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December 23, 1994

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

Subject: LaSalle County Nuclear Power Station Units 1 and 2
Commonwealth Edison (ComEd) BWR Improvement Strategy
NRC Docket Nos. 50-373 and 50-374

- Reference: (A) Meeting between representatives of ComEd and the NRC
staff at LaSalle County Station on December 1, 1994.
- (B) Meeting between ComEd and the NRC staff at NRC Region
3 on November 10, 1994 to discuss LaSalle's Engineering
and Materiel Condition Issues.

In late 1993 and early 1994 LaSalle's performance was identified as declining. At that time LaSalle was placed on the NRC's declining plant list. As part of an improvement effort, we finalized our Business Unit Plan (BUP) in May of 1994. The BUP set forth LaSalle's plans to accomplish improvement. Accompanied by the BWR Immediate Improvement Strategy Metrics as a tool to gauge our progress, LaSalle was able to focus in on issues and effect changes in several key areas.

The efforts in response to those plans have shown improvements at LaSalle during the second half of the year. Radiation Protection performance has improved and there have been no significant operating events. I believe the leadership, teamwork and commitment exhibited at the station is considerably improved since early 1994. However, we are still being challenged by the need to improve plant Materiel Condition. Improving Materiel Condition needs to be the continuing major focus of our efforts to help improve reliability.

LaSalle met with members of the NRC staff during the above Referenced meeting to discuss LaSalle County Station's progress with regard to its overall improvement efforts. We appreciated the opportunity we had to present the current status of LaSalle improvement initiatives to the NRC. As a followup to the meeting, we feel it is important to provide the NRC with a detailed discussion of our immediate and most important focus areas at LaSalle. This letter summarizes our actions in regards to our Near Term Improvement Plan. The Near Term Improvement (NTI) initiatives were identified as key elements from the BUP, and were assembled in August 1994 to provide focus and establish priority for performance activities during the following six months. The four issues our Near Term Improvement Plan focuses on are:

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- Radiation Protection and Awareness
- Materiel Condition
- Issues Management
- Management and Leadership.

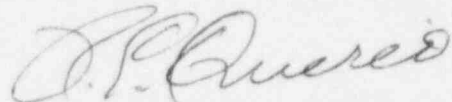
A more complete discussion of these issues is provided in Attachment A to this letter. Attachment B maps the Near Term Improvement Plan issues against the LaSalle Business Unit Plan. Attachment C, LaSalle's Overview of Planning and Oversight Vehicles, is a graphical representation of how the Near Term Improvement Plan is inter-related to the overall success of ComEd.

LaSalle Management believes that these four issues are our highest priority and need to be continuously and aggressively pursued. Although we believe we have made improvements in these and other areas, LaSalle has a long way to go to achieve good plant performance. We realize that the rate of improvement must accelerate. We plan to stay focused on our Near Term Improvement Plan to achieve these important goals.

As indicated during the Reference B meeting, LaSalle would like to continue the Quarterly meetings with the NRC to discuss Materiel Condition issues. There is a meeting tentatively scheduled for February to discuss Maintenance and Work Control.

ComEd appreciates the NRC staff's attention and consideration of the aforementioned issues. We will work with the NRC staff in monitoring progress in the course of the implementation of our plans as well as monitoring our overall performance. We are committed to ensuring the continued safe operation of LaSalle County Station.

Respectfully,



Robert E. Querio
Site Vice-President
LaSalle County Station

Attachments: A - Summary of LaSalle Near Term Improvement Plan
 B - LaSalle Near Term Improvement Plan Issues
 Compared to LaSalle Business Unit Plan
 C - Overview of Planning and Oversight Vehicles

cc: J. M. Taylor, Executive Director for Operations
W. T. Russell, Director - Nuclear Reactor Regulation
J. B. Martin, Regional Administrator - RIII
H. Miller, Deputy Regional Administrator - Region III
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ATTACHMENT A

SUMMARY OF LASALLE NEAR TERM IMPROVEMENT PLAN

Radiation Protection and Awareness

LaSalle is strengthening its training, processes and procedures to promote better radiation worker behavior. Benchmarking trips have been conducted and the lessons learned in the areas of hot spot posting and step off pad layout & control have been incorporated.

