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 RECIP. NAME: PERKINS, K. RECIPIENT AFFILIATION: Region 5 (Post 820201)

SUBJECT: Forwards data logs for control room visits for 910313-0402,
 per util 910329 ltr.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

P.O. Box 968 • 3000 George Washington Way • Richland, Washington 99352

April 2, 1991


RECEIVED
MARCH 3 1991
13

Ken Perkins
United States Nuclear Regulatory Commission
Region V
1450 Maria Lane, Suite 210
Walnut Creek, California 94596

Subject: DATA LOGS OF CONTROL ROOM VISITS

Please find enclosed the data logs of the Control Room visits for the time period, March 13 through April 2, 1991, per our letter dated March 29, 1991.

Sincerely,



J.W. Baker
WNP-2 Plant Manager

sg

Enclosures

9104170034 910402
PDR ALOCK 05000397
R PDR

11
IE-01



WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

FUNCTIONAL MANUAL
FOR NUCLEAR OPERATION

NUCLEAR OPERATION STANDARD

NUMBER: NOS-28

PAGE: 7 OF 7 , REV. 1

WNP-2 MANAGEMENT WALKTHROUGH PROGRAM

DATE: 3/13/91

MANAGEMENT OBSERVATIONS

1. ASSIGNED PERSONS: OJSEN , TIME IN: 1500 OUT: 1545
2. SHIFT: _____ SHIFT MGR.: MANN 3. SHIFT: _____ SHIFT MGR.: _____
4. BUILDING(S) VISITED:
Reactor ✓ Turbine Generator ✓ Radwaste _____
General Service _____ Diesel Generator _____ Other _____
5. GENERAL COMMENTS: BRIEFED LICENSED CREW MEMBERS ON CURRENT SITUATION, RESULTS OF REGION II MEETING, CONDUCT OF EXAMS ON 3/19-20. REQUIREMENTS FOR EOP'S AND FIELDED QUESTIONS
6. CORRECTIVE ACTIONS: (Observations requiring, or potentially requiring immediate action by the Shift Manger).
7. RECOMMENDATIONS: (Observations of a long-term nature for possible improvements in operations, maintenance, equipment, and safety).
8. Management of supporting organizations should provide observations on performance of software/hardware provided to support WNP-2 operation.
9. Team members should indicate below if they desire feedback on actions taken, or to be taken, resulting from their observations.

Yes ☐

No ☐

ATTACHMENT 1

#9104170034



WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

FUNCTIONAL MANUAL
FOR NUCLEAR OPERATION

NUCLEAR OPERATION STANDARD

NUMBER: NOS-28

PAGE: 7 OF 7, REV. 1

WNP-2 MANAGEMENT WALKTHROUGH PROGRAM

DATE: 3/13/91

MANAGEMENT OBSERVATIONS

1. ASSIGNED PERSONS: OXSEN TIME IN: 0655 OUT: 0745
2. SHIFT: _____ SHIFT MGR.: CANDON 3. SHIFT: _____ SHIFT MGR.: _____
4. BUILDING(S) VISITED:
Reactor ✓ Turbine Generator ✓ Radwaste _____
General Service _____ Diesel Generator _____ Other _____
5. GENERAL COMMENTS: BRIEFED LICENSED CREW MEMBERS ON CURRENT SITUATION.
RESULTS OF REGION II MEETING, CONDUCT OF EXAMS ON 3/19-20.
REQUIREMENTS FOR EOPs AND FIELDLED QUESTIONS
6. CORRECTIVE ACTIONS: (Observations requiring, or potentially requiring immediate action by the Shift Manager).
7. RECOMMENDATIONS: (Observations of a long-term nature for possible improvements in operations, maintenance, equipment, and safety).
8. Management of supporting organizations should provide observations on performance of software/hardware provided to support WNP-2 operation.
9. Team members should indicate below if they desire feedback on actions taken, or to be taken, resulting from their observations.

Yes ☐

No ☐

ATTACHMENT 1

FIELD OBSERVATION

Observer: S.L. McKay Date: 3/13/91

Crew/Employees: Crew C (MANN ET AL)

Scope of Job Observed: Control Room OPS

Please mark an (x) in the column that best answers the following questions. Indicate N/A if not applicable.

1. Was the crew/individual properly equipped to perform the job (i.e., tools, knowledge, procedures)?
2. Were procedures used and adhered to as required?
3. Were crew members adequately skilled and knowledgeable to perform the job?
4. Were safe work practices followed? N/A
5. Are workers adhering to the radiological work requirements? N/A
6. Was time used effectively?
7. Was good housekeeping practiced? N/A
8. Did crew function as a team to complete the job?
9. Was the crew able to make appropriate adjustments to new conditions when necessary?
10. Did the quality of work meet your expectations?
11. Did the quantity of work meet your expectations?
12. Were you satisfied with the overall performance of the job and sequence of events?

RATINGS		
Not at All	Generally	Completely
		X
		X
		X
		X
		X
		X
		X
		X

Good Practices: - NONE - BUSINESS AS USUAL

Concerns: - UPCOMING EVALUATION

Comments: HELD. DISCUSSION WITH CONTROL ROOM STAFF

WITH REGARDS TO UPCOMING NRC EVALUATION.

THEY SEEM TO HAVE A GOOD (THOUGH TIRED)

PERSPECTIVE AS TO THE TASK THEY FACE.

Recommendations: NINE



Wed 3/13

1100: Visited control room. Spoke to Andy Langdon and licensed crew for 35 minutes on Region V meeting. Discussed upcoming exam with its new ground rules. Emphasized EOP policy with variations permitted only after crew discussion on technical basis. Very good session.

