From: Marc Dapas
To: ABB, WLA, JLC1, JAG Arthur Beach, William Axelson, James Caldwell
Date: 12/16/96 1:31pm John Grobe
Subject: Highlights from the LaSalle Independent Safety Assessment Exit Mtg

Attached are some highlights from the exit meeting for the LaSalle Independent Safety Assessment (ISA) which was conducted Friday morning (12/13). I have also attached some highlights from my meeting with the site VP, Bill Subalusky, on Friday afternoon following the routing resident exit meeting. If you have any questions, please call. Thanks.

For Donna Skay and Larry Rossbach, some of the information in the attachments that relates to conclusions provided by the ISA team, appears sensitive, e.g. "The team questioned the ability of the licensee to safely operate the plant". We need to be careful what we include in a Director's Highlight in light of the distribution.

CC: NCD2.CH1.MPH, DEH, WND2.WNP3.DMS6, WND2.WNP3.LWR, ...

A/8

ISA EXIT NOTES

Five teams evaluated the areas of Operations, Maintenance, Engineering, Plant Support, and Management, respectively.

Fujimoto (team leader) began the exit meeting by stating that LaSalle is "at the crossroads with no holds barred".

In the area of Organizational Effectiveness and Management, the teams identified that the following items were "missing":

> Trust, training, teamwork, leadership, safety culture, ownership, design control, work control, and corrective actions.

OPERATIONS

General Theme: **Questioned the ability of personnel to operate the plant safely**

- Lack of understanding and buy-in for "Operations Excellence"
  - Poor procedures and procedure quality
  - No self-checking and poor supervisory oversight
  - Standards are not internalized

- Gap exits between management and workers (union management issues)
  - Overtime policy
  - Workers will not write problem identification forms (PIFs) which reflect on a fellow worker's performance or involvement in an activity
  - Rather than generate PIFs, workers will submit problems to stewards
  - Relationship between management and operators characterized by mistrust and hidden agendas, which is amplified by high degree of management turnover

- Teamwork is lacking
  - Operational plan does not address human performance problems
  - Nuclear Station Operators (NSOs) are not participating in briefings
  - NSOs will not identify equipment problems
  - NSOs waiting for direction
  - Shift Technical Advisor roles misunderstood
  - Poor change management
  - "Me First" attitude

- Weak shift manager performance
  - Not setting safety conscience
  - Training ownership not present
  - Not accountable for crew performance
  - Don't feel empowered (ability issue)

- Training environment not conducive to affecting change
  - Poor communication
  - Weak simulator scenarios
  - Poor procedures and standards

- Change management problems
  - Delivery of reorganization not done well

- Lack of accountability
  - Discipline difficult - can't separate job and personal relationships
  - Difficult to confront one another on performance issues

- Other issues
  - 10 missed TS surveillances
  - Failed 2 of 4 simulator scenarios (reactivity control failures - operators did not drive rods in)

MAINTENANCE

General Themes: (1) **Essential program elements are missing; specifically, teamwork, management expectations, and training**

(2) **"The bar has been raised at LaSalle and the staff is not keeping up" because production and short term availability is the focus rather than long term availability**

- Clear lack of teamwork
  - Not everyone is taking ownership to solve problems (especially workers).
  - The air-operated valve, motor-operated valve, and preventive maintenance project management teams are good, but there needs to be more examples of effective teamwork
  - Problems are fixed for the short term
  - Poor job of communicating problems within the maintenance organization
  - "Top down mentality" exists - more involvement by management is needed
  - Workers don't trust management
  - Programs are started, but are not finished
  - Workers are not fully involved - sometimes not listened to or quit

- Maintenance performance indicators missing
  - Backlog not clearly defined and no ownership
  - Rework not measured and root causes not understood
  - There is the perception that all post-maintenance tests fail

- Performance standards missing
  - Housekeeping, radios, "pictures" - reflect on professional attitude

- Lack of first line supervisor involvement
  - Supervisors spending time doing someone else's work
  - Lack of coaching
  - Technical support missing

- Missing solid and effective training program
  - Workers not specialized for jobs
  - Focus on getting units online and making money

- Work control problems
  - Process should effect identifying, planning, scheduling, and executing work
  - About 2000 work request backlog - system likened to "drinking out of a fire hose"
  - Interface problem - 75% of work packages returned and analysts/workers don't communicate
  - Control of work scope not maintained
  - Lack of station ownership for program
    - Superintendents don't own program
    - No schedule adherence
    - No line management involvement
    - No maintenance shop involvement

ENGINEERING

General Themes: (1) **Reactive organization**

(2) **Configuration management and design basis problems**

(3) **Poor engineering management, engineering work quality, and systems engineering program implementation**

(4) **Lack of established standards of conduct and good performance expectations**

- Design and licensing basis issues
  - Not adequately defined and not always understood and implemented
  - Calculations to address inaccuracies in "Loop" instrument calibrations (from sensor to actuation device) not completed
  - High pressure scram calculation not conservative
  - Design deficiencies have existed since late 1980's
  - P&IDs are inaccurate
  - UFSAR review ongoing
  - Unauthorized modifications implemented though work control process

- Engineering work quality
  - Not being thorough and accurate
  - Numerous PIFs
  - Inadequate evaluations - scope and information
  - Engineers don't recognize the degree of the problems

- Safety evaluations are inadequate
  - Independent review group identified that 40 percent of evaluations reviewed were deficient, requiring revision
  - No technical justification for service water operability
  - Field Change Requests increasing

- Ineffective system engineering program
  - Program is not being implemented
  - No monitoring or trending
  - Reactive mode - not being managed

- Limited qualified system engineers
- Operational experience assessment program is not being effectively implemented

- Problems with effectively managing engineering work
  - 1200 Engineering Requests and 300 start-up issues
  - High engineering backlog
    - Size likely unknown
    - Not prioritized
    - Engineering not committed to completion
    - Performance indicators do not adequately reflect actual conditions

WHY DO THESE PROBLEMS IN ENGINEERING EXIST?