The postings for hot spots have been upgraded and a database developed to track the status of the hot spot reduction program. All step off pad and change areas have been upgraded. During non-outage conditions, LaSalle has only one Radiologically Posted Area (RPA) ingress/egress path.

Expanded General Employee Training (NGET) is being used for all 1994 and 1995 requalification classes. The expanded NGET requires each LaSalle employee to attend a one and one-half day class which includes a proficiency demonstration to don and doff protective clothing in a simulated, contaminated radiation area. The goal of the expanded training is to give the employees complete, specific training, whereas in the past, training assumed the individuals understood all the basics.

The Radiation Protection and Operating Department interface has been improved. Radiation Protection Technicians attend all shift briefings and participate in selected operator rounds. Respective members of the Radiation Protection and Operating Departments meet weekly to discuss rad worker performance issues and propose solutions. Additionally, the Radiation Protection Manager position, which has been vacant since June, has been filled by a highly qualified individual with significant utility experience.

LaSalle is reducing its existing source term inventory, which has historically been a significant contribution to collective dose at the station. Chemical decontamination of the reactor recirculation system was completed during the sixth refueling outage on unit one. A chemical decontamination of the both the reactor recirculation system and the residual heat removal system is planned for the next Unit Two outage (L2R06) in February, 1995. Additionally, eleven hydrolaze ports have been installed which allow plant personnel flushing access in order to keep hot spots under control.

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Water chemistry is being optimized for radiation dose reduction by adding depleted zinc to the reactor coolant system and reducing iron concentration in the condensate system feeding the reactor. Addition of zinc and removal of iron reduces activation products in the piping corrosion layer. The Unit 1 reactor water zinc concentration is being maintained at a target maintenance level of 4 ppb. The new CP resins in U-1 are performing well. Feedwater iron concentration was reduced with the new resins. The Zinc Addition system will also be installed on Unit 2 during L2R06.

Advanced technologies are being utilized to enhance radiation worker performance. A new RPA access control system has been implemented. Remote monitoring has been utilized in four locations, with other locations planned to support the L2R06 refueling outage. Cameras have been installed in the radwaste liner fill heads and the turbine building ventilation fan rooms for personnel safety. Cameras have also been installed to reduce operator exposure during normal rounds in the URC pump room and Waste Sludge pump room. Robotic equipment has been used for entries into the heater bay and radwaste pump rooms.

The cumulative station dose is being managed effectively and is approximately 20 REM under the year to date goal. The station dose is being projected at 730 REM at the end of the year. Achievement of this dose reduction can be attributed to better pre-job ALARA planning along with enhanced line management supervision of work activities.

Materiel Condition

Numerous materiel condition improvements have recently been completed at LaSalle. New control room recorders have been installed, most recently during the last Unit 1 refuel outage. The new recorders implement state of the art technology and are much easier for the operators to use. In response to a GE RICSIL on diaphragm hardening of Scram Solenoid Pilot Valves, LaSalle replaced all diaphragms that may have been susceptible to the hardening. The Lovejoy Feedwater Control Modification was installed on Unit 1, thus completing the feedwater upgrade that has been needed since initial construction. The new controls allow much finer feedwater control and are more responsive. Oil was replaced with grease in the RHR Service water pump seals. The pump seals were not designed to use oil and the oil was leaking. A modification was installed on various chemical sampling panels to allow the Chemists to flush the lines periodically to prevent the lines from becoming clogged. Unit 1 and 2 Reactor Building Ventilation (VR) damper actuators and springs were replaced to ensure the dampers shut completely. The 1A RBCCW pump vibration problem was resolved; the problem was due to the base plate being loose. A new type of valve packing material, EVP9000, was installed on numerous valves. The new material is much more dependable and is used throughout the industry.

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Installation of the Zinc Addition system, which improved water chemistry, was also performed.

