REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8804270172 DOC. DATE: 88/04/13 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
CONWAY, W. F. Florida Power & Light Co.
RECIP. NAME RECIPIENT AFFILIATION
GRACE, J. N. Region 2, Ofc of the Director

See Rpt

SUBJECT: Forwards summary of Mgt-on-shift repts including initial repts of shift supervisors, per 871019 order.

DISTRIBUTION CODE: IE36D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 49
TITLE: Immediate/Confirmatory Action Ltr (50 Dkt-Other Than Emergency Prepar

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL
	PD2-2 LA	1	0	PD2-2 PD	1	1
	EDISON, G	1	1			
INTERNAL:	NRR/DOEA/EAB 11	1	1	REG FILE 02	1	1
	RES/DE/EIB	1	1	RGN2 FILE 01	1	1
	RGN2/DRSS/EPRPB	1	1			
EXTERNAL:	LPDR	1	1	NRC PDR	1	1
	NSIC	1	1			

TOTAL NUMBER OF COPIES REQUIRED: LTTR 11 ENCL 10

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

FPL

APRIL 13 1988

L-88-180

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.

Also included with this report are the initial reports of the shift supervisors. These reports are designed to parallel the current MOS program using the in place shift management.

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

Very truly yours,

W. F. Conway
Acting Group Vice President
Nuclear Energy Department

WFC/SDF/gp
Attachment

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

IE36

MANAGEMENT ON SHIFT (MOS)

WEEKLY SUMMARY REPORT

WEEK STARTING: 04/04/88

Five MOS Observers were on shift; Neil Roos, St. Lucie Nuclear Plant Quality Control Supervisor (04/04-10/88, days), Andrew P. Drake, Westinghouse Electric Corporation (04/04-11/88, evenings), Daryle L. Osborn, Turkey Point Nuclear Plant Configuration Manager (04/04-05/88, evenings), J. M. Mowbray, Turkey Point Nuclear Plant JPE Lead Mechanical Engineer (04/05-10/88, evenings) and Steven T. Hale, Turkey Point Nuclear Plant Site Project Engineering Supervisor (04/10-11/88, evenings).

During the period, Unit 3 returned to 100% power on April 4 and operated at that level for the remainder of the week. Unit 4 started and ended the reporting Period at 100% power, but was shutdown and operated at lower powers between April 6 and 9 as the result of leakage in the Turbine Control Oil System.

No immediate safety problems were identified during the reporting period. One questionable work practice was identified associated with a lack of procedural control or PWO guidance associated with replacement of the Source and Intermediate Range BFD/NBFD relays. The lack of specifying proper clearance could have resulted in an inadvertent plant trip when replacing a relay on one train.

During the reporting period the MOS Observers noted thirty-five recommendations or areas of improvements. These comments and suggestions included:

Four comments were made concerning the manner in which various plant personnel were performing their duties including the activities of a Health Physics Technician, operator response times to Reactor Auxiliary Building panel alarms and the absence of a Nuclear Operator whose presence was required during Intake Cooling Water (ICW) strainer backwashing.

Regarding the ICW strainer backwashing incident above, a procedural step required the operator to be in radio contact with the Control Room and in the vicinity of the equipment during the evolution and the operator failed to comply. This item was of significant concern to FPL and as a result the operator involved has been counseled regarding his error and this information will be passed on to the operating crews to ensure that they are aware of the importance of procedural compliance. The Resident Inspector will be briefed on these corrective actions.

ATTACHMENT: MOS DAILY REPORTS

Seven comments were made concerning plant administrative items such as notifications after plant trips, proper security lighting under trailers, proper acceptance criteria for 100% power calorimetrics and proper computer monitoring of the status of the PWO system.

Nine comments were made concerning procedural items associated with replacing nuclear instrumentation relays, alarm responses for Post Accident Monitoring System heat tracing, independent valve alignment verification methods and a conflict between Interim Technical Specifications and off-normal procedures for Rod Position Indication.

Ten comments were made concerning equipment-related items such as the condition of the 3B Condensate Pump expansion joint, priority for cleaning an ICW strainer, spurious Fire Detection alarms and a couple of secondary plant steam leaks.

Five miscellaneous items were identified such as housekeeping near the Unit 4 Component Cooling Water Heat Exchangers, a vacuum pump hanging from a conduit, the need for a written guideline for a fire watch briefing and removal of all Construction QC tags associated with the Unit 4 Post Accident Monitoring System.

During the reporting period, a Plant Supervisors-Nuclear, Management-on-Shift reporting program was initiated. The program reports have three sections identifying questionable work practices, areas for improvement and good practices/professionalism observations.

The PSN's identified four questionable work practices such as the excessive time the Raw Water Pumps are out-of-service, security force responses to spurious alarms from Control Room doors and two instances of improper security of ladders near safety-related equipment.

Additionally, the PSN's identified fifteen areas for improvement. The suggestions included:

ATTACHMENT: MOS DAILY REPORTS

MANAGEMENT ON SHIFT (MOS)

WEEKLY SUMMARY REPORT

WEEK STARTING: 04/04/88

Six comments associated with equipment such as length of time the Laundry and Waste Monitor Pumps are out-of-service, steam leak on the Moisture Separator supply valve and the Auxiliary Feedwater Pump mechanical overspeed limit switch.

Four comments associated with work control items such as priorities for I&C technician work, ensuring adequate inventory of important items in stores and use of laborers for the Intake Cooling Water Valve watch were made.

Five miscellaneous comments associated with items such as Main Steam Isolation Valve position during turbine rolldown, door locks in the Condensate Polisher Building and procedures associated with Rod Position Indication alignment were presented.

The items associated with PSN-MOS are being handled and tracked in the same manner as other MOS items.

ATTACHMENT: MOS DAILY REPORTS

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

wkly

To: Operations Superintendent - Nuclear Date: 04/04/88

From: N. Roos *(MOS Observer)* Shift: ☒ Day ☐ Night

A. Plant evolutions observed

- Routine power operations, Unit 4
- Down power evolution, Unit 3
- Shift turnover
- Shift briefing

B. Immediate safety problems

None

C. Questionable work practices

None

D. Area(s) for improvement

None

E. Professionalism, Summary of Shift, Comments

None

F. Recommendations

None

Completed By: N. Roos *MOS Observer* Date: 04/04/88

Reviewed By: *Operations Superintendent-Nuclear* Date: 4/5/88

Management Review By:

PM-N 4/5/88 Date | SVP 4/5/88 Date | VP 4/5/88 Date

04/04/88

*MOS 1 01.07.88

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

To: Operations Superintendent - Nuclear Date: 04/04-05/88

From: Daryle Osborn *(MOS Observer)* Shift: ☐ Day ☒ Night

Plant evolutions observed

- Unit 3, 70% to 100% power
- Unit 4, 100% power - Steady State
- Shift turnover meeting
- Operations support training
- Toured secondary side

B. Immediate safety problems

None

C. Questionable work practices

None

D. Area(s) for improvement

No comment

E. Professionalism, Summary of Shift, Comments

No comment

F. Recommendations

No comment

Completed By: Daryl Osborn *MOS Observer* Date: 04/04-05/88

Reviewed By: [signature] *Operations Superintendent- Nuclear* Date: 4/5/88

Management Review By:

[signature]	4/5/88	[signature]	4/5/88	[signature]	4/5/88
PM/N	*Date*	*SVP*	*Date*	*VP*	*Date*

