

December 19, 1997

Mr. W. T. Subalusky, Jr.  
Site Vice President  
LaSalle County Station  
Commonwealth Edison Company  
2601 North 21st Road  
Marseilles, IL 61341

SUBJECT: NRC OVERSIGHT PANEL MEETING SUMMARY

Dear Mr. Subalusky:

The NRC Oversight Panel met with Commonwealth Edison and LaSalle County Station management on November 21, 1997. This management meeting was open to public observation. Enclosure 1 contains the associated meeting summary. Enclosure 2 contains the handout provided to the NRC Oversight Panel by Commonwealth Edison during the meeting.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosures will be placed in the NRC's Public Document Room.

Sincerely,

/s/ G. E. Grant

Geoffrey E. Grant, Director  
Division of Reactor Projects

Docket Nos.: 50-373; 50-374  
License Nos.: NPF-11; NPF-18

Enclosures: 1. Meeting Summary  
2. Meeting Handout

See Attached Distribution

IE451

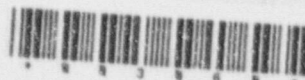
DOCUMENT NAME: G:\LASALLAS11217.SUM

To receive a copy of this document, indicate in the box "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

|        |                     |  |  |                               |
|--------|---------------------|--|--|-------------------------------|
| OFFICE | RIII                | <input checked="" type="checkbox"/> RIII | <input checked="" type="checkbox"/> RIII | <input type="checkbox"/> RIII |
| NAME   | DHills/et <i>AV</i> | AVegel <i>N</i>                          | GGrant <i>GES</i>                        |                               |
| DATE   | 12/18/97            | 12/18/97                                 | 12/19/97                                 | 12/ /97                       |

OFFICIAL RECORD COPY

9712300398 971219  
PDR ADOCK 05000373  
P PDR





UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION III  
801 WARRENVILLE ROAD  
LISLE, ILLINOIS 60532-4351

December 19, 1997

Mr. W. T. Subalusky, Jr.  
Site Vice President  
LaSalle County Station  
Commonwealth Edison Company  
2601 North 21st Road  
Marseilles, IL 61341

SUBJECT: NRC OVERSIGHT PANEL MEETING SUMMARY

Dear Mr. Subalusky:

The NRC Oversight Panel met with Commonwealth Edison and LaSalle County Station management on November 21, 1997. This management meeting was open to public observation. Enclosure 1 contains the associated meeting summary. Enclosure 2 contains the handout provided to the NRC Oversight Panel by Commonwealth Edison during the meeting.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosures will be placed in the NRC's Public Document Room.

Sincerely,

A handwritten signature in cursive script, reading "Geoffrey E. Grant", is written over the typed name.

Geoffrey E. Grant, Director  
Division of Reactor Projects

Docket Nos.: 50-373; 50-374  
License Nos.: NPF-11; NPF-18

Enclosures: 1. Meeting Summary  
2. Meeting Handout

See Attached Distribution

cc w/encls: O. Kingsley, Nuclear Generation Group  
President and Chief Nuclear Officer  
M. Wallace, Senior Vice  
President, Corporate Services  
E. Kraft, Vice President  
BWR Operations  
Liaison Officer, NOC-BOD  
D. A. Sager, Vice President,  
Generation Support  
D. Farrar, Nuclear Regulatory  
Services Manager  
I. Johnson, Licensing  
Operations Manager  
Document Control Desk-Licensing  
F. Dacimo, Plant General Manager  
P. Barnes, Regulatory Assurance  
Supervisor  
Richard Hubbard  
Nathan Schloss, Economist  
Office of the Attorney General  
State Liaison Officer  
Chairman, Illinois Commerce  
Commission

Distribution:

Docket File w/encls  
PUBLIC IE-01 w/encls  
A. Beach w/encls  
Deputy RA w/encls  
RIII Enf. Coord. w/encls  
SRI LaSalle w/encls  
Project Mgr., NRR w/encls

DRP w/encls  
TSS w/encls  
DRS (2) w/encls  
RIII PRR w/encls  
RAC1 (E-Mail)  
CAA1 (E-Mail)  
DOCDESK (E-Mail)



cc w/encs: O. Kingsley, Nuclear Generation Group  
President and Chief Nuclear Officer  
M. Wallace, Senior Vice  
President, Corporate Services  
E. Kraft, Vice President  
BWR Operations  
Liaison Officer, NOC-BOD  
D. A. Sager, Vice President,  
Generation Support  
D. Farrar, Nuclear Regulatory  
Services Manager  
I. Johnson, Licensing  
Operations Manager  
Document Control Desk-Licensing  
F. Dacimo, Plant General Manager  
P. Barnes, Regulatory Assurance  
Supervisor  
Richard Hubbard  
Nathan Schloss, Economist  
Office of the Attorney General  
State Liaison Officer  
Chairman, Illinois Commerce  
Commission



**Enclosure 1**  
**Public Meeting Summary**  
**NRC Oversight Panel for LaSalle County Station**

**November 21 Management Meeting**

**Summary:**

The licensee presented information contained in the applicable handout in Enclosure 2. During the licensee's presentation, the licensee provided clarification in response to NRC questions and comments. The licensee provided a status of the restart plan, discussed several material condition improvements being implemented during the extended shutdown, presented their current assessment of operator performance, and discussed the status of license amendments needed before plant restart.