1520: Visited control room. Spoke to Mike Mann and his crew at considerable length. Discussed Walnut Creek meeting, upcoming exams and EOP policy. No one felt there should be a prescription that EOP are "guidelines".

earlier activity
0620 Batteries changed BT-1 departed INOP
2 hr LCO ending @ 0615. After telcon

from Jack Balen, Plant Manager
0515, arrived on site ~ 0615.
Went to battery charger G.I. room
with Balen, Melan and watch
trouble, shooting effort - electronic
control card was replaced and G.I.
charger declared operable @ 0820



FIELD OBSERVATION

Observer: McKen Date: 3/14/91

Crew/Employees: CREW C (TURNING etc)

Scope of Job Observed: _____

Please mark an (x) in the column that best answers the following questions. Indicate N/A if not applicable.

1. Was the crew/individual properly equipped to perform the job (i.e., tools, knowledge, procedures) ?
2. Were procedures used and adhered to as required ?
3. Were crew members adequately skilled and knowledgeable to perform the job ?
4. Were safe work practices followed ? N/A
5. Are workers adhering to the radiological work requirements ? N/A
6. Was time used effectively ?
7. Was good housekeeping practiced ? N/A
8. Did crew function as a team to complete the job ?
9. Was the crew able to make appropriate adjustments to new conditions when necessary ? N/A
10. Did the quality of work meet your expectations ?
11. Did the quantity of work meet your expectations ?
12. Were you satisfied with the overall performance of the job and sequence of events ?

RATINGS		
Not at All	Generally	Completely
		X
		X
		X
		X
		X
		X
		X
		X

Thursday 3/14
0700 MAIN control room 100%
Discussed status with Norm Hancock
No significant issues

1136 MAIN control room - 100%
Discussed status with crew members





WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

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FOR NUCLEAR OPERATION

NUCLEAR OPERATION STANDARD

NUMBER: NOS-28

PAGE: 7 OF 7 . REV. 1

WNP-2 MANAGEMENT WALKTHROUGH PROGRAM

CONTROL ROOM VISIT

DATE: 3/14/91

MANAGEMENT OBSERVATIONS

1. ASSIGNED PERSONS: OXSEN TIME IN: 1055 OUT: 1130
2. SHIFT: _____ SHIFT MGR.: HAIRCOCK 3. SHIFT: _____ SHIFT MGR.: _____
4. BUILDING(S) VISITED:
Reactor ☒ Turbine Generator ☒ Radwaste _____
General Service _____ Diesel Generator _____ Other _____
5. GENERAL COMMENTS: BRIEFED LICENSED CREW MEMBERS ON REGION V MEETING, EXAM CHANGES FOR 3/18/91. EXPLAINED CURRENT SITUATION DISCUSSED EOP REQUIREMENTS AND FIELDLED QUESTIONS.
6. CORRECTIVE ACTIONS: (Observations requiring, or potentially requiring immediate action by the Shift Manager).
7. RECOMMENDATIONS: (Observations of a long-term nature for possible improvements in operations, maintenance, equipment, and safety).
8. Management of supporting organizations should provide observations on performance of software/hardware provided to support WNP-2 operation.
9. Team members should indicate below if they desire feedback on actions taken, or to be taken, resulting from their observations.

Yes ☐

No ☐

ATTACHMENT 1





WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

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FOR NUCLEAR OPERATION

NUCLEAR OPERATION STANDARD

NUMBER: NOS-28

PAGE: 7 OF 7, REV. 1

WNP-2 MANAGEMENT WALKTHROUGH PROGRAM

CONTROL ROOM VISIT

DATE: 3/14/91

MANAGEMENT OBSERVATIONS

1. ASSIGNED PERSONS: OXSEN ; TIME IN: 0645 OUT: 0705
2. SHIFT: _____ SHIFT MGR.: HANCOCK 3. SHIFT: _____ SHIFT MGR.: _____
4. BUILDING(S) VISITED:
Reactor ☒ Turbine Generator ☒ Radwaste _____
General Service _____ Diesel Generator _____ Other _____
5. GENERAL COMMENTS: WATCHED CREW BRIEFING, DISCUSSED PLANT STATUS WITH SM & STA
6. CORRECTIVE ACTIONS: (Observations requiring, or potentially requiring immediate action by the Shift Manager).
7. RECOMMENDATIONS: (Observations of a long-term nature for possible improvements in operations, maintenance, equipment, and safety).
8. Management of supporting organizations should provide observations on performance of software/hardware provided to support WNP-2 operation.
9. Team members should indicate below if they desire feedback on actions taken, or to be taken, resulting from their observations.

Yes ☐

No ☐

ATTACHMENT 1

Friday 3/15

0720 Visited control room - plant OK

100% Norm Hancock S.M.

Discussed minor issues with Art Wood; STA

Visual discussions with rest of licensed

crew - Toured parts of Radwaste

0815 - Attended morning meeting - no
major operational or maintenance challenges
Working drawings planned for this evening



1615 - Visited control room - Plant 100%
OK. Mike Mann, SM, and Bill
Ester, CRS, independently told me
they had finished their special
simulator modules and that they felt
they and their crew were ready.

1645 - Visited simulator - Watched
E crew handle a mini-LOCA
scenario and listened to parts of
debrief. Communication was excellent.



FIELD OBSERVATION

Observer: S. Miley Date: 3/16/91

Crew/Employees: CREW E

Scope of Job Observed: GENERAL RAMP TOWERS ETC

Please mark an (x) in the column that best answers the following questions. Indicate N/A if not applicable.

