

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-454/95002(DRS); 50-455/95002(DRS)

Docket No. 50-454; 50-455

Licenses No. NPF-37; NPF-66

EA 94-265

Licensee: Commonwealth Edison Company  
4450 North German Church Road  
Byron, IL 61010

Meeting Conducted: January 9, 1995

Meeting At: Region III Office, Lisle, Illinois

Type of Meeting: Enforcement Conference

Inspection Conducted: Onsite at Byron Station Nuclear Plant,  
November 29 through December 20, 1994

Inspectors: R. M. Bailey, Operator Licensing Section 2  
N. D. Hilton, Division of Reactor Project  
R. C. Paul, Office of Investigations

Approved By: T. M. Burdick  
T. M. Burdick, Chief  
Operator Licensing Section 2

1/11/95  
Date

Meeting Summary

Enforcement Conference on January 9, 1995, (Report No. 50-454/95002(DRS);  
50-455/95002(DRS))

Areas Discussed: The apparent violations and areas of concern regarding the failure to maintain a licensed senior operator in the control room with a Unit operating at power and to properly document that finding were reviewed. The corrective actions taken or planned by the licensee were also discussed.

## DETAILS

### 1. Persons Present at Conference

K. Strahm, Vice President, Power Operations, ComEd  
K. L. Graesser, Site Vice President, Byron Station  
G. K. Schwartz, Station Manager, Byron Station  
T. E. Gierich, Operations Manager, Byron Station  
R. F. Wegner, Shift Operations Supervisor, Byron Station  
D. O. Brindle, Regulatory Assurance Supervisor, Byron Station  
T. K. Schuster, SQV Director, Byron Station  
H. D. Pontious, Nuclear Licensing Admin., Byron Station  
C. Kudalis, OPEX Administrator, Byron Station  
G. L. Heesaker, Operations Shift Engineer, Byron Station  
S. Dresser, Operations Shift Supervisor, Byron Station  
D. Boyd, Reactor Operator, Byron Station  
S. D. Bomgardon, Reactor Operator, Byron Station  
P. L. Maher, Shift Engineer, Braidwood Station  
P. Planing, Shift Manager, Dresden Station  
E. A. Broccolo, Station Manager, Zion Station  
J. Wennerholm, Unit Supervisor, Zion Station  
J. McSorley, Reactor Operator, Zion Station  
J. B. Reis, Control Room Supervisor, LaSalle Station  
M. T. Lesnal, Regulatory Performance Admin., ComEd  
W. Lipscomb, EA, Nuclear Operations Division, ComEd  
J. Gliebe, EA, Nuclear Operations Division, ComEd  
G. Wald, Nuclear Commission Admin., ComEd  
D. Hubeler, IBEW Local Union 15 representative, ComEd

### U. S. Nuclear Regulatory Commission

H. J. Miller, Deputy Regional Administrator, RIII  
C. D. Pederson, Deputy Director, Division of Reactor Safety, RIII  
M. A. Ring, Chief, Operations Branch, DRS, RIII  
M. J. Jordan, Chief, Operator Licensing Section 1, DRS, RIII  
T. M. Burdick, Chief, Operator Licensing Section 2, DRS, RIII  
H. Peterson, Senior Resident Inspector, RIII  
S. G. DuPont, Senior Resident Inspector, RIII  
R. M. Bailey, Reactor Engineer, RIII  
N. D. Hilton, Reactor Engineer, RIII  
J. A. Lennartz, Reactor Engineer, RIII  
E. W. Cobey, Reactor Engineer, RIII  
K. Requard, Reactor Engineer, RIII  
B. A. Berson, Regional Counsel, RIII  
R. W. DeFayette, Director, Enforcement and Invest. Coord. Staff, RIII  
P. R. Pelke, Enforcement Specialist, RIII  
R. A. Capra, Director, Projects Division III, NRR  
R. R. Assa, Project Manager, NRR  
G. F. Dick, Project Manager, NRR  
J. R. Gray, Deputy Director, Office of Enforcement, (OE)  
M. A. Satorius, Enforcement Specialist, (OE)

## 2. Enforcement Conference

An Enforcement Conference was held in the NRC Region III office on January 9, 1995. This conference was conducted as a result of the preliminary findings of the inspection conducted from November 29 through December 20, 1995, in which apparent violations of NRC regulations and license conditions were identified. Inspection findings are documented in Inspection Report No. 50-454/94026; 50-455/94026, transmitted to the licensee by letter dated December 30, 1994.

The purpose of this conference was to (1) discuss the apparent violations, causes, and the licensee's corrective actions; (2) determine if there were any escalating or mitigating circumstances; and (3) obtain any information which would help determine the appropriate enforcement action.

The licensee's representatives did not contest any of the apparent violations and were in agreement with the NRC's statement of the areas of concern.

The licensee's representatives described the events which led to the apparent violations, including root causes and corrective actions taken and planned. A summary of the licensee's corrective actions is included in the attached handout that the licensee provided at the conference (Attachment 1). Among these actions taken or planned in the area of operations were revised policies addressing mid-shift turnovers, notifications to management and log entries to address some of the NRC's immediate concerns.