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

To: Operations Superintendent - Nuclear Date: 04/04-05/88

From: Andrew P. Drake *(MOS Observer)* Shift: ☐ Day ☒ Night

A. **Plant evolutions observed**

- Unit 3 power increase from 75% to 100%
  3-OSP-75.1, Auxiliary Feedwater Train I Operability Test
  3-OSP-75.2, Auxiliary Feedwater Train II Operability Test
  3-OSP-59.5 Section 7.1, Power Range Checks
  3-OSP-49.1 Sections 3.1 and 7.2, Reactor Protection System Logic Test
  3-ONOP-59.5, Source Range Malfunction
- Unit 4, 100% power
  4-OSP-75.1, Auxiliary Feedwater Train I Operability Test
  4-OSP-75.2, Auxiliary Feedwater Train II Operability Test
  4-OSP-59.5 Section 7.1, Power Range Checks
- Tour Turbine Building

B. **Immediate safety problems**

None

C. **Questionable work practices**

None

D. **Area(s) for improvement**

1. While I & C technicians were performing maintenance procedure MP-0732 to replace relay 3-SRB-1-B per PWO #7231, additional relays were actuated. Conversations with Control Room personnel determined that when certain wires were removed from the relay and separated, both source range detectors on Unit 3 re-energized and pegged out high then de-energized. This action can cause severe damage to these detectors. The operators pulled the fuses on the two source range drawers to prevent reoccurrence. Maintenance procedure MP-0732 should be revised so that both source range channels are de-energized with fuses pulled prior to working on 3-SRB-2-B, 3-SRB-1-B, 4-SRB-1-B, 4-SR-2-B or the same relays on the A Train.
2. While observing operators performing Section 7 of 3-OSP-049.1, Reactor Protection System Logic Test, a confusing sequence of steps was noted. Step 7.1.31 has the operator depress and hold the auto shunt test panel B shunt block pushbutton. Steps 7.1.32 thru 7.1.35 must also be performed while holding this button. However this is not evident since each step is numbered separately. Steps 7.1.32 thru 7.1.35 should be made substeps of 7.1.31 to clarify this requirement. 4-OSP-049.1 has this same sequence and should also be revised.

E. **Professionalism, Summary of Shift, Comments**

1. All operations were performed in a safe, professional manner.
2. Peak shift I & C Supervisor did an excellent job instructing two recently employed I & C technicians in performing the change of the 3-SRB-1-B relay per maintenance procedure MP-0732. He anticipated the need for instruction since they were new to the job. He was very knowledgeable with the relay arrangement.

F. **Recommendations**

See items in section D.

Completed By: Andrew P. Drake — *MOS Observer* Date: 04/04-05/88

Reviewed By: K.W. Pearce — *Operations Superintendent- Nuclear* Date: 4/5/88

Management Review By: PM/N 14/5/88 Date; SVP 14/5/88 Date; VP 4/5/88 Date

PSN MOS

Date Started 04/04/88 | Date Finished 04/05/88

Initiating PSN _____ PSN _____ Completed PSN Jones

Initiating APSN _____ APSN _____ Completed APSN _____

A. Questionable Work Practices/Actions Taken/Recommendations

None

B. Areas for Improvement/Recommendations/Actions Taken

Midnight shift

1. Why has one Laundry Pump been out-of-service for one year?
2. Why has one Waste Monitor Tank Pump been out-of-service for one year?
3. Why doesn't stores have Whitey valves (those valves needed for Nitrogen Backup System)? Why don't we have at least one Boric Acid Transfer Pump in stores? Why don't we have a new Waste Gas Compressor in stores? Why doesn't stores have flow indicators for Component Cooling Water Heat Exchangers? Maybe we should do a complete audit of stores and supplies to see if they have what we request them to maintain.

C. Good Practices/Professionalism Observed

Midnight shift

Dave Taylor spoke at shift meeting about the DAM Monitoring System. He showed operators valve location and new requirements for isolating. Operators appreciate this information upfront. Operators performed several evolutions in their usual professional manner.

Reviewed By _____ Date _____ Actions Completed _____ Date _____

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

To: Operations Superintendent - Nuclear Date: 04/05/88

From: N. Roos *(MOS Observer)* Shift: ☒ Day ☐ Night

A. Plant evolutions observed

- Routine power operations, Units 3 and 4
- Shift turnover
- Shift briefing
- Reactor Protection Logic Test - partial
- Control Room response to fire at elevator

B. Immediate safety problems

None

C. Questionable work practices

None

D. Area(s) for improvement

None

E. Professionalism, Summary of Shift, Comments

None

F. Recommendations

None

Completed By: N. Roos *MOS Observer* Date: 04/04/88

Reviewed By: [signature] *Operations Superintendent-Nuclear* Date: 4/6/88

Management Review By: [signature] *PM-N* 4/6/88 *Date* / *SVP* *Date* / *VP* *Date*

04/04/88

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

To: Operations Superintendent - Nuclear Date: 04/05-06/88

From: Andrew P. Drake *(MOS Observer)* Shift: ☐ Day ☒ Night

A. Plant evolutions observed

- Unit 3, 100% power
- Unit 4, 100% power
- Peak shift
  - -3rd RCO performed 0-OSP-023.1, operability test on "B" Emergency Diesel.
  - -Turbine Operator, local operations at "B" Emergency Diesel in support of operability test
  - -End of shift briefing
  - -Site evacuation alarm test
  - -0-OSP-200.3 section 7.3, Seal Oil Backup Test
- Mid shift
  - -Shift briefing
  - -Normal logs/operations
  - -Toured Radiation Control Area/Reactor Auxiliary Building

B. Immediate safety problems

None

C. Questionable work practices

None

D. Area(s) for improvement

1. Unit 3 Miscellaneous Relay Rack R-46 (3-QR-46) has an outstanding PWO on the broken door lock since 5/28/85, almost 3 years. No record could be found in the computer. A new PWO was initiated by the mid-shift PSN (WA880970255). This is supposed to be a locked relay cabinet. The lock should be replaced. PWO should not take 3 years to correct.
2. Attachment 2 of 0-OSP-023.1 Operability Test of "B" Emergency Diesel Generator is a local data log sheet. One item to be recorded is the Radiator Inlet Temperature using TI-444B. TI-444B was tagged out-of-service and a PWO #WA880712026 written on 3/11/88 with a "B5" priority (within 14 days). Instead a contact pyrometer had to be used to record this data. Since the procedure does not state a contact pyrometer can be used in place of TI-444B, an on-the-spot change (OTSC) should have been made. However TI-444B should have been repaired by 3/25/88. Remind operators that even changes in monitoring instruments need to be covered by OTSC before proceeding with the procedure.

E. Professionalism, Summary of Shift, Comments

1. Peak and mid shift operations were performed in a professional and safe manner.
2. Peak shift 3rd RCO and Turbine Local Operator communicated very well during the Operability Test on the "B" Emergency Diesel.
3. Mid shift briefing was extremely informative. Since the shift was coming back from a few days off, the PSN reviewed the last couple days of operations and read the night orders to the shift.
4. While touring the Reactor Auxiliary Building, I observed the local HP Technician reading a paperback book. I reported this to the mid shift PSN who stated he would check into it on his tour.

F. Recommendations

1. There seems to be a recurring problem with PWO's. A PWO can be written and the green PWO tag hung, but the actual PWO information never entered into the computer system. Therefore a problem looks like it has been identified but in actuality will not be worked on. A possible solution may be to assign a licensed operator as the GEMS coordinator/planner for operations on the day shift. This person would be responsible for entering, tracking, and expediting operation PWO's including those written on the mid and peak shifts. The mid and peak shift operators would be responsible for entering PWO's on critical items/equipment but could turn over the other items to the GEMS coordinator/planner. At present the work load on the NWE, APSN, and PSN does not allow them to sit at the computer for a couple hours each shift entering and authorizing PWO's, therefore non-critical ones are left out and in time forgotten or lost.

