ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:8801040220 DOC.DATE: 87/12/23 NOTARIZED: NO DOCKET #
FACIL:50-250 Turkey Point Plant, Unit 3, Florida Power and Light C 05000250
50-251 Turkey Point Plant, Unit 4, Florida Power and Light C 05000251
AUTH.NAME AUTHOR AFFILIATION
WOODY,C.O. Florida Power & Light Co.
RECIP.NAME RECIPIENT AFFILIATION
GRACE,J.N. Region 2, Ofc of the Director

SUBJECT: Forwards Mgt-On-Shift weekly rept,per 871019 order.

DISTRIBUTION CODE: IE01D COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 47
TITLE: General (50 Dkt)-Insp Rept/Notice of Violation Response

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL
	PD2-2 PD	1	1	McDONALD,D	2	2
INTERNAL:	AEOD	1	1	DEDRO	1	1
	NRR MORISSEAU,D	1	1	NRR/DLPQ/PEB	1	1
	NRR/DOEA DIR	1	1	NRR/DREP/EPB	1	1
	NRR/DREP/RPB	2	2	NRR/DRIS DIR	1	1
	NRR/PMAS/ILRB	1	1	OE LIEBERMAN,J	1	1
	OGC/HDS2	1	1	REG FILE	1	1
	RES DEPY GI	1	1	RGN2 FILE 01	1	1
EXTERNAL:	LPDR	1	1	NRC PDR	1	1
	NSIC	1	1			

TOTAL NUMBER OF COPIES REQUIRED: LTTR 21 ENCL 21

RIDS/ADDS

RIDS/ADDS

P.O. BOX 14000, JUNO BEACH, FL 33408-0420

FPL

DECEMBER 23 1987

L-87-534

87 DEC 28 A9:23

Dr. J. Nelson Grace
Regional Administrator, Region II
U.S. Nuclear Regulatory Commission
101 Marietta Street, N.W., Suite 2900
Atlanta, Georgia 30323

Re: Turkey Point Units 3 and 4
Docket Nos. 50-250 and 50-251
Management-on-Shift Weekly Report

Dear Dr. Grace:

Pursuant to the Nuclear Regulatory Commission Order dated October 19, 1987, the attached summary of Management-on-Shift (MOS) reports is submitted.

Should there be any questions on this information, please contact us.

Very truly yours,

C. O. Woody
Executive Vice President

COW/SDF/cn
Attachment

cc: J. Lieberman, Director, Office of Enforcement, USNRC
D. G. McDonald, Project Manager, NRR, USNRC
Senior Resident Inspector, USNRC, Turkey Point Plant
R. E. Tallon, President, FPL

MOS001

MANAGEMENT ON SHIFT (MOS)

WEEK STARTING: December 14, 1987

WEEKLY SUMMARY REPORT

Four MOS observers were on shift: L. McLaughlin, St. Lucie Plant (12/14-21, 1987, Days); P. Walker, Westinghouse Electric Corporation (12/14-21, 1987, Night); Jim Reed, Turkey Point Training Department MOS Instructor (12/14-21, 1987, Night); Vito A. Kaminskas, Turkey Point Reactor Supervisor (12/17-21, 1987, Night). While on shift these MOS observers reported any potential safety problems, questionable work practices, operating strengths, areas for improvement and general recommendations.

During this period Unit 3 progressed from Mode 5 to Mode 1, and Unit 4 was in Mode 1. One item was categorized as an immediate safety problem due to it's reportability under 10 CFR 50.72. This was an inadvertent initiation of containment and control room ventilation isolation signals during periodic testing due to a component failure. A need to improve communications between I&C and the control room operators was identified during this event.

The following questionable work practices were identified during the week:

- When a normal SG blowdown flow indicator was out of service, the alternate flow measurements were not documented as required.
- An additional inadvertent containment and control room ventilation isolation occurred while trouble shooting radiation monitor R-11.
- Conflicts between procedures, Technical Specifications and interim Technical Specifications continue to create unnecessary confusion and delays.

Areas observed that need improvement are:

- The recently implemented "Plan of the Day" needs refinement to reflect a more accurate picture of the work in progress.
- SG blowdown remained isolated for lengthy period of time while the flow transmitter was being repaired.
- The backlog of PWO items was again mentioned.
- Several specific equipment problems were noted and are being scheduled for correction. As examples, investigations into problems with instrument and MSIV Nitrogen backup and the RCP oil lift pumps were recommended.
- The need for better procedural guidance for special valve watches was identified.
- Better tools are needed for work on the ICW pumps.
- It was suggested that a GEMS planner be available on back shifts to assist I&C.

ATTACHMENT: MOS DAILY REPORTS

MANAGEMENT ON SHIFT (MOS)

WEEKLY SUMMARY REPORT

WEEK STARTING: December 14, 1987

Numerous recommendations were submitted by the MOS observers. While many of these address previously mentioned items, the following additional items are being evaluated.

- Two improvements to the MOS procedure ADM-019 were mentioned.

  1. Provide more detailed definitions for immediate safety problems and questionable work practices.

  2. Provide guidance for MOS manning requirements. Specifically, what action is necessary if an MOS observer is not able to complete his shift.

- A recommendation was made to caution the operators not to sit on the console hand rails due to the potential of inadvertently actuating a switch. Operators were not seen sitting on the rails but were noticed to occasionally lean against them. No switch actuation was confirmed but the observer had seen it occur at other plants.

A review of the past weekly reports was made to identify the areas where attention is most needed. Equipment reliability and work practices represent the majority of MOS comments. The next area for improvement is correction of procedural inadequacies.

It should be noted that procedure usage continues to improve.

