

ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:8909290238 DOC.DATE: 89/09/13 NOTARIZED: NO DOCKET #
 FACIL:50-410 Nine Mile Point Nuclear Station, Unit 2, Niagara Moha 05000410
 AUTH.NAME AUTHOR AFFILIATION
 KHARDT,L. Niagara Mohawk Power Corp.
 RECIPIENT NAME RECIPIENT AFFILIATION
 RUSSELL,W. Region 1, Ofc of the Director

SUBJECT: Forwards revised action plan to address concerns noted in
 Insp Rept 50-410/89-12.

DISTRIBUTION CODE: IE01D COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 29
 TITLE: General (50 Dkt)-Insp Rept/Notice of Violation Response

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
	PDI-1 PD	1 1	SLOSSON,M	1 1
	BENEDICT,R	1 1		
INTERNAL:	ACRS	2 2	AEOD	1 1
	AEOD/DEIIB	1 1	AEOD/TPAD	1 1
	DEDRO	1 1	NRR SHANKMAN,S	1 1
	NRR/DEST DIR	1 1	NRR/DLPQ/PEB	1 1
	NRR/DOEA DIR 11	1 1	NRR/DREP/EPB 10	1 1
	NRR/DREP/RPB 10	2 2	NRR/PMAS/ILRB12	1 1
	NUDOCS-ABSTRACT	1 1	OE LIEBERMAN,J	1 1
	OGC/HDS1	1 1	<u>REG FILE</u> 02	1 1
	RES MORISSEAU,D	1 1	RGNI FILE 01	1 1
EXTERNAL:	LPDR	1 1	NRC PDR	1 1
	NSIC	1 1		

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK,
 ROOM P1-37 (EXT. 20079) TO ELIMINATE YOUR NAME FROM DISTRIBUTION
 LISTS FOR DOCUMENTS YOU DON'T NEED!

TOTAL NUMBER OF COPIES REQUIRED: LTTR 26 ENCL 26

R
I
D
S
/
A
D
D
S



September 13, 1989

Mr. William Russell
Regional Administrator
United States Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406

Dear Mr. Russell:

RE: NINE MILE POINT UNIT 2 DOCKET NO. 50-410

Your letter dated August 23, 1989 transmitted the combined Inspection Report No. 50-410/89-12 (OL) on the Requalification Program Evaluation and BWR Power Oscillation Program Inspection. This letter requested Niagara Mohawk Power Corporation to provide a Revised Action Plan to address the concerns discussed in paragraph 6.2.a of the Inspection Report.

Our internal assessment revealed the potential causes described below for the concerns listed in paragraph 6.2.a of the Inspection Report. We are conducting an independent assessment of the Unit 2 Requalification Program as described in the attached Revised Action Plan to identify and resolve the underlying root causes.

Action Plan Concern 1:

It does not analyze why NMPC was not able to detect the problems with the operator performance and knowledge deficiencies prior to the NRC conducting the requalification examination.

Potential Causes:

1. Our review of past examinations and evaluations conducted during the Requalification Program lacked sufficient depth to allow us to identify these deficiencies so that we could resolve them prior to the NRC Requalification examination.
2. Neither the instructors nor the operators clearly understood the required performance standards, especially those related to the simulator portion of the operating examination.



Action Plan Concern 2:

It does not consider whether the simulator scenarios were realistic, manageable, and the operators were not properly trained to handle complex emergency situations.

Potential Causes:

1. The crew size for simulator training was reduced from the normal operating crew size to the minimum Technical Specification shift complement shortly before the NRC Requalification examination, without sufficient training time in this new configuration. This crew size reduction was made without performing an adequate assessment of its impact on crew function and interaction. As a result, operators were unfamiliar with their new roles and responsibilities and shift supervisors experienced difficulty in establishing proper priorities for the crew and its individual members.
2. Simulator scenarios used to prepare the operators for the NRC Requalification examination were not as complex as those used during the examination. We incorrectly interpreted feedback from other utilities to indicate that the NRC favored mostly slower paced scenarios of medium complexity. Our simulator training program should have included more of the faster paced, complex emergency situation scenarios as we prepared our operators for the new style requalification examination.
3. Examination scenarios were not validated using a four (4) man operating crew.

