July 20, 1992

Docket No. 50-237
Docket No. 50-249

Commonwealth Edison Company
ATTN: Cordell Reed
Senior Vice President
1400 Opus Place - Suite 300
Downers Grove, IL 60515

Dear Mr. Reed:

SUBJECT: DRESDEN OVERSIGHT TEAM SITE VISIT, JUNE 23-25, 1992

As you are aware, Dresden Units 2 and 3 were placed on the NRC watch list after the January 1992 NRC senior management meeting. As a result of Dresden being placed on the watch list, the Dresden Oversight Team (DOT) was formed. The DOT will continue to make periodic visits to Dresden to evaluate the progress of the efforts to improve performance, to provide feedback to the Commonwealth Edison Company (CECo) on the status of the improvement programs, to provide recommendations on the NRC inspection effort at Dresden, and to provide a written periodic written status of CECo's efforts to improve Dresden's performance.

The DOT made its third onsite visit to Dresden on June 23-25, 1992. We conducted numerous interviews and reviewed documentation in each of the areas discussed in the attached report. Many of the DOT issues represent impressions and viewpoints derived primarily from these interviews.

During this third visit the DOT focused on your self assessment efforts and your programs and actions taken to improve performance. We found that many positive initiatives have been implemented, but the effect of most of these has not yet been demonstrated. We also found that your self assessment program was lacking in certain areas. Problems were still evident with backlogs of work, materiel condition, housekeeping, and work planning.

Once again, the team was pleased with the level of candor in our discussions and interviews with the plant staff.

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If you have any questions or comments on this report or other DOT activities, please contact me at (708) 790-5603. The next DOT onsite visit has been scheduled for September 9-11, 1992.

original signed by

T. O. Martin, Deputy Director
Division of Reactor Safety

Attachment: As stated

cc w/attachment:
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State Liaison Officer

RIII	RIII	RIII	RIII	NRR	RIII
JM		WGT	yes	JM for	yes
Martin/lc	Miller	Greenman	Norelius	Barrett	Davis
7/15/92	7/16/92	7/17/92	7/17/92	7/17/92	7/17/92

REPORT ON THE THIRD VISIT OF THE DRESDEN OVERSIGHT TEAM JUNE 23-25, 1992

I. Scope and Participants

The Dresden Oversight Team (DOT) made its third onsite visit to Dresden on June 24-25, 1992. During this visit the DOT focused on the programs and actions taken to improve performance. The following DOT members participated in this visit:

T. O. Martin, DOT Chairman
R. Barrett
E. Leeds
M. Jordan
S. Stasek

II. Overview and Conclusions

During this third visit the DOT focused on the programs and actions taken to improve performance and on the licensee's self assessment efforts. We found that many positive initiatives had been implemented, but the effect of most of these have not yet been demonstrated. The licensee's self assessment program was lacking in certain areas. Problems were still evident with backlogs of work, materiel condition, housekeeping, and work planning.

This report identifies a number of specific positive observations and concerns which will be followed in future visits. The principle observations and conclusions follow.

Materiel Condition: The team noted a slight improvement in plant housekeeping since the last DOT visit but would still describe overall plant materiel condition (housekeeping plus materiel upkeep) as weak. Problems with reactor feed pump seals continue to have a significant impact on plant operations. Assignment has been made of a full time materiel condition coordinator.

Leadership: As acknowledged by the licensee, managing change will be one of their greatest future challenges. These changes include the addition of programs (materiel condition improvement, procedure upgrade), new senior managers, new fundamental ways of conducting business (planning and scheduling, control room communications, shift turnover), and increased scrutiny by entities outside the plant (NRC, INPO, CECo corporate). All this is occurring in the face of a plant staff that still appears to be mildly skeptical whether new management expectations and program changes will be long lasting.

Positive steps were taken in a number of areas including the assignment of new managers in the areas of maintenance, materiel condition improvement, and procedure upgrade. In the area of corrective actions, the licensee was in the process of removing the complexity of numerous corrective action systems and replacing them with a consolidated integrated reporting process. This was scheduled for implementation in July 1992 and appeared to be on track. Improvement was noted in the oversight and direction of the routine, morning planning meeting.