ATTACHMENT: MOS DAILY REPORTS

0-ADM-019	Management on Shift (MOS) MOS DAILY REPORT	Page 1

To: Operations Superintendent - Nuclear Date: 12/14/87

From: Lamar McLaughlin *(MOS Observer)* Shift: ☒ Day ☐ Night

A. Plant evolotions observed

- 6:30 a.m. MOS turnover
- 7:00 a.m. plant status meeting. Major items to bring Unit 3 on line - PZR temp indicator, condensate cleanup, purge valves
- 7:45 a.m. CR shift meeting directed mainly toward bringing Unit 3 on (Salkeld and Guyer held efficient and professional briefing)
- Walked down Turbine Plant (Plant is pretty clean)
- Toured Auxiliary Building
- 3:45 p.m. attended Control Room shift meeting
- Operations staff pursued deleting the requirement for both pressurizer water and steam space temperature indicators. The PSN evaluated the validity, checked to see if there was a basis, determined that this deletion was non-conservative, and requested prior PNSC approval of the OTSC.

B. Immediate safety problems

None

C. Questionable work practices

None

D. Actions taken

None

E. Strengths

- Plant is clean
- Very few steam leaks on secondary
- At 3:45 shift meeting discussions by PSN/APSN the following were stressed:
  - Goals for the shift
  - Knowledge of annunciator status
  - The need for a quiet Control Room
  - The need to ensure the equipment out of service log is updated

F. Areas for improvement

None

G. Recommendations

Leak on one of the circulating water supplies to Unit 4 located in East condensate pit. Will check with maintenance tomorrow to see if a PWO has been written. NWE notified.

Completed By: Lamar MCLaughlin — **Date:** 12/14/87
MOS Observer

Reviewed By: L.W. Pearce — **Date:** 12/15/87
Operations Superintendent-Nuclear

CJB 12/15/87 PJO 12/15/87 FINAL PAGE 12/15

0-ADM-019	Management on Shift (MOS) MOS DAILY REPORT	Page 1

To: Operations Superintendent - Nuclear Date: 12/14-15/87

From: Peter L. Walker *(MOS Observer)* Shift: ☐ Day ☒ Night

A. Plant evolutions observed

- U3-Drew pressurizer bubble - now stable at 22%
- U4-100% steady state OPS
- I&C Testing induced containment ISOL (no physical action) and Control Room ventilation switched to recirc (Physical change). Reported to NRC ½ Hr. later. Toured U4 secondary side - No problems - Looks good.

B. Immediate safety problems

None

C. Questionable work practices

None

D. Actions taken

None

E. Strengths

Rapid, professional handling of inadvertent Phase A/Control Room vent actuation.

Bubble formation was performed smoothly.

F. Areas for improvement

None

G. Recommendations

1. Caution operators to not sit on console handrail - Switches can (and have been in past) be actuated.
2. Unit 3's makeup flow indications are still inaccurate - Operators are compensating for it be blending heavily with Boric Acid, but it definitely needs improvement.

Completed By: P.L. Walker *MOS Observer* Date: 12/15/87

Reviewed By: J.W. Pierce *Operations Superintendent- Nuclear* Date: 12/15/87

0-ADM-019	Management on Shift (MOS) MOS DAILY REPORT	Page 1

To: Operations Superintendent - Nuclear Date: 12/14-15/87

From: J. Reed *(MOS Observer)* Shift: ☐ Day ☒ Night

A. Plant evolutions observed

- Pre-shift brief
- Post shift meeting
- Prssurizer bubble formation and draindown
- R-11 Trouble shooting

B. Immediate safety problems

None

C. Questionable work practices

- APSN discovered a potential missed Technical Specification requirement in that FI-6277B, SG blowdown flow indicator has been out of service and the T.S. required alternate flow measurements appear not to have been documented.
- I&C Techs while trouble shooting R-11 caused an inadvertent Containment/Control Room ventilation isolation.

D. Actions taken

On the Blowdown flow indicator, the PSN ordered blowdown secured pending evaluation. The PSN immediately consulted with OPS Superintendent, Chemistry Supervisor and Nuclear licensing on the ventilation isolation. The PSN classified this as a significant event and made appropriate notifications.

E. Strengths

- I was very impressed with the prompt, professional, and appropriate actions taken by the on-shift supervision in response to the blowdown flow indicator issue.
- Unit 3 and 3rd RCO worked well together in stabilizing the RCS following pressurizer draindown.

F. Areas for improvement

The Plan of the Day does not appear to be a very useful tool in that it does not reflect reality. It listed 3 jobs for I&C, none of which were actually being worked. Also the critical path schedule for Unit 3 did not reflect the jobs required for heatup.

G. Recommendations

I recommend that ADM-019 be revised to provide more definitive guidance to the MOS observer on the classification of immediate safety problems and questionable work practices. The current definitions are not clear.

Completed By: J. Reed — *MOS Observer* — Date: 12/15/87

Reviewed By: J.W. Pence — *Operations Superintendent-Nuclear* — Date: 12/15/87

CJS 12/15/87 JRS 12/15/87 JWP 12/15

FINAL PAGE

0-ADM-019	Management on Shift (MOS) MOS DAILY REPORT	Page 1

To: Operations Superintendent - Nuclear Date: 12/15/87

From: Lamar McLaughlin *(MOS Observer)* Shift: ☒ Day ☐ Night

A. Plant evolutions observed

- MOS turnover @ 0804
- Plant status meting
- Control Room shift meeting
  - A pressurizer bubble is drawn (Unit 3)
  - Preparing to start condensate pump and run polisher
- Unit 4 at 100%
- Unit 3 Condensate pump started after feed line vent repaired
- Reviewed R-11 event and discussed with I&C, OPS and Technical Personnel, also reviewed 3-PMI-067.1 and FSAR

B. Immediate safety problems

None

C. Questionable work practices

Communication between I&C and Operations Personnel. Will review this event further and make recommendations tomorrow.