During the discussion, the licensee indicated the following with regards to the effectiveness of improvement actions and current plant performance:

- Mr. Oliver Kingsley, Chief Nuclear Officer for Commonwealth Edison, stressed that he was "giving his personal word" that the licensee would not come to the NRC staff and ask permission to restart LaSalle County Station until they are assured the plant can restart safely. He wanted to avoid restarting the plant and then having a major event or significant design problem occur. He indicated they would continue to stress doing work right the first time.
- Unit 1 startup had been targeted as April 2, 1997. This date was a challenge, but achievable. Additional engineering and testing activities could raise additional issues, which could further delay startup.
- The Restart Plan strategy for safe plant operations was about 70 percent complete. The licensee continued to see progress, especially with respect to out-of-service program implementation, plant labeling, shift turnover, and plant equipment challenges.
- A significant change in human performance at LaSalle Station was apparent. The licensee was meeting its goals in this area, although they recognized that further improvement was needed. The licensee indicated that there had been no out-of-service errors in the last 3½ months. However, this statement did not reflect "lesser" events. The licensee was striving to have employees report even insignificant problems and two recent "time-outs" had been conducted in response to problems, such as out-of-service problems. They had been working on driving down the threshold for identifying human performance problems and they stated that union members were now writing problem identification forms involving other union members, a change from the past.
- The Restart Plan strategy for improving plant material condition was about 80 percent complete. The licensee predicted the punch list (items remaining) would be small enough to close this strategy by the end of January 1998.

- Considerable progress had been seen in engineering effectiveness. The licensee was still taking actions to address engineering personnel qualifications and the ability to effectively resolve equipment problems in a timely manner.
- The Restart Plan strategy for corrective action/self assessment improvement was closed and ready for NRC inspection. In response to a question from the NRC staff, the licensee indicated that the Corrective Action Review Board was established as a standard long-term process for Commonwealth Edison plants as opposed to a short-term action.
- The Operator High Intensity Training Program was complete and the closure package for the Restart Plan strategy involving training was being prepared.
- With regard to the Restart Plan strategy for process improvements, the licensee had seen success in processing of procedure changes and the ability of operators to control equipment.
- The licensee currently had 67 open Corrective Action Records for Safety Assessment and Quality Verification organization findings which they believed was too high and was a continuing challenge.
- The licensee had completed approximately 13,000 of an anticipated 22,000 outage activities. They were currently in the process of completing some of the more difficult activities, such as modifications.

During the discussion, the NRC staff communicated the following considerations:

- The NRC staff questioned the system engineering turnover rate and experience level. The licensee responded that although they had experienced some turnover of system engineers, a large part was replacement of contractors with Commonwealth Edison employees. Raising the standards for engineers had, in some cases, highlighted performance problems, but new people were changing the work philosophy. The licensee also maintained that the experience level of system engineers had increased in the last 6 to 8 months. In addition, the licensee indicated that the engineering assurance group had resulted in an increase in the quality of engineering work products such that they could now go back to a sampling approach.
- The NRC staff questioned the methodology the licensee was using to track completion of Restart Plan items. The licensee described the work management system being used to track the completion of physical work. In response to an NRC staff question regarding independent reviews of Restart Plan implementation, the licensee responded that an assessment in this area was planned for January 1998.
- During a discussion on material condition improvements, the NRC staff related a recent NRC finding involving numerous minor material condition problems in containment and the fact that licensee management had not been in containment in over 8 months. The Site Vice-President indicated that he had been in containment after this issue was raised and that he had found similar conditions. The licensee maintained that plant management was now getting into hard to access areas and every area in the plant had been assigned a responsible manager.



- The NRC staff recognized the considerable scope of hardware improvements the licensee was attempting to implement and commended the extensive licensee efforts aimed at human performance improvement. However, the NRC staff noted that the licensee was still at an early stage of the performance improvement process. The NRC staff urged the licensee to focus on what's really needed for restart and what their oversight efforts are finding, including the measures they are using to judge progress. The NRC staff expressed optimism that if the licensee took the right steps, LaSalle County Station was in a position to quickly become a good performer.

#### Attendees:

#### NRC

A. Beach, Regional Administrator, Region III  
 G. Grant, Director, Division of Reactor Projects (DRP)  
 R. Capra, Director, Project Directorate III-2, Office of Nuclear Reactor Regulation  
 M. Leach, Chief, Operator Licensing Branch  
 T. Vogel, Acting Chief, DRP Branch 2  
 M. Huber, Senior Resident Inspector, LaSalle  
 D. Hills, Project Engineer  
 E. Duncan, Reactor Engineer

#### Commonwealth Edison

O. Kingsley, Chief Nuclear Officer, ComEd  
 W. Subalusk, Site Vice-President, LaSalle  
 F. Dacimo, Plant General Manager, LaSalle  
 S. Smith, Plant Manager, LaSalle  
 T. O'Leary, Executive Staff, ComEd  
 I. Johnson, Licensing Director, ComEd  
 B. Riffer, Quality and Safety Assessment Manager, LaSalle  
 T. Broccolo, Corporate Assessment Manager, ComEd  
 J. Bailey, Restart Manager, LaSalle  
 D. Farr, Operations Manager, LaSalle  
 G. Poletto, Site Engineering Manager, LaSalle  
 D. Boone, Site Services Manager, LaSalle  
 D. Sanchez, Training Manager, LaSalle  
 W. Jakielse, Shift Manager, LaSalle  
 J. Fiesel, Mechanical Maintenance Department Supervisor, LaSalle  
 D. Jenkins, General Attorney, ComEd  
 T. Poindexter, Attorney (Winston & Strawn), ComEd  
 D. Evans, Liaison, ComEd  
 C. Berry, LaSalle  
 P. Resler, LaSalle Communications, ComEd  
 J. Schrage, WMD, LaSalle  
 J. Walker, Corporate Assessment, ComEd  
 T. Cannon, Equipment Operator, LaSalle  
 D. Sergenti, Radiation Protection Technician, LaSalle  
 P. Soenksen, Instrument and Control Planner, LaSalle