**BYRON NUCLEAR POWER STATION**

**FAILURE TO MAINTAIN A LICENSED  
SENIOR OPERATOR IN THE  
CONTROL ROOM**

**ENFORCEMENT CONFERENCE**

**JANUARY 9, 1995**

**REGION III**

## AGENDA

Opening		K. Graesser
Introduction		G. K. Schwartz
Chronology		S. Dresser/ G. Heesaker
Safety Significance		R. Wegner
Conclusions		R. Wegner
Corrective Actions		T. Gierich
Overview		
	Site	K. Graesser
	Company	K. Strahm

## APPARENT VIOLATIONS

Failure to maintain a licensed senior operator in the common unit dual control room with a unit in other than cold shutdown or refueling in accordance with 10 CFR 50.54 (m)(2)(iii);

Failure to record the occurrence in the operations shift logs in accordance with Technical Specification 6.8.1.



## OVERVIEW of CHRONOLOGY

Friday, October 14, 1994 (1st Shift, Thurs. 2200 - Fri. 0600)

- U2 Shift Supervisor (SS) relieves Station Control Room Engineer, (0203).
- U2 SS exits Main Control Room (MCR) with the Turbine Bldg Equipment Attendant (EA) to supervise swapping of 2B Feed Water Pump oil filter, (0210).
- NSO's realize no SRO in MCR and call on radio for an SRO to return to MCR, (0230).
- U2 SS returns to MCR followed shortly by the U1 SS and then the SCRE, (0232).
- After turning over to SCRE, U2 SS reports error to Shift Engineer, (0245).
- SE and U2 SS review Tech Spec Table 6.2-1 (Minimum Shift Crew Manning) and decide no Tech Spec violation has occurred.

Friday, October 14, 1994

- SS's and SE assume duties and begin shift

Saturday, October 15, 1994 (1st Shift, Friday 2200 - Saturday 0600)

- SS's and SE perform closer review of Tech Specs and determine the incident violates Tech Spec 6.2.2.b which requires an SRO in MCR at all times.
- SE documents incident on a PIF and the Operations Manager is later notified. It is not clearly communicated that a Tech Spec violation has occurred.

Monday, October 17, 1994

- PIF is reviewed at Screening Meeting by Shift Operations Supervisor (SOS) and Regulatory Assurance. Identified as a 30 day reportable event (LER).

## NARRATIVE of CHRONOLOGY

October 14, 1994

On first shift, during the early morning of October 14, 1994, the Unit 2 Turbine Building Equipment Attendant (EA) came to the Unit 2 SRO Shift Supervisor (SS) in the SE's Office requesting guidance for swapping the oil filter on the 2B Feedwater Pump. The SS needed to talk to the Unit 2 NSO on an unrelated topic, so he told the EA to go to the Unit 2 desk and that he, the SS, would join him in a moment. At about 0201 hrs, the SS entered the Control Room and joined the EA at the U2 Nuclear Station Operator (NSO) Desk intending to discuss the pending filter swap with the NSO and the EA.

The Station Control Room Engineer (SCRE) approached the U2 NSO Desk and asked the U2 SS to relieve him for a few minutes. The SS agreed and, after a turnover, the SS assumed the Command and Control duties of the Control Room Supervisor SRO.

This SS stated that he normally moves his security badge to a different location on his body when he is performing a relief for the SCRE, as an additional reminder of his Control Room Supervisor responsibilities. On this occasion, however, he forgot to move his badge [Lapse of Memory/Recall]. There is no policy or procedure that requires the Control Room Supervisor SRO to perform this action. The SCRE exited the Control Room at 0203 hrs leaving the SS in charge of the Control Room.

The SS then discussed the procedure for swapping the Feedwater Pump oil filter to the EA. When he had completed his explanation, the EA was still not comfortable with performing the filter swap alone. The SS was focusing on the EA's lack of confidence in performing the pending task and his role in helping the EA [Tunnel Vision]. During this conversation, the SS became so involved that he mentally reentered his normal role as an in-plant supervisor. The SS told the NSO that he would accompany the EA and help him with the task, a routine part of his normal first line supervisory duties [Habit Intrusion]. The NSO was not aware that the Shift Supervisor had taken the SRO duty for the Control Room [Unawareness], and therefore, he did not remind the SRO of his Control Room Duties.

The SS did not remember at that moment that he had the responsibility as the SRO in the Control Room [Lapse of Memory/Recall]. Unfortunately, his Shift Supervisor instincts came into effect [Reflex/Instinctive Action]. He exited the Control Room at 0210 hrs, and accompanied the EA to the 426' Turbine Building to help swap the oil filter on the running FW pump. In no way at all were the SS's actions malicious or intentional.



During a phone conversation at approximately 0230, the Unit 1 NSO was told that a Maintenance Foreman was going to be coming in to talk to the SCRE. The Unit 1 NSO commented to the other NSOs present that the SRO was not in sight. On infrequent occasions, the SRO is out of the line of sight of the unit panels for short periods of time, such as when checking the back panels, going to the copy machine, or to the printers. The NSOs had been involved with their duties, and were not immediately aware that there wasn't an SRO present in the Control Room [Unawareness]. One of the extra NSOs performed a quick check behind the panels and determined that there was no SRO present in the Control Room. The Center Desk NSO immediately called the SE office. When no one answered, the NSO called on the radio for an SRO to come to the Control Room. Three messages were transmitted in a short time (within a minute).