Action Plan Concern 3:

It does not evaluate the organization interface difficulties that led to the program deficiencies.

Potential Causes:

1. The communications between Operations management and Training management was inadequate. Requalification Program concerns were not effectively communicated or discussed between the two groups. Senior level management was not aware of several major Requalification Program decisions including the one to reduce simulator crew size. Feedback from training to the plant was ineffective.
2. A number of conflicting demands existed for the operator resources including plant startup and operation, the development and validation of the requalification examination test bank, and the redevelopment of the Requalification Program.



Action Plan Concern 3:

Potential Causes: (Cont'd)

3. Plant Operations had not taken full ownership of the Operator Training program although the degree of ownership had increased over the past several months.
4. Standards for conduct of operations (e.g. communications, roles, and responsibilities) were not clearly defined for operators or instructors.

Action Plan Concern 4:

It does not analyze if the training originally conducted was satisfactorily performed and properly evaluated.

Potential Causes:

Potential causes relative to the performance and evaluation of the training originally conducted have yet to be clearly identified. The independent assessment being performed will review this area in depth.

Action Plan Concern 5:

It does not analyze the quality of the training material.

Potential Causes:

Our accreditation self-assessment revealed weaknesses in the requalification material. Our Systematic Approach to Training (SAT) project is intended to correct these deficiencies and ensure a job-relevant requalification training program.

Action Plan Concern 6:

It does not analyze if there is an attitudinal problem with some operators.

Potential Causes:

1. In general, the operators have a positive attitude toward the requalification training program. Many of the operators have expressed a willingness to work with the training department to improve the program.



Action Plan Concern 6:

Potential Causes: (Cont'd)

2. Lack of clearly defined performance standards led to confusion for both the operators and the trainers. In the absence of established standards, the operators and trainers had become frustrated while they attempted to define acceptable performance levels. This frustration may have appeared to be an attitudinal problem while in actuality, operators have a positive attitude toward training.
3. The independent program assessment being performed will also review this concern.

Action Plan Concern 7:

It does not address the underlying reasons why the performance and knowledge deficiencies exist.

Potential Causes:

See Action Plan Concern #1.

Action Plan Concern 8:

It does not contain provisions for independent assessment of your training program actions.

Comment:

An independent assessment has been incorporated into the Requalification Program Action Plan to investigate these concerns and any other concerns which may be identified during the assessment. A followup independent assessment will be conducted to measure the effectiveness of the corrective actions taken.



Action Plan Concern 9:

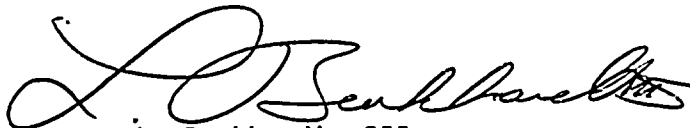
It does not consider whether Technical Specification changes are required for minimum Control Room staffing.

Potential Causes:

We do not feel it necessary to change our Technical Specifications for minimum Control Room staffing. We have demonstrated the ability to manage complex scenarios with the current minimum crew size, especially with proper training emphasis on roles and responsibilities and prioritization. It is acknowledged, however, that we are revising our training program to more accurately reflect our actual operating crew size by training and examining with an additional licensed Reactor Operator that can be summoned to the Control Room during the course of the emergency.

Changes to the original plan are shown by lines in the right-hand margin.