## Enclosure 2

Commonwealth Edison  
Management Meeting Handout



## *Station Direction*

**World Class Performance**



**Safe, Long, Uneventful Run**



**Safe, Uneventful Startup**

**November 21, 1997**

**NRC Region III - Lisle, Illinois**

**LaSalle**



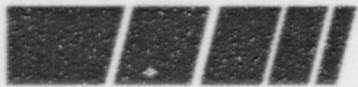


*NRC Public Meeting*  
*November 21, 1997*

- |                                   |             |
|-----------------------------------|-------------|
| ● NRC Introduction                | Leach/Beach |
| ● President/CNO Opening Remarks   | Kingsley    |
| ● LaSalle Introduction            | Subalusky   |
| ● Restart Plan Status             |             |
| > Restart Schedule                | Bailey      |
| > Human Performance               | Dacimo      |
| ● Material Condition/Improvements | Smith       |
| ● Operator Training               | Farr        |
| ● Technical Specification Changes | Barnes      |
| ● Closing Remarks                 | Subalusky   |
| ● NRC Closing Remarks             | Leach/Beach |

**LaSalle**





# U1 Integrated Summary Restart Schedule

| ID | Task Name                                       | Lead    | J | F | M | A | M | J | J | A | S | O | N | D | J | F | M |
|----|---|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21 | Unit 1 Restart Action Plan                      |         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 22 | Strategy 1- Safe Plant Operation                | Enright |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 23 | Strategy 2 - Human Performance                  | Boone   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 24 | Strategy 3 - Plant Materiel Condition           | Higgins |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 25 | Strategy 4 - Effective Engineering Support      | Doletto |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 26 | Strategy 5- Corrective Action / Self Assessment | Riffer  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 27 | Strategy 6 - Training                           | Sanchez |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 28 | Strategy 7 - Process Improvement                | Smith   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 29 | Complete Strategy                               |         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 30 | Strategy Close-out                              |         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 31 | Restart Issues Committee Review                 |         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 32 | Q&SA Review                                     |         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 33 | Offsite Corporate Assessment                    |         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

