \times 10^{-13}$	
Train #4	$<2.09 \times 10^{-13}$	$<2.00 \times 10^{-13}$	

REACTOR COOLANT SYSTEM PROFILEPLANT STATUS

	<u>0500 6/20/79</u>		<u>0500 6/21/79</u>		<u>0500 6/22/79</u>	
	A	B	A	B	A	B
Th	158.9	160.5	159.0	160.3	158.1	159.7
Tc	149.61	103.7	149.8	104.3	149.0	104.2
$\Delta T$	9.3	56.8	9.2	56.0	9.1	55.5
Tstm	147.5	125.9	147.3	125.8	146.6	124.3
PZR Level	Cal.	Solid	Solid		Solid	
	DVM	-	-		-	
R.C. Press.	Heise	326	325		326	
	DVM	327.39	325.47		329 / 4.391	
	Cavity	340	335		345	
		420" 6.8 volts	405" 6.65 volts		412" 6.7 volts	
Turb. B/P		35% Closed	36% Closed		35% Closed	
I.C.T.	High	270.8	270.1		269.4	
	Min.	141.7	142.0		141.8	
M.U. Temp.		139.8	140.1		137.6	

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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 |
| ● 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 |
| ● Development of alternate system for pressure/volume control system                          | C-1 |
| ● 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. |

ACTION ITEMS

## TECHNICAL WORKING GROUP MEETING

1000

6/19/79

1. When transporting waste liquids keep track of valves and maintain logs, status sheets, etc., to maintain proper fluid control during these movements. Rusche
2. Do not transfer Unit 2 accident waste liquids to Unit 1. Rusche
3. Be prepared to discuss at Friday's meeting status of the Columniated Acqua Scan. Wilson
4. Determine if either valve DHV-1 or DHV-171 should be opened or remain closed. Wilson
5. Continue to take RCS samples. Rusche
6. Provide a judgment on sample data concerning the validity of samples taken. Rusche

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*File* *J. Collins*  
*Tech Working*  
*Group*  
June 22, 1979

MEMO TO: Distribution

FROM: E. C. McCabe, Jr.

SUBJECT: NOTES ON LICENSEE TECHNICAL WORKING GROUP MEETING ON 6/22/79

1. Releases

Problem: Auxiliary Building DF (Sensor 222 to 228) appears to be only 1.5-2.0. To look at DF for past month, efficiency of charcoal and check for bypass flow. DF of about 10 was being achieved before at these low levels of input. Change of charcoal 2 times per week (Mon. & Thu.) acceptable to licensee. (No offsite release problems involved) - stack trains about E-13.)

2. Dome Monitor

Evaluation of validity to be provided for Tuesday meeting.

3. Iodine

Aux. Bldg I is relatively constant, not tracking decay rate. Cause unknown. No increase in leakage identified. Possible contributors include decreased fresh air input (diesel dose), leaching from concrete, and releases from cleanup process (minor burps). Evaluation of this area to be given priority.

4. Plant Status

Following the new curve for bypass valve (35 % closed). Primary leak rate about 0.35 gpm. B & W feels pressure not a problem above 150 psig (now about 325-350). Containment cooling still on 1 pump, 3 coolers, with evaporative cooling system being readied for use (has surge tank permitting leakage checks and allows securing river water pumps, uses

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same cooling coils as at present.) Next plant change is scheduled to be pressure-volume control system operation-not definitively scheduled yet. Chlorides are 6 ppm, pH is 7.6, Boron is 3295 ppm, Na is 330 ppm, H<sub>2</sub> and total gas are 20.9 cc/kg (from 6/10 RCS sample). Radionuclides are (uci/ml): I<sup>131</sup> - 7.7; Cs<sup>134</sup>-25; Cs<sup>136</sup>-0.77; Cs<sup>137</sup>-110; Ba<sup>140</sup> - 21; H<sup>3</sup>-0.33; Xe<sup>131</sup>-0.11; Xe<sup>133</sup>-5.5 E-4. (telephoned results - may be some errors in communication.) Question: Why does pH tend to drop so much - about 0.5 per week? Answer not known.