Very truly yours,



L. Burkhardt, III
Executive Vice President
Nuclear Operations

LB:ck
(0684b)

Attachment



Mr. William Russell

Page 6

xc: Director, Office of Nuclear Reactor Regulation
Mr. R. A. Capra, Director
Ms. M. M. Slosson, Project Manager
Mr. W. A. Cook, Resident Inspector
Records Management



NMP2 REQUALIFICATION PROGRAM ACTION PLAN

SEPTEMBER 1989

REVISION 1



NMP2 REQUALIFICATION PROGRAM ACTION PLAN

The Nine Mile Point Unit 2 Operations and Operations Training Department underwent an evaluation of individual performances and Requalification Program during the weeks of July 17 and July 24, 1989. During this evaluation, 10 of 24 licensed operators failed one or more sections of the examination. In addition, 1/2 the crews (3 of 6) exhibited sufficient deficiencies to warrant failure as teams by the Nine Mile Point Unit 2 evaluators. Based on this evaluation, Nine Mile Point Unit 2 is implementing an Action Plan to correct these deficiencies.

Our initial evaluation of the program revealed the specific issues discussed below. Management Analysis consultants will be conducting an independent assessment of the Unit 2 Requal Program to identify the underlying root causes of these weaknesses and to make sure that there are no other weaknesses in the program. In addition, we will review the adequacy of the corrective action taken. |1
|
|
|
|
|

The specific actions contained in this document are designed to correct the program, individual, and crew performance problems noted during the evaluation period, with particular emphasis on those issues of examination content and crew failures in the simulator. The specific issues include:

1. The NMP-2 Requalification Program was judged unsatisfactory by both NMPC and NRC.
2. Evaluation of the written examination by the NMPC Instructional Technologist group raised concerns about examination structure.
3. Evaluation of the written examination by the NMP-2 Operations Instructional Group raised concerns about Operator knowledge deficiencies.
4. Weaknesses were noted in crew communications
5. STA involvement in plant assessment and event control was not consistent between crews
6. Operator actions were not always in accordance with guidance as provided in the Emergency Operating Procedures (EOP's)
7. Operator actions were not always in accordance with guidance as provided in normal operating procedures during emergency events



8. Dynamic simulator scenarios used in the evaluation were not always realistic, manageable and within the 50 minute standard as set forth in ES-601
9. Teamwork, including prioritization, of crew actions, evaluation of plant conditions and communications were weak during emergency events.

|
|
|
|
|



Specific Issue #1

- A. The NMP-2 Requalification Program was judged as unsatisfactory by the NMPC Training Department and the NRC, in that:
1. >25% of the licensed operators (10 of 24) failed at least one section of the examination, failing overall.
 2. >25% of the licensed operators (7 of 24) failed the written examination.
 3. >1/3 of the crews (3 of 6) failed the simulator team evaluation.





Specific Issue #1: (Cont'd)

The extent to which organizational interface difficulties led to program deficiencies.

- d. If there is/was an attitude problems with some operators.
 - e. Why NMPC failed to generate an examination bank of high quality written questions and simulator scenarios. (Corrective Actions 3.B.5 and 8.B.4)
 - f. Why NMPC failed to properly time-validate written examination questions and simulator scenarios. (Corrective Actions 3.B.6 and 8.B.6)
 - g. If the quality of the classroom/simulator training including training materials was adequately conducted during the 1988/1989 Requalification Program.
 - h. If training and evaluation adequately addressed operator knowledge/performance weaknesses.
 - i. If the NMP2 Requalification Program Action Plan adequately addresses all issues pertaining to the Requalification Program and individual operator failures.
9. Prepare a summary of "lessons learned" to prevent recurrence. Develop a process to ensure that lessons learned at Unit 1 (Unit 2) are communicated to Unit 2 (Unit 1).
10. Conduct a followup independent assessment to measure the effectiveness of the actions taken in this action plan.
11. Prepare a "lessons learned" transmittal to address the importance of ensuring that upper level management is aware of and agrees with major program changes.

Rivers/Abbott/
Dahlberg

N/A

9/29/89

Rivers

4/1/90

4/30/90

Rivers/Abbott

10/1/89

11/1/89



Specific Issue #2:

Responsibility

Impl. Date

Comp. Date

A. Evaluation of the written examination by the NMPC Instructional Technologist Group resulted in several concerns, in that;

- 1) Test item construction is not clear.
- 2) Point values for multiple part answers were not specified.
- 3) Several double jeopardy questions were noted.
- 4) Questions requiring multiple responses were not separated out.