1. Was the crew/individual properly equipped to perform the job (i.e., tools, knowledge, procedures) ?
2. Were procedures used and adhered to as required ?
3. Were crew members adequately skilled and knowledgeable to perform the job ?
4. Were safe work practices followed ?
5. Are workers adhering to the radiological work requirements ?
6. Was time used effectively ?
7. Was good housekeeping practiced ? N/A
8. Did crew function as a team to complete the job ?
9. Was the crew able to make appropriate adjustments to new conditions when necessary ?
10. Did the quality of work meet your expectations ?
11. Did the quantity of work meet your expectations ?
12. Were you satisfied with the overall performance of the job and sequence of events ?

RATINGS		
Not at All	Generally	Completely
		X
		X
		X
		X
		X
		X
		X
		X
		X
		X
		X

Good Practices : _____

Concerns : _____

Comments : I CONDUCTED A GENERAL PLANNING TOUR (D/H-HPS;

CASE SPREADING, RU BLOG, RIF FLOW, CONTINUOUS ROOM ETC).

ALL ACTIVITIES WERE AS PER OUR ADMINISTRATIVE P.D.Ms.

SCHEDULED ACTIVITIES ARE NOT BEING TIT AVAILABLE

CLEAR SCHEDULE.

Recommendations : _____

Saturday 3/16

1120 telcom to control room, Norm Hancock - plant running well. Sam McKay and AMO candidate had just left.

1416 Visited control room 10040 observed turnover between Norm Hancock and Mike Mann. Downstream last night for weekly tests to 87% went OK Hotwell conductivity has increased very slightly. Had problem during night with for level switch LIS-37D - PER written

1440 At PSF with Bob Barnett for. Received copies of exam scenarios. And discussed the two most difficult ones briefly



1513 At simulator - watched E
shift handle scenario involving yet
another LOCA/loss of AC power
situation. Left simulator @ 1545

Sunday 3/17
0810 Visited control room. Discussed
plant status with Norm Hancock, Noel
Emmerson. 100% no significant issues.
Security drill just concluding. Hotwell
conductivity has stabilized. Reviewed
logs. Walked panels. Reviewed D/G bearing
oil level control procedure.

0900 At PSF - Talked extensively
with crew, Carl Beaton, Paul Taylor
et al. Stressed EOP policy, reviewed
emergency procedures, JCO content and
fielded questions.

0930 At simulator - Bill Sharp informed
call from Hancock that he needed help
to deal with a personal situation. Shift
beginning scenario.



1400 - Message on home message taken
from Sam Mickey - Hancock situation
being evaluated at Krolec hospital

1900 - Falcon with Sam Mickey
Norm is OK and wants to continue
in his current role. Bill Sawin is eligible
to replace Norm if needed. We will
continue to monitor Norm's health.



FIELD OBSERVATION

Observer: S. Meley Date: 3/18/91

Crew/Employees: CREW E TO CREW B TURNER

Scope of Job Observed: TRANSITION TO SUBINTEGRATED TURNER

Please mark an (x) in the column that best answers the following questions. Indicate N/A if not applicable.

1. Was the crew/individual properly equipped to perform the job (i.e., tools, knowledge, procedures) ?
2. Were procedures used and adhered to as required ?
3. Were crew members adequately skilled and knowledgeable to perform the job ?
4. Were safe work practices followed ?
5. Are workers adhering to the radiological work requirements ? N/A
6. Was time used effectively ?
7. Was good housekeeping practiced ? N/A
8. Did crew function as a team to complete the job ?
9. Was the crew able to make appropriate adjustments to new conditions when necessary ?
10. Did the quality of work meet your expectations ?
11. Did the quantity of work meet your expectations ?
12. Were you satisfied with the overall performance of the job and sequence of events ?

RATINGS		
Not at All	Generally	Completely
		X
		X
		X
		X
		X
		X
		X
		X
		X

Good Practices : _____

Concerns : _____

D Comments : I OBSERVED CREW TURNOVER PRACTICES. ALL
ACTIVITIES APPEAR TO BE WITHIN THE EXPECTATIONS OF
OUR ADMINISTRATIVE POLICIES.

Recommendations : _____

FIELD OBSERVATION

Observer: S. M. Elsay Date: 3/18/91

Crew/Employees: CREW 2

Scope of Job Observed: START OF SHIFT WORK ACTIVITIES

Please mark an (x) in the column that best answers the following questions. Indicate N/A if not applicable.

1. Was the crew/individual properly equipped to perform the job (i.e., tools, knowledge, procedures)?
2. Were procedures used and adhered to as required?
3. Were crew members adequately skilled and knowledgeable to perform the job?
4. Were safe work practices followed? N/A
5. Are workers adhering to the radiological work requirements? N/A
6. Was time used effectively?
7. Was good housekeeping practiced? N/A
8. Did crew function as a team to complete the job?
9. Was the crew able to make appropriate adjustments to new conditions when necessary?
10. Did the quality of work meet your expectations?
11. Did the quantity of work meet your expectations?
12. Were you satisfied with the overall performance of the job and sequence of events?

RATINGS		
Not at All	Generally	Completely
		X
		X
		X
		X
		X
		X
		X
		X



Good Practices : _____

Concerns : _____

Comments : I DISCUSSED THE PREVIOUS WEEKENDS WORK ISSUES

IN ADDITION TO A BRIEF P.E.R. REVIEW. I REVIEWED BOTH

THE C.L.O & S. MATHS. LOGS. ALL ACTIVITIES APPEARED TO

BE NORMAL & AS PER OUR PROCEDURES

Recommendations : _____

Monday 3/18

0655 - in control room. 100%
watched shift daily briefing

discussed status with Harack/Timmerman

0740 Discussed plant status with
Jack Baker

1300 - visited simulation - NRC/SS
about to start scenario shutdown.

FIELD OBSERVATION

Observer: J BAKER Date: 3/19/91 0730-0800

Crew/Employees: MANN Shift Mgr.