Currently, there are numerous material condition improvements in progress. The Instrument Nitrogen System compressor is being overhauled to stop oil leaks and to perform basic refurbishment of minor parts. Improvements to the Condensate System reliability are being performed. Lessons learned from the 2A CD pump repair (which was out-of-service from July to October for pump and motor repair) are being utilized in the course of overhauling the remaining condensate pumps. The Electrode Boilers are being refurbished. Garlock 3504 gasket material is being installed on virtually all equipment that uses oil. This new material is more compatible with synthetic oil. Repairs to the internal liner of waste tank 0WX07TB are being performed. The liner had been deteriorating.

During the upcoming Unit 2 L2R06 refuel outage starting in February, additional materiel condition improvements are scheduled to be performed. The Lovejoy Feedwater Control Modification that was installed on Unit 1 will be installed on Unit 2. Work will be performed on the Auxiliary power transformers, including revising the UAT/SAT Relay scheme, replacement of the SAT/UAT Oil Pumps and Power Cords, MPT gasket replacement, and maintenance on buses 243, 241Y, 242X, and 252. This work is being performed to incorporate lessons that were learned from the September 1993 loss of off-site power event. Maintenance on various check valves to correct minor problems will be performed. Extensive work to upgrade the condition of the Reactor Recirculation System will be performed. This work includes pump seal replacements on both the A and B pumps, refurbishment of the B Hydraulic Power Unit, change out of the A flow control valve, and pump and motor alignment of the A pump. The lessons learned from the recent December 1994 forced outage to repair RPIS problems will be incorporated during the outage. The actuator on the Turbine Lube Oil Temperature Control Valve will be replaced so that full range of the valve motion will be attained. The RCIC 2E51-F045 steam supply valve will be replaced. Replacement of this valve will correct some of the previous RCIC Turbine Overspeed problems. Zinc addition for dose rate reduction improvement will be installed on Unit 2. Eddy current testing and subsequent repair of leaks will be performed on three Low Pressure Feedwater Heaters, one High Pressure Feedwater Heater, and 50% of the Main Condenser tubes. Main Condenser Hood Expansion Joint replacements will be performed to prevent against possible tears and leaks from occurring during operations. Additionally, chemical decontamination of the Recirculation and Residual Heat Removal Systems will be performed to reduce source term inventory.

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The Vulnerability Assessment Team (VAT) issued the final report of their objective, qualitative risk assessment of selected LaSalle systems and vital components. In general, it was concluded that the significant issues were receiving site attention, and no significant safety issues were discovered. Based upon their PRA importance, thirteen systems were reviewed which resulted in 18 vulnerabilities and 97 observations. The vulnerabilities, by definition of greater significance, are being reviewed by System and Site Engineering, and their proposed resolution will be discussed with the Technical Review Committee. The Observations have been added to the Work Assignment Tracking System for resolution based upon their risk significance.

To improve work efficiencies, the Work Control Center (WCC) has been activated. The WCC concept places individuals from the Work Planning, Operating, Health Physics, and Maintenance Departments into the same large office room thereby allowing them to communicate better to plan the upcoming work schedule. The Electronic Work Control System (EWCS) has been implemented and start-up issues are being identified and resolved. The EWCS combines various management work processes with the out of service program. In this way, all aspects of the work package are linked together electronically. The Radwaste nuclear work request (NWR) backlog, the non-outage corrective NWRs requiring package preparation backlog, and the "now available" non-outage corrective NWR backlog, are all being reduced. Reduction of these backlogs will improve materiel condition by decreasing the amount of longstanding degraded equipment.

Engineering input into maintenance planning is being increased. Eight on-site staff engineers have been added. Written roles and responsibilities for Site Engineering have been completed. Three Senior System Engineers have been put in place. The Senior System Engineer program will provide experienced System Engineers in all engineering specialty areas. The Senior System Engineer requirements include a four year degree, and at least 11 years of technical and job related experience. Successful candidates are approved by a Corporate System Engineering Review Board.

Issues Management

The corrective action process is being improved to assure problems are solved and commitment dates are met. In the past, corrective actions were often not properly identified and the corrective actions were untimely and incomplete. An Engineering Work Assignment Tracking System (WATS) has been established and is being used by several departments. The WATS is a computer access data base that is updated by the cognizant individual of a particular work assignment. It is used to track the

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status of different issues and assignments, thereby allowing rapid understanding of the status of a particular issue. Special Management attention has been given to overdue action items. Since October 1994 the overdue action item list has been maintained at or near zero.