During his absence from the Control Room, the SS had been assisting the EA in swapping the Feedwater Pump oil filter. They had finished the job, but the SS was still in the plant when the Center Desk NSO made his request over the radio. The SS realized what he had done, and immediately returned to the Control Room. The Shift Supervisor reentered the Control Room at 0232 hrs, after an absence of 22 minutes.

The other SRO Shift Supervisor (SS2) on duty that morning also heard the radio message, verified the message over the radio, and came to the Control Room, entering at 0234 hrs, just after the other SS's return. Moments later, at 0237 hrs, the SCRE also returned from his plant tour. He then assumed the responsibility of the Control Room Supervisor SRO.

At no time during this incident did a transient or accident occur. Unit 1 was in Mode 6 and Unit 2 was in Mode 1, steady state and stable throughout the period that the SRO was absent from the Control Room.

When the SS was relieved of the Control Room Supervisor SRO responsibility, he went directly to report his error to the Shift Engineer (SE). The SE counseled the SS on what the Company expects of the SRO manager in the Main Control and how these expectations apply to the SS when he takes on that responsibility. The SS volunteered to write the PIF and the SE said he would handle it after he had more facts. The SS was visibly upset by the matter so the SE took him outside for a walk to get some fresh air and to put his mind at ease by explaining that it wasn't on purpose and that the event would be looked at as a mental lapse on his part and not malicious in nature.

Knowing of a requirement for an SRO in the Control Room, the SE & SS reviewed Tech Specs for applicability. Looking at Tech Spec Table 6.2-1, titled Minimum Shift Crew Composition, the SE and the SS decided that although there was some question whether or not minimum manning had been maintained (per paragraph 2 Table 6.2-1) the requirement was now satisfied and there was no sense of urgency to write a PIF.

Since it was now late in the shift the SE decided to continue his investigation the next day at 1800. The next evening further clarification was found in Tech Spec 6.2.2. Returning to work later that evening (Friday night for Saturday, October 15, first shift) were two of the NSO's from the previous night. After the 2300 shift briefing an SS informed the SE that the NSO's from the previous night were discussing the matter of the SRO leaving the MCR with the new NSO's. The SE went into the MCR on Unit 1 and questioned them about the matter asking who noticed that the SRO was gone, what prompted them to notice & why did it take so long to notice. Away from the main conversation an NSO asked the SE how high had this gone and the SE replied that so far he was the only one but that the Ops Manager would be informed later that night when he came in to support an outage appreciation event at 3 AM. The SE then called Security and requested door records for the MCR. After reviewing those records it was determined that the absence was 22 minutes and that there was no other SRO in the MCR at that time. The PIF was then written. Although the SE realized that a Tech Spec requirement had not been met he did not realize at the time that it was outside the bounds of the Tech Spec and therefore did not make any further notification or log it.

Later that shift, at approximately 0300, the SE talked to the Operations Manager. He told the Operations Manager that they had experienced a problem and that a PIF had been written. The SE stated that the SRO had left the MCR. The SE told the Operations Manager that when the NSOs realized it they immediately called the SRO back to the Control Room. The Operations Manager misunderstood this and thought that the SRO was just heading toward the door [Verbal Communications]. During this conversation, the SE did not indicate that a Tech Spec violation was involved.

The incident was reviewed at the next PIF screening meeting which was held Monday, October 17. Per BAP 1250-2, Problem (Deviation) Identification and Root Cause Investigation Procedure, the incident was reviewed by the Shift Operations Supervisor and the Regulatory Assurance Department, and identified as a 30 day reportable event (LER). The PIF was assigned as a significance level 3 and investigation level 3.

When the SS returned to work (from his "weekend") on Tuesday the 18th, the Shift Operations Supervisor (SOS), who had been present at the PIF screening meeting the previous day, met with the SS to ask about the details of the event. The SOS asked the SS how long he had been out of the Control Room. The SS replied that it had been for about 20 minutes. The SOS recognized the severity and magnitude of the event and had a Security Computer report of the Control Room access generated to obtain an exact time figure for the duration of the event. This information was obtained Tuesday morning and was discussed with the Operations Manager at that time.

## SAFETY SIGNIFICANCE

### Event Safety Significance was Minimal

- Number of SROs on shift = 4  
Number of ROs on shift = 6  
(During the event, at least 5 ROs were in the MCR)
- U-1 Status: Stable in Mode 6  
Boron 2135 ppm, ARI, SR NI 3 cps, RCS at 82 F and 0 psig  
Rx Vessel Level being maintained below Rx Flange
- U-2 Status: Stable in Mode 1  
Rx at 99 %, Turbine at 1167 MWe, RCS at 580 F and 2235 psig
- No off normal events occurred during the MCR SRO's absence. No significant reactivity changes were in progress. No actual adverse safety impact.
- The STA was available within 10 minutes of the MCR.
- Once it was noticed that the SRO was not in the MCR, two Shift Supervisors responded to the RO's radio call and immediately reported to the MCR.

### Regulatory Significance

- Shift Supervisor failed to focus on his responsibilities as SRO in Charge of the MCR.
- Technical Specification wording in "Administrative Controls" (Section 6) was not noticed at the time of the occurrence. Later, upon the Shift Engineer's return, the PIF was written and the proper Reportability determination (ie. 30 day LER) was made.
- On-shift Licensed Personnel were sensitive to the matter but did not aggressively communicate the issue to upper management.
- Past events were not identified, so corrective actions could not be identified which would have prevented this more serious event from occurring.