D. Actions taken

None

E. Strengths

- Operators use their procedures extensively:
  - RCP starting
  - Cold Shutdown to Hot Standby
  - Containment integrity lineup check
- I&C personnel reviewed the procedure for calibration of R-3-11 and recognized inadequacies with the procedure. They requested support from the PUP group to revise this procedure as appropriate.
- Manpower was placed appropriately in critical path type work items. Workers were actively working to repair:
  - Feed line vent
  - 3A I&C ICW expansion joint

F. Areas for improvement

Potential areas of improvement will be addressed and recommendations made in the 12/16/87 report.

G. Recommendations

None

Completed By: Lamar McLaughlin — *MOS Observer* — Date: 12/15/87

Reviewed By: L.W. Pierce — *Operations Superintendent-Nuclear* — Date: 12/16/87

CPB 12/16/87 FPD 12/16/87

FINAL PAGE

0-ADM-019	Management on Shift (MOS) MOS DAILY REPORT	Page 1

To: Operations Superintendent - Nuclear Date: 12/15-16/87

From: Peter L. Walker *(MOS Observer)* Shift: ☐ Day ☒ Night

A. Plant evolutions observed

- Unit 4: Steady state 100% operation
  - Accumulator 4A leaks, required makeup
  - Primary water storage tank topped off
- Unit 3: ICW expansion boot repaired -10 minute run acceptable - no leakage
  - RTD bypass loop manual isolation valve was balky - required extra force to operate it - once freed, it worked properly.
  - 3C RCP oil lift pump develops adequate pressure, but with rapid pulsations which prevent illumination of 2 minute interlock light. Started 3A RCP and began heatup entered Mode 4, and currently holding for chemistry check.

B. Immediate safety problems

None

C. Questionable work practices

None

D. Actions taken

None

E. Strengths

Proper decision making process on RCP oil pressure problem. Began heatup with other pump, and day shift will evaluate/correct problem.

F. Areas for improvement

None

G. Recommendations

I need to clarify my previous comment relative to sitting on the console railing. It is improper to sit (leaning is acceptable) on the railing. I also cannot confirm previous actuation of switches by operators sitting on the rails. It was hearsay, but I have seen it at other plants.

Completed By: Peter L. Walker — *MOS Observer* Date: 12/16/87

Reviewed By: L.W. Pearce — *Operations Superintendent-Nuclear* Date: 12/16/87

OPS 12/16/87 PRB 12/16/87 BOD 12/16/87

FINAL PAGE

0-ADM-019	Management on Shift (MOS) MOS DAILY REPORT	Page 1

To: Operations Superintendent - Nuclear Date: 12/15-16/87

From: J. Reed *(MOS Observer)* Shift: ☐ Day ☒ Night

A. Plant evolutions observed

- Preshift brief
- End of shift meeting
- ICW expansion joint replacement
- Transition to Mode 4

B. Immediate safety problems

None

C. Questionable work practices

None

D. Actions taken

None

E. STRENGTHS

Maintenance Department provided outstanding support in the I.C.W. repair. Operations was meticulous in verifying all requirements met to transition to Mode 4.

GOOD PRACTICE

The peakshift APSN utilized an outstanding informal system which he calls plan of the shift (P.O.S.). It is handwritten in a standard format, reproduced, and passed out to everyone at the pre-shift brief. It appears to be very effective. (Please see attached example).

F. AREA(S) FOR IMPROVEMENT

- OSP-201.1 Attachment I Page 11 of 21 contains instructions for channel check of containment high range area radiation monitoring system. These instructions contain switch names/positions which do not agree with the installed hardware.
- 3C RCP could not be started for RCS heatup because the oil lift pump would not make its interlock. Operators stated this problem has existed intermittently for several years and has in the past been solved by TSA installation of a jumper to bypass the interlock. I feel this type of solution is acceptable once or twice while awaiting a permanent fix, but should not be utilized for years.
- There is still no blowdown on 4B SG because a resolution to meet the Technical Specification Requirement 3.4.4 as documented on my 12/14-15/87 report.

G. RECOMMENDATIONS

SEE AREA FOR IMPROVEMENT

Completed By: J. Reed *MOS Observer* Date: 12/16/87

Reviewed By: J.W. Pearce *Operations Superintendent-Nuclear* Date: 12/16/87

CMS 12/16/87 TTB 12/16/87 JAQ 12/16/87

FINAL PAGE

15 DEC 87 PEAKSHIFT

UNIT 3

MODE 5, ≈ 180°F, PRZ BUBBLE, 3B RCP

- MAJOR DELAYS FOR MODE CHANGE
  - ① ICW pp EXPANSION JOINTS (2 SHIMS)
  - ② R-11 + 12 · ⑤ POSSIBLE LEAK ON 200B
  - ③ 3C RCP
  - ④ QR 50/51

CONDENSATE READY TO GO AFTER 3A SGFP

3A TPCW HX ISOLATED - SAFETY LEAK

CONTAINMENT INTEGRITY

- ① WAITING ON R-11+12

GOP 503

- ① AS-N REVIEW OF TSAs
- ② FINAL CLEARANCE + EOOS REVIEW
- ③ CONTAINMENT INTEGRITY
- ④ ECF TEST

START LOOKING @ 350°F HOLDS.

UNIT 4

MODE 1 733 MWe

- 4C CCW HX C035 = 24
- 4B CHG pp 72 HRS
- FT 62778 BLOWDOWN ISOLAT
- N-41 005 - 1+C CAL
  BISTABLES THROWN
- CV 1506 ON H/L

SHIFT OBJECTIVES

① PLACE 4C CCW HX BACK IN SERVICE - (W.O.)