Awareness, utilization, and accountability of the Integrated Reporting Program (IRP) process is being improved. Timeliness of root cause analysis (RCA) is being improved, with approximately 90% being completed within 30 days. Cycle time for management review of RCAs is also being decreased. An Integrated Quality Effort (IQE) process has been implemented. The format for the monthly assessment meetings was modified in November, whereby each department reports on their performance based on self-assessment concepts, focusing on problems and actions that are planned. The recent meetings have been a major improvement over previous IQE meetings. This process provides data and trends to Station Management on their effectiveness in setting standards, reinforcing performance expectations, and achieving desired results.

The Quality Verification Department has implemented an "Integrated Analysis" process. This process independently reviews station performance information and provides both Corporate and Station management with necessary information on adverse performance trends.

Management and Leadership

By establishing clear standards and expectations, leadership behaviors are being improved. Benchmarking trips have been taken and a site leadership plan was developed and is being implemented. Expectation seminars for all station personnel on the "ComEd Strategic Plan", "Ethics Roll-out", and "Leadership III", have been completed. Reverse supervisor reviews have been performed to provide feedback on leadership behavior. The information from the reverse supervisor reviews will be evaluated and used as a basis for future Performance Planning and Review (PPR) objectives and developmental activities.

Management focus on resolving long-standing issues has been improved. A top 30 Technical issues list has been developed and has been communicated. The top 30 Technical issues list defines the problem associated with each issue and allows prioritization and for development of action plans. This information is also put in the WATS. Management monitoring has been enhanced by implementation of the Field Monitoring Program. This oversight function provides Station Management with a first-hand idea of the problems encountered by workers in the field, and will allow management to be proactive in the resolution of potential issues. Initiation of daily

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accountability meetings began in December, these meetings are intending to cause Senior Management to deal with station issues as a team.

Line department support of training is being improved. On the Job Training (OJT) is being observed by line management and is being recorded using the recently implemented OJT observation checklist. There is an increased emphasis on making all aspects of training a priority for everyone in the station. This includes the individual being trained, the supervisor of the individual being trained, and the individual performing the training.

ATTACHMENT B

LaSalle Near Term Improvement (NTI) Plan Issues Compared to LaSalle Business Unit Plan

NTI Issue	LaSalle (BUP) Plan	Discussion - Comparisons
Radiation Protection and Awareness	II.2 - Radiation Protection and Awareness	<p>Issue: Workers receive high collective radiological dose. Workers who do not understand or respect the radiological hazards are at times inattentive to details and disregard procedures, resulting in unnecessary exposure and contamination events. High percentage of the plant area is contaminated. High radiation area controls are not effective. Radioactive material has left the RPA because of ineffective processes and controls. Radiation Protection Technicians are unaware of best industry practices.</p> <p>Results: The results being achieved thru the NTI plan are consistent with the objectives outlined in the LaSalle BUP plan regarding Radiation Protection and Awareness. The NTI plan provides a focus and priority for immediate performance improvement activities addressing the Radiation Protection and Awareness issues. The Improvement Objectives that the NTI plan is addressing in regards to Radiation Protection and Awareness are: (1) Strengthen training, processes and procedures to promote better radiation worker behaviors; (2) Reduce existing and Minimize future Source Term Inventory, (3) Optimize reactor water chemistry; and (4) Utilize improved technology (remote monitoring, robotics, etc.) and permanent engineering solutions. The actions that are being performed to meet these Improvement Objectives are discussed in detail in Attachment A.</p>