Self-assessment: The monthly Dresden performance improvement report was weak in several important areas, particularly addressing personnel errors and procedural adherence. The most recent version of this document for May 1992 showed 1 personnel error and no procedural adherence problems in the last 3 months. This specific information was based solely on DVRs which is clearly too high of a threshold to provide meaningful information. Through DOT review of other plant corrective action systems, several more examples of personnel error and procedural deficiencies were found during this period. The licensee intended to improve this important feedback mechanism.

Communication: This will be a continuing challenge. A lot has been done to communicate expectations to the plant staff. There is evidence that the message has been received and understood, but there may not be a complete buy-in on whether the changes will be sustained in the long run. Interdepartmental communications is still an obstacle, and communications from management to staff in providing the direction of new programs and policies will also be a challenge.

Commitment Management: The Dresden Management Action Plan or DMAP is the system for tracking action items assigned to various plant departments. Out of 1846 total action items in this system, 192 were overdue. Although the DOT found no specific late items that had an immediate impact on safety, this number seemed high. Also, the DMAP program did not have the provision to assign a priority or an estimate of manpower needed to accomplish tasks.

Planning: Some significant positive changes were seen in this area including a major revision to the daily planning meeting (everyone using a consistent plan) and an improved approach to outage planning (fixing the scope of work well in advance of the outage). These were fundamental improvements and very much in need. The effect of these improvements will be evaluated in future visits.

Root Cause Determination for Dresden Problems: At the time of this visit, a licensee contractor had completed development of causal factors for the performance problems at Dresden. These factors were going through a validation process that should be done by the end of July 1992. The Plant Manager indicated that the results of this study would be factored into the overall performance improvement efforts at Dresden. Similarly, Region III, in response to a Commission staff requirements memorandum, independently developed root causes for CECo weaknesses. The DOT saw no benefit in discussing this matter further until the results of the licensee study was finalized and the NRC study was made public and available to the licensee.

III. Plant Status

During the visit, Units 2 and 3 were operating at approximately 75% power, primarily due to problems with the reactor feed pump seals. Major periodic maintenance work was underway on the Unit 2/3 emergency diesel generator. Approximately 17 alarms were actuated for both units. The number of instruments with problem tags did not seem to be abnormally high.

IV. Engineering and Technical Support

The dedicated contractor effort appears to be on track.

In order to consolidate engineering support activities and gain efficiency in the use of engineering contractors, CECo has implemented a program to provide a lead primary engineering contractor for each site. For Dresden, the lead contractor is Bechtel. Bechtel's involvement is being phased in over a period of several years and will eventually achieve about 70% of the contracted engineering effort. Bechtel has quickly staffed up its new local office with about 200 professionals.

The role of the Tech Staff in plant activities could be enhanced.

The Technical Staff includes a large pool of capable, enthusiastic engineers. Despite the relatively low experience level of many technical staff personnel, they perform a number of important functions, on both a routine and reactive basis. A good example of their reactive role was observed in their excellent support of the task force on reactor feed pump seal failures.

However, plant management has identified, with assistance from INPO and CECo corporate staff, several barriers preventing the technical staff from having a greater impact on the plant operations and safety. A major area targeted for improvement relates to management processes. Expectations need to be better communicated to staff, and followed up afterwards. Greater emphasis should be placed on setting priorities for tech staff and on tracking progress on important items. These are areas that plant management plans to pursue.

The experience level of the Technical Staff has been significantly impacted by the inability to retain engineers. The licensee was aware that to solve this problem a career path for progression within the tech staff was needed so that engineers do not feel the need to move to Operations or ENC for promotions. Enhanced job satisfaction and increased efficiency of the system engineers could also be attained through the elimination of some administrative and secondary duties.

Finally, a stronger interface with Operations and Maintenance is needed to enhance the impact of tech staff on key plant programs and projects. One positive move in this direction was the greater participation by tech staff in the daily planning meetings.