## CONCLUSIONS

- **THE ACTION WAS UNINTENTIONAL.**
- The communications in the control room were less than our expectations.
- The middle of shift reliefs were less than our expectations.
- The communications of this event and the communication of the significance of this event did not meet our expectations.
- We did not fully ensure our expectation of the proper control room culture.
- We did not have the proper focus on superior plant operations for all conditions.
- We hesitated in writing the PIF - we did not display our expectations of conservative plant operations.
- This was a self identified event. The PIF process worked in that when the problem was identified, the PIF was written and the investigation began to fully understand the problem. The safety net was tested and it worked.
- This is NOT indicative of past operations performance.

## CORRECTIVE ACTIONS

### PURPOSE

- To ensure the operators at Byron Site feel the responsibility they are charged with.
- Not to just focus on this event, but to look at enhancements to total plant operations and get back to core business.
- Not minimize this event as a once in a lifetime. Think of this event as it should never had occurred and it will not ever occur again.
- Look at what allowed this event to occur.

### WHO IS RESPONSIBLE FOR THE CORRECTIVE ACTIONS

- THE OPERATIONS MANAGER



**SHORT-TERM CORRECTIVE ACTIONS AS A RESULT OF THE EVENT (All Completed)**

- Placed a physical barrier in place to prevent the duty SRO from leaving the Main Control Room (clasp on the Security Card Reader Badge).
- Communicated the event to all our operators (see attached daily orders).
- Communicated our expectations to all our operators (see attached daily orders).
- Performed a Level III Root Cause Investigation to determine proper casual factors (started on 10/18/94).
- The root cause investigation was completed and identified 12 inappropriate actions. From the inappropriate actions 26 corrective actions were pursued. Of the 26 corrective actions recommended 23 have been completed with 3 currently in progress (see attached EVENT/PIF CORRECTIVE ACTIONS).
- Involve our operators in our corrective actions. Shift Engineer and SRO involved in the event were responsible for developing further enhancements.



- Revised Policies for the Operations Department
  - Log entries and turnover items (BAP 350-1)
  - Control Room announcements on who is in charge after a turnover(BAP 335-1)
  - How to conduct a mid-shift turnover (BAP 300-1, 335-1)
  - Notifications to management (Operating Policy 400-16)
  - Morning phone message on plant operations (Operating Policy 600-1)
  - Notifications both inside and outside the company (Operating Policy 400-16)
  - Minimum manning requirements (BAP 320-1)
- Shift Engineers were assigned the task of re-focusing on their responsibilities and developing the Shift Engineer Mission Statement of responsibilities (see enclosed).
- Other examples of improvements are:
  - Operations Self Assessments in Training
  - Electronic Rounds and Turnovers
  - Shift Engineers' Ownership in monthly meetings
  - Operations Manager's discussions with requal groups during requal
  - Shift Operations Supervisor's number one assignment of involvement in Training to ensure our expectations are being met.

## ACTION AS A RESULT OF THE EVENT

Lesson Plan regarding Tech Spec Section 6. Highlight pertinent to Licensed Operators on shift and train

and Shift Logs and Turnovers to enhance documentation and review of such.

At Managers' meeting, the Byron Operations Manager will included will be the root cause, causal factors, and the

of changing the Security Door access computer to from exiting.

event occurred. The  
y for safe and conservative  
e event because we  
itive environment we  
aw we must not confuse our  
economic goals.

Engineers that was started  
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essment of the last U-2 unit

Supervisor reviewed both the  
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This is being done  
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## IMPROVEMENTS

Plans were being developed when the event occurred. The priority was given to a new site strategy for safe and conservative operations. This strategy was recognized prior to the event because we focused the company focus on the competitive environment we operate in. We want our operators and the site to know we must not confuse our safe and conservative operations with our economic goals.

Leadership coaching of the Operating Engineers that was started last year. The coaching was started to ensure the upper levels of management knew our expectations to provide leadership values to the Operating Engineer's self assessment of the last U-2 unit was part of that change process.

Operations Manager and the Shift Operations Supervisor reviewed both the recent INPO Operations Managers meeting and the Operating Excellence Seminar recently concluded at Calvert Cliffs to ensure our proper. (PIF generation, Trend analysis, removing barriers)

Conference to all Site Operations Managers on the challenge to operations. We need to ensure we have the safe and conservative plant operations. We need to ensure that operators need to know that conservative operations will be rewarded and non-conservative operations will not be rewarded or supported.

Expectations to everyone in operations. This is being done through coaching sessions in small groups to equal class seminars on operations.

Operators must understand they are the last line of defense

Operators must understand they are in charge

Operators must not accept the status quo

Operators must have a questioning attitude

Operators must not accept work-arounds

Operators must expect superior performance from themselves and the same from their crew.

Operators must be above any personal interest. The safety of these units, the full disclosure of any abnormal condition, must be our responsibility.