② PLACE #3 CONDENSATE SYST IN SERVICE - (W.T.O) - ▼ 1 POLISHER VESSEL

③ U-3 ECF TEST - (R.O.)

④ ORMS MONTHLY TEST - (R.O.)

⑤ REVIEW: GOP 503 } (AS-N, ARSN, NWE)
INTEGRITY

Dec 87

OS

PEAKSHIFT

COMMON

ARMS CHs

#6 GIST

B WG C

INVERTER HALON

UNIT 3

3A ICW pp (2 SHIFTS)

Rx TRIP BKRS

R-15 & 20-19

LI 6308B

FT 475

LT 461

S/G Sample 308

PEN 64A

PRZ SPL HTRs

N-32, 35 & 36

R-11 & 12

AFW MOV 1404

FCV 479

Accum PRESS PC 9218

3-554C?

3-556B?

CV 851C

QR 50/51

CV 303C

CV 850E

MOV 863A

UNIT 4

SEAL INJ FI 124

R-17B, R-20 & 15

EMERG SFP pp

N-32

FT 6277B & 6275

A GAMMA MET.

PURGE VALVES

4C CCW Hx

4B CHG pp

Book - PRMS MONTHLY TEST

0-ADM-019	Management on Shift (MOS) MOS DAILY REPORT	Page 1

To: Operations Superintendent - Nuclear Date: 12/16/87

From: Lamar McLaughlin *(MOS Observer)* Shift: ☒ Day ☐ Night

A. Plant evolutions observed

- MOS turnover
- Plant status meeting
- Control Room shift meeting
  - Unit 4 at 100%
  - Unit 3 is in Mode 4. Chemistry hold for condensate cleanup
- Down power occurred on Unit 4 when intercept valve went partially closed. The plant was subsequently returned to full power.
- Heatup commenced on Unit 3
- Control Room peak shift meeting

B. Immediate safety problems

None

C. Questionable work practices

None

D. Actions taken

None

E. Strengths

- Heatup above 200F° commenced. Procedure was used and heatup rate was plotted.
- R-3-11 event
  - I&C personnel working this job utilized an approved procedure and it appears that they complied with it.
  - An I&C supervisor addressed the plant staff status meeting and discussed revisions to 3-PMI-067.1 that should resolve the root cause of this event (see recommendations)
  - Evaluation for reportability (see recommendations)
    - Correctly identified as an ESF actuation
    - NRC was promptly notified
    - AP 0103.16 was utilized to make these notifications

F. Areas for improvement

See recommendation for R-3-11 event

G. Recommendations

- That I&C personnel notify operators prior to acuating any equipment such as that actuated in R-3-11 event.
- Technical Department should include in its evaluation of this event: Consideration of the statement/note on page 6 of AD 0103.12. "Action that is part of a preplanned sequence during testing or reactor operation is not reportable".

Completed By: Lamar McLaughlin — Date: 12/16/87
MOS Observer

Reviewed By: L.W. Pearce — Date: 12/17/87
Operations Superintendent- Nuclear

12/17/87

FINAL PAGE

0-ADM-019	Management on Shift (MOS) MOS DAILY REPORT	Page 1

To: Operations Superintendent - Nuclear Date: 12/16-17/87

From: P.L. Walker *(MOS Observer)* Shift: ☐ Day ☒ Night

A. Plant evolutions observed

- Preshift briefing
- Post shift meeting
- Unit 4 Megawatt loss (20 MWE)
- Violation of Interim Technical Specifications (ITS) and conflict between ITS and plant procedures.
- A daily surveillance on vital equipment (Computer Room HVAC) was missed
- Significant event: Control Room/Containment Purge Isolation Actuation.

B. Immediate safety problems

None

C. Questionable work practices

None

D. Actions taken

None

E. Strengths

The decision to reduce power slightly to reduce #4 Turbine Control Valve instability due to apparent unstable control oil pressure was excellent. The Unit performed well the rest of the night.

The Technical Specification violation issue was expeditiously resolved.

F. Areas for improvement

See Jim Reed's report.

G. Recommendations

- Select and use one set of Technical Specifications.
- Define differences between old and new Technical Specifications.
- Train operators on their use and interpretations prior to their use.

Completed By: P.L. Walker — Date: 12/17/87
MOS Observer

Reviewed By: L.W. Pearce — Date: 12/17/87
Operations Superintendent- Nuclear

THB 12/17/87
JHR 12/17/87

FINAL PAGE

0-ADM-019	Management on Shift (MOS) MOS DAILY REPORT	Page 1

To: Operations Superintendent - Nuclear Date: 12/16-17/87

From: Jim Reed *(MOS Observer)* Shift: ☐ Day ☒ Night

A. Plant evolutions observed

- Preshift brief
- Post shift meeting
- Unit 4 Megawatt loss (above 20 MWE)
- Violation of Interim Technical Specifications (ITS). Conflict between ITS and plant procedures
- Missed daily surveillance on vital equipment
- Significant event Containment/Control Room ventilation isolation
- The Turbine operator was unable to conduct his daily surveillance on Computer Room Air Conditioning because the entry door was stuck shut.

B. Immediate safety problems

During performance of periodic test on PRMS-19 Containment/Control Room ventilation isolation actuated. Apparent cause was a short in the relay circuit. This was still being confirmed.

C. Questionable work practices

- The PSN discovered that the plant had entered Mode 4 on 12/16/87 without 2 trains of Containment Spray operable which is explicitly required by ITS. Plant procedures require Containment Spray to be placed in service at 380°F. Immediately the PSN made preparations to cooldown, the Plant Manager waived the requirement of ITS and the heatup was continued.