Completed By: Andrew P. Drake — *MOS Observer* Date: 04/05-06/88

Reviewed By: L. W. Pearce — *Operations Superintendent- Nuclear* Date: 4/6/88

Management Review By:

PM-N	Date	SVP	Date	VP	Date
	4/6/88		/		/

04/05-06/88

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

To: Operations Superintendent - Nuclear Date: 04/05-06/88

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

A. Plant evolutions observed

- Routine Control Room operations
- Peak end-of-shift meeting
- Peak to midnight shift turnover
- 3-PMI-28.3, Rod Position Indication Hot Calibration, baseline data collection - partial
- 0-OSP-023.1, "B" Emergency Diesel Generator Operability Test - partial
- Tour of Turbine Building, partial tour of Auxiliary Building

B. Immediate safety problems

None

C. Questionable work practices

None

D. Area(s) for improvement

1. The 4B Condensate Polisher Vessel is currently indicated as out-of-service on the control panel by a large red duct tape "X". This appears to be a less than desirable method of tagging. This issue previously identified and closed as MOS item #88-0492.
2. Polyflow tubing is currently used to supply air through hand loaders to the Turbine Plant Cooling Water Intake Cooling Water Strainer Inlet Valves under Temporary System Alteration 4-86-73-63. The tubing is tie-wrapped in overhead locations within the Turbine Building but is laid loose and unprotected under and around the Turbine Plant Cooling Water Heat Exchangers. Overhead routing in this area would both clear walkways and protect the tubing.
   Note: The Temporary System Alteration tag at valve 4-POV-314 is damaged and illegible.
3. Valve 4-30-791, 4A Reheater Drain Tank FE-5120 Bypass Outlet Stop Valve, was observed to have a packing leak. PWO 306922 was initiated with the Nuclear Watch Engineer.
4. Valve 4-30--2102, Drain Valve for 4A Moisture Separator Reheater Drain to Condenser, was observed to have a packing leak. PWO 306923 was generated.
5. Relief valve RV-3-1409, Desuperheater Steam Supply Relief Valve, was observed to be leaking through. PWO 306924 was generated.
6. Operability testing of the "B" Emergency Diesel Generator was impacted by two existing PWO's; PWO WA880712026 initiated 3/11/88 on TI-444B and PWO 311621 initiated 2/09/88 on TI-442B. Both PWO's had priorities requiring action prior to this test. A hand held instrument was substituted for the test readings. Both PWO's are related to calibration.

Section D continued

7. The overflow for the Unit 4 Feedwater Pump Seal Water Tank was observed to be discharging into a damaged area of concrete and fill. PWO 307276, initiated 9/13/87, is hung on CV-4-2210, the level control valve for the tank. The discharge through the overflow continues deterioration in the area and prevents inspection and repair. A higher priority for the PWO appears to be necessary.
8. During calibration of the Rod Position Indicators under 3-PMI-28.3 the lower calibration point is at 20 steps, the set point for activation of turbine runback. This results in extensive relay chatter. Followup with the I&C Supervisor indicated that 2 or 3 relays have been damaged this year during testing in accordance with this procedure.

E. Professionalism, summary of Shift, Comments

1. Conduct of the Control Room staff on both shifts, the end-of-shift meeting and the shift turnover were conducted in a professional manner.
2. During walkdown of the Auxiliary Building, LI-1002A (Laundry Tank 'C') and LI-1010A (Laundry Tank 'A") were observed to be alarming high for 10-15 minutes without response be a Nuclear Operator. No operators could be located on the 18' elevation of the Auxiliary Building. A roving security guard summoned a Nuclear Operator by phone from the Health Physics station. Response was approximately 3 minutes after the call. The alarming panel attracted the attention of several people but none took action until the security guard. Perhaps some indication on the panel to notify the Control Room would prevent this type of occurrence.

F. Recommendations

1. In order to prevent further relay damage during performance of *-PMI-28.3, a review should be conducted to change the lower limit calibration signal from 0.3 volts (20 steps) to a higher or lower value. This would eliminate relay chatter which repeats for each indicator calibrated.

Completed By: J. M. Mowbray — *MOS Observer* — Date: 04/05-06/88

Reviewed By: L. W. Pearce — *Operations Superintendent- Nuclear* — Date: 4/6/88

Management Review By: _____ *PM/N* _____ *Date* _____ *SVP* _____ *Date* _____ *VP* _____ *Date*

Date Started 04/05/88	**PSN MOS**	Date Finished 04/06/88

Initiating PSN Schimkus PSN Wogan Completed PSN Anderson

Initiating APSN Murphy APSN Singer Completed APSN Reese

A. Questionable Work Practices/Actions Taken/Recommendations.

None

B. Areas for Improvement/Recommendations/Actions Taken

None

C. Good Practices/Professionalism Observed

Mike Mowbray (MOS) assisted PSN with a concern over rattling inside 3B Main Steam Line Safety RV-1407 - Appears jacking screw loose. He will assign an engineer to troubleshoot on day shift.

Reviewed By K.J. Fowler Date 4/6/88 Actions Completed _____ Date _____

W+/Y

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

To: Operations Superintendent - Nuclear Date: 04/06/88

From: N. Roos *(MOS Observer)* Shift: ☒ Day ☐ Night

A. Plant evolutions observed

- Routine power operation, Units 3 and 4
- Shift turnover
- Shift briefing
- Emergency Diesel periodic.test

B. Immediate safety problems

None

C. Questionable work practices

None

D. Area(s) for improvement

None

E. Professionalism, Summary of Shift, Comments

Observed several operators and training personnel in the Control Room conducting re-qualification walk-throughs; as many as ten at one time during the shift. With these people included, approximately 18 operator/training personnel were in the operator area.

Proper scheduling of activities could help to reduce the effects of these training activities.

F. Recommendations

See E

Completed By: N. Roos *MOS Observer* Date: 04/06/88

Reviewed By: [signature] *Operations Superintendent- Nuclear* Date: 4/7/88

Management Review By: [signature] *PM-N* 4/7/88 *Date* [signature] *SVP* 4/7/88 *Date* [signature] *VP* 4/7/88 *Date*

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

To: Operations Superintendent - Nuclear Date: 04/06-07/88

From: Andrew P. Drake *(MOS Observer)* Shift: ☐ Day ☒ Night

A. Plant evolutions observed

- Unit 3, 100% power
  -Normal operation/logs
- Unit 4, Shutdown from 100% to 0%
  -Power decrease to 40% for Turbine Valve Test
  -Power reduction to 0% due to increase leakage on guarded oil system
  -4-GOP-103 power operation to Hot Standby
- Mid shift brief
- Peak shift ending brief
- Tour Reactor Auxiliary Building

B. Immediate safety problems

None

C. Questionable work practices

None

D. Area(s) for improvement

1. Observed an alarm condition on the Unit 3 Post Accident Monitoring Heat Tracing Panel in the Reactor Auxiliary Building. The Nuclear Operators (NO's) in the Reactor Auxiliary Building were not sure what this alarm meant and gave a confusing explanation. Neither NO seemed to understand what the alarm meant and did not seem concerned with it. The operating procedure, OP-2500.2, Post Accident Sampling System Heat Tracing Operation, gives no assistance in diagnosing these alarms. The NO's need additional training on this system and an off normal procedure needs to be written to cover alarm conditions and actions to be taken.
2. I have noticed on my last trip here and recently a weakness in the area of notification of plant events on some shifts. Training might consider running some senarios for the shifts to exercise the notification procedures.

E. Professionalism, Summary of Shift, Comments

1. The mid shift crew responded very well to the increased leakage on the #3 Turbine Control Valve control oil line. The PSN and APSN responded quickly to have the spilled oil contained and cleaned up. A Fire Watch was established where oil had soaked the insulation on hot piping. Notifications were made in accordance with AP-0103.43, Duty Call Responsibilities.
2. Mid shift RCO's provided excellent instructions to the operators in training during the power reduction for the Unit 4 Turbine Valve test and subsequent shutdown. They monitored the students closely and asked informative questions prior to authorizing manipulations on the board.

F. Recommendations

See items 1 and 2 in section D.