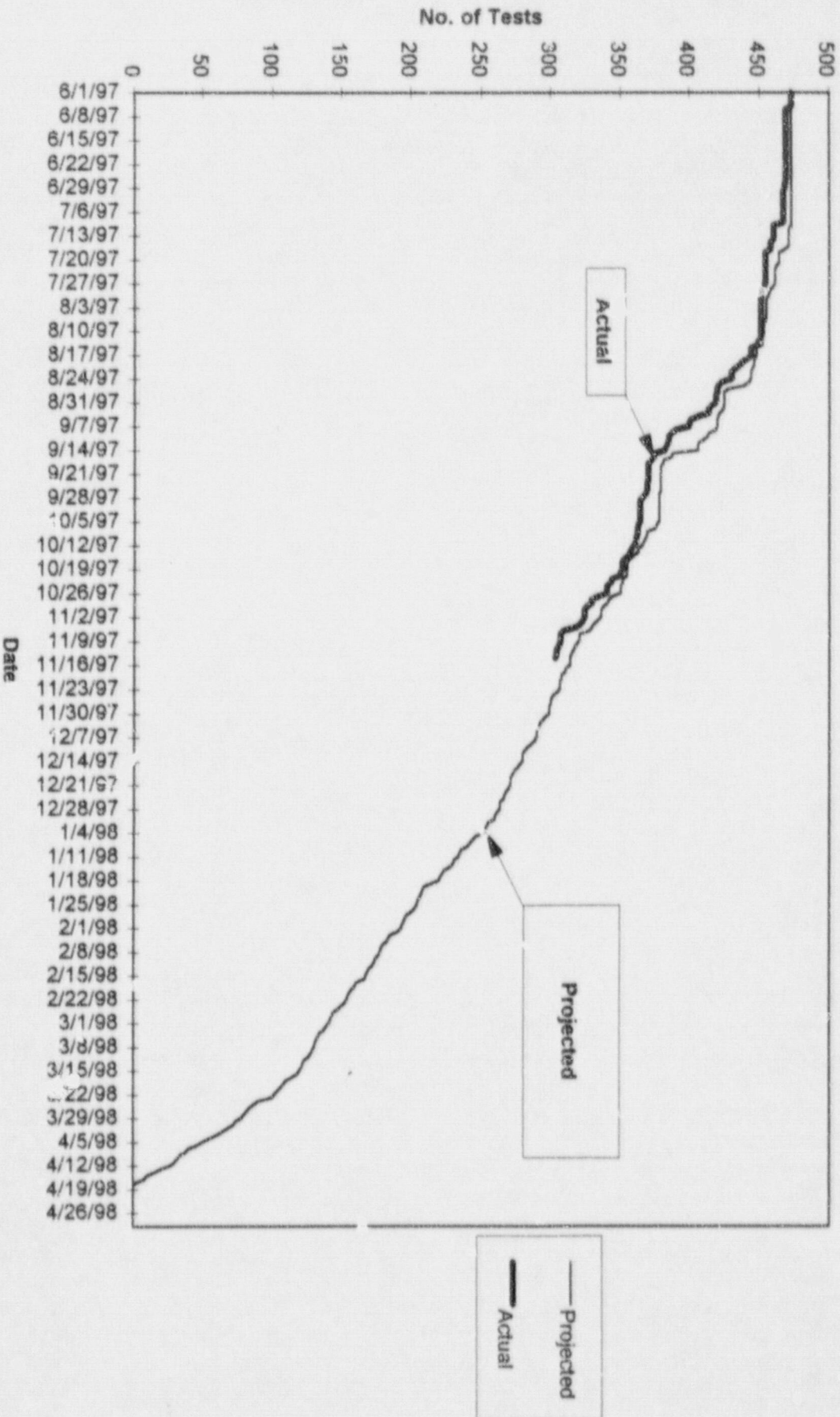


# U1 Integrated Summary Restart Schedule

| ID | Task Name                               | Lead            | J | F | M | A | M | J | J | A | S | O | N | D | J | F | M | A | M | J |
|----|---|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1  | Unit 1 Integrated Restart Schedule      | Bailey          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2  | Unit 1 L1F35 Outage Schedule            | Higgins         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 3  | Divisional Work Windows                 | Higgins         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 4  | Non-Divisional Work Windows             | Higgins         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 5  | Unit 1 Restart Testing                  | Magnafici       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 6  | Design Changes (DCP's)                  | Connell         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 7  | Engineering Requests (ER's)             | Connell         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 8  | Operator Startup Training               | Sanchez         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 9  | NRC Inspection and Regulatory Activity  | Barnes          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 10 | Nuclear Tracking System (NTS)           | Rifler          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 11 | System Readiness Review                 | Palmieri        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 12 | Perform Site Department Self Assessment | Smith / Poletto |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 13 | RIRC Restart Recommendation             | Bailey          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 14 | Q&SA Readiness Assessment               | Fuffer          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 15 | CNO / Corporate Evaluation              | Kingsley        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 16 | Brief NOC / BOD For Restart             | Kingsley        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 17 | NRC CAL Closure Meeting                 | Barnes          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 18 | Mode Switch to Start Up (Target)        | Dacimo          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 19 | On Line                                 | Dacimo          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 20 | Unit 1 - 100% Power (Target)            | Dacimo          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |