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Material Condition	II.3 - Material Condition	<p>Issue: Overall plant materiel condition and equipment reliability needs improvement. Temporary system changes and workarounds are routinely accepted as solutions to poor equipment performance. Planning for maintenance of equipment has insufficient engineering input.</p> <p>Results: The results being achieved thru the NTI plan are consistent with the objectives outlined in the LaSalle BUP plan regarding Materiel Condition. The NTI plan provides a focus and priority for immediate performance improvement activities addressing the Materiel Condition issues. The Improvement Objectives that the NTI plan is addressing in regards to Materiel Condition are: (1) Improve key equipment reliability by completing critical repairs and reducing Temporary System Changes (TSCs) and work-arounds; (2) Improve work efficiencies and reduce NWR backlog; and (3) Increase engineering input into maintenance planning. The actions that are being performed to meet these Improvement Objectives are discussed in detail in Attachment A.</p>
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<p>Issues Management</p>	<p>II.4 - Issues Management</p>	<p>Issue: Station issues are often not properly identified resulting in poor prioritization and inefficient resource allocation. Corrective actions are often untimely and incomplete.</p> <p>Results: The results being achieved thru the NTI plan are consistent with the objectives outlined in the LaSalle BUP plan regarding Issues Management. The NTI plan provides a focus and priority for immediate performance improvement activities addressing the Issues Management Issues. The Improvement Objectives that the NTI plan is addressing in regards to Issues Management are: (1) Revise the corrective action process to assure problems are solved and committed dates are met; (2) Improve awareness, utilization and accountability of the IRP process; (3) Improve root cause analysis, timeliness and trending; and (4) Develop and implement self-assessment as a routine. The actions that are being performed to meet these Improvement Objectives are discussed in detail in Attachment A.</p>
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<p>Management and Leadership</p>	<p>II.1 - Management and Leadership</p>	<p>Issue: Management has focused on short term fixes rather than thorough resolution of long standing issues. Failure to establish clear standards and expectations and a lack of emphasis on personal accountability has led to poor adherence to station policies and procedures. Management's involvement in day-to-day details distracts them from effectively monitoring overall station performance. Line department support of training is inadequate. Management oversight and direction has not been sufficient in resolving training weaknesses. The Training program needs to retain its INPO accreditation. The Engineering Support Program (ESP) is not being implemented in a timely fashion due to inadequate management prioritization and coordination.</p> <p>Results: The results being achieved thru the NTI plan are consistent with the objectives outlined in the LaSalle BUP plan regarding Management and Leadership. The NTI plan provides a focus and priority for immediate performance improvement activities addressing the Management and Leadership Issues. The Improvement Objectives that the NTI plan is addressing in regards to Management and Leadership are: (1) Improve leadership behaviors by establishing clear standards and expectations; (2) Improve Management's focus on resolving long-standing issues; (3) Enhance management monitoring, assessment, and effectiveness; (4) Clarify and communicate expectations for line department support of training; (5) Improve management oversight and direction in resolving training weaknesses; (6) Retain INPO Training Program accreditation; (7) Implement ESP on schedule. The actions that are being performed to meet these Improvement Objectives are discussed in detail in Attachment A.</p>
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ATTACHMENT C

Overview of Planning and Oversight Vehicles

The attached chart outlines the inter-relationship between the short-term LaSalle Near Term Improvement Plan and LaSalle Plan (Business Unit Plan). The other plans discussed (LaSalle Business Plan, Nuclear Division Strategic Plan and Commonwealth Edison Strategic Plan) are more global in nature and provide a charter for ComEd overall.

The Commonwealth Edison Strategic Plan was initiated in early 1994 to provide the company a road map for the future. Following the development of this Plan, the Nuclear Division embraced division-specific items for incorporation into the Nuclear Division Strategic Plan. ComEd expects the development of this plan to be completed in early 1995. The LaSalle Business Plan also embodies the Commonwealth Edison Strategic Plan, although it is specifically tailored to LaSalle Station.

Overview of Planning and Oversight Vehicles

Commonwealth Edison
Nuclear Operation Division

PLANS

Commonwealth Edison Strategic Plan

Nuclear Division Strategic Plan

LaSalle Business Plan

Improvement Plan

Business Unit Plan

FOCUS AREAS

Near Term
Improvements

RP Awareness
Material
Condition
Issues
Management
Management &
Leadership

12/94

12/95

12/96

12/97

12/98

12/99

MEASUREMENTS

Line Management Assessment - Metric Reports - BWR Monthly Report

OVERSIGHT

Independent Assessment - Nuclear Oversight Report - Management Review Board - Nuclear Operation Overview Committee