Completed By: Andrew P. Drake — *MOS Observer* Date: 04/06-07/88

Reviewed By: *Operations Superintendent- Nuclear* Date: 4/7/88

Management Review By:

PM-N 4/7/88 Date

SVP 4/7/88 Date

VP 4/7/88 Date

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

To: Operations Superintendent - Nuclear Date: 04/06-07/88

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

A. **Plant evolutions observed**

- Routine Control Room operation
- Shutdown of Unit 4, 4-GOP-103, Power Operation to Hot Shutdown, to Mode 2
- Shutdown of miscellaneous equipment associated with the Unit 4 shutdown, various procedures
- Tour of Turbine Building, Auxiliary Building and Intake
- Peak shift end-of-shift meeting, turnover to midnight shift, midnight shift start-of-shift briefing

B. **Immediate safety problems**

None

C. **Questionable work practices**

None

D. **Area(s) for improvement**

1. A crack was observed in a fillet weld to the sockolet upstream of valve 3-30-507, isolation for PX-1461 in the 5A Feedwater Heater drain. This condition was originally discussed in the time frame of the Unit 4A Condensate line support repair. Insulation was already removed but no PWO tag was hung. PWO306925 was originated.
2. A packing leak was observed in valve SGB-3-098, Blowdown Tank Level Controller, 6265B, high pressure side isolation. PWO 306926 orginated.
3. Fire detection panel 4C284 for fire zones 72 and 74 Emergency Diesel Generators, was observed to spuriously alarm 4 times in a 5 minute period as well as numerous other times over both shifts. Each alarm was a flow alarm. The Turbine Operator is required to reset the trouble alarm and walkdown the area to confirm no discharge. Two PWO's are hung on the panel, PWO 315907 initiated 11/28/87 and PWO 312331 initiated 3/12/88. The TO on the peak shift reported that an initial attempt to repair the panel had not been successful and that he was not aware of any other actions. Each alarm is time consuming for the Turbine Operator to respond to. A higher priority for the PWO's or a review of the cause of the alarms would appear to be appropriate.

D Continued

4. A continuous firewatch is currently assigned to Fire Zones 88 & 89, Unit 3 Blowdown area, by NCR-C-088-88. When approached the firewatch indicated the assignment based on an assignment sheet from the Firewatch Supervisor and an excerpt from the NCR. When questioned as to the specific duties involved, the firewatch generally indicated some blowdown piping as the concern. The NCR addressed conduit related to the Auxiliary Feedwater System. Further discussion with the Firewatch Supervisor indicated that a typical firewatch assignment included a review of the PSN request sheet, the firewatch log form, any special requirements and escort of each firewatch to the assigned post; however, no written guidelines are utilized to insure that each firewatch is specifically briefed. Based on the Supervisor's input, the situation in the Blowdown area appears to be a unique condition. However, a written guideline for the briefing and some confirmation that the firewatch understands the specific requirements of a post could eliminate similar situations.
5. During walkdown of the Auxiliary Building Fan Room, an unidentified vacuum pump and control box was found chained with a substantial chain and padlock to a conduit feeding SV-4-2912, Containment Isolation Valve for the Containment Atmosphere Monitors R11 & 12. The attachment of this unanalyzed equipment to safety related equipment could result in unacceptable interaction in a seismic event. The APSN took immediate action to attempt to locate the responsible department for removal of the equipment. No one had been identified at the end of the shift. In general, it is not an acceptable practice to attach temporary equipment to permanent plant equipment without specific procedural guidance. It would appear that the responsible work group requires a briefing in order to identify these concerns for application in their daily work.

E. Professionalism, Summary of Shift, Comments

1. Conduct of the Control Room staff, the shift briefings and other plant departments were well organized and professional in addressing the Unit 4 shutdown and subsequent efforts to begin repair of the oil system. Specific response from Mechanical Maintenance in investigation of the leak and control/cleanup of the spill showed excellent support by the operating staff.
2. Interaction of the shift Reactor Operators and the on-shift trainees during shutdown of Unit 4 is also worthy of specific notice. The shift operators addressed not only the specifics of the shutdown in progress but also included a great deal of practical background to assist the trainees.

F. Recommendations

1. The Unit 4 High Pressure Turbine leak appeared unchanged when observed prior to Unit 4 shutdown. Examination after shutdown indicated steam cutting adjacent to the cylinder heating tap. I recommend that a permanenet type repair be completed prior to Unit 4 restart based on severity of the leak and the pressure/temperature of the steam involved.
2. Information furnished by the Power Plant Engineering Site Office indicated that a rattling noise in a Unit 3 Main Steam Safety Valve was acceptable and did not impact operation of the valve based on a telecon with the vendor, Dresser Industries. A review of PC/M 86-136, which removed the lifting devices from these valves, and a subsequent walkdown confirmed all valves conform to the PC/M requirements. It appears that no further action is required.

Completed By: J. M. Mowbray — *MOS Observer* Date: 04/06-07/88

Reviewed By: [signature] — *Operations Superintendent- Nuclear* Date: 4/7/88

Management Review By: [signature] *PM-N* 4/7/88 *Date* [signature] *SVP* 4/7/88 *Date* [signature] *VP* 4/7/88 *Date*

04/06-07/88

FINAL PAGE

Date Started 04/06/88	**PSN MOS**	Date Finished 04/07/88

Initiating PSN Schimkus PSN Wogan Completed PSN Anderson

Initiating APSN Murphy APSN Singer Completed APSN Reese

A. Questionable Work Practices/Actions Taken/Recommendations

Found an extension ladder not wired to an I-Beam directly over Auxiliary Feedwater Valve FCV-3-2817. Appears it was being used by Electrical Department to test a fire detector for the Feedwater platform. Had the ladder fallen it would have damaged air/nitrogen piping for FCV-3-2817. Actions taken were to notify Electrical Department to remove the ladder. Recommend PWO work package state to lash ladder down if needed.

B. Areas for Improvement/Recommendations/Actions Taken

1. Recommend Construction switch to a drilling technique when breaching the control building barriers for conduit runs, etc. The present air hammer method is too distracting.
2. Control Room door design seems to be a continuing problem. Need to expedite design change/evaluation.
3. The way Intake Cooling Water Temperatures look there is a good chance of requiring a 2201 valve watch on both units for the entire summer and Operations can only support this on overtime. Recommend FPL laborers be used as valve watchers once trained in the duties. Also we need another shelter with air conditioner for the other Unit. The sun is taking its toll on the watch.
4. At 2300 Unit 4 Oil-Controlled Breakers opened following turbine trip which removed unit from line for maintenance on #3 Turbine Control Valve. Main Steam Isolation Valves (MSIVs) were shut at 2310 by RCO possibly due to low RCS average temperature. The MSIV's should have been maintained open when the Turbine rolled down to allow cooling of Turbine blading i.e., less windage on blades. Operators are not trained on this subject of the proper time for closure of MSIVs and why. Recommend re-qualification training for this subject.

C. Good Practices/Professionalism Observed

1. Praises to the Electrical Department for prompt response and excellent timing of Reactor Trip Breakers during performance of Reactor Protection Test on 4/5/88.
2. Observed an excellent well-coordinated shutdown of Unit 4 by all operators. Had no significant event or loss of control at any point. Peak shift did an excellent job analyzing the control valve problem and bringing the unit to Mode 2. This made mid shifts workload an easy evolution.
3. APSN/RCOs/NTOs worked a steady fast pace to have Unit 4 Generator degassed and purged with carbon dioxide with all oil system clearances hung ahead of schedule - great work!.
4. Maintenance support has been outstanding during the past week. Good decision was made concerning the Air Side Seal Oil Pump. Operators addressed concerns for performance of contingency actions during performance of Nuclear Instrumentation System calibration. This shows good Tech. Spec. awareness.