Scope of Job Observed: Control Room Activity / Plant Status.

Please mark an (x) in the column that best answers the following questions. Indicate N/A if not applicable.

1. Was the crew/individual properly equipped to perform the job (i.e., tools, knowledge, procedures)? 3 RO's.
2. Were procedures used and adhered to as required?
Observed J+LL being issued
3. Were crew members adequately skilled and knowledgeable to perform the job?
4. Were safe work practices followed?
5. Are workers adhering to the radiological work requirements?
N/A
6. Was time used effectively? Control Room Activity was Normal - ~~for~~ discussions with the SM on Obser. eval. Exams was brief & to the point.
7. Was good housekeeping practiced?
8. Did crew function as a team to complete the job? Saw IC surv. work through the process
9. Was the crew able to make appropriate adjustments to new conditions when necessary?
10. Did the quality of work meet your expectations?
11. Did the quantity of work meet your expectations?
12. Were you satisfied with the overall performance of the job and sequence of events?

RATINGS		
Not at All	Generally	Completely
		X
		X
		X
		X
	N/A	
	X	
	X	
		X
	X	
		X
		X
		X

Good Practices : _____

Concerns : _____

Comments :

Plant was stable and the operations crew was aware of plant status. They were focused on shift activities - There were 3 RO's → upcoming exam was not distracting the shift crew.

Recommendations :

none.

FIELD OBSERVATION

Observer : R. S. McKay Date : 3/19/91

Crew/Employees : Crew E

Scope of Job Observed : _____

Please mark an (x) in the column that best answers the following questions. Indicate N/A if not applicable.

1. Was the crew/individual properly equipped to perform the job (i.e., tools, knowledge, procedures) ?
2. Were procedures used and adhered to as required ?
3. Were crew members adequately skilled and knowledgeable to perform the job ?
4. Were safe work practices followed ? N/A
5. Are workers adhering to the radiological work requirements ? N/A
6. Was time used effectively ?
7. Was good housekeeping practiced ? N/A
8. Did crew function as a team to complete the job ?
9. Was the crew able to make appropriate adjustments to new conditions when necessary ?
10. Did the quality of work meet your expectations ?
11. Did the quantity of work meet your expectations ?
12. Were you satisfied with the overall performance of the job and sequence of events ?

RATINGS		
Not at All	Generally	Completely
		X
		X
		X
		X
		X
		X
		X
		X



Good Practices : _____

Concerns : _____

Comments : AS STATED BEFORE, I TALKED WITH THE ENTIRE
CIRCUIT ON THE PRESENT PLANT STATUS. THE PLANT
PERFORMANCE REMAINS SOLID WITH NO SIGNIFICANT
CHALLENGES TO OPERATING PERFORMANCE.

Recommendations : _____



Tuesday 3-19
0730 At control room 100%

1650 At control room, Plant OK.
Briefed crew, Becker, Tantor on
reasons for delaying the ops exams
Some frustration about delays,
exam content....

FIELD OBSERVATION

Observer: S. L. McKay Date: 3/20/91

Crew/Employees: CREW E TO CREW E TURNER

Scope of Job Observed: GENERAL OBSERVATION OF CREWS

Please mark an (x) in the column that best answers the following questions. Indicate N/A if not applicable.

1. Was the crew/individual properly equipped to perform the job (i.e., tools, knowledge, procedures) ?
2. Were procedures used and adhered to as required ?
3. Were crew members adequately skilled and knowledgeable to perform the job ?
4. Were safe work practices followed ? N/A
5. Are workers adhering to the radiological work requirements ? N/A
6. Was time used effectively ?
7. Was good housekeeping practiced ? N/A
8. Did crew function as a team to complete the job ?
9. Was the crew able to make appropriate adjustments to new conditions when necessary ?
10. Did the quality of work meet your expectations ?
11. Did the quantity of work meet your expectations ?
12. Were you satisfied with the overall performance of the job and sequence of events ?

RATINGS		
Not at All	Generally	Completely
		X
		X
		X
		X
		X
		X
		X
		X
		X



Good Practices : _____

Concerns : _____

① Comments : REVIEWED THE CREW ACTIVITIES, BOTH ON MIDSHIP
& DAYSHIFT. THE CREW WORK LEVEL IS WELL WITHIN
MANAGEMENT EXPECTATIONS & CREW STRENGTH. AS TO BE
EXPECTED THERE IS MUCH CONCERN OVER THE LIC. EXAMINATION
PROCESS.

Recommendations : _____

1700-1815

Crew/Employees: Becker / Taylor

Scope of Job Observed : CR activity



- [illegible]

Good Practices : _____

Concerns : _____

Comments : We are planning on taking the generator off on 3/21 PM and there will be obser. exams on 3/21, 22. I felt the crew is ready for both. Their attitude is to get the exams over with and don't want any delay. They were reviewing the STETS clearance on the socky-

Recommendations : we need to be sensitive to the change and the human factors associated with the same. Will pass this on to Sam.

Jack.

Wed 3/20

0655 IN cert 10/100pm 100% OK
Discussed plant status with Mann
Shaffer, McKinney.

0740 Telcon to Jack Baker. Scribe
results from spare main transformer
bushings are high $\approx .07$. Will resample
this AM and if confirmed, bring plant to
15% and clean bushings.

1630 - Discussion with Baker - BPA
wants to reschedule insulator drawings
because of a sub/compartment base shipment
Current plan is to bring plant down 1500
tomorrow

FIELD OBSERVATION

Observer: J Baker Date: 3/21/91

Crew/Employees: Becker / Taylor

Scope of Job Observed: Plant Remove Generator from Service
~85% → remove MSE → REC Transfer → 25% → remove RFW Pu.