B. Corrective Actions

- 1) Train all Operations Training Instructors involved in writing open reference examinations, on examination development techniques (i.e., test taking, test construction, and question construction).
- 2) Review all examination questions associated with the requalification examination bank for format and correlation to learning objectives.
- 3) Review all future requalification examinations for format and organization prior to examination implementation.
- 4) Formulate a plan to complete the Systematic Approach to Training Process.

Oxford

N/A

3/1/90

Oxford

As Developed

*Continuing

Oxford

As Developed

*Continuing

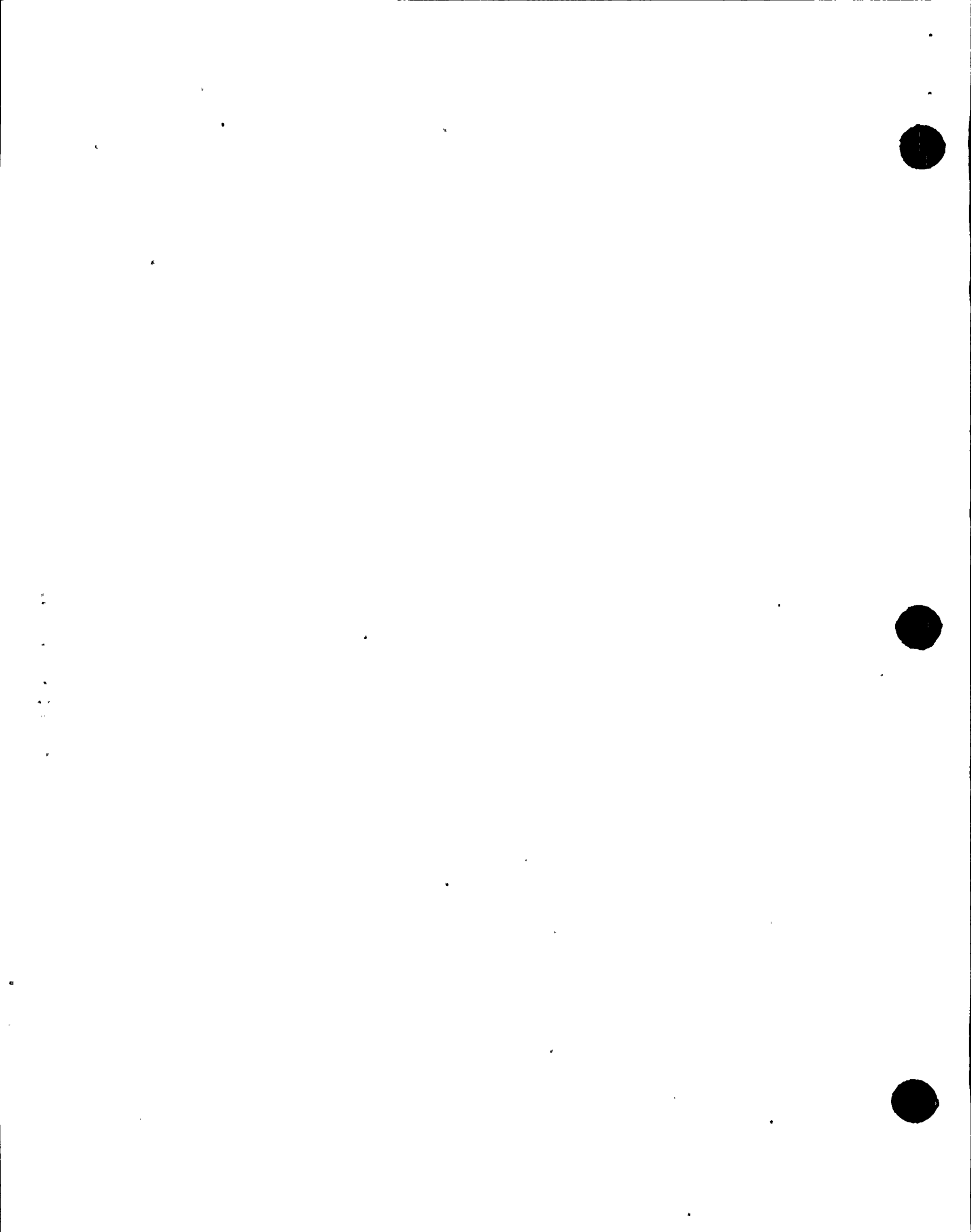
Weimer/Smith

10/1/89

10/31/89

| 1

* This item will be an ongoing process in the requalification program.