Reviewed By [signature] Date 4-7-88 Actions Completed _____ Date _____

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

To: Operations Superintendent - Nuclear Date: 04/07/88

From: N. Roos *(MOS Observer)* Shift: ☒ Day ☐ Night

A. Plant evolutions observed

- Routine power operation, Unit 3
- Shift turnover
- Shift briefing

B. Immediate safety problems

None

C. Questionable work practices

None

D. Area(s) for improvement

None

E. Professionalism, Summary of Shift, Comments

None

F. Recommendations

None

Completed By: N. Roos *MOS Observer* Date: 04/07/88

Reviewed By: R.W. Pierce *Operations Superintendent- Nuclear* Date: 4/8/88

Management Review By: C/S 14/5/88 *PM-N* *Date* SVP 4/8/88 *Date* ____ / ____ *VP* *Date*

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

To: Operations Superintendent - Nuclear Date: 04/07-08/88

From: Andrew P. Drake *(MOS Observer)* Shift: ☐ Day ☒ Night

A. Plant evolutions observed

- Unit 3, 100% power
  -Normal operations and logs
- Unit 4, Critical at near zero power, increase to 1.5-2% power
  -Normal operations and logs
  -Secondary system warmups and system checks

B. Immediate safety problems

None

C. Questionable work practices

None

D. Area(s) for improvement

1. Further clarification of the individual who can perform Independent Verification (IV) of steps performed by "trainees in the presence of a qualified operator", is needed. Example: A trainee performs a procedure in the presence of a qualified operator. Several steps in the procedure must be IV. Can the qualified operator who watched the trainee perform the steps also perform the IV? The shift info book (night order) Item #2 on 1/25/88, page 32 (see attached) attempts to address this, however as it is written it can be interpreted both ways. The administrative procedure, 0-ADM-031, Independent Verification, does not address this situation. Different shifts are interpreting the shift info book entry both ways.

   a. Clarify the intent of the shift info book entry so that all shifts perform the proper IV procedure.
   b. Revise 0-ADM-031 to specifically address the use of trainees to perform steps requiring IV, and how/who may perform the IV. The operators should not have to rely on the shift info book for operating guidance of this importance.

1-25-88

CLARIFICATION OF OPERATIONS EVOLUTIONS PERFORMED BY TRAINEES (LICENSED AND NON-LICENSED:

1) TRAINEES SHOULD BE ALLOWED TO PERFORM ANY SINGLE-ENTRY (NO I.V.) PROCEDURE IN THE PRESENCE OF A QUALIFIED OPERATOR. THIS INCLUDES THE PROCEDURE SIGN-OFFS. THE QUALIFIED OPERATOR OBSERVING THE PROCEDURE PERFORMANCE SHOULD ENTER A LINE IN THE REMARKS SECTION SUCH AS "WITNESSED PROCEDURE PERFORMANCE" AND SIGN BELOW THE ENTRY.

2) TRAINEES SHOULD BE ALLOWED TO PERFORM PROCEDURES WHICH REQUIRE I.V. IN THE PRESENCE OF A QUALIFIED OPERATOR INCLUDING PROCEDURE SIGNOFFS. ALL I.V.'S HOWEVER SHOULD BE PERFORMED BY A QUALIFIED OPERATOR I.A.W. O-ADM-031, INDEPENDENT VERIFICATION. THE QUALIFIED OPERATOR OBSERVING THE PROCEDURE PERFORMANCE SHOULD ENTER A LINE IN THE REMARKS SECTION SUCH AS "WITNESSED PROCEDURE PERFORMANCE" AND SIGN BELOW THE ENTRY.

3) TRAINEES SHOULD BE ALLOWED TO PERFORM PROCEDURES ONLY FOR POSITIONS IN WHICH THEY HAVE PREVIOUSLY OR ARE CURRENTLY

E. Professionalism, Summary of Shift, Comments

Items 1 and 2 in section E of previous days report (4/06-07/88) should refer to peak shift crew instead on mid shift crew.

F. Recommendations

See section D

Completed By: Andrew P. Drake — *MOS Observer* Date: 04/07-08/88

Reviewed By: L.W. Pearce — *Operations Superintendent- Nuclear* Date: 4/8/88

Management Review By:

PM-N	Date	SVP	Date	VP	Date
GJB	4/8/88	[illegible]	4/8/88		

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

To: Operations Superintendent - Nuclear Date: 04/07-08/88

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

A. Plant evolutions observed

- Routine Control Room operation
- Preparation to begin 4-GOP-301, Hot Shutdown to power operation
- End-of-shift, beginning-of-shift and turnover meetings for peak/midnight shifts
- Tour of 4160V Switchgear and 480V Motor Control Center (MCC) areas and Radiation Controlled area

B. Immediate safety problems

None

C. Questionable work practices

None

D. Area(s) for improvement

1. A number of storage and double wide trailers in the RCA currently have temporary lighting installed for security requirements. Approximately mid-way through the shift all but one of these lights were found out-of-service. The Captain of the Guard was contacted with this information. He stated that these lights are found unplugged periodically and that he would take action to restore the lighting. The lighting was partially restored at the end of the shift. Two potential improvements apply in this area. Security personnel should be apprised of the necessity of the temporary lighting and should take appropriate action upon identification of a problem. The lighting itself including the power connections should be tagged to indicate the purpose/requirement for the lighting to prevent future disruptions.

B. **Professionalism, Summary of Shift, Comments**

1. Shift meetings and conduct of the operations staff were excellent given the major activities underway. Interface with all maintenance groups was thorough and informative and kept activities well coordinated throughout both shifts.
2. Housekeeping in the Switchgear and MCC areas was excellent.
3. Item #1 in my report for the previous night, 04/06-07/88, included a typographical error. The last sentence in the item should have read, "Specific response from Mechanical Maintenance in investigation of the leak and control/cleanup of the spill showed excellent support of the operating staff".
4. A "lost" clearance tag was identified in one of the MCC's. The operations staff had already taken appropriate actions to lift the clearance with a "lost" tag. However, the peak shift staff made an additional effort to properly retrieve and dispose of the identified tag.

F. Recommendations

1. The recent cleaning of the Unit 4 Component Cooling Water Heat Exchanger has allowed some debris to accumulate in that area (i.e., old hydrolaser hose, etc.). A general cleanup appears to be appropriate.

Completed By: J. M. Mowbray — Date: 04/07-08/88
MOS Observer

Reviewed By: [signature] — Date: 4/8/88
Operations Superintendent- Nuclear

Management Review By: [signature] 4/8/88 — [signature] 4/8/88 — [signature] —
PM-N *Date* *SVP* *Date* *VP* *Date*

PSN MOS

Date Started 04/07-88 | Date Finished 04/08/88

Initiating PSN Schimkus | PSN Anderson | Completed PSN Schimkus

Initiating APSN Murphy | APSN Reese | Completed APSN Murphy

A. Questionable Work Practices/Actions Taken/Recommendations

None

B. Areas for Improvement/Recommendations/Actions Taken

Days - None

Peaks- The Polisher Buildings are now required to be locked. The lock can not be defeated while inside the building. (It takes a key to get out). I feel this is unsafe and may be against the fire code. These doors need to be able to be locked on the outside but able to be opened from the inside without a key.

Mids- Proper utilization of manpower available, and a clear set of true priorities to start up Unit 4, could be of value to I&C on backshifts. On start of the mid-shift, I&C was asked to concentrate all efforts on repair of PT-406 (B-QSPDS) and FT-497 (4C Feed Flow transmitter). These are the only two items holding Unit 4 from returning to power.

Continued on page 2.....

C. Good Practices/Professionalism Observed

Days-None

Peaks-None

Mids- Maintenance Foreman (Stowe) was exceptional in his support of Operations to allow Operators to warm up the secondary; draw vacuum and continue his work evolutions. At one point the welder refused to work on the east control valve guarded oil line welds due to moisture on deck plate and temperature in Turbine housing. Foreman immediately got air movers positioned to allow cooling and dryout of area. Welder was satisfied with this.