# LIF35 Restart Testing Scope Tests Remaining



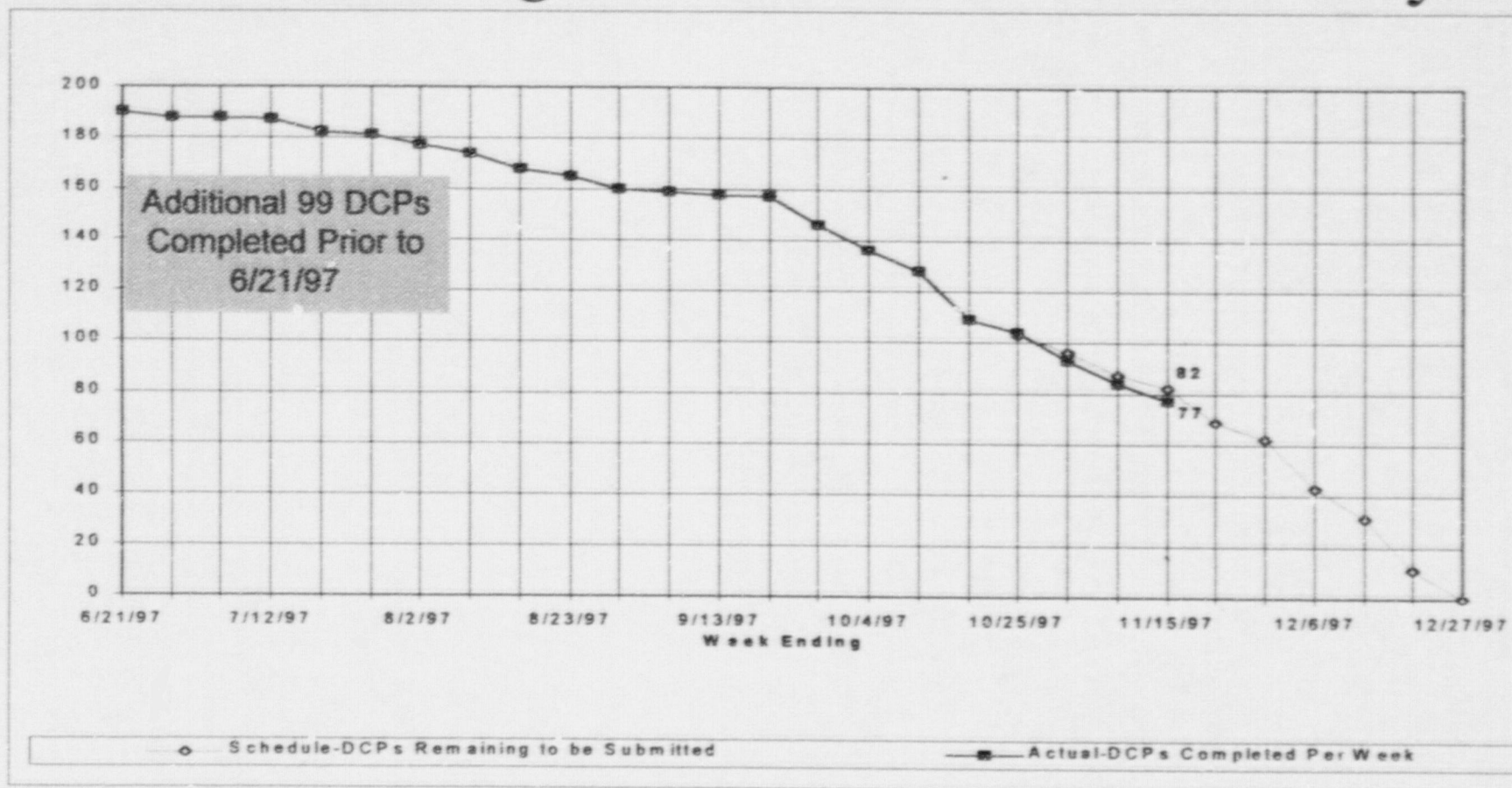
LaSalle





# L1F35 Design Change Packages

## # Remaining to be Submitted to Work Analyst

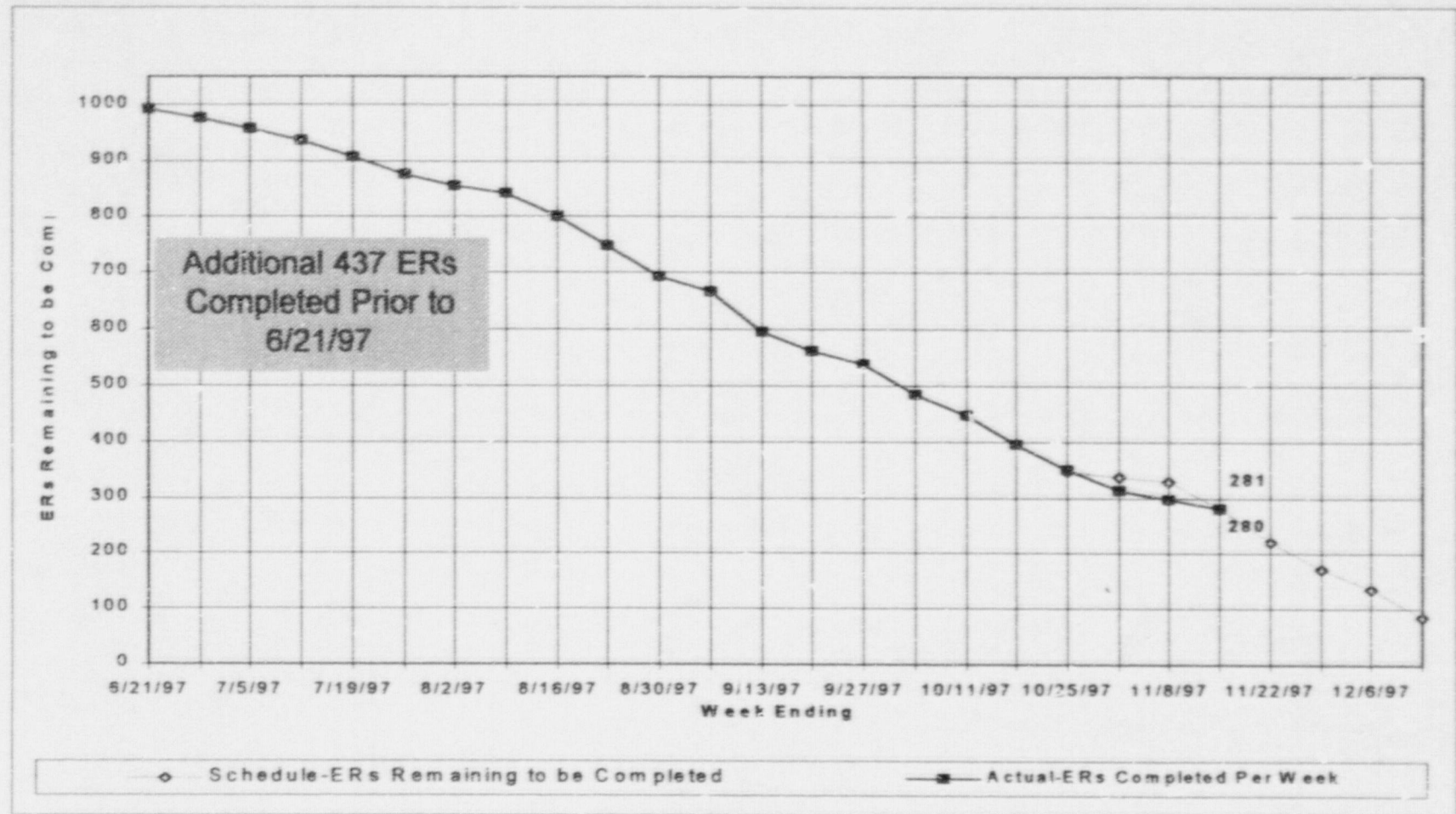


| Legend |                           | 6/28 | 7/05 | 7/12 | 7/19 | 7/26 | 8/2 | 8/9 | 8/16 | 8/23 | 8/30 | 9/6 | 9/13 | 9/20 | 9/27 | 10/04 | 10/11 | 10/18 | 10/25 | 11/01 | 11/08 | 11/15 | 11/22 | 11/29 | 12/06 | 12/13 | 12/20 | 12/27 | Cumulative |
|--------|---------------------------|------|------|------|------|------|-----|-----|------|------|------|-----|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------|
| DCP    | Added after 9/1/97        | 0    | 0    | 0    | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0   | 5    | 2    | 1    | 4     | 0     | 0     | 4     | 6     | 7     | 4     |       |       |       |       |       |       | 33         |
|        | Completed / Dispositioned | 2    | 0    | 1    | 5    | 1    | 4   | 3   | 6    | 3    | 5    | 1   | 6    | 3    | 12   | 14    | 8     | 19    | 9     | 17    | 16    | 11    |       |       |       |       |       |       | 146        |
|        | Remaining to Complete     | 188  | 188  | 187  | 182  | 181  | 177 | 174 | 166  | 165  | 160  | 159 | 158  | 157  | 146  | 136   | 128   | 109   | 104   | 93    | 84    | 77    |       |       |       |       |       |       | 77         |