These challenges will take time to meet. However, they are necessary to make better use of tech staff talent and give tech staff a more prominent role in the plant.

V. Operations and Planning

Enhancements to operations continue to be made.

The station initiated several new enhancements since the last DOT visit. These include an extensive remodeling of the control room access, incorporation of a 3-day rolling schedule into operation scheduling, establishing the Shift Engineer as the key person with control over the daily schedule, establishing the use of

uniforms by the reactor operators, and upgrading the carpet in the control room. The operations staff still expressed a wait-and-see attitude about whether the new programs and changes would be permanent. Managing change will continue to be a major challenge in operations as well as other areas.

Observations of operations activities showed no abnormalities.

Observations of control room activities revealed that the control room was properly staffed and licensed operators were knowledgeable of their panels, plant conditions, and were responsive to plant alarms.

Improvements being made in outage planning.

The station is putting a considerable amount of effort into improving their outage planning program. A Technical Review Board (TRB) was established to identify and prioritize the modifications to be accomplished in upcoming outages. The modification work scope for the January 1993 unit 2 outage was also frozen, a considerable departure from the previous way of doing business which was to make significant adjustments in outage work scope up to the last minute before the outage. A group dedicated to outage scheduling was also established. These efforts are recognized as improvements, however, the scheduling of the myriad of activities to support the modifications (installation procedure development, materiel procurement, post modification testing, etc.) is only being generally monitored by the TRB but not rigorously scheduled. The potential exists for a significant last minute work crunch. The TRB acknowledged the need to establish milestones and have a better method of monitoring the progress of planned modifications. Outage planning and scheduling will be reviewed further in the future.

VI. Maintenance

New Maintenance Department Head is focusing on providing leadership, improving work process, work planning and reducing the current maintenance backlog.

At the last DOT visit, May 14-16, 1992, a new maintenance department head had just been assigned. Over the past month, he became familiar with the maintenance department and focused on a number of areas to concentrate his efforts to improve departmental performance. His first action was to focus departmental attention on reducing the maintenance backlog on items that impact plant performance. Previously, a considerable amount of effort had been expended by the maintenance staff at installing modifications and performing work not directly associated with plant performance. He also reorganized the department to (1) improve work flow, (2) provide a complementary structure for better coordination with the work planning organization, and (3) improve reporting assignments to allow the departmental masters (lead foremen) more opportunity to perform their oversight and managerial function.

The new maintenance department head indicated that his focus will continue to be on the flow of work through the maintenance department, coordination with the other site departments, and work planning. He intends to emphasize activities supporting schedular commitments, that is, ensuring that parts, job scope, procedure, work package, RWP, etc. are available and prepared before equipment

is taken out of service. He also intends to make a high priority conducting maintenance activities in a logical, trackable manner, with the best tools and support available to the maintenance staff.

A senior individual from outside Dresden has been assigned to oversee the plant materiel condition improvement program.

The licensee assigned a senior level individual to oversee the plant materiel condition improvement program. This person has previously worked at CECo corporate, INPO, Braidwood, LaSalle, and Quad Cities. He will report directly to the production superintendent, which provides an appropriate level of senior management oversight. With regard to housekeeping, the upgrade of the condensate pump room and source term reduction activities are positive initiatives. Plans to strengthen the existing housekeeping improvement program and instill accountability and ownership for housekeeping in all plant staff were underway. In addition, the materiel condition improvement program will include the reliability centered maintenance program, the equipment reliability issues program, a new trending and analysis database. Performance indicators to chart equipment performance improvement have not yet been established. Overall, these were positive initiatives, but the complexity of the program in terms of the number of departments and individuals involved will present a significant management challenge.

Materiel condition and plant housekeeping were still weak.

The team noted a slight improvement in plant housekeeping since the last DOT visit but would still describe overall plant materiel condition (housekeeping plus materiel upkeep) as weak. Problems with reactor feed pump seals continue to have a significant impact on plant operations. Outside areas around the power block were found to be messy with multiple lay down areas of rusted materiel, bags of trash, several areas of contaminated dirt, and gear adrift.