Reviewed By R.W. Pearce Date 4/8/88 Actions Completed _____ Date _____

Continuation Page

Page 2 of Section B

Date: _____

Shift: ☐ Day
☐ Night

At 0100 I requested MOS to tour the work activity areas mentioned above. Once again in the I&C shop, we discussed the work activities needed with the I&C Supervisor. I had to change the I&C work priorities and request that two teams be utilized for Containment entrys. Each team would stay on B Quality Safety Parameter Display System (QSPDS) job until SCBA bottles were expended, then the second team would enter the Containment as relief to continue work. This cut down on the time lost for rest periods. It was noted that the final entry into Contaiment on peak shft was completed at 2330. The next entry was make at 0152. This is approximately a 2½ hour lag time. If I&C manpower can only allow six specialist on mid shift during an outage condition, then lower priority jobs should be dropped to allow critical path jobs full attention. I had to reprioritize usage of I&C manpower to expedite the job.

Recommendations:

1. Supply manpower needed to give full coverage on critical path jobs.
2. Touch base with Operations Maintenance Coordinator to set priorities.

_____
MOS Observer

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

To: Operations Superintendent - Nuclear Date: 04/08/88

From: N. Roos *(MOS Observer)* Shift: ☒ Day ☐ Night

A. Plant evolutions observed

- Routine power operation, Unit 3
- Placing Unit 4 on-the-line
- Shift turnover

B. Immediate safety problems

None

C. Questionable work problems

None

D. Area(s) for improvement

None

E. Professionalism, Summary of Shift, Comments

Ten consecutive hourly calometric power determinations were 100.1 to 100.3 percent power. No stated policy could be located. Reactor Supervisor indicated it was acceptable. This should be reviewed by management to determine if it is consistant with plant policy.

F. Recommendations

None

Completed By: N. Roos *MOS Observer* Date: 04/08/88

Reviewed By: [signature] *Operations Superintendent- Nuclear* Date: 4/11/88

Management Review By: [signature] 4/11/88 *PM-N* *Date* / *SVP* *Date* / *VP* *Date*

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

To: Operations Superintendent - Nuclear Date: 04/08-09/88

From: Andrew P. Drake *(MOS Observer)* Shift: ☐ Day ☒ Night

A. Plant evolutions observed

- Peak Shift
  - Unit 3, 100% power, normal operation and logs
  - Unit 4, Power increase 40% to 55%
  - 4-ONOP-028, Reactor Control System Malfunction
  - End of shift briefing
- Mid Shift
  - Shift turnover, peak to mid
  - Beginning of shift briefing
  - Unit 3, 100% power, normal operation and logs
  - Unit 4, power increase 55% to 80%

B. Immediate safety problems

None

C. Questionable work practices

None

D. Area(s) for improvement

While increasing power on Unit 4, the RCO determined that the bank demand step counters and Rod Position Indicators (RPI) for Bank D Control rods did not agree within the required plus or minus 12 steps. Off normal procedure 4-ONOP-028 section 5.1 was referenced and it states "a difference of greater than 12 steps between RPI and group demand counter is acceptable for power operations below 50% power". However Interim Technical Specifications (T/S) 3.1.3.1. RPI group height, which is applicable in Modes 1 and 2, states "all full length (shutdown and control) rods, shall be operable and positioned within plus or minus 12 steps (indicated position) of the reference position corresponding to the group demand counter position within one hour after rod motion." The reference position is offered in Interim T/S as "..for control banks C and D; the group demand counter indicated position between 0 and 30 steps withdrawn inclusive and between 150 and 228 steps withdrawn inclusive. For the withdrawal range of 31 to 149 steps inclusive, the reference position shall be the individual rod calibration curve noting indicated analog rod position versus indicated group demand counter position."

When the RPI/step counter discrepency was first noted, the step counters for control bank D indicated 147 steps and RPI about 174 steps a 27 step deviation. The reactor was held at about 49% power. Per 4-ONOP-028 this would be acceptable since power was less than 50%. Interim T/S 3.1.3.1 however states in action "d", with one rod misaligned from its reference position by more than plus or minus 12 steps (indicated position), be in hot standby within 6 hours.

Since the step counter was at 147 steps, the operators need to use the individual rod calibration curve for the reference positon. However this curve does not yet exist. Instead the operators used the step counters. Shortly thereafter the rods were moved to maintain the required flux difference in the core and ended up at 156 steps demand (step counter) position and 176 steps indicated. (Still greater than 12 step difference).

In order to show that rod position was within the plus or minus 12 step limit, a Reactor Engineer had to be called in from off site to perform a flux map. Then a PWO had to be written for I&C to adjust the RPI indicators to within plus or minus 12 steps, and an On The Spot Change (OTSC) implemented prior to increasing power above 50%.

Plant management needs to address this situation in a timely manner, preferably before the next startup. If a change to interim T/S cannot be made, then a Reactor Engineer should be held on site during the entire startup and an active PWO implemented for RPI calibration to minimize the time delay.

This incident delayed a power increase for approximately four hours.

E. Professionalism, Summary of Shift, Comments

Peak shift crew responded well to Rod Position Indication problem. Operations personnel kept on top of the situation and requested assistance in a timely fashion. I & C and Reactor Engineering were quick to respond when requested to provide assistance.

F. Recommendations

Identify a way to relieve the crew performing a startup from experiencing the RPI/Interim Tech. Spec. problem every time.

Completed By: Andrew P. Drake — Date: 04/08-09/88
MOS Observer

Reviewed By: [signature] — Date: 4/11/88
Operations Superintendent- Nuclear

Management Review By:

PM/N	Date	SVP	Date	VP	Date
[signature]	4/11/88	/		/	

04/08-09/88

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

To: Operations Superintendent - Nuclear Date: 04/08-09/88

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

A. **Plant evolutions observed**

- Routine Control Room operation
- Power escalation on Unit 4 per 4-GOP-301, Hot Shutdown to Power Operation
- Shift and shift turnover meetings
- Tour of Radiation Control Area and Turbine Building

B. **Immediate safety problems**

None

C. **Questionable work problems**

None

D. **Area(s) for improvement**

1. The dischage lines for the Unit 4 Post Accident Hydrogen Monitoring System in the Auxiliary Building Fan Room are currently taged "QC Hold" with a handwritten notation that the material is on Temporary Release. A followup review of DR 642-87 has determined that it is closed with a specific directive to remove all hold tags. Tags "22 of 23" and "13 of 30" for this DR are still in place. Construction QC is required to remove the tags. Their procedure should include verification that all tags are removed from Temporarily Released material as well as material in stores.

E. Professionalism Summary of Shift, Comments

1. During walkdown of the Auxiliary Building, the 3A Intake Cooling Water Strainer was found to be in full flow backwash. The Nuclear Operator (NO) was not in the vicinity as required by procedure TP-430. Upon his return, it was also determined that he failed to comply with the requirement for continuous radio contact with the Control Room. When the NO was questioned as to why he did not stay in the area and in radio contact, the NO responded "you caught me". The incident was identified to the PSN who had a subsequent discussion with the NO.

F. Recommendations

1. A lighting fixture immediately over the 'C' Auxiliary Feedwater Pump is vibrating with the Main Steam lines. It appears that several of the screws mounting the fixture are missing. I suggest that an Electrical Department representative review the condition to determine if any action is required.