Operators must feel the Responsibility of the control room command

AS	Complete
Procedure enhanced.	Yes
Added in 12/10/94 by Order.	Yes
Added in 12/10/94 by Order.	Yes
Procedure enhanced	Yes
Added in 12/10/94 by Order.	Yes
Procedure enhanced.	Yes
Procedure enhanced.	Yes
Added in 12/10/94 by Order.	Yes
Procedure enhanced.	Yes
Added in 12/10/94 by Order.	Yes

- An Operating Department Self Assessment Committee was established to look at this event along with our operating culture (including communications, command and control responsibilities, MCR professionalism and decorum, benchmarking, et). This Committee, consisting of one person from each level in the Operating Department, will be a standing committee that reports to the Operating Manager and looks at operations as a whole to improve operations high standards.
- In addition, not as a result of this event but accelerated because of it, we have assigned the Operations Self Assessment Committee to look at all of the shift operations and have implemented the following recommendations:
  - Two SRO's assigned to the Control Room. SCRE will be single point of accountability. He will be relieved of Administrative duties and will maintain his overview function.
  - Rules of conduct for the SRO turnover in the Main Control Room.
  - Relieving the shift operations of some of their administrative burden to enhance focus on our unit operations
  - Operating Management, who work outside of the MCR, directly reporting to the Shift Engineer will work out of the Shift Engineer's office.
  - Reinforce the "quiet time" for MCR Turnovers and enhance the Shift Briefing protocol.

## EVENT CAUSAL FACTOR OVERVIEW

### Lapse of Memory/Recall:

Shift Supervisor failed to move his badge as had been his practice to help him to remember when he was in charge of the control room.

When Shift Supervisor went into the field with the Equipment Attendant he did not remember that he was in charge of the control room.

### Tunnel Vision:

Shift Supervisor became so involved in explaining procedure to Equipment Attendant that he mentally re-entered his normal role as in-plant supervisor.

### Habit Intrusion/Reflexive/Instinctive Action

Shift Supervisor accompanied Equipment Attendant into the field as he usually does in the performance of his first line supervisory duties.

### Unawareness:

NSO had not been told that Shift Supervisor had assumed control of control room and so did not remind Shift Supervisor that he could not accompany Equipment Attendant into the field.

NSOs involved with their duties and not immediately aware that no SRO was not present in the control room.

### Not Familiar With Sources:

On shift licensed personnel could not find Technical Specification that required one SRO to be in the control room at all times.

### Written Communication:

Shift Engineer did not log event because believed it was an issue of personnel error by the Shift Supervisor.

### Verbal Communications:

Operations Manager misunderstood Shift Engineer to say the Shift Supervisor had been stopped at door and he was leaving control room instead of that he actually had left for some time.



## EVENT/PIF CORRECTIVE ACTIONS

<u>Inappropriate Action</u>	<u>Corrective Action</u>	<u>Status</u>	<u>Complete</u>
<ul style="list-style-type: none"> <li>• The SS did not totally refocus his attention on his new responsibilities and left the Control Room while responsible for the Control Room SRO duties.</li> </ul>	Re-enforce Management expectations when accepting a position's responsibilities.	Included in 10/19/94 & 12/10/94 Daily Orders.	Yes
	Develop a clasp to remind wearer of SRO responsibilities.	Clasp in use beginning 10/19/94.	Yes
	Review BAP descriptions of roles and responsibilities of Licensed Shift Personnel and ensure responsibilities are clearly documented. (BAP 300-1, BAP 335-1)	Procedures enhanced.	Yes
	Review possibility of changing the door access computer to prevent the last SRO from exiting.	NTS #454-180-94-01500-01 tracks this item to completion.	No
<ul style="list-style-type: none"> <li>• Shift personnel did not realize their responsibility to pursue the issue in an aggressive and timely manner.</li> </ul>	Counsel the personnel regarding their responsibilities concerning this event.	Both the SE and the SS received counselling on 10/19/94 in addition to disciplinary action.	Yes
	Communicate management expectations to all shift personnel to expeditiously notify the appropriate personnel(including upper Operations management) upon Technical Specification violations or potential violations.	Included in 12/10/94 Daily Order.	Yes
<ul style="list-style-type: none"> <li>• Personnel on shift did not immediately realize or identify the Tech Spec Requirement that was applicable.</li> </ul>	Emphasize the importance of Section 6 of Tech Specs.	Included in 10/19/94 Daily Order.	Yes
	Revise BAP 320-1 and BAP 335-1 to clearly include the appropriate Technical Specification requirement.	Procedure enhanced.	Yes
	Enhance Training Lesson Plan regarding Tech Spec Section 6.	TRR written to train operators in 1st quarter 1995.	No



<u>Inappropriate Action</u>	<u>Corrective Action</u>	<u>Status</u>	<u>Complete</u>
<ul style="list-style-type: none"> <li>• Shift personnel did not document the event in the respective Log Books or note it as a Turnover item.</li> </ul>	Emphasize use of logs and turnovers as a communications tool and as a legal document concern.	Included in 12/10/94 Daily Order.	Yes
	Counsel the SE and SS regarding their responsibilities.	SE and SS received counselling on 10/19/94.	Yes
	Develop Computerized Logs and Turnovers to enhance documentation and upper management review of such.	Efforts are ongoing in this area	No
	Review BAP 350-1 for possible enhancements.	Procedure enhanced.	Yes
<ul style="list-style-type: none"> <li>• The PIF was not written in a timely manner or written such that it clearly related the problem that had occurred. A Security report of the Control Room access doors was not included with the PIF package.</li> </ul>	Emphasize writing PIFs on all identified problems with content consistent with management expectations.	Included in 12/10/94 Daily Order.	Yes
	Counsel personnel regarding their responsibilities.	Personnel counselled on 10/19/94.	Yes
<ul style="list-style-type: none"> <li>• On-shift personnel experienced communication problems with upper Management.</li> </ul>	Emphasize the importance of concise communications within the Department.	SE received counselling on 10/19/94.	Yes
	Counsel the SE about his need to better communicate with personnel throughout the organization.	Included in 10/19/94 Daily Order.	Yes
	Revise Operating Policy #400-16 to instruct the SE to notify appropriate personnel upon Technical Specification violations and potential violations	Policy enhanced.	Yes