A multi-discipline team has been formed to resolve the recurrent reactor feed pump seal problems.

The reactor feed pump seals at Dresden have been a recurrent problem limiting power operations and plant performance since 1972. The licensee formed a multi-discipline reactor feed pump team to try to resolve the longstanding seal problems that have adversely affected pump operation. The team is led by a senior engineer from ENC who reports directly to the Maintenance department head. Members of the team include technical staff, maintenance personnel, vendor representatives and consultants. The DOT will review the team's progress over the course of the next several visits.

VII. Procedures & Administrative Controls

Several initiatives were recently implemented at Dresden to cause improvement in this area. Additionally, several more were under development and were to be implemented in the near future. The following are of particular note.

Progress is being made in reducing the backlog of procedure revisions.

The Procedure Review Manager's (PRM) initial attempt at prioritizing the outstanding procedure changes resulted in the decision to first complete a large segment in the operations area that could be finished quickly. The PRM stated that safety significance of each change and its effect on the plant was always a major consideration. With this in mind, it was the opinion of the PRM that the backlog could be reduced by approximately 800 within the next several weeks. At the time of the teams's visit, there were 1763 procedures under review in the change process which is a reduction of nearly 500 from the last visit in May. In addition, a reduction in temporary procedure changes was noted (from 197 to 179).

The recent assignment of the PRM to assist in reducing the backlog of outstanding procedure changes is considered a prudent action given the prior difficulties noted in this area. The goal of quickly reducing the backlog to make the procedure change program more manageable appears to be reasonable.

First steps in streamlining the procedure change process has been implemented but the process remains slow.

Since the last DOT visit, the licensee completed a revision to the procedure change procedure to relieve several bottlenecks and recently started revising several changes using the new process. Initial feedback from those involved was positive, however, more time is needed to better evaluate the overall effectiveness of the new process.

Although the process has been in use for several weeks, the average age of procedure change in review cycle increased from 192 to 223 days. The licensee indicated this was apparently due primarily to several newer changes recently completed. The DOT will continue to monitor this area for the anticipated reversal of this trend.

The Technical Specification change request to allow further streamlining of the procedure change process was submitted by the licensee, and NRR plans to expedite their review. The licensee, in anticipation of that change, was preparing the draft revisions to the implementing documents.

The current corrective action programs are significantly splintered with trending capability extremely limited.

At the time of the team's visit, the licensee utilized many different corrective action programs. Each covered specific activities or aspects of plant operation. These included, but were not limited to, Deviation reports (DVRs), Radiological Occurrence Reports, Discrepancy Records, Nonconformance Reports, Problem Analysis Data Sheets, Personnel Injury Reports, Procedure Adherence Deficiency Reports, the near miss program, etc.

Many of these systems addressed personnel errors, however, the licensee chose to track only DVR related personnel errors as a means for measuring improvements in this area. As a result, many of the personnel errors that occurred were not trended in the licensee's monthly performance improvement report.

The new corrective action program is nearing implementation

On July 28, the licensee planned to implement the Integrated Reporting Program (IRP) that will attempt to integrate many of the individual corrective action programs discussed above into one program to centralize the correction and tracking of plant problems. The procedure to be used to accomplish this was found to be very comprehensive, long, and complex. The licensee indicated they recognized the need for doing effective training before program implementation. The first steps to provide the necessary training were underway at the time of the DOT visit. These, so far, have consisted of brief "awareness" sessions conducted with the individual departments. More in-depth, training was to be provided for those requiring a more detailed knowledge of the program. The DOT will further evaluate the IRP and its implementation during future site visits.

VIII. Exit Meeting

An exit meeting with the licensee was held on June 25, 1992. Mr. A. Bert Davis, Regional Administrator, was in attendance as the senior NRC representative. Mr. Dennis Galle, Vice President of BWR Operations; Chuck Schroeder, Plant Manager; and other Dresden representatives were present.