5. Tank Farm

Eductor revisions continuing, as are pump rigs. Eductors probably to be finished first and tried tomorrow, then pumps if eductors still don't work. Upper eductors work now, but effluent is about 135°-ECM being issued for change to reduce temperature. Water in system to be filtered to remove fluorescense dye, to consider then processing thru EPICOR I (o.k. to do per Order).

\*6. "B" OTSG Long Term Cooling

Vendor to come in today re leakage from pump seal, which is still a problem. "B" SG fill preps to continue, but actual fill not to be conducted until further directed.

7. CAP-GUN II (EPICOR II)

Revisions being finished, need breaker parts and level switch, and means of closing <sup>big</sup> ~~6-9~~ doors. Nearing completion, but changes still coming in. Shooting for 7/15 to be ready and trained for operation.

8. Interfm Staging Area *EPICOR-II*  
July 9-10 set for review by Penna. NRC:NRR to attend.
- \*9. Pressure-Volume Control (P/V Control)  
Ready to set pressure regulating valve today; more N<sub>2</sub> to arrive today, permitting full charge of banks. Operational testing to begin this weekend, if feasible.
10. Fuel Handling Building Cleanup  
To start on Monday - same staging to be left up.
- \*11. Sampling System  
Line flush needed before tie-in - includes Heise gage line. OOS period is upwards of a day and involves gage relocation. NRR has the procedure for review. This is a problem area and acceptable resolution has not been achieved. Core drilling into model room completed.
12. Penetration 605  
Probes in - initial readings at inner penetration point are 30 R (non-directional); 10 R looking down, 7 R horizontal, 4 R looking up.
13. Westinghouse ADHR  
Valve pit next step - details should be available next week (Note: Nonconformance on penetration grout forwarded by fax to RI (R. Carlson) for review on 6/21.)

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*E. C. McCabe, Jr.*  
E. C. McCabe, Jr., Chief  
IE Resident Office, TMI

Distribution

TMI-2

J. Collins, NRR  
D. Haverkamp  
D. Neely

RI

B. Grier  
E. Brunner  
R. Carlson  
G. Smith  
H. Kisher  
G. Walton

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*File*

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A G E N D A

TECHNICAL WORKING GROUP

1000

6/22/79

1. Radioactive Releases

✓ 748, Auxiliary Building Fans

Check DF across HPR 228/222.

✓ Point Sources - Compressors *Leak program continuing*

✓ Dome Monitor - Containment Survey (14" Penetration) - Jim Moore  
action by Tues.

2. Plant Status

✓ a. RCS Profile ✓

*.34 to .67 leak rate*

*325<sup>#</sup> - 375<sup>#</sup>*

✓ b. Containment Water Level *289.67 (0400AM)* *250<sup>#</sup> ± 25*

Reactor Building Pressure @ neg press - run & R longer than an

Elect Checks - Critical Equipment *2 hr period.*

✓ c. Plant Operations Schedule

✓ Sample Results -

Keep pH @ ~ 8.0

*Press/Vol.*

*control needs to be tested & prove its reliability*

3. Analysis

a. Status of Columnated Aqua Scan

4. Pre-operational Testing

✓ a. Tank Farm

6/22

✓ b. OTSG "B" Long-Term Cooling (Readiness to operate) Completed (except insulation)

✓ c. EPICOR (CAP-GUN II) *Does not include bells 7/5/79*

*Finishing up procedure*

d. RCS Pressure/Volume Control Turnover for Testing

6/25

*Level switch on tank clean water return line.*

*Set N<sub>2</sub> pressure regulator*

5. Construction Status

a. Alternate Decay Heat Removal

• System Tie-Ins

6/29 ✓

*Sample sink completed by 7/29*

• Available for Met-Ed Acceptance Test

7/15 (Currently under study)

• Valve Pit Concrete Work

8/15 ✓

*Staging area, flood protection*

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*Sampling system - flushing procedure - in NRC*

*DHV  
1 & 171 measuring  
OK stayed same.  
need recommendations  
from B&W on pH.*

*Trouble to pump  
seals already  
went into to  
condenser to  
fill generator.  
No filling but  
get ready.*

*Working parallel to pump - comp tomorrow  
Estimated completion - completed tomorrow*

6/22/79

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ACTION ITEMS

## TECHNICAL WORKING GROUP MEETING

1000

6/19/79

- |  |        |
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| 2. Do not transfer Unit 2 accident waste liquids to Unit 1.  | Rusche |
| 3. Be prepared to discuss at Friday's meeting status of the Columnated Acqua Scan.   | Wilson |
| 4. Determine if either valve DHV-1 or DHV-171 should be opened or remain closed.   | Wilson |
| 5. Continue to take RCS samples.   | Rusche |
| 6. Provide a judgment on sample data concerning the validity of samples taken.   | Rusche |

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PLANT OPERATION STAFF.