<u>Inappropriate Action</u>	<u>Corrective Action</u>	<u>Status</u>	<u>Complete</u>
• A description of the event was not included in the morning Plant Status phone message.	Reinforce management expectations concerning the content of the phone message.	Included in 12/10/94 Daily Order.	Yes
	Review Operating Policy #600-1 to address message content and to have the SE responsible for overseeing the meeting.	Policy enhanced	Yes
• The Senior Resident Inspector was not expeditiously notified.	Emphasize management support for open, honest, and timely notifications and communications.	Included in 12/10/94 Daily Order.	Yes
<u>Additional Items</u>			
• Control Room Decorum and Professional behavior did not match Management expectations.	Reinforce Management expectations for Control Room Decorum and Professional behavior.	Included in 12/10/94 Daily Order.	Yes
• On Shift organization requires a critical self assessment with corresponding corrective actions due to:	Reevaluate Control Room Manning/ Roles/ Responsibilities.	Final implementation in progress.	Ongoing
1) performance issues,	Implement two SROs in MCR.		
2) desirability of 2 SROs in the Control Room,	Reduce Administrative Work load from on-shift personnel.		
3) advent of Electronic Work Control System and Electronic Out of Service,			
and			
4) NRC concerns.			
• Ensure other 5 ComEd Sites are aware of this event.	Byron OM to present at upcoming OM seminar	Being scheduled	No

## SITE VICE PRESIDENT OVERVIEW

- From the presentation, I believe you can see our Operations Personnel are dedicated to do 100% of the job and are absolutely concerned with Safe Conservative Operations. On October 14, 1994, the Shift Supervisor and Shift Engineer did not meet our expectation and standards, nor did they meet their own.
- As Tom Gierich said, in 1994 we have been focusing on enhancements in the operating area. It is our No. 1 Business Strategy for 1995 and one of our Focus Issues.
- During 1994, we have been reviewing:
  - Our concerns on Operational performance. Byron has always had a strong record.
  - Reviewing PIF's for human performance issues, to classify so we are able to address, and correct.
  - Operating Manager has had meetings with Shift Engineers and Operating Engineers.
  - As stated the event was self-identified, had low safety significance, but high management significance.
- I hope we have shown during our discussion that we have taken this event very seriously. We don't believe the facts support escalated enforcement. Byron Site has been operation focused, has had a strong conservative operating approach and this event showed us that "yes" we have the opportunity for further improvements.
- We believe the root cause of the event was as our Causal Factor showed it to be, a "lapse of memory/recall". I was concerned that the event was characterized in the Inspection Report as "inattentiveness to duty" because this phrase has a special meaning in the Nuclear Industry that applies to occurrences like sleeping and not to inadvertent actions taken in pursuit of plant responsibility.

File Location: 1.02.0169

DAILY ORDER SUBJECT
SUBJECT: SRO in the MCR/ Ops. Self Assessment

SHEET 1 OF 2  
 EFFECTIVE DATE: 10-1-94  
 EFFECTIVE THRU: 11-19-94  
 WRITER/DEPT. RFW/OP  
 AUTHORIZED BY: R. Wegman  
SOS/JOE

## ORDERS:

Last week we had an occurrence that resulted in a Technical Specification Violation that you should all be aware of. For a period of 22 minutes, there was not a SRO in the Main Control Room. Tech Spec 6.2.2.b states, "... at least one licensed Senior Operator shall be in the control room". This was a very serious mistake on our behalf with obvious regulatory repercussions. This is comparable to having a NSO leaving the "at the controls area" (ie. horseshoe) for 22 minutes. Obviously that can't happen.

The following short-term corrective actions (3) need to be communicated:

1. The Duty SCRE will use the identification clasp that has been made up. This must be passed from one individual's film badge to the other to identify the SRO in Command and Control of the MCR. This clasp will function as a positive control method for ensuring the SCRE/CRS cannot physically card out of the MCR.
2. You need to realize that Tech Spec Section 6 requirements are equally important as "other" Tech Specs. The people involved had some question about the Tech Spec impact since it was in Section 6. This is a misconception. This event is considered "operation prohibited by Tech Specs" and is reportable to the NRC per 10CFR 50.73 (a)(2)(i)(B). An LER will be written. Reportability Manual SAF 1.15 applies for this incident.
3. The seriousness of this event must be communicated to all licensed personnel on shift. This Daily Order satisfies this for now; more information will definitely follow.

CONTINUED

SHIFT	SE	WSS	SS	SS	SCRE	NSO	NSO	NSO	NSO	EO	RWS
A	JB	@	MAN		MRK	in	HR	an	mw	bs	EF
B	GA	SLP			IMW	ST		Ind	SW	MS	Jed
C	COO	DS	JW		RO	MAS	CR	RP	all		
D	CH	HR	MM		MA	DR	TH	m		TH	GP
E	SW	SP			HR	MM	JAN	MS	TS		
F	BS	GR			RAK	DR	HB	BS	JAN	TSU	

APPROVED (Final)

APR 25 1995

C.O.S.M.