Specific Issue #3:

A. Evaluation of the written examination for knowledge and deficiencies by the NMP-2 Operations Training Group raised the following concerns, in that;

- 1) SRO's experienced difficulty in;
 - a) Determining the actions necessary for a loss of Stator Cooling Water when less than the runback setpoint.
 - b) Selecting the necessary response to a short period annunciator.
 - c) Determining Primary Containment Isolation Setpoints for various isolation groups.
 - d) Understanding operations of the EHC system Load Limiter Set.
 - e) Determining the capacity/limitations for operation with one Reactor Feed Pump.
 - f) Determining Limiting Plant Conditions on a loss of 2NPS-SWG003.
 - g) Determining possible scram signals as a result of a Loss of Instrument Air.
 - h) Causes and Effects of Reactor Level Swell.
 - i) Calculating single Loop MAPLHGR.
 - j) Determining Pressure response to an MSIV isolation following a reactor scram.



Specific Issue #3 (Cont'd):

- 2) Both SROs and ROs experienced difficulty in;
 - a) Ascertaining Operator actions on a loss of Low Pressure Feed Heater string.
 - b) Determining the actions necessary for a sympathetic alert.
 - c) Describing the EOP basis which allows for MSIV re-opening during an ATWS.
 - d) Defining the effects of Loss of Extraction Steam on Reactor Power.
 - e) Calculating total core flow when in a single loop configuration.
 - f) Ascertaining the negative response time of the Turbine Control Valves and the Turbine Control Valve Setpoint.
 - g) Determining the followup actions required following a Circulating Water Pump Trip.
- 3) ROs experienced difficulty in;
 - a) Determining Operator actions on a loss of RBCLC.
 - b) Ascertaining the steps necessary to override Containment Purge Valves following isolation.
 - c) Ascertaining the steps required to place CSH System in a Tank to Tank Lineup following initiation.
 - d) Determining immediate actions on a Loss of H₂ Seal Oil.



Specific Issue #3 (Cont'd):

- Recognizing indications of an OFG H₂ Explos
- f) Determining notifications required as a communications aide.
- g) Recognizing EOP entry conditions for an ATWS situation.
- h) Recognizing feedwater effects on Reactor Pressure.
- i) Describing plant response on a Loss of Vacuum.
- j) Identifying limitations placed on operation of Main Condenser Vacuum Breakers.

B. Corrective Actions

	<u>Responsibility</u>	<u>Impl. Date</u>	<u>Compl. Date</u>
1) Review examination results with all licensed operators requiring remediation.	Kaminski	N/A	7/31/89
2) Develop a Remediation Plan for examination failures to be conducted between 8/1/89-8/15/89.	Kaminski	N/A	7/31/89
3) Perform re-examination of all examination failures between 8/16/89-8/18/89.	Weimer/Smith	8/16/89	8/18/89
4) Add <u>all</u> questions where >20% of examinees missed the item into the next two year requalification program. EOP weaknesses and usage deficiencies will be reviewed with all Licensed Operators (See 6.B.1, 6.B.2 and 7.B.1)	Weimer	N/A	1/02/90
5) Analyze the quality of written examination questions used in the Requalification Program examinations. (See Corrective Action 1.B.8.e)	Rivers	9/15/89	10/15/89
6) Determine why NMPC failed to properly time validate written examination questions (See Corrective Action 1.B.8.f)	Rivers	9/15/89	10/15/89



Specific Issue #4:

A. Weaknesses were noted in crew communications, in that:

1. Operators used imprecise language
2. Directions were non specific
3. Reports/directives were not always acknowledged
4. Repeatbacks were often not noted or weak.
5. Orders were not directed at one individual, sometimes resulting in no accountability.