LaSalle



# L1F35 ERs Remaining to be Completed



| Legend                | 6/28 | 7/5 | 7/12 | 7/19 | 7/26 | 8/2 | 8/9 | 8/16 | 8/23 | 8/30 | 9/6 | 9/13 | 9/20 | 9/27 | 10/4 | 10/11 | 10/18 | 10/25 | 11/01 | 11/08 | 11/15 | 11/22 | 11/29 | 12/06 | 12/13 | Cumulative |
|-----------------------|------|-----|------|------|------|-----|-----|------|------|------|-----|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------|
| Added                 |      |     |      |      |      |     |     |      |      |      | 0   | 11   | 8    | 4    | 41   | 22    | 28    | 36    | 26    | 29    |       |       |       |       |       | 241        |
| Completed/Disposed    |      |     |      |      |      |     |     |      |      |      | 26  | 70   | 35   | 25   | 55   | 36    | 51    | 47    | 62    | 44    |       |       |       |       |       | 503        |
| Remaining to Complete |      |     |      |      |      |     |     |      |      |      | 667 | 597  | 562  | 537  | 482  | 446   | 395   | 347   | 312   | 281   |       |       |       |       |       | 281        |

LaSalle





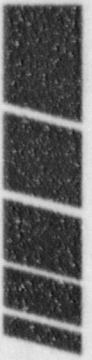
# ***Restart Action Plan***

## ***Strategy 2 - Action Plan 2.1***

### ***Human Performance***

- **Goal - Achieve a Step Change Improvement in Human Performance as Measured by:**
  - Event Free Clock
  - Out of Service Errors
  - Safety System Actuations
  - Open Significant Human Performance PIFs
  - Open Significant Procedure Adherence PIFs