Completed By: J. M. Mowbray — *MOS Observer* Date: 04/08-09/88

Reviewed By: [signature] — *Operations Superintendent- Nuclear* Date: 4/11/88

Management Review By: [signature] *PM-N* Date / *SVP* Date / *VP* Date 04/08-09/88

PSN MOS

Date Started 04/08/88 | Date Finished 04/09/88

Initiating PSN Jones | PSN Anderson | Completed PSN Schimkus

Initiating APSN Haley | APSN Reese | Completed APSN Murphy

A. Questionable Work Practices/Actions Taken/Recommendations

1. Typically one of the two Raw Water Booster Pumps is out-of-service. The one out-of-service pump is usually not repaired until the running pump breaks. I have witnessed one of these pumps sitting broken for months at a time leaving only one in service. When both pumps are out-of-service, the service water to all 4 units must be supplied by the High Tower. We must dedicate out entire water treatment output to supply water to keep a level in the High Tower. Recommend ownership of these pumps be taken from Units 1 & 2 Maintenance Department or have a requirement that if a pump breaks it must be repaired immediately.

Continued....

B. Areas for Improvement/Recommendations/Actions Taken

1. Each time we bring a unit up in power the Rod Position Indicators (RPI) end up greater than 12 steps out of alignment with their step counter below 50% power. As per ONOP-028 this is allowed. But as per ADM-021 this is not allowed. Therefore each time we bring a unit up ADM-021 will have to be waivered and OTSC'd. Recommend: ADM-021 be changed to allow RPI's to be out of the 12 step band at less than 50% power. I think this should be allowed since this procedure is not a lawful Tech. Spec. and we cannot live with it.

Continued...

C. Good Practices/Professionalism Observed

Day-The #4 Unit came on the line smoothly this morning. This was due to good communications between the operators.

Peak- The professional response of both the on-shift P.U.P. person and Reactor Engineering to the Rod Position Indication problem on Unit 4 was outstanding.

Mid- Operators reported numerous discrepencies on systems' operation as Unit 4 power was escalated. Various problems encountered were mitigated, allowing smooth entry to 100% power level.

Reviewed By T.W. Pierce Date 4/11/88 Actions Completed _____ Date _____

Continuation Page

Page 2 of Section A

Date: 04/08/88

2. On PSN midshift tour, found a step ladder balanced against conduit approximately one foot from Auxiliary Feedwater Train I Flow Indicators on Unit 3 Feedwater platform. The ladder was not lashed by any means. Requested Mechanical Maintenance remove ladder.

Recommended actions:
Add a section to the scaffolding procedure to address the proper use of ladders and precautions when using them.

3. Security Guards have been receiving multiple spurious Control Room door alarms on many doors in the Control Room. The guards have been coming in Control Room approximately every 15-30 minutes requesting the PSN key card number. When questioned why the PSN key card number is required, the reply is that he must be accountable for all persons in the Control Room when an alarm is received. I have observed some guards come in Control Room, get PSN card key number and leave without checking the zone which alarmed.

Actions taken:
Requested Security Supervisor (Captain) conference to discuss actions needed to ensure proper Control Room security. Requested incident report to find out why guards are using different techniques for verifying these alarms. Requested Security Supervisor to have conference with all guards and inform them of our procedure for alarms.

Continuation Page

Page 2 of Section B

Date: 04/08

2. 4B Steam Generator Feedwater Pump could not be started at 400 MWE due to oil being saturated with water. This is a re-occurring problem due to the design of the seal and its drain characteristics.
The seals stream water into the bearing housing at low loads and adjustment of drains and seal water is not clearly defined by procedure to give a workable technique to prevent future occurrence. A QIP team is presently researching the design and this problem. On 4/8/88 the problem of oil-water mixture was identified by the Turbine Operator. Maintenance was requested to change the oil. Unit 4 was restricted to 60% power for 4 hours during the oil change evolution.

Recommendations:

1. Modify seal drain characteristics.
2. Give better procedural guidance and training to operators on adjustment of seal water and drains for different load conditions.
3. Have a method to key Maintenance to observe the idle pumps oil reservoir condition prior to starting second Steam Generator Feedwater Pump, with adequate time to change oil, if necessary.
4. Initiate a PCM to install piping and a permanent Delaval oil/water separator in each room with taps to both Steam Generator Feedpumps' oil reservoirs.

3. On PSN midshift tour found "A" Auxiliary Feedwater (AFW) Pump mechanical overspeed limit switch flipped behind roller plate. This is a reoccurring problem which has been addressed numerous times in past years since the trip and throttle valves were installed.

Actions taken: Requested STA to research all logic which this switch controls. Also requested information into whether this could cause an operability problem with the A AFW Pump. Requested APSN have switch placed into proper position. This causes the trip and throttle valve to be tripped closed during the process of resetting the switch roller. APSN requested STA to write a Technical Department field report. Placed PWO on problem (PWO #WA880409061715).

Recommendations:
Perform PCM on modifying the switch or the roller plate.

4. Another area for improvement is ensure steam leaks are repaired during short outages rather than depend on Ferminite to take care of the problem when on-line. An example of this is the 4C Moisture Separator Reheater timing valve body-to-bonnet leak which was blowing hard prior to unit shutdown. Now the leak has propagated to a massive leak as it was not repaired during the outage.

Recommendations:

1. Schedule adequate manpower to cover jobs needed to be done.
2. Utilize construction labor if FPL plant maintenance manpower is not available.
3. Establish a tracking system for leaks to be fixed when unit comes down and make one group assume accountability.

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

To: Operations Superintendent - Nuclear Date: 04/09/88

From: N. Roos *(MOS Observer)* Shift: ☒ Day ☐ Night

A. Plant evolutions observed

- Routine power operations, Units 3 and 4
- Shift turnover
- Shift briefings
- Turbine Trip System Periodic Test

B. Immediate safety problems

None

C. Questionable work practices

None

D. Area(s) for improvement

None

E. Professionalism, summary of Shift, Comments

None

F. Recommendations

None

Completed By: N. Roos *MOS Observer* Date: 04/09/88

Reviewed By: [signature] *Operations Superintendent-Nuclear* Date: 4/11/88

Management Review By:

PM-N	Date	SVP	Date	VP	Date
CMS	4/11/88	/	/	/	04/09/88

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

To: Operations Superintendent - Nuclear Date: 04/09-10/88

From: Andrew P. Drake *(MOS Observer)* Shift: ☐ Day ☒ Night

A. **Plant evolutions observed**

- Unit 3, 100% power
- Unit 4, 100% power
- Normal operation and logs

B. **Immediate safety problems**

None observed

C. **Questionable work practices**

None observed

D. **Area(s) for improvement**

The PWO system seems to have some serious deficiencies in it. PWO #880970255 was entered and approved on 4/6/88 to replace a 3 year old PWO that could not be found in the GEMS computer. Less than 24 hours later, Mechanical Maintenance reported that this PWO could not be found in GEMS and another PWO #WA880971446 was written in its place. The original PWO was entered and approved by the mid shift PSN on 4/6/88. A search thru the GEMS computer was futile.

A second case is Unit 4 Recorder R-4-1413 which had 11 or 12 PWO's on it; all but one were removed earlier this week. A search thru GEMS indicated one active PWO, 2 PWO's "coded out" and one PWO with work completed. However 7 or 8 PWO's are still unaccounted for. The Unit 4 RCO's are re-writing the PWO's since the problems still exist on the recorder.

Numerous other incidents of "vanishing" PWO's exist. This situation is creating a high level of furstration for the Control Room and outside operators.

E. Professionalism, Summary of Shift, Comments

1. Jim Hendrickson in Reactor Engineering is to be commended for his outstanding attitude and professionalism during the peak shift. He had to be called in twice from off-site to perform flux maps due to Rod Position Indication problems on Unit 4.

F. Recommendations

1. Modify the current PWO system so that PWO's cannot be removed without notifying the originator. This is not currently being done.