D. Actions taken

PSN, in consultation with OPS Superintendent, elected not to trouble shoot the main Turbine control valve until Westinghouse could be consulted (good call).

E. Strengths

When Unit 4 lost 20MW the APSN held a discussion with the RCO in which he reviewed the control oil problems and briefed the RCO on what actions to take if conditions deteriorated.

F. Areas for improvement

Concerning the ITS violation. I have several concerns:

- A request was made for resolution of this issue several weeks ago but none was provided. (Heresay)
- The operators are very uncomfortable with ITS and the system of using 2 sets of Technical Specifications.
- It appears that this ITS requirement may be wrong in that placing the Containment Spray Pumps in service <350°F may cause conflicts with the operation of R.H.R.
  a) The PSN ordered maintenance to remove the door from the hinges however, they were unable to accomplish this prior to midnight. My concern is that a PWO was submitted 4 months to repair the door.
  b) I took a look at the PWO backlog via the GEMS System. I asked for all PWO's originated in 1985 and it gave me eleven. Of the 11 a few looked important and should be worked, several appeared to be not valid and should be scrapped. Two of the 11 appeared to be duplicates.

G. Recommendations

I strongly recommend the practice of laying paper on the Control Room floor be stopped. Operators were tripping over the paper when they needed to get to the control board quickly. I think this has the potential to create a serious problem.

Completed By: Jim Reed — *MOS Observer* Date: 12/17/87

Reviewed By: L.W. Pearce — *Operations Superintendent- Nuclear* Date: 12/17/87

7748, 12/17/87

FINAL PAGE

12/15 12/17/87

0-ADM-019	Management on Shift (MOS) MOS DAILY REPORT	Page 1

To: Operations Superintendent - Nuclear Date: 12/17/87

From: Lamar McLaughlin *(MOS Observer)* Shift: ☒ Day ☐ Night

A. Plant evolutions observed

- MOS turnover
- Plant Status meeting
- Control Room briefing
- Reviewed Control Room logs and drawings
- R19 work/trouble shooting (350°F item) - Unit 3
- Unit 3 at 322°F, Unit 4 at 95%
- Unisolable leak on spectacle flange for steam generator wet layup (see strengths)
- Unit 3 has 3RCP's running
- Security event and NRC notifications

B. Immediate safety problems

None

C. Questionable work practices

None

D. Actions taken

None

E. Strengths

- Unisolable seat leak a spectacle flange was found
  - The upstream isolation valve and seat leakage (About 5-10 ~~GMP~~ GPM gp4)
- Operators coordinated with maintenance to blank the leakage
  - The operators evaluated alternates to reduce pressure at the flange such that it could be blanked
    - Used Control Room prints
    - Considered cooling down
    - Drained downstream piping
    - Kept cool condensate on valve
- Maintenance support
  - Slow deliberate loosening of flange bolts
  - Blanking of flange
  - Supervisory help

F. Areas for improvement

None

G. Recommendations

None

Completed By: Lamar McLaughlin — Date: 12/17/87
MOS Observer

Reviewed By: L.W. Pearce — Date: 12/18/87
Operations Superintendent-Nuclear

FTB 12/18/87

FINAL PAGE

0-ADM-019	Management on Shift (MOS) MOS DAILY REPORT	Page 1

To: Operations Superintendent - Nuclear Date: 12/17-18/87

From: Peter L. Walker *(MOS Observer)* Shift: ☐ Day ☒ Night

A. Plant evolutions observed

- Unit 3: 3A reactor coolant pump started
  - Secured RHR System, stabilized pressurizer level
  - Completed Chemistry sampling for hideout
  - Began a slow heatup to 380°F, simultaneous with pressurizing accumulators
  - Held at 380°F while waiting for accumulator pressure to be placed in specification
- Unit 4: Stable at 92% power - waiting for Westinghouse resolution of Turbine control problem
  - Component cooling heat exchanger returned to service
  - Testing of NIS channel N43

B. Immediate safety problems

None

C. Questionable work practices

None

D. Actions taken

None

E. Strengths

Operators coordinated very well on the job of securing Residual Heat Removal System (Unit 3).

Tonight's shift was very smooth and professional

F. Areas for improvement

None

G. Recommendations

None

Completed By: P.L. Walker — *MOS Observer* Date: 12/18/87

Reviewed By: L.W. Pearce — *Operations Superintendent- Nuclear* Date: 12/18/87

12/18/87

FINAL PAGE

0-ADM-019	Management on Shift (MOS) MOS DAILY REPORT	Page 1

To: Operations Superintendent - Nuclear Date: 12/17-18/87

From: Vito A. Kaminskas *(MOS Observer)* Shift: ☐ Day ☒ Night

A. Plant evolutions observed

- Unit 3 heatup 330°F - 400°F 3-GOP-503
- Taking RHR out of service 3-OP-50
- Opening of feedwater discharge MOV's (manually)
- Containment Spray verification 3-OSP-68.3
- Release of Cold Shutdown clearance 3-GOP-503

B. Immediate safety problems

None

C. Questionable work practices

None

D. Actions taken

None

E. Strengths

Shift briefing:

- APSN and NWE informed shift of plant objectives
- Equipment out of service
- Planned events for the shift
- Maintenance and Health Physics personnel attended shift briefing

F. Areas for improvement

- ICW strainers need to be cleaned (Informed APSN)
- 3A ICW strainer DP gauge needs to be repaired (PWO 308058 9/13/87)
- Flow gauge on 3A and 3C CCW HX missing
- CV-4-2202 needs to be repaired
- Provide procedure guidance for valve watch at *-2201 when the CCW HX is out of service for cleaning (When to post valve watch)

G. Recommendations

- Chemistry Department personnel should attend Operations shift briefing at 11:30 p.m.
- Provide ladder or stand (Platform) so Operations personnel can manually open feedwater discharge valve safely.
- Chemistry Department should provide a brief outline to Operations Department to explain hide out tests performed at 200°F, 350°F, 400°F and 547°F (i.e. Purpose of Test, Duration of Test etc.)