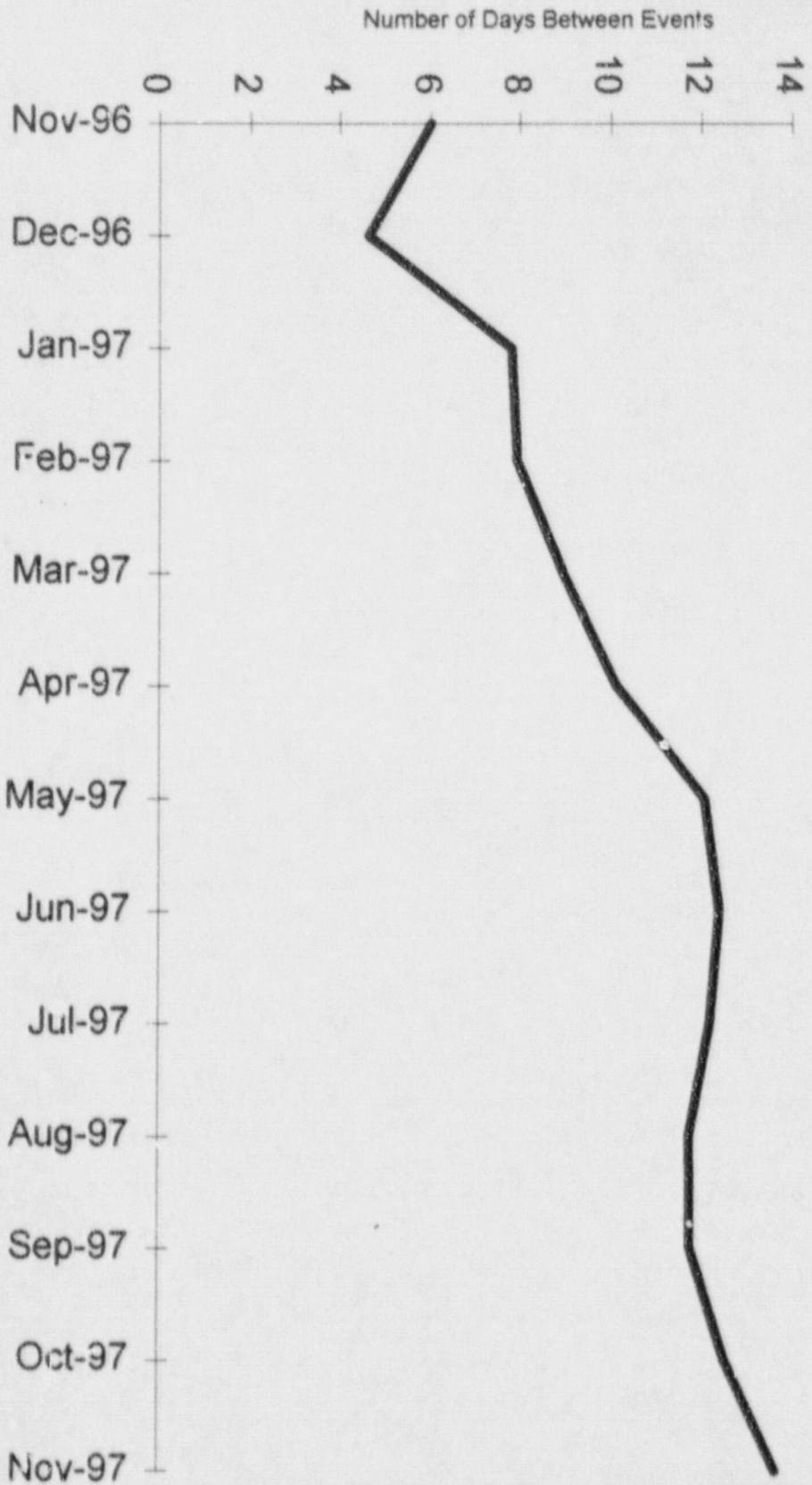




# Event Free Clock

## Average Days Between Events

11-5-96 thru 11-4-97

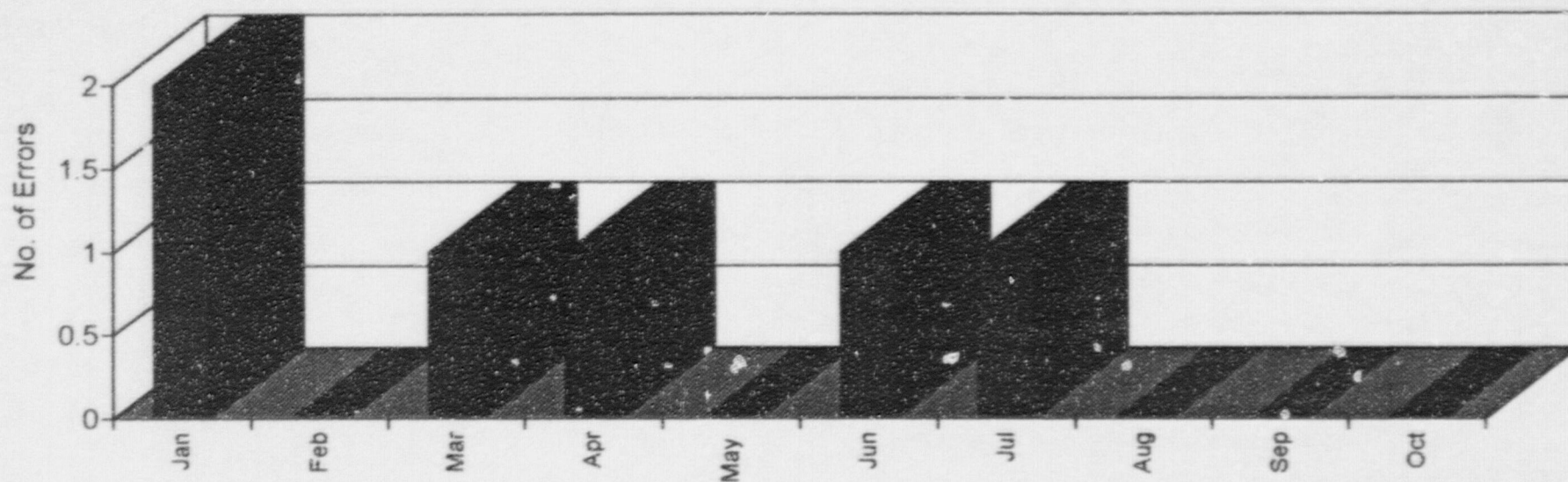


LaSalle





## Out of Service Errors

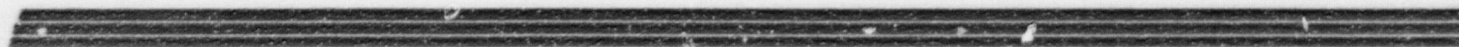


1997

|     | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| LAS | 2   | 0   | 1   | 1   | 0   | 1   | 1   | 0   | 0   | 0   |     |     |

Table displays number of errors during the month. Graph display total number of errors for the year.

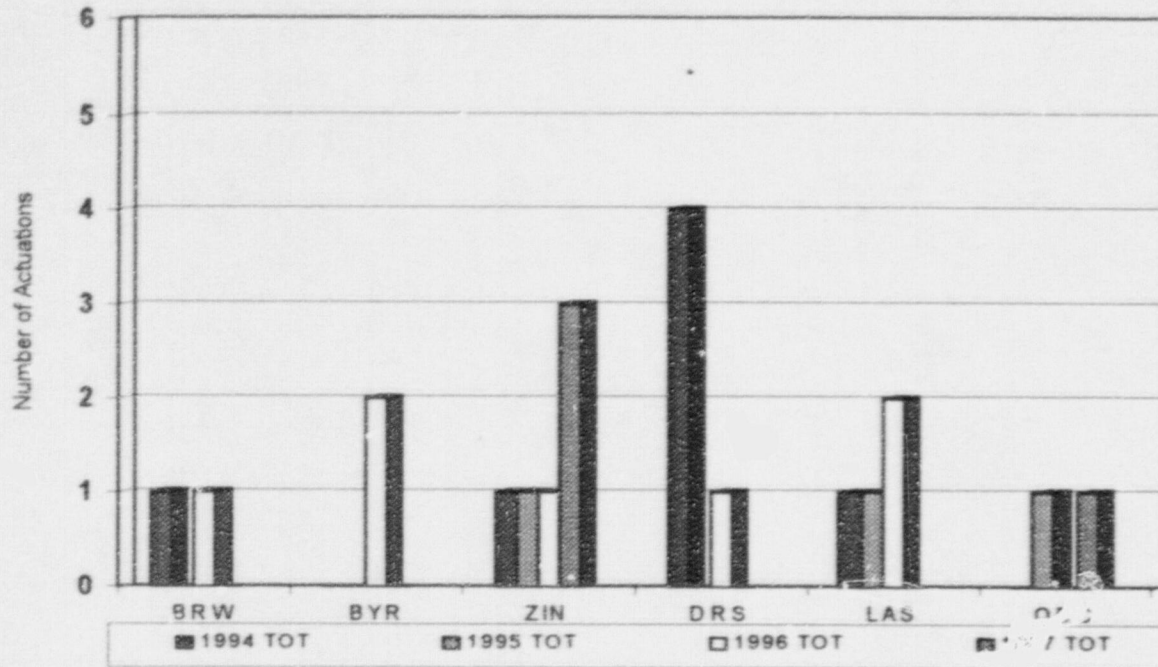
**LaSalle**







# Safety Systems Actuations



Definition: Manual or automatic actuations of the logic or equipment of either certain Emergency Core Cooling Systems (ECCS) or, in response to a low voltage on a vital bus, the emergency AC power system. (# per month)