Task	Description	Priority	Expected Completion	Status	Task Coord.
1.	Plant Status	A-1	On-going	Solid at approx. 350 psig.	
2.	OTSG "B" Long-Term Cooling	C-1		GPU hold on filling "B" OTSG and cutting into system.	
3.	Obtain RCS Sample (Primary letdown). Obtain PZR Sample, and bleed tank samples.	C-1	On-going	RCS Pressure continue sample.	Hetrick
4.	Erect high radiation doors in Auxiliary Building.			Door survey to be made to identify any additional problems.	Shovlin
5.	RB Sump Level	A-1		Convene group if water level elev. reading is 290.5.	Kunder
6.	Provide frequency of DH-V2 motor meggering.	A-1	On-going	Obtaining daily motor megger readings/sw-box reading.	Bensel
7.	Current leak rate	A-1		6/15, 0330; 495 gpm	
8.	Pressure Volume Control System			B&R will complete engr. for remote operation in Control Room.	
9.	RCS Pressure Control			Procedure needed for transition from present make-up and let-down system to new Pres. Vol. Control System.	

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PLANT MODIFICATIONS

Task	Description	Priority	Expected Completion	Status	Task Coord.
WG-1	Install AB-FHB Filter System.	A-1	Punch list items to be completed.	System operational 5/11.	Shubert
WG-2 (L-1)	Decon. water in AB using EPICOR ion exchange process.	A-1	Punch list items to be completed.	Turned over for test 5/23.	Lacy/ Fricke
WG-6 (L-2)	Install storage vessels in Fuel Pool "A".	A-1	Turn over to be 6/22.		Gibson
WG-12	Ventilation filtration system for decay heat pits.	A-1	7/12		Shubert
TS-3C	Develop complete package for long-term cooling OTSG "B".	C-1	Punch list items to be completed.	Completed 5/2	Jordan/ Lanza
TS-6B	RCS pressure control system.	C-1	Complete by 6/19.	Turnover to test 6/19.	Miller/ Lilly
TS-14	Shielding for decay heat pump.	C-2	7/5	Turnover for test 7/5.	Lieberman
TS-15	Westinghouse ADHR.	C-1	Turnover for test 7/3.	See Westinghouse schedule.	
WG-19	New Sample Sink-Unit 2 .		Turnover for test 7/20.	ECM's on hold for re-eval. of criteria-long-term in-stead of short-term use.  Decon model room 6/13.	Barrett/ Fricke

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Westinghouse

Task	Description	Priority	Expected Completion	Status	Task Coord.
TS-15	ADHRS Installation	C-1	7/15 *	* Completion date currently under study.	
	Westinghouse Engineering Design Complete	C-1	6/25 (As Builts)	95% Complete	
	Assemble ADHR Skid	C-1	6/30	Mech. 100% complete, Elect. 85% complete.	
	Assemble CCW Skid	C-1	6/30	Mech. 100% complete, Elect. 85% complete.	
	Receive Control Trailer			On-Site	
	Install Panels & MCC in trailer	C-1	6/30		
	Complete Installation of Pipe Penetration Assemblies	C-1	Completed 6/15	100%	
	Cut 12" Header and Weld Weldolet	C-1	6/24 - 6/29	On hold.	
	Cut 10" Header and Weld Weldolet Channel A	C-1	6/24 - 6/29	On hold.	
	Cut 10" Header and Weld Weldolet	C-1	6/24 - 6/29	On hold.	
	Complete Fit up and welding of inside piping (total of 42 field welds).	C-1	6/25	In progress.	
	Complete Fit up and welding of outside piping (total of 15 field welds)	C-1	Open	Dependent upon valve pit constr.	
	Turn over to Met-Ed (Acceptance Test) *			7/15 *	