Please mark an (x) in the column that best answers the following questions. Indicate N/A if not applicable.

1. Was the crew/individual properly equipped to perform the job (i.e., tools, knowledge, procedures)?
2. Were procedures used and adhered to as required?
3. Were crew members adequately skilled and knowledgeable to perform the job?
4. Were safe work practices followed?
5. Are workers adhering to the radiological work requirements?
6. Was time used effectively?
7. Was good housekeeping practiced?
8. Did crew function as a team to complete the job?
9. Was the crew able to make appropriate adjustments to new conditions when necessary?
10. Did the quality of work meet your expectations?
11. Did the quantity of work meet your expectations?
12. Were you satisfied with the overall performance of the job and sequence of events?

RATINGS		
Not at All	Generally	Completely
		X
		X
		X
		X
	NA	
		X
	NA	
		X
	NA	
		X
		X
		X

Good Practices : _____

Concerns : _____

Comments :

Carl Becker maintained overview and broad direction. Paul Taylor did an excellent job in command & control - ~~also~~ displayed excellent knowledge. - Discussed STETS with Gary W. - the released/return columns status are too close together - George Lockhart was used as

Recommendations :

Admin extra - JCO being complied with. Note Paul Taylor would not mind a 1 yr rotation to simulator instructor (note simulator & not class room).

Thursday 3/21

0700 At main control room 100%
Several switchyard insulators are
dirty - plan to down power to 20%
beginning @ 1500, clean insulators off
line with high pressure spray.

@ 1500 - Plant @ 78% ↓, discussed
plans for night work with Jack Arter

Observer: Jack Baker Date: 3/22/91 17.30

Crew/Employees: Mann / Estes

Scope of Job Observed: CR Activity

1. Was the crew/individual properly equipped to perform the job (i.e., tools, knowledge, procedures) ?
2. Were procedures used and adhered to as required ?
3. Were crew members adequately skilled and knowledgeable to perform the job ?
4. Were safe work practices followed ?
5. Are workers adhering to the radiological work requirements ?
6. Was time used effectively ?
7. Was good housekeeping practiced ?
8. Did crew function as a team to complete the job ?
9. Was the crew able to make appropriate adjustments to new conditions when necessary ?
10. Did the quality of work meet your expectations ?
11. Did the quantity of work meet your expectations ?
12. Were you satisfied with the overall performance of the job and sequence of events ?

[illegible]

Good Practices : _____

Concerns : _____

Comments : The plant was stable at ~15% and
about ready to put the generator in after insulation
cleaning. ICO requirements met - Crew relieved
since they passed their qual exam.

Recommendations : _____



Friday 3/22
0605, At control room 180° power
insulators cleaned and traps being
cleaned
0740 Briefed Mazur in Seattle telcon
on plant status

0945 check plant status w/ McKay
Connect @ synchronous speed.

FIELD OBSERVATION

Observer: MEIKEN Date: 3/23/91

Crew/Employees: LANGDON (ETAL)

Scope of Job Observed: CREW ACTIVITIES

Please mark an (x) in the column that best answers the following questions. Indicate N/A if not applicable.

1. Was the crew/individual properly equipped to perform the job (i.e., tools, knowledge, procedures) ?
2. Were procedures used and adhered to as required ?
3. Were crew members adequately skilled and knowledgeable to perform the job ?
4. Were safe work practices followed ? N/A
5. Are workers adhering to the radiological work requirements ? N/A
6. Was time used effectively ?
7. Was good housekeeping practiced ? N/A
8. Did crew function as a team to complete the job ?
9. Was the crew able to make appropriate adjustments to new conditions when necessary ?
10. Did the quality of work meet your expectations ?
11. Did the quantity of work meet your expectations ?
12. Were you satisfied with the overall performance of the job and sequence of events ?

RATINGS		
Not at All	Generally	Completely
		X
		X
		X
		X
		X
		X
		X
		X

Good Practices : _____

Concerns : _____

Comments : _____

HELD CREW MEETING ON RESULTS ON OPE.
+ PROBLEMS INVOLVED. CREW MANNING IS ADEQUATE
FOR PRESENT PLANT ACTIVITIES. CREW PERFORMANCE &
MORALE APPEARS TO BE GOOD.

Recommendations : _____

SAT 3/23

0805 IN MAIN control room. R@ 85%
Hptwell conductivity held steady after
down power. Briefed Andy Landdon on
new JCO (and crew)

1940 telcom to Norm Hancock
plant @ 75% making wd pattern
adjustments to ramp up. No other
significant issues.

SUN 3/24

1003. At control room 90% A

No significant issues, Andy Langdon
Herb discussed plant. coral, tanks
Hotwell conductivity still holding

#21 - tel. call to Norun Hancock
Plant @ 100%, no significant issues

Mon 3/25

0618 At main control room 100% Rx
Observed turnover between Hancock
and Langdon - no significant issues
Rumor was it that BPA will ask us
to stay on line until 5/2/91. Discussed
plant status with CRS and ROs

0900 telcon to Langdon - rumor on outage
start slipage was wrong

1920 - telcon to Norm Hancock 100%
no significant issues

FIELD OBSERVATION

Observer: J Baker Date: 3/26/91 1700

Crew/Employees: Shaeffer/Estes

Scope of Job Observed : CR

Please mark an (x) in the column that best answers the following questions. Indicate N/A if not applicable.

[illegible]

Good Practices : _____

Concerns : _____

Comments :

Discussed with STA coverage - he went to morning meeting and it is now clear that that is not desirable - are executing to BCO in re to extra SRO. -

Plant very quiet - Next discussion topic is what these operators can do during outages -

Recommendations : i.e. what are licence duties.