B. Corrective Actions

1. Train operators, in the simulator, to ODI 1.06, Verbal Communications. Add Learning objective to all new and revised Simulator Lesson Plans (Long Term).
2. Train instructors in the ODI and reinforce the policy to train to these standards during simulator training.
3. Observations will be conducted by management personnel (e.g. General Superintendent, Station Superintendent, Operations Superintendent and/or other Operations Management Staff) for a minimum of three (3) weeks during each Requalification Cycle that includes simulator training. This will aid in identifying and correcting weaknesses in operating crew performance.

<u>Responsibility</u>	<u>Impl. Date</u>	<u>Comp. Date</u>	
Cigler	7/31/89	10/6/89	1
Cigler	7/31/89	8/21/89	1
Willis/Peifer	8/21/89	*Continuing	

* This item will be an ongoing process in the requalification program.



Specific Issue #4: (Cont'd)

	<u>Responsibility</u>	<u>Impl. Date</u>	<u>Comp. Date</u>
4. Observations will be conducted by management personnel (e.g. Manager Nuclear Services, Superintendent of Training, Assistant Superintendent of Training and/or other Operations Training Staff) for a minimum of three (3) weeks during each Requalification Cycle that includes simulator training. This will aid in identifying and correcting weaknesses in simulator instructor performance.	Peifer	8/21/89	*Continuing
5. Schedule the Unit 1 training groups to evaluate, implementation of standards on a selected crew at least once per quarter and provide report to Operations Superintendent.	Weimer/Sanaker	10/2/89	*Continuing
6. Include video tape in post simulator exercises to more effectively critique communications teamwork and prioritization (Long term).	Kaminski	10/9/89	*Continuing
7. Schedule cross crews to evaluations of another crew at least once per calendar quarter (Long Term).	Weimer/Smith	10/2/89	*Continuing

* This item will be an ongoing process in the requalification program.



Specific Issue #5:

A. STA involvement in plant assessment and event control was not consistent between crews, in that;

1. Some STA's provided little or no assessment of events to the SSS/SED other than updating parameters and classifying events.
2. Some STA's did not provide the SSS with support in ensuring all EOP actions were completed.
3. Some STA's did not correct inappropriate actions or recommend appropriate actions.

B. Corrective Actions

1. Formalize management expectations (beyond what is defined in EPP's and AP's) for the actions of the STA during EOP's.
2. Train STA's (all SRO's) in the standard during simulator training. Add learning objectives to all new Simulator Lesson Plan Learning Objectives (Long Term).
3. Train instructors in the standard and reinforce the policy to train to these standards during simulator training.
4. Observations will be conducted by management personnel (e.g. General Superintendent, Station Superintendent, Operations Superintendent and/or other Operations Management Staff) for a minimum of three (3) weeks during each Requalification Cycle that includes simulator training. This will aid in identifying and correcting weaknesses in STA performance.

Responsibility

Impl. Date

Complete Date

<u>Responsibility</u>	<u>Impl. Date</u>	<u>Complete Date</u>	
Smith/Abbott	N/A	7/28/89	
Cigler	7/31/89	10/6/89	1
Cigler	7/31/89	8/21/89	
Willis	8/21/89	*Continuing	1

* This item will be an ongoing process in the requalification program.



Specific Issue #5: (Cont'd)

5. Observations will be conducted by management personnel (e.g. Manager Nuclear Services, Superintendent of Training, Assistant Superintendent of Training and/or other Training Staff) for a minimum of three (3) weeks during each Requalification Cycle that includes simulator training. This will aid in identifying and correcting weaknesses in simulator instructor performance.
6. Schedule the Unit 1 training groups to evaluate implementation of standards on a selected crew at least once per quarter and provide a report to the Operations Superintendent.
7. Schedule cross-crew evaluations of another crew at least once per calendar year.
8. Schedule the Unit 1 Operations Superintendent to evaluate team performance on a selected crew on a regular basis.