- past engineering leadership was weak and did not provide high standards

- Resources were not properly allocated
  - Deferred design basis review program
  - Instrument inaccuracies not addressed
  - Longstanding equipment problems not fixed
  - Design/licensing basis not understood

- No sense of urgency to fix problems and lack of teamwork

PLANT SUPPORT

General Theme: **With the exception of the Security program, the Emergency Preparedness, Fire Protection, industrial safety, and Radiation Protection programs were considered broken**

Fire Protection

- Problems in the area of fire hazards
  - 250 work requests, one of which dated back to 1993 - 50% of which are corrective
  - Human performance (missed fire watches, incomplete surveillances)
  - Fire hazards analysis not kept up to date

- Fire protection not a high priority
- Responsibilities not understood
- Low standards for personnel and equipment

Radiation Protection (RP)

- On the positive side, the RP organization created an atmosphere of camaraderie and trust which was conducive to getting work done

- Maintaining low worker exposures is a problem
  - High worker dose
  - High source term
  - Numerous hot spots
  - Cobalt reduction program going slow
  - Much rework

- Low standards for accepting maintenance, i.e., not creating leak tight standards

- Good RP practices missing

- RP training not efficient

- RP technicians don't document poor practices and are not held accountable

Chemistry

- Equipment and practices considered a strength

- Corrosion program is missing
  - Implemented water biocide injection too late, i.e., after condenser damage due to failure to recognize the problem. Also slow to implement corrective actions.
  - Service water piping system not assessed
  - No decision on hydrogen treatment of reactor coolant system leading to potential core shroud cracking

Emergency Preparedness (EP)

General Theme: Missing key elements for superior performance

- Met tower doesn't meet Reg Guide 1.23
  - The lower sensors are affected by the buildings
  - Problem recognized since 1991, yet no action taken until Notice of Violation issued

- Lack of priorities and aggressiveness in pursuing issues

- Worker notification not up to standards, i.e., no pagers

- Operations Support Center does not have filtered air - Emergency Plan needs to be changed

- Unannounced drills are not performed

Industrial Safety

- Overall program considered average
  - Improvement programs are missing
  - Workers are uncooperative in implementing the program
  - Workers and management didn't trust the program
  - Management not working to solve problems

Highlights from 12/13 discussion with Subalusky

- Subalusky thought the team did a superb job
- The delivery to an audience of about 200 LaSalle employee's was excellent
- The team provided the appropriate "shock value"
- Bottom line conclusion from the team was that "People are saying the right words, but are not believing them"
- Team did not identify much in the way of new issues, but provided several "impactive" examples and gave additional insights on selected issues, such as management/union problems. Subalusky provided me with an example to illustrate this point:

  Operators were documenting problems informally using "anomaly sheets" which were provided to the union steward, versus documenting problems using the problem identification form (PIF) process. Subalusky equated this practice to having the "inmates running the asylum".

- The team questioned the ability of the licensee to run the plant safely.
- Two of the central problem areas identified by the team were:
  Operator capability, and
  Configuration management/Design issues.
- In the area of configuration management and design issues, Subalusky stated that the station suffered from the "sins of the past".
- Subalusky stated that to capitalize on the shock value provided at the team exit and to let the staff know that ComEd management is serious about the issues at LaSalle, startup for both units was "indeterminate" at this point, but at least would be delayed until June/July.
- Subalusky said he wants actions to drive the startup date versus the startup date driving actions.
- Subalusky stated that personnel at LaSalle don't understand what effective resolution/corrective action means. He elaborated on this point, stating that LaSalle has no less than ten "related findings" from INPO, unacceptable in terms of the industry norm.
- Subalusky outlined his startup plan briefly focusing on Engineering and Operations.

  - In Operations, he plans on conducting extensive re-training, four to six weeks, for all operators to address the issue of operator capability. However, Subalusky stated that he must fix the problem with the knowledge level and quality of the training department instructors first.
  - Is looking at assigning mentors to each shift manager.

- To address the design issues in engineering, the staff is conducting a "functional"/design review for five systems (similar to the NRC Safety System Functional Inspection concept). Two of the systems will receive a more thorough design bases reconstitution type review.

- Subalusky also discussed his "soft issues" plan to address concerns such as accountability, teamwork, and union/management issues. He informed me that he would be making additional management changes beginning with work control.

- Subalusky stated that he thought the new Unit 1 Maintenance manager, Fahey, was doing a good job, i.e., he is involved, people oriented, and clearly establishing standards.

- Likewise, Subalusky expressed his confidence in Hildebrandt, the new engineering manager.