Tues 3/26

0618 In control room 100%.

Observed turnover - Milo Mann

Norm Haycock, Bill Shaffer. No

significant issues, Discussed plant
status and today's press conference
with whole crew.

FIELD OBSERVATION

Observer: McKay Date: 3-27-91

Crew/Employees: CREW C (MANN, ESTES ETAL)

Scope of Job Observed: CONTROL ROOM OPERATIONS

Please mark an (x) in the column that best answers the following questions. Indicate N/A if not applicable.

RATINGS

Not at All	Generally	Completely
		X
		X
		X
		X
		X
		X
		X
		X
		X
		X

1. Was the crew/individual properly equipped to perform the job (i.e., tools, knowledge, procedures)?
2. Were procedures used and adhered to as required?
3. Were crew members adequately skilled and knowledgeable to perform the job?
4. Were safe work practices followed? N/A
5. Are workers adhering to the radiological work requirements? N/A
6. Was time used effectively?
7. Was good housekeeping practiced?
8. Did crew function as a team to complete the job?
9. Was the crew able to make appropriate adjustments to new conditions when necessary?
10. Did the quality of work meet your expectations?
11. Did the quantity of work meet your expectations?
12. Were you satisfied with the overall performance of the job and sequence of events?

Good Practices : _____

Concerns : _____

Comments : THE CONTROL ROOM OPERATIONS & INITIATION OF
DAILY WORK ACTIVITIES WERE OBSERVED. THE NEW START
SCHEDULE FILM WCCG IS VERY MUCH A HELP &
START IN THE RIGHT DIRECTION IN ~~THE~~ CONTROLLING
WORK ACTIVITIES.

Recommendations : _____

Wed. 3/27

0620 IN main control room R/C 100%
Set in on turnover with Norm Etes
Hancock and Shaffer. Plant quiet.
Laborer backed a fork lift into #25
light pole near switch and knocking
it over. No one was injured. Lamp was
left energized as isolating lamp would
require taking out too many security lights

1840 - telco to WNP-2. Norm Hancock
100% power - no significant issues



Thur 3/28

0620 - MAIN control room 100%
Mike Mann / Norm Hancock - last night's
light pole event follow up - pole had
been determined - when circuit was
re-energized a major ground was
indicated. Circuit had to be de-
energized which took out several
security lights requiring compensatory
measures.

FIELD OBSERVATION

Observer: J BAKER Date: 3/29/91
 Crew/Employees: Langdon / Rocky / Hendrick / Newsom / ^{extra sec} / ^{STA} / ^{STA} / ^{extra} / Moore
 Scope of Job Observed: Control Room Observation BCO

Please mark an (x) in the column that best answers the following questions. Indicate N/A if not applicable.

1. Was the crew/individual properly equipped to perform the job (i.e., tools, knowledge, procedures) ?
2. Were procedures used and adhered to as required ?
3. Were crew members adequately skilled and knowledgeable to perform the job ?
4. Were safe work practices followed ?
5. Are workers adhering to the radiological work requirements ?
6. Was time used effectively ?
7. Was good housekeeping practiced ?
8. Did crew function as a team to complete the job ?
9. Was the crew able to make appropriate adjustments to new conditions when necessary ?
10. Did the quality of work meet your expectations ?
11. Did the quantity of work meet your expectations ?
12. Were you satisfied with the overall performance of the job and sequence of events ?

RATINGS		
Not at All	Generally	Completely
		✓
	✓	
	✓*	
		✓*
	NA	
		✓
		✓
		✓
	✓*	
		✓
		✓

* Note - crew was conducting bypass valve testing. Since adequate preconditioning margin they remained at full power. Note ~ max rec flow and only 4 rods remained at 4G. Pressure feedback from BPU testing caused rx pow to increase to ~100.5%. STA/SM recognized and gave feedback to CES/rec to slow down on the rate of change of BPU position. Good feedback / not well anticipated.



Good Practices: SM/STA watching core power plot on high resolution CRT (i.e. narrow range). Gave feedback

Concerns: ~~none~~. Talked to Dave Moore - rec failed during exam, we passed. B. Confusion as to who was on panel at time of need for ECC pump trip. Dave maintains Green was on the panel, he was operating TSis pulling fuses and he shouldn't have failed. Recommend we get statement from Green/Moore/Crew and provide Comments: to REC.

Plant was quiet.

Had excellent dialogue with J. Monroe (NRR License branch) as to the history of exams/standards from pre 45 Rev 5, Rev 6. Believe the key to us settling the

Recommendations: standards of regional exam is to learn from other programs (especially those with recent failures). Good insight as to the history. He will be here next week performing an assessment of the hot license exam process. Recommend our root cause group (Higgins) talk to him if he has time.



FIELD OBSERVATION

Observer: Jack Baker Date: 3/29/91

Crew/Employees: Mann / Estes 630 - 0700

Scope of Job Observed: BCO Compliance

Please mark an (x) in the column that best answers the following questions. Indicate N/A if not applicable.

1. Was the crew/individual properly equipped to perform the job (i.e., tools, knowledge, procedures) ?
2. Were procedures used and adhered to as required ?
3. Were crew members adequately skilled and knowledgeable to perform the job ?
4. Were safe work practices followed ?
5. Are workers adhering to the radiological work requirements ?
6. Was time used effectively ?
7. Was good housekeeping practiced ?
8. Did crew function as a team to complete the job ?
9. Was the crew able to make appropriate adjustments to new conditions when necessary ?
10. Did the quality of work meet your expectations ?
11. Did the quantity of work meet your expectations ?
12. Were you satisfied with the overall performance of the job and sequence of events ?