Completed By: Andrew P. Drake — *MOS Observer* Date: 04/09-10/88

Reviewed By: [signature] — *Operations Superintendent- Nuclear* Date: 4/11/88

Management Review By:

PM-N	Date	SVP	Date	VP	Date
[signature]	4/11/88	/	/	/	04/09-10/88

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

To: Operations Superintendent - Nuclear Date: 04/09-10/88

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

A. **Plant evolutions observed**

- Routine Control Room operation
- Flux map of Unit 4
- Shift turnover
- Tour of condenser pits, Condensate Polishers and Radiation Control Area

B. **Immediate safety problems**

None

C. **Questionable work practices**

None

D. **Area(s) for improvement**

1. A leak was identified in the 3A North Inlet Waterbox upper manway. PWO 402256 was initiated.
2. Valve 3-30-224, 2B Feedwater Heater Tubeside Drain, was identified as leaking through. PWO 402257 was initiated.
3. Security lighting under the storage trailers immediately south of the Rad Waste Building was again identified as unlit at approximately 0230. Following a discussion with the Captain of the Guard, all lighting was restored within ten minutes. The captain indicated he would followup to determine why Security patrols had failed to identify the problem. See my report of 04/07-08/88 for previously identified concerns.
4. PWO 400636 was generated 4/01/88 to manually clean the 4A Intake Cooling Water Strainer due to high differential pressure (DP). The PWO is still unworked and strainer DP exceeds 3 psi (i.e. nearly pegged high). Given both the criticality and high visibility of this system, a higher priority seems to be appropriate.

E. Professionalism Summary of Shift, Comments

1. Both I&C Maintenance and Reactor Engineering responded well in support of operations. Both of these groups and the Control Room staff responded promptly and properly to the Interim Tech. Spec. on Rod Position Indicators.

F. Recommendations

1. The expansion joint on the 3B Condensate Pump is operating in a partially collapsed condition. Deterioration of the expansion joint outer jacket and some reinforcing material is already evident. Mechanical Maintenance should review the condition of this expansion joint with the manufacturer and plan appropriate action for the next outage.

Completed By: J. M. Mowbray *MOS Observer* Date: 04/09-10/88

Reviewed By: [signature] *Operations Superintendent- Nuclear* Date: 4/11/88

Management Review By:

PM-N	Date	SVP	Date	VP	Date
[signature]	4/11/88	/	/	/	/

PSN MOS

Date Started 04/09/88 | Date Finished 04/10/88

Initiating PSN Jones | PSN Anderson | Completed PSN Anderson Jones

Initiating APSN Haley | APSN Reese | Completed APSN Murphy

A. Questionable Work Practices/Actions Taken/Recommendations

None

B. Areas for Improvement/Recommendations/Actions Taken

one

C. Good Practices/Professionalism Observed

Day shift- None

Peak shift- Reactor Engineering was called out twice for flux mapping due to Rod Position Indication problems and responded in very good time with a very good attitude. These people are very professional and anxious to help. Good job!

Reviewed By L.W. Pearce Date 4/11/88 Actions Completed _____ Date _____

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

To: Operations Superintendent - Nuclear Date: 04/10/88

From: N. Roos *(MOS Observer)* Shift: ☒ Day ☐ Night

A. Plant evolutions observed

- Routine power operations, Units 3 and 4
- Shift turnover
- Shift briefing

B. Immediate safety problems

None

C. Questionable work practices

None

D. Area(s) for improvement

None

E. Professionalism, Summary of Shift, Comments

None

F. Recommendations

None

Completed By: N. Roos *MOS Observer* Date: 04/10/88

Reviewed By: *Operations Superintendent- Nuclear* Date: 4/11/88

Management Review By:

PM-N	Date	SVP	Date	VP	Date
	4/11/88		/		/

04/10/88

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

To: Operations Superintendent - Nuclear Date: 04/10-11/88

From: Andrew P. Drake *(MOS Observer)* Shift: ☐ Day ☒ Night

A. **Plant evolutions observed**

- Unit 3, 100% power
- Unit 4, 100% power
- Peak shift briefing
- Peak/Mid shift turnover
- Mid shift briefing

B. **Immediate safety problems**

None observed

C. **Questionable work practices**

Unit 4 Intermediate Range Relay IR-B-1 was scheduled to be replaced on the mid shift. During the briefing a concern was raised on the possibility of also de-energizing the second relay. Since I was present at the relay rack on 4/4/88 when the Source Range Relays were replaced, I was also concerned with a similar event. (See MOS report 4/4-5/88, item D.1).

The response to my original MOS item was to point out that step 4.1 of Maintenance Procedure MP-0732, Testing and Replacement of BFD/NBFD Relays in the Reactor Protection, and Safeguards Systems is to obtain proper clearances. The PWO for the Intermediate Range Relays was marked no clearance required.

Further conversation with the I & C Supervisor on the possibility of opening a trip breaker during the relay work was conducted. It was determined that a clearance should be requested on the trip breaker to prevent an inadvertant trip.

Since two incidents of possible trip breaker actuation during relay repairs have occurred this week, I would requst a revision to MP-0732 be made, rather than wait for it to be upgraded in 1991.

D. Area(s) for improvement

1. Check Reactor Protection relay wiring diagrams and identify possible situations such as those identified for 3-SRB-2-B and IR-B-1.
2. Revise MP-0732 to clearly state when a clearance is required on the Reactor Trip Breakers for relay replacement. Step 4.1 in MP-0732 does not provide adequate guidance.
3. In order to rack Reactor Trip Breakers in and out for a clearance, the operators must use portions of OSP-049.1 "Reactor Protection System Logic Test". A seperate procedure should be written to cover just racking the breakers in and out. Too many steps in OSP-049.1 must be N/A'd by the PSN and some may be missed.

E. Professionalism, Summary of Shift, Comments

Mid shift APSN, PSN and Unit 4 RCO responded very well as a team to verify the possible hazards associated with the replacement of the Intermediate Range Channel relay. They more than likely prevented an inadvertant trip of Unit 4.

F. Recommendations

See section D.

Completed By: Andrew P. Drake — *MOS Observer* Date: 04/10-11/88

Reviewed By: [signature] — *Operations Superintendent- Nuclear* Date: 4/11/88

Management Review By:

PM-N	Date	SVP	Date	VP	Date
[signature]	4/11/88	/	/	/	04/10-11/88

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

To: Operations Superintendent - Nuclear Date: 04/10-11/88

From: S. T. Hale *(MOS Observer)* Shift: ☐ Day ☒ Night

A. Plant evolutions observed

- Unit 3, operation at 100% power
- Unit 4, operation at 100% power

B. Immediate safety problems

None

C. Questionable work practices

None

D. Area(s) for improvement

None

E. Professionalism, Summary of shift, Comments

1. Two impressions of the plant on my first night on MOS:
   - The plant is extremely clean. I was really impressed with the cleanliness of the Turbine area, all decks.
   - The shift turnover was done very professionally with a good exchange of information, especially the peak to mid. The PSN was well informed and presented an excellent overview of plant status on objectives for the shift.
2. Implementation of the procedure to rack in the B Bypass Reactor Trip Breaker was done with good team work and communication all the way around. Actions by this shift (although not prescribed procedurally) probably prevented a reactor trip.

F. Recommendations

Continue to monitor the steam leak on the sensing line on the Unit 4 High Pressure Turbine.

Completed By: S. T. Hale *MOS Observer* Date: 04/10-11/88

Reviewed By: *Operations Superintendent- Nuclear* Date: 4/.../88

Management Review By:

PM/N _____ Date 4/11/88 SVP _____ Date / VP _____ Date /

Date Started 04/10/88	**PSN MOS**	Date Finished 04/11/88

Initiating PSN Jones PSN Anderson Completed PSN Harpel

Initiating APSN _____ APSN _____ Completed APSN _____

A. Questionable Work Practices/Actions Taken/Recommendations

None

B. Areas for Improvement/Recommendations/Actions Taken

None

C. Good Practices/Professionalism Observed

None

Reviewed By [signature] Date 4/11/88 Actions Completed _____ Date _____