(0615A/0032A/041989)

If someone was looking at our performance the past several weeks, they would probably question what's occurred. The following is a list of some of the more notable events:

- a. 2B AF Pump Trip due to operator miscommunications during the U-2 Rx Trip Response.
- b. U-1 Train B Cnmt Ventilation Isolation during an SSPS procedure with SED.
- c. 1B D/G Trip while hanging the DC X-tie Surveillance.
- d. 1B CV Pump Start-up with no oil in the Gear Changer.

This list doesn't include a couple of the equipment mis-positionings that have occurred. Our objective is not to go into detail on any of these. The point is OUR performance has been far from stellar. This last event has the possibility of resulting in a Level III, Civil Penalty Violation.

At this time, we need to increase our focus. Operating Management will be evaluating themselves and also shift performance. We will decide prior to each Mode Change whether we are operating in a flawless, conservative manner. Only after we are satisfied will Unit 1 progress up in modes.

Communications is at the heart of much of this - communications with each other in the MCR, in the field, with other departments, to upper management, and also to the NRC! You should call myself or Tom Gierich, day or night, to discuss any of this.

Recently, the Operations Department received notice of a SALP 1 Rating from the NRC. Let's use this latest incident to get back on track where we all have worked so hard to get.



File Location: 1.02.0169

DAILY ORDER SUBJECT
SUBJECT: NRC Comments / Mgt Info. re: "NRC Special Inspection for SRO out of Control Room"

SHEET 1 OF 4  
EFFECTIVE DATE: 12/10/94  
EFFECTIVE THRU: 11/10/95  
WRITER/DEPT. RFW, OP  
AUTHORIZED BY: R. W. Rabin  
SOB/OE

ORDERS:

Please read the attached.  
Sorry for the length. I tried to cover  
all the bases.  
As always, I'm interested in your feedback.  
Thanks.

SHIFT	SE	AS	SS	SS	SCRE	NSO	NSO	NSO	NSO	EO	RWS
A	ROB	Q	MSW		MMR	JA	HR	AW	MO	ROB	EX
B	BA	SL			MM	ST	RV	Ind	SW		JE
C	ROB	DTJ	JR	ROB	MM	MM	CH	RY	off AC	NEW	RE
D	GTJ	MM	CR		MM	MM	CH	AC	off	CR	
E	SW	GA			MM	MM	SW	MM	BU		MM
F	AT	ROB	MM	CR	PAK	MM	MM	MM	MM	STU TMM	MM

RECEIVED (Final)

DEC 25 1994

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After a week and a half, the NRC has concluded their "Special Inspection" regarding the 10/14/94 incident where an SRO was out of the MCR for 22 minutes. The meeting minutes are getting typed up and we hope to get them out soon. As with any serious event (of which this continues to be) there are many lessons to be learned. The purpose of this letter is not to point fingers at anybody. More importantly, we must take a critical self assessment of our performance. That being to learn from our mistakes and move ahead in pursuit of continuous improvement.

As of Friday, the NRC can't tell us what the violations are, or what the severity might be at this time. In addition to the lack of SRO in the Control Room being a potential violation, there are a couple other main points that came out of the Inspection and need to be discussed here. The two areas are "Mid-shift Reliefs" and our Department's "Reporting of the Events." A few words will be presented here regarding each. Also, they are continuing to look at our station's Overtime Records for the B1R06 period. The O.T. was excessive and the documentation of deviations was not stellar. More information is pending in this area.

*NRC Comment #1: Mid-shift Turnovers / Reliefs must have a higher level of formality.*

*Response 1a:* Generally, we do a good job at conducting "End of Shift" Turnovers. It has been noted that our mid-shift reliefs (e.g. breaks for lunch or tours) are inconsistent, at best. *We expect that ANY turnover by SRO or RO Licensed individuals (NSO, SCRE, SE, SF) have a similar level of formality and seriousness as the shiftly ones.* The extreme example that has always been unacceptable is, "I had it, you got it". I would expect that the mid-shift turnovers take a minimum amount of time - both to transfer all essential items and also for the new person to be comfortable to resume duty. We realize this is situational with the duty extra NSO, for example. *The turnover must have the same level of content as the end of shift ones also.* They must include plant status, Tech Spec issues, evolutions/work in progress, manpower assignments, etc. The latest Turnover sheet, Log entries, and "Work in Progress" sheets should all be referred to. Self discipline, respect for license duties, and personal accountability go a long way. The NRC was quite critical of our MCR decorum. We must all realize that professionalism and other cultural aspects build over time. Always room for improvement here.

*Response 1b:* The SRO in Charge of the MCR (i.e. SCRE / CRS) must be known by the Control Room NSO's at all times. *Whenever the SCRE turns over to another SRO, he must announce to/notify all NSO's the fact that a relief has been made and who has responsibility of supervising the licensed activities of the NSO's.* It is imperative that the NSO's know who has these duties.