[illegible]

Good Practices : _____

Concerns : _____

Comments :

Plant was @ 100% and only issue was
SBAT in LCO due to lost chemical canister -
under control. Mann/Estes/Rambo/Blake/Hughes
Ramos/Wenham (STA) in CR. P Taylor SSS.
Discussed STA standing order on independently.

Recommendations :

Verifying control rod motion -
satisfactory.

FIELD OBSERVATION

Observer: W.D. Shaeffer Date: 3/29/91

Crew/Employees: 'C' Mike MANN

Scope of Job Observed: Dayshift turnover & crew briefing.

Please mark an (x) in the column that best answers the following questions. Indicate N/A if not applicable.

1. Was the crew/individual properly equipped to perform the job (i.e., tools, knowledge, procedures)?
2. Were procedures used and adhered to as required?
3. Were crew members adequately skilled and knowledgeable to perform the job?
4. Were safe work practices followed?
5. Are workers adhering to the radiological work requirements?
6. Was time used effectively?
7. Was good housekeeping practiced?
8. Did crew function as a team to complete the job?
9. Was the crew able to make appropriate adjustments to new conditions when necessary?
10. Did the quality of work meet your expectations?
11. Did the quantity of work meet your expectations?
12. Were you satisfied with the overall performance of the job and sequence of events?

RATINGS		
Not at All	Generally	Completely
		X
		X
NOT	OBSERVED	
		X
		X
		X
NOT	OBSERVED	
		X
		X
NOT	OBSERVED	
NOT	OBSERVED	
		X

Good Practices : Excellent turnover information presented by CRS. All personnel
understood ~~was~~ their assigned tasks. The CRS's sweater was
extremely fashionable and deserving of quite a few light-
hearted comments.

Concerns : Overall attitude was good. Some individuals still concerned
about the recent happenings and what the future holds. (i.e.
remediation, time off crew etc.)

Comments : 1100 meeting today with crews should enlighten everyone
to the plans we have for remediation, outage, post-outage
etc. (As well as we know them ~~to~~ now!)

Recommendations : NONE.

Fri - 3/29

0620 MAIN control room, live
talked issues with Andy Langdon,
Bill Esda. QA rep discussed
QFR-1 issue of Rx Protection System
30% bypass of T/G trips. I
explained design philosophy of US/NA.
first stage T/G pressure as an equivalent
of Rx power, etc. this issue will work
through the PER process.

2020 - telcon to WNP-2 - Andy
Langdon - NO significant issues
Rx engineering tells Andy that.
Although there are 4 control rods @
pos -40 - there is no advantage to
adjust flow/rod pattern to pull them
to 48. WNP-2 is UNOFFICIALLY AT
COASTDOWN!



3/30/91 Sat
0740 in main control room 100%
Mike Mann, Bill Estes, Chris Samson
NRC - discussed coastdown status
and merits of 12 hr shifts and
upcoming outage - No significant issues
Bob Parboll - 10% engineering predicts
we will enter feedwater temp reduction
mode Wed of next week

1746 - telcon to WMP-2 - Mike Mann
S/M. Wetwell concentrations for
O₂ drifted out of spec causing LCO.
Just finished purging to bring O₂ within
spec. No other significant issues



FIELD OBSERVATION

Observer: J Baker Date: 3/31/91 1940-2130
 Crew/Employees: Laradon/Rockey/^{extra 500}Prescott/Moore/Woods/Gregory/^{STA}Bentrup
 Scope of Job Observed: CR Activity

Please mark an (x) in the column that best answers the following questions. Indicate N/A if not applicable.

1. Was the crew/individual properly equipped to perform the job (i.e., tools, knowledge, procedures) ?
2. Were procedures used and adhered to as required ?
3. Were crew members adequately skilled and knowledgeable to perform the job ?
4. Were safe work practices followed ?
5. Are workers adhering to the radiological work requirements ?
6. Was time used effectively ?
7. Was good housekeeping practiced ?
8. Did crew function as a team to complete the job ?
9. Was the crew able to make appropriate adjustments to new conditions when necessary ?
10. Did the quality of work meet your expectations ?
11. Did the quantity of work meet your expectations ?
12. Were you satisfied with the overall performance of the job and sequence of events ?

RATINGS		
Not at All	Generally	Completely
		✓
		✓
		✓
		✓
	NA	
	✓	
		✓
		✓
	NA	
		✓
		✓
		✓

Good Practices : _____

Concerns : Note - Mr. Dave Moore maintains he should not have been the person who failed as RO during signal. Will contact training/ NRC. Discuss his legal rights to protest - told him to wait until after we have additional conversation with the ~~case~~ NRC.

Comments : All conditions of BCO met - Plant at full power, all rods out, max REC flow - ~~has~~ Crew has reviewed procedures for FFTR. Bontrop conducted shift rounds - Sat. Discussed the upcoming outage scope / staffing.

Recommendations : _____

3/31/91 Sunday

0654 MAIN control room Rbx @ 100%

Observed Bill Estes brief crew.

Discussed plant status with Mike Mann

No significant issues.

1616 IN MAIN control room 99% ↓

Discussed plant status with Mike Mann
Bill Estes et. al. - Constabond will
average $-\frac{1}{2}$ to / day.



FIELD OBSERVATION

Observer : McKay Date : 4/1/91

Crew/Employees : CREW E

Scope of Job Observed : DAYSHIFT OBS

Please mark an (x) in the column that best answers the following questions. Indicate N/A if not applicable.