Completed By: Vito A. Kaminskas — *MOS Observer* — **Date:** 12/18/87

Reviewed By: L.W. Pearce — *Operations Superintendent-Nuclear* — **Date:** 12/18/87

12/18/87

FINAL PAGE

0-ADM-019	Management on Shift (MOS) MOS DAILY REPORT	Page 1

To: Operations Superintendent - Nuclear Date: 12/18/87

From: Lamar McLaughlin *(MOS Observer)* Shift: ☒ Day ☐ Night

A. Plant evolutions observed

- Plant status meeting
- Control Room shift meeting
  - Unit 3 at 450°F, Unit 4 at 93%
- Toured cable spreading, switchgear and Diesel Rooms.
- Reviewed procedure concerning spectacle flange problem that occurred on 12/18/87 (See recommendations).
- Discussed with maintenance leak around circulating water supply to the condenser. Actions are in progress concerning this problem.
- At approximately 1535 "4C" ICW failed. Operators attempted to start "4B" ICW pump and it failed.
- The ERT was activated and an unusual event was declared. Government agencies were notified.
- A Turbine shutdown was begun
- 4B circulating water pump was shut off

B. Immediate safety problems

None

C. Questionable work practices

None

D. Actions taken

None

E. Strengths

None noted

F. Areas for improvement

None

G. Recommendations

Procedures 3-GOP-503 and 3-OP-079 appear to conflict with each other in that 3-GOP-503 requires that the steam generator wet layup system lineup be verified prior to reaching 350°F while 3-OP-079 states that the spectacle flanges for this will be closed prior to 200°F.

Recommend Operations or the PUP Group review and revise these procedures as necessary.

Completed By: Lamar McLaughlin **Date:** 12/18/87
MOS Observer

Reviewed By: L.W. Pearce **Date:** 12/21/87
Operations Superintendent-Nuclear

OPS 12/21/87 JRD 12/21/87
MJB 12/21

FINAL PAGE

0-ADM-019	Management on Shift (MOS) MOS DAILY REPORT	Page 1

To: Operations Superintendent - Nuclear Date: 12/18-19/87

From: P.L. Walker *(MOS Observer)* Shift: ☐ Day ☒ Night

A. Plant evolutions observed

- Unit 3 Continuing heatup:
  - Aborted attempt to start 3A Reactor Coolant Pump
  - Breaker control malfunction
- Unit 4 Two failed intake cooling water pumps:
  - 1 Broken coupling, 1 seized pump bearing
  - Power decreased to 50% before receiving clearance from NRC to stay at power for 24 hrs, allowing time to get pumps back in service
  - 4C pump was repaired, inspected and returned to service 6 hours after first pump failed.
  - 4B pump is currently being replaced, project satisfactory repair within 24 hour period
- Unit 4 Turbine Control valves are stable, but one valve's position indication is failing. A plant work order is already in existence.

B. Immediate safety problems

None

C. Questionable work practices

None

D. Actions taken

None

E. Strengths

Excellent handling of a very serious safety related event - loss of two of three intake cooling water pumps. Direct observation of work performed showed thorough investigation of the problem, immediate attention to initiating repairs, swift, safe and efficient repairs of the pumps, and careful post-repair testing.

Also, I commend all concerned (including Nuclear Regulatory Commission) for an intelligent decision to allow extra time for repairs while producing power from Unit 4.

F. Areas for improvement

None

G. Recommendations

Check coupling on 4A intake cooling water pump - for evidence of deterioration similar to that observed on 4C pump. Unit 3 pumps should also be checked.

Note: At approximately 0410 a.m. P.L. Walker became sick and had to leave the site.

Vito A. Kaminskas
12/19/87

Completed By: P.L. Walker — *MOS Observer* Date: 12/19/87

Reviewed By: L.W. Pearce — *Operations Superintendent-Nuclear* Date: 12/21/87

OJB 12/21/87 JRD 12/21/87

FINAL PAGE

0-ADM-019	Management on Shift (MOS) MOS DAILY REPORT	Page 1

To: Operations Superintendent - Nuclear Date: 12/18-19/87

From: Vito A. Kaminskas *(MOS Observer)* Shift: ☐ Day ☒ Night

A. Plant evolutions observed

- Unit 3 Heatup 460°F - 547°F, 3-GOP-503
- Start/Stop of 3A Reactor Coolant Pump, 3-OP-41.1
- Unit 4 Inservice Test 4C ICW Pump, 4-OSP-19.1
- Unit 4 Removal and installation of 4C and 4B ICW Pump
- Unusual event notification EP-20101 (Loss of two ICW Pumps)

B. Immediate safety problems

None

C. Questionable work practices

None

D. Actions taken

None

E. Strengths

- Review of procedure by APSN that dealt with loss of ICW with operators
- Support to Operations personnel by Licensing group during unusual event (Loss of 2 of 3 ICW Pumps).
- Support to Operations personnel by Maintenance groups for repairs of ICW Pumps.
- Support by Technical Inservice Testing group on testing of 4C ICW Pump.
- Support by Electrical Department in investigating 3A RCP start/stop problem.

F. Areas for improvement

Provide better tools to Maintenance personnel working on ICW Pumps. They need longer handle tools to install coupling.

G. Recommendations

Provide guidance in ADM-019 "Management on Shift" if an emergency occurs and MOS personnel have to leave the site. What action should be taken? (How long can MOS be gone before replacement has to be found?).