Responsibility

Impl. Date

Cont. Date

Peifer

8/21/89

*Continuing

Weimer/Sanaker

10/2/89

*Continuing

Weimer/Smith

10/2/89

*Continuing

Weimer/Randall

10/2/89

*Continuing

* This item will be an ongoing process in the requalification program.



Specific Issue #6:

Responsibility

Impl. Date

Comp. Date

A. Operator actions were not always in accordance with EOP's as provided in the EOP's, in that;

1. One crew violated EOP's by securing Standby Liquid Control pumps with all rods not in following an ATWS, although the RO's knew it was not an appropriate action.
2. One crew never implemented vessel flooding in accordance with EOP's, although the STA knew or suspected that conditions were met and the requirement existed.
3. Five (5) crews failed to adequately control water level 159-202" by overfilling the vessel. Confusion existed with RO's and one (1) SRO as to what normal water level was in the EOP's. In three (3) events, the water level rise was slow and controlled.
4. One (1) SRO failed to fully implement guidance for vessel flooding.
5. Two (2) SRO's failed to recognize that a diamond decision block is not an action statement, in that; when asked if 3(2)SRV's could be open they opened 3(2) SRV's when procedurally 7 were to be opened.
6. One RO suspected that an order to open 2 SRV's was incorrect, but did not question the SSS because he believed the SSS was being guided by EOP's.

B. Corrective Actions

1. Develop and implement a 2-3 day EOP refresher training session on EOP usage and basis. Include portions of Mitigation of Core Damage not covered in EOP's and emphasizing the significance of water level control and overfilling events.

Williamson

8/21/89

10/6/89

| 1
|
|
|
|





Specific Issue #7:

A. Operator actions were not always in accordance with Guidance as provided in normal operating procedures during emergency events, in that;

1. Some crews had difficulty in carrying out N2-OP-97, Section H.2 per EOP-RQ.
2. Although crews could work through OP-29 during a recirc pump trip and recovery, two crews wasted 45 minutes doing administrative tasks that were not necessary and one crew did not realize a recirc pump could not be started in the restricted zone and drove recirc flow further into the zone in an attempt to restart the pump. (Observed during NMPC Evaluation Week)
3. Several RO's did not correctly place RHR in SP Cooling or DW/SP Spray when required in an emergency situation.

B. Corrective Actions:

1. Review specific deficiencies concerning EOP required actions during EOP refresher training.
2. Implement "closed book" JPM's in the simulator on those emergency tasks that should be able to be performed without the use of a procedure.
3. Establish formal management expectations for verification of immediate actions taken during emergency conditions.

Responsibility

Impl. Date

Comp. Date

<u>Responsibility</u>	<u>Impl. Date</u>	<u>Comp. Date</u>
Williamson/ Cigler	8/21/89	10/6/89
Kaminski	1/2/90	*Continuing
Smith/Abbott	N/A	8/21/89

* This item will be an ongoing process in the requalification program.



Specific Issue #8:

A. Dynamic simulator scenarios used in the evaluation were not always realistic, manageable and within the 50 minute standard as set forth in ES-601, in that:

1. One scenario involved an ATWS following an MSIV isolation due to failed fuel (>3XNFPB isolation). In addition, the SDV ruptured in the Reactor Building causing a direct leak from the vessel to the secondary containment. The SSS was in 14 different EOP's.
 - a. This scenario was beyond the boundaries of the NMP2 FSAR.
 - b. This scenario was unmanageable in that two crews took manual pressure control as directed by EOP's, then required the same operator to inject with both SLC pumps. Both crews lost control of manually overridden automatic functions resulting in vessel depressurization and subsequent overflow.
2. All scenarios exceeded the 50 minute time guidelines.

B. Corrective Actions:

1. Develop a plan to implement each of the 15 existing scenarios into the requalification program for training and evaluation.
2. Revise each scenario validated during the requal cycle and revalidate with one crew.
3. Develop one new 50 minute scenario each cycle with material corresponding to the material taught in the cycle.

* This item will be an ongoing process in the requalification program.