1. Was the crew/individual properly equipped to perform the job (i.e., tools, knowledge, procedures) ?
2. Were procedures used and adhered to as required ?
3. Were crew members adequately skilled and knowledgeable to perform the job ?
4. Were safe work practices followed ?
5. Are workers adhering to the radiological work requirements ?
6. Was time used effectively ?
7. Was good housekeeping practiced ? N/A
8. Did crew function as a team to complete the job ?
9. Was the crew able to make appropriate adjustments to new conditions when necessary ?
10. Did the quality of work meet your expectations ?
11. Did the quantity of work meet your expectations ?
12. Were you satisfied with the overall performance of the job and sequence of events ?

RATINGS		
Not at All	Generally	Completely
		X
		X
		X
		X
		X
		X
		X
		X
		X
		X

Good Practices : _____

Concerns : _____

Comments : RESERVED - ① TURNOVER, ② SCHEDULED STARTS ③

CREW MANNING ; SHIFT ACTIVITIES WERE WELL

WITHIN THE ~~SCOPE~~ ~~FOR~~ ~~DO~~ CAPABILITY OF THE

PERSONNEL PRESENT.

Recommendations : _____

4/1/91 Monday
0614 In main control room 99%
Observed turnover Andy Langden -
Norm Hampole. Process computer
tripped out during the night. STA
could not effect repair. No other
significant events



FIELD OBSERVATION

Observer: Melany Date: 4/1/91

Crew/Employees: Hanson (etal)

Scope of Job Observed: RAW & CREW PERFORMANCE

Please mark an (x) in the column that best answers the following questions. Indicate N/A if not applicable.

1. Was the crew/individual properly equipped to perform the job (i.e., tools, knowledge, procedures) ?
2. Were procedures used and adhered to as required ?
3. Were crew members adequately skilled and knowledgeable to perform the job ?
4. Were safe work practices followed ?
5. Are workers adhering to the radiological work requirements ? N/A
6. Was time used effectively ?
7. Was good housekeeping practiced ?
8. Did crew function as a team to complete the job ?
9. Was the crew able to make appropriate adjustments to new conditions when necessary ?
10. Did the quality of work meet your expectations ?
11. Did the quantity of work meet your expectations ?
12. Were you satisfied with the overall performance of the job and sequence of events ?

RATINGS		
Not at All	Generally	Completely
		Y
		Y
		X
		X
		X
		Y
		X
		X
		X
		Y



Good Practices : _____

Concerns : _____

Comments : DISCUSSED THE SCHEDULED BACKSHIFT ACTIVITIES

WITH THE SWINGSHIFT MAINTENANCE SUPERVISOR.

THE PLANNED & CONTROL ROOM IS ALIVE. STAFFING IS

WELL WITHIN SCHEDULED ACTIVITIES.

Recommendations : _____

FIELD OBSERVATION

Observer: LT HAROLD Date: 4/2/91 0015-0105

Crew/Employees: Langdon, Rocky, Eades - STA, Gregory, Prescott + 2

Scope of Job Observed: Control Room Activity

Please mark an (x) in the column that best answers the following questions. Indicate N/A if not applicable.

1. Was the crew/individual properly equipped to perform the job (i.e., tools, knowledge, procedures) ?
2. Were procedures used and adhered to as required ?
3. Were crew members adequately skilled and knowledgeable to perform the job ?
4. Were safe work practices followed ?
5. Are workers adhering to the radiological work requirements ?
HP was obtaining floor smear samples in Control Room
6. Was time used effectively ?
7. Was good housekeeping practiced ?
8. Did crew function as a team to complete the job ?
9. Was the crew able to make appropriate adjustments to new conditions when necessary ?
10. Did the quality of work meet your expectations ?
11. Did the quantity of work meet your expectations ?
12. Were you satisfied with the overall performance of the job and sequence of events ?

RATINGS		
Not at All	Generally	Completely
		✓
		✓
		✓
		✓
		DID NOT OBSERVE
	✓	
		✓
		✓
		DID NOT OBSERVE
		✓
		✓
		✓

Good Practices : _____

Concerns : _____

Comments : Met Mr. Meyers, Resident Inspector from
Peach Bottom. Discussed the Plant Mgr's Course. He
asked if I knew Ken Powers who attended the course
with me. Mr. Meyers had been in the control room
earlier. He thought the plant looked good following a

Recommendations : Done by HP. Electricians were tagging
out FPC suction valve 181 for mechanical work commencing
day shift Tuesday. Probably go on Feedwater temp reduction
Wednesday. Attitudes were observed as good. Plant
was quiet. Mechanics were checking anti-rotation
collars on valve operators.



FIELD OBSERVATION

Observer: CREW D & CREW E SLM Date: 4/2/91

Crew/Employees: LANGDON / HANCOCK TURNER

Scope of Job Observed: Control room OPS

Please mark an (x) in the column that best answers the following questions. Indicate N/A if not applicable.

1. Was the crew/individual properly equipped to perform the job (i.e., tools, knowledge, procedures) ?
2. Were procedures used and adhered to as required ?
3. Were crew members adequately skilled and knowledgeable to perform the job ?
4. Were safe work practices followed ?
5. Are workers adhering to the radiological work requirements ?
6. Was time used effectively ?
7. Was good housekeeping practiced ?
8. Did crew function as a team to complete the job ?
9. Was the crew able to make appropriate adjustments to new conditions when necessary ?
10. Did the quality of work meet your expectations ?
11. Did the quantity of work meet your expectations ?
12. Were you satisfied with the overall performance of the job and sequence of events ?

RATINGS		
Not at All	Generally	Completely
		✓
		X
		X
		✓
		X
		X
		X
		✓
		✓
		X
		✓
		✓



Good Practices : _____

Concerns : _____

Comments : AS PREVIOUSLY NOTED ; VERIFIED CONTROL ROOM
ACTIVITIES ARE WITHIN THE CAPABILITIES OF ASSIGNED
CONTROL ROOM STAFF.

Recommendations : _____