Completed By: Vito A. Kaminskas — *MOS Observer* Date: 12/19/87

Reviewed By: L.W. Pearce — *Operations Superintendent-Nuclear* Date: 12/21/87

OPS 12/21/87 12/21/87 12/21/87

FINAL PAGE

0-ADM-019	Management on Shift (MOS) MOS DAILY REPORT	Page 1

To: Operations Superintendent - Nuclear Date: 12/19/87

From: Lamar McLaughlin *(MOS Observer)* Shift: ☒ Day ☐ Night

A. Plant evolutions observed

- Plant status meeting
- Control Room briefing
- Toured Unit 3 MSIV area
- Unit 3 2335 # Leak Test Completed
- Turbine Oil System was adjusted with Westinghouse personnel providing consultation
- Unit 4 has all ICW Pumps returned to service
- Control Room Operations

B. Immediate safety problems

None

C. Questionable work practices

None observed

D. Actions taken

None

E. Strengths

- Coordinated return to service of two failed ICW Pumps within the 24 hour discretionary period allowed by the NRC.
- Control Room briefings concerning NRC's rulemaking on individual enforcement.

F. Areas for improvement

None

G. Recommendations

None

Completed By: Lamar McLaughlin — *MOS Observer* **Date:** 12/19/87

Reviewed By: L.W. Pearce — *Operations Superintendent-Nuclear* **Date:** 12/21/87

12/21/87 12/21/87

FINAL PAGE

0-ADM-019	Management on Shift (MOS) MOS DAILY REPORT	Page 1

To: Operations Superintendent - Nuclear Date: 12/19-20/87

From: P.L. Walker *(MOS Observer)* Shift: ☐ Day ☒ Night

A. Plant evolutions observed

- Unit 3: Inspection of intake cooling water pump 3A showed bad coupling - decided to replace it with Unit 4 pump previously removed, presently being overhauled.
  - Disassembly of 3A pump still in progress
  - Reactor Protection Tests of trip and safeguards logic was performed satisfactorily.
- Unit 4: Completed oil change on 4B feedwater pump, and evaluated rod position indication deviation (D Bank) with step counters, utilizing a flux map. Position was calibrated based on flux map, and power was escalated to 100%. Unit operating steady state (with Xenon burning out).

B. Immediate safety problems

None

C. Questionable work practices

None

D. Actions taken

None

E. Strengths

Good decision to refurbish 3A intake cooling water pump.

F. Areas for improvement

None

G. Recommendations

None

Completed By: Peter L. Walker — *MOS Observer* Date: 12/20/87

Reviewed By: L.W. Pearce — *Operations Superintendent-Nuclear* Date: 12/21/87

12/21/87 12/21/87 12/21/87

FINAL PAGE

0-ADM-019	Management on Shift (MOS) MOS DAILY REPORT	Page 1

To: Operations Superintendent - Nuclear Date: 12/19-20/87

From: Vito A. Kaminskas *(MOS Observer)* Shift: ☐ Day ☒ Night

A. Plant evolutions observed

- Unit 4 Power increased from 50% to 100%, 4-GOP-301
- Start of 4B Feedwater Pump, 4-OP-74
- Start of 4B Heater Drain Pump, 4-OP-81
- Unit 3 Reactor protection Test, 3-OSP-49.1
- Unit 3 Safeguards Test, OP-4004
- Immediate action taken in response to loss of instrument air 4-ONOP-013

B. Immediate safety problems

None

C. Questionable work practices

None

D. Actions taken

None

E. Strengths

- Plant tour by SRO (APSN) to ensure Secondary Plant was functioning properly.
- Board walkdown by RCO's during shift turnover.
- Management's decision to hold Unit 3 startup and investigate root cause of 4B and 4C ICW Pump failure of 12/19/87. Also, to inspect Unit 3 ICW Pumps.
- Management requests Corporate Metallurgist to assist in root cause analysis of ICW Pump failure.

F. Areas for improvement

- GEMS planner needed on mid-shift to assist I&C personnel in preparing work packages.
- Need to determine root cause for loss of instrument air on 12/19/87.

G. Recommendations

Observation:

In the Control Room there are seven (7) No Smoking signs and on frequent occasions people smoke in the Control Room.

Completed By: Vito A. Kamiskas — *MOS Observer* Date: 12/20/87

Reviewed By: L.W. Pearce — *Operations Superintendent-Nuclear* Date: 12/21/87

OPS 12/21/87 12/21/87

FINAL PAGE

0-ADM-019	Management on Shift (MOS) MOS DAILY REPORT	Page 1

To: Operations Superintendent - Nuclear Date: 12/20/87

From: Lamar McLaughlin *(MOS Observer)* Shift: ☒ Day ☐ Night

A. Plant evolutions observed

- Morning plant status meeting
- Control Room shift briefing
- Control Room operations
- Unit 3 MSIV backup nitrogen returned to service approximately 15 minutes prior to 48 hour LCO expiration (bottles replaced). Operators have difficulty in maintaining pressure. I will review REA, PC/Ms in and any NCR's for this system on my next shift in January.
- 3A ICW Pump is critical path. Unit 4 - 100% power at end of shift.

B. Immediate safety problems

None

C. Questionable work practices

None noted

D. Actions taken

None

E. Strengths

None noted this shift

- General Comment: The operating crews I observed followed procedures, communicated well amongst themselves (particularly during shift briefings) and generally did what they needed to run the units in a professional manner. Obstacles that make it difficult to do a good job need to be removed.

F. Areas for improvement

A potential area for improvement is the Nitrogen backup system.

G. Recommendations

None at this time.