Responsibility

Impl. Date

Comp. Date

<u>Responsibility</u>	<u>Impl. Date</u>	<u>Comp. Date</u>
Kaminski	N/A	10/2/89
Kaminski	As Revised	N/A
Kaminski	As Developed	*Continuing



Specific Issue #8: (Cont'd)

4. Analyze the quality of simulator scenarios used in the Annual Requalification Program examinations. (See Corrective Action 1.B.8.e)
5. Determine whether the simulator scenarios used in the Annual Requalification were realistic and manageable.
6. Determine why NMPC was unable to properly time validate simulator scenarios used in the Annual Requalification Examination. (See Corrective Action 1.B.8.f)

<u>Responsibility</u>	<u>Impl. Date</u>	<u>Comp. Date</u>	
Rivers	9/15/89	10/15/89	
Rivers	9/15/89	10/15/89	
Rivers	9/15/89	10/15/89	



Special Issue #9:

Responsibility

Impl. Date

Comp. Date

A. Teamwork, including prioritization, evaluation and communication, were weak, in that:

1. Several crews tended to "cluster" around problems.
2. One crew took an action in violation of EOP's even though the Reactor Operator knew the action was incorrect.
3. Several crews allowed alarms to continue for up to ten (10) minutes, trying to verbally communicate above the alarm noise during EOP's.
4. Some crews SSS' were not aware of sources of water that were injecting into the vessel causing overflow.
5. Several crew members did not effectively screen plant parameters to ensure pertinent EOP parameters were communicated to the SSS.
6. Several STA's were more concerned with classification of events than assessment of plant conditions.
7. SSS' did not always effectively prioritize crew actions during EOP's.
8. Two crews did not correctly evaluate system status of recirc pumps being tripped prior to drywell spray being initiated.
9. Some RO's did not effectively communicate their actions so that other members could react (i.e. Rod Insertion following an ATWS that directly impacted vessel depressurization).

B. Corrective Actions:

1. Establish formal management expectations for the roles and responsibilities of crew members during emergency conditions.

Smith/Abbott

N/A

7/28/89



Specific Issue #9: (Cont'd)

	<u>Responsibility</u>	<u>Impl. Date</u>	<u>Comp. Date</u>
2. Train crews in the standard during simulator training and add to Simulator Lesson Plan Learning Objectives.	Cigler	7/31/89	10/6/89
3. Train instructors to the standard and reinforce the policy to train to these standards during simulator training.	Cigler	7/31/89	8/14/89
4. Perform team and individual evaluations on each crew each requalification training week.	Kaminski	10/2/89	*Continuing
5. Observations will be conducted by management personnel (e.g. General Superintendent, Station Superintendent, Operations Superintendent and/or other Operations Management Staff) for a minimum of three (3) weeks during each Requalification Cycle that includes simulator training. This will aid in identifying and correcting weaknesses in crew performance.	Willis	8/21/89	*Continuing
6. Observations will be conducted by management personnel (e.g. Manager Nuclear Services, Superintendent of Training, Assistant Superintendent of Training and/or other Operations Training Staff) for a minimum of three (3) weeks during each Requalification Cycle that includes simulator training. This will aid in identifying and correcting weaknesses in simulator instructor performance.	Peifer	8/21/89	*Continuing
7. Schedule the Unit 1 training group to evaluate implementation of standards on a selected crew at least once per quarter and provide a report to the Operations Superintendent.	Weimer/Sanaker	10/2/89	*Continuing

* This item will be an ongoing process in the requalification program.



Specific Issue #9: (Cont'd)

	<u>Responsibility</u>	<u>Impl. Date</u>	<u>Com. Date</u>
8. Schedule cross-crew evaluations of another crew at least once per calendar year.	Weimer/Smith	10/2/89	*Continuing
9. Schedule the Unit 1 Operations Superintendent to evaluate team performance on a selected crew on a regular basis.	Weimer/Randall	10/2/89	*Continuing
10. Determine the reason for operators inability to handle complex emergency situations. (See Corrective Action 1.B.8.b)	Rivers/Smith	9/15/89	10/15/89

* This item will be an ongoing process in the requalification program.