Currently the SCRE's are using a *clasp*, attached to their Security Badge, to accomplish the following:

- a. Provide a positive control method for preventing them from inadvertently leaving the MCR.
- b. Act as a symbol that states he understands and has accepted the responsibilities of the CRS.
- c. Finally, it shows other people who has command and control and who is supervising the NSO's.

*Response 1c:* *Any time one of the three Unit (0,1,2) NSO's turnover, they must inform the SCRE / CRS that a turnover has taken place and also tell them who the person is. This includes both mid-shift turnovers and end of shift turnovers.* The SRO in charge of the MCR must know who has the unit responsibilities of manipulating the controls. Dedicated NSO's (e.g. RH System / Primary Parameter watch) should also inform the CRS after turnovers. If an operation is important enough to have a dedicated licensed individual, then it is important enough to have a formal turnover and subsequent notification to the SCRE. This should not be left up to any guesswork.

NRC Comment #2: Reporting / Documentation of Event was unacceptable.

Response 2a: For this event, the PIF wasn't written in a timely manner due to not being able find the specific wording in Tech Specs. We knew there was a requirement: we just didn't get to the precise words that first day of the occurrence. The PIF was written the second night upon further review of Tech Specs. In hindsight, this was a mistake. There are several items to present:

- a. Write the PIF if ANY commitment or requirement is questioned. A violation does not have to be confirmed as such to have a PIF. Our low PIF threshold is important. PIF's should be written if there is a hint of a violation.
- b. The PIF write-ups must be complete. They should be a 'stand alone' description of the problem. Vagueness has to be avoided. Paint the picture, don't just sketch it.
- c. Lastly, PIF's must be timely. Operating has a good record of PIF generation. Timeliness was a concern for this incident and others. The PIF needs to be written early and given to the SE. The SE (with other licensed people) has the responsibility to determine operability and reportability.

Response 2b: Operating Logs and Turnover Sheets are our official documentation. The paperwork needs to document both infractions and POTENTIAL infractions. Logs should describe the event or concern. Many people review the Shift Engineer Logs, specifically. They are used daily to understand the sequence of events and also to confirm regulatory requirements. The SE has this responsibility.

None of this should be new. It is very rare that we see someone write too much. Let's all attempt to be more narrative. Other operators depend on it. Non-operating people depend on it.

The turnovers should cover things that have happened AND things that are pending. Also, they should be used for questions or issues DESERVING resolution. Operating management has a responsibility to aggressively pursue your concerns. You have the responsibility to bring them to our attention.

Our 'paper trail' is important and legally required. We cannot afford the remote appearance of indiscretion. We don't operate that way; we can't afford to operate that way.

Response 2c: Nothing beats the timeliness and effectiveness of verbal communications. If something is seriously troubling you, a phone call should be made - to someone in an office, at a home, on our pagers. Anyone can call. We are receptive to talking at any time and even coming in for issues. This includes concerns that go beyond unit generation. We are interested. It's our job. Unavailability of any level of management should not be a barrier.

Another point to ask yourself is, did the person really understand my message? We like to believe three-legged communications are the best way to confirm that the person has received the message. If there's some doubt, don't be embarrassed or hesitate to consult another point of view. This business is too complicated for any one person or two persons to know it all.

Response 2d: Finally, the Daily Status morning phone call made by the SCRE is also important. Significant PIF's (including POSSIBLE violations / LER's) SHALL be verbalized. We must remain open and honest. If there's a question as to what should be included, call myself or Tom first if you want. We will most likely err on the side of reporting the situation. To repeat, our PIF threshold is low. "Significant PIF's" is subjective, of course. It doesn't mean "SIGNIFICANT PIF's". What you may think is minor or trivial, very often is not to others. If in question, call it in. Operators aren't typically shy, don't be here either.

Conclusion:

As previously stated, there have been a lot of issues that arose out of this event. What makes Byron successful is a proactive approach towards implementing appropriate corrective actions. We are concluding the PIF write-up ourselves; so additional final corrective actions will be forthcoming. The necessary BAP's or Policies will be enhanced in the near future.

Hopefully, this write-up gives you a better idea of what is expected and what is needed right now. It is not possible to explain all the background of what's transpired these past several weeks. I apologize if some of this isn't thoroughly explained. It is difficult to cover all the bases in a couple page letter.

There are a lot of resources within our control for resolving issues. The most important one in our department is the people. Our *Vision and Values* are sound. . Let's continue to work together, focus on our jobs, and get back on track - towards a World Class Operations. We all have the confidence, talent and perseverance to succeed.

*W*e the Shift Engineers at Byron Station have three primary responsibilities which must be followed at all times; protect the health and safety of the public and plant personnel, protect the plant investment, and generate efficient cost effective power. To meet these responsibilities, the Shift Engineers must be leaders who demonstrate the following attributes:

*We are responsible for the activities at the station and accountable for making the final decision.*

*We are highly motivated people who take on challenges willingly and continually look for opportunities to improve operations at the station.*

*We are committed to meeting the needs of the station.*

*We are proactive problem solvers and decision makers who solicit input from all resources, reach valid conclusions and take action.*

*We set high expectations for our performance as well as those around us.*

*We are goal oriented; we prioritize tasks, optimize resources, and complete tasks correctly and in a timely manner.*

*We act as positive role models.*

*We are coaches who continually provide constructive criticism to promote better performance.*

*We are team builders who instill cooperation and participation in all team members.*

*We are communicators who actively listen and provide clean and concise feedback.*