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**WASTE MANAGEMENT GROUP**

Task	Description	Priority	Expected Completion	Status	Task Coord
-1	Design, installation, and operation of EPICOR for Unit 2. See Plant Modifications (WG-2)	B-1			
-2	Design, installation, and operation of emergency surge tanks (tack farm) in Unit 2 "A" Fuel Pool. See Plant Modifications (WG-6)	B-1			
-10	Pursue activities on processing Unit 2 water through CAP-GUN to insure available freeboard for Unit 2.	A-1		Normal processing- Unit 1 limits remain as is.	Garnier/Weller
-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.	McCombs Arthur *Blair
-36	Investigate the effects which the operations associated with reactor plant long-term cooldown will have on discharge to the waste systems. Related to L-6.	C-1		In progress.	McGoey Ross/ *Collins
L-47	Resolve sample lab requirements versus capabilities to support EPICOR I and II operations.	B-1		Lab requirements defined; procedures and equipment in place or on order. Lab procedures being developed by Rad Co. Eng	Kraft
L-5	Change out AB/FHB HVAC vent filter train charcoal bed.  * NRC contact	A-1		"A" & "B" trains of the AB filters and "A" train of FHB filters removed and replaced, units back in service. FHB "B" train in change-out scheduled for 5/17. Deluge systems secured on all renewed filter trains.	McCombs Edwards *Wall  Spent tray to stock complete

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WASTE MANAGEMENT GROUP

Task	Description	Priority	Expected Completion	Status	Task Coord
-27	Develop sampling plan to assess AB waste for transuranic content. Insure that Mat-Ed Ops. coordinate sample requirements with ORNL to insure satisfactory analysis results.	B-2		Preliminary sample results obtained from ORNL. Further study involving need for additional samples is underway.	D. NI R. WI S. KR *J. C
-29	Investigate reported water collection in the "B" fuel pool obtain samples and make plans for disposition. Also investigate the preoperation condition of the fuel pool from a leakage standpoint.	B-2		Water from Unit 2 const. Sample needed.	Willie *Barre
-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.	McCor Willie *Barre
-30	Reactor Purge System Charcoal Filter Sample.	A-2		RB purge filter sample all ready for analysis. Scheduled week of 5/20.	McCor *Colli
-41	Develop filter management strategy.	B-2		Standard procedures to sample charcoal systems in review.	McCor

\* NRC contact

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WASTE MANAGEMENT GROUP

Task	Description	Priority	Expected Completion	Status	Task Coord
-42	Develop a program to assess and monitor I release sources.	E-2		Four-part approach: 1. E&P to complete review of release candidates. 2. Pursue a tracer program to find leak. 3. Pursue an air monitoring program with SAI/EPRI to plot I levels. 4. Review local ventilation conditions to verify flow distributions.	McCo McCo Mont SAI: CL Pe Vo
L-11	Investigate/develop process for eliminating Unit 2 water in RCET/s. Process planning for Units 1 and 2. Design (conceptually) a waste processing system for Unit 2 High Level Liquid Wastes.	E-3		Proposal to be received from chem-nuclear 5/4/79.	Snid *Well
L-20	Obtain a level measurement and a sample of water from the RB sump and basement.	E-3		Measurement using Heise Gauge being explored.	Ros *Can
L-30	Develop plan for radiation survey in Auxiliary and Fuel Handling Bldg.	E-3			Op *Sto
3-4	High level solid waste disposal investigation.	E-2		In progress.	Pas Edu *Well *Col
* NRC contact					
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WASTE MANAGEMENT GROUP

Task	Description	Priority	Expected Completion	Status	Task Coord
5	Temp. on site storage for Demin. Liners - Dasiga.	B-2	Final storage proposal by GAI. Being assessed by WMA.	In progress.	Pastor Edward *WEL *COL
4	High level solid waste disposal investigation.	B-2		In progress.	M.K. C.E. *R. Y *J. C
5	Expand Solid Waste Disposal Study to include the design of a temporary on-site storage facility for demineralizer liners while awaiting casks.	B-2		Final storage proposal presented by GAI. Data to be assessed by WMA.	

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\* NRC contact