Completed By: Lamar McLaughlin *MOS Observer* **Date:** 12/20/87

Reviewed By: *Operations Superintendent-Nuclear* **Date:** 12/21/87

0/B 12/21/87 12/21/87

FINAL PAGE

0-ADM-019	Management on Shift (MOS) MOS DAILY REPORT	Page 1

To: Operations Superintendent - Nuclear Date: 12/20-21/87

From: P.L. Walker *(MOS Observer)* Shift: ☐ Day ☒ Night

A. Plant evolutions observed

- Maintenance on 3A intake cooling water pump.
- Walked down Unit 3 secondary side.
- Unit 3: Hot standby operations
  Start of 3A feedwater pump
  Drew vacuum in main condenser
- Unit 4: 100% steady state operation
  Adjusted packing on 4B intake cooling water pump
  NPO monitored NIS testing performed by trainees
  4C Component water heat exchanger valved out for cleaning

B. Immediate safety problems

None

C. Questionable work practices

None

D. Actions taken

None

E. Strengths

Based on condition of pump removed from 3A intake cooling water pump spot, a good decision was made to replace it prior to going critical.

F. Areas for improvement

None

G. Recommendations

None

Completed By: Peter L. Walker — Date: 12/21/87
MOS Observer

Reviewed By: L.W. Pearce — Date: 12/21/87
Operations Superintendent- Nuclear

0/3 12/21/87 12/21/87

FINAL PAGE

0-ADM-019	Management on Shift (MOS) MOS DAILY REPORT	Page 1

To: Operations Superintendent - Nuclear Date: 12/20-21/87

From: Vito A. Kaminskas *(MOS Observer)* Shift: ☐ Day ☒ Night

A. Plant evolutions observed

- Fire Drill
- Reactor protection N-35, N-36 3-OSP-49.1 retest
- Estimated critical condition calculation OP-1009.1
- Inservice Test of 3B Charging Pump 3-OSP-47.1
- 3A ICW Pump Electrical lead installation
- 4B ICW Pump repair packing
- Start of 4B ICW Pump 4-OP-19
- Remove FT-475 from service (Steam flow 3A channel 4)
- Group XI Trainees on Shift
- Unit 3 Mode 3, 547°F, 2235 psig
- Unit 4 Mode 1, 100% power

B. Immediate safety problems

None

C. Questionable work practices

None

D. Actions taken

None

E. Strengths

Combined turnover between offgoing PSN and APSN and oncoming PSN and APSN. The turnover covered in detail past events from previous shift and events scheduled for next shift.

RCO checks list to ensure all trainees on shift are authorized to make reactivity changes under his direct supervision.

F. Areas for improvement

None

G. Recommendations

Need original Quality Plant Drawings, Logic Diagrams, Hagan Prints etc. in Control Room.

Plant Drawings, Logic Diagrams, Hagan Prints etc. need to be laminated because of high usage, or replaced more frequently.

Completed By: Vito A. Kaminskas — Date: 12/21/87
MOS Observer

Reviewed By: L. W. Pearce — Date: 12/21/87
Operations Superintendent-Nuclear

OPS 12/21/87 12/21/87

FINAL PAGE

ACRONYMS

AEO	Auxiliary Equipment Operator
AFW	Auxiliary Feedwater
ANPO	Assistant Nuclear Plant Operator
APSN	Assistant Plant Supervisor Nuclear
ASP	Administrative Plant Supervisor Procedure
CCW	Component Cooling Water
CP	Charging Pump
CVCS	Chemical Volume Control System
DG	Diesel Generator
DC	Direct Current
ΔP or DP	Differential Pressure
ECCS	Emergence Core Cooling System
EDG	Emergency Diesel Generator
ERT	Event Response Team
EW	East-West
FCV	Flow Control Valve
FPL	Florida Power and Light Company
FSAR	Final Safety Analysis Report
GEMS	Generating Equipment Management Systems
GPM	Gallons Per Minute
HCV	Hand Control Valve
HHSI	High Head Safety Injection
HX	Heat Exchanger
IAW	In Accordance With
ICW	Intake Cooling Water
ICWP	Intake Cooling Water Pump
IST	Inservice Testing
LCV	Level Control Valve
MCC	Motor Control Center
MG	Motor Generator
MSIV	Main Steam Isolation Valve
MOS	Management on Shift
MOV	Motor Operated Valve
NAB	Nuclear Administration Building
NAWAS	National Warning System (Emergency Planning)
NCR	Non-Conformance Report
NIS	Nuclear Instrumentation System
NO	Nuclear Operator
NOP/NOT	Normal Operating Pressure/Normal Operating Temperature
NPO	Nuclear Plant Operator
NPS	Nuclear Plant Supervisor
NRC	Nuclear Regulatory Commission
NS	North-South
NWE	Nuclear Watch Engineer
OMS	Overpressure Mitigating System
ONOP	Off Normal Operating Procedure
OOS	Out-of-Service
OTSC	On The Spot Change
PI	Polarization Index
PM	Preventative Maintenance
PNSC	Plant Nuclear Safety Committee
PORV	Power Operated Relief Valve
PPM	Parts Per Million
PRZ	Pressurizer
PUP	Procedure Upgrade Program
PWO	Plant Work Order
QSPDS	Qualified Safety Parameter Display System
RCA	Radiation Control Area
RCO	Reactor Control Operator
RCP	Reactor Coolant Pump
RCS	Reactor Coolant System
RHR	Residual Heat Removal
RTD	Resistance Temperature Device
RV	Reactor Vessel
SAS	Safety Assessment System
S/G	Steam Generator
SGFP	Steam Generator Feed Pump
SIS	Safety Injection System
SNOW	Short Notice Outage Work
SNPO	Senior Nuclear Plant Operator
STA	Shift Technical Advisor
TOP	Temporary Operating Procedure
TSA	Temporary System Alteration
TP	Temporary Procedure
VCT	Volume Control Tank
W	Westinghouse Corporation