|     | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| BRW | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |     |     |
| BYR | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |     |     |
| ZIN | 0   | 0   | 1   | 0   | 0   | 0   | 1   | 0   | 1   | 0   |     |     |
| DRS | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |     |     |
| LAS | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |     |     |
| QDC | 0   | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |     |     |

Table displays monthly actuations. Graph displays year to date actuations.



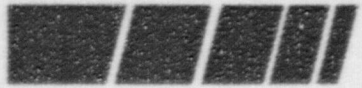


## *Open Significant Human Performance and Procedure Adherence PIFs*

- One Human Performance PIF Currently Open
  - L1997-06992 - Individual Entered Posted Restricted Area during Surveillance Testing
  
- One Procedure Adherence PIF Currently Open
  - L1997-07071 - Required Analysis not Addressed in ECN 001234M







# *Human Performance*

- Action Plan

- Establish Clear Expectations
- Follow-up to Confirm Expectations are Understood
- Training to Improve Human Performance
- Accountability to Resolve Weaknesses and Eliminate Errors
- Improve Organizational Communications



## *Key Action Plan Steps*

- Set & Communicate Expectations (Procedure Adherence, Self Check, Questioning Attitude, and Demanding Resolution)
- Coaching and Observation Training
- Peer Check/Field Observation Programs
- STAR Simulator Training
- High Intensity Training (HIT) for Operators
- MARC Process/CFR/Rewards & Recognition
- FLS Assessment
- Bargaining Unit / Department Head Meetings





## *Current L1F35 Scope of Work*

|                            | <b>Total</b> | <b>Currently<br/>Remaining</b> |
|----------------------------|--------------|--------------------------------|
| • Design Change Packages   | 294          | 77                             |
| • Engineering Requests     | 1437         | 280                            |
| • Work Request Tasks       | 6395         | 2022                           |
| • Surveillance Tasks       | 1165         | 453                            |
| • Preventative Maint.Tasks | 503          | 126                            |

## *Material Condition - Completed*

- RHR Service Water
- Turbine Building Ventilation
- Condensate/ Condensate Booster Pumps
- Main Condenser
- Motor Driven Reactor Feed Pumps
- SBM Switch Replacements
- Main Steam Isolation Valves
- Meteorological Tower Relocation
- Reactor Manual Control System



## *CD-10 Work Window Summary*

- Schedule: CD-10 Window Opened  
November 13, 1997
- Contains: 1982 Work Tasks: Critical  
Path presently is Reactor  
Water Cleanup
- Length: 54 Days

## *Material Condition - CD-10 Window*

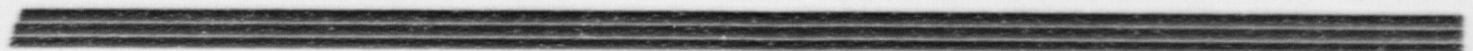
- Reactor Water Cleanup System
- ECCS Suction Strainers (NRCB 96-03)
- Main Condenser
- Feedwater System
- Reactor Head Vent Valve
- Reactor Core Isolation Cooling System
- Reactor Building Closed Cooling Water System
- Turbine Building Closed Cooling Water System
- Electro-Hydraulic Control System
- Lake Blowdown System





## *Materiel Condition - Remaining*

- CR / AEER Ventilation (VC/VE)
- Oscillating Power Range Monitors (GL 94-02)
- Secondary Containment
- HELB
- Drywell Sump Indicators
- KM Relays
- IRMs / SRMs
- Reactor Recirculation System
- FW Control System
- Primary Containment Penetrations (GL 96-06)





## *Dynamic Exam Results*

- Recent (10/24/97) Results:
  - Two Crews (10 Individuals) Failed Their Simulator Exam
  - One Crew "Passed with Remediation"
    - All three crews did not "Emergency Depressurize" in a timely manner when the temperature limits of the drywell were challenged.
- A Formal Root Cause was Conducted







## *Dynamic Exam Results*

### Root Cause Team Findings:

- Inappropriate Management Decision
  - Individuals in HIT remediation will not be allowed to participate in the NRC annual requalification examination process until remediation has been successfully completed.
- Exam Scenario Quality
  - Strengthen the Exam Validation Process
  - Reviewed Currently Existing Exam Materials
  - Upgrade the Simulator Containment Model
  - Acquire Additional Instructor Resources

# ***License Amendments Required for Unit 1 Restart***

| Amendment  | Planned<br>Submittal | Submitted | Required | NRC<br>Approved |
|--|----------------------|-----------|----------|-----------------|
| LAR 262: Delete reference to Reactor Steam Pressure from Condenser Low Vacuum Isolation per DCPs 9700461/2 | 12/12/97             |           | 3/13/98  |                 |
| LAR 255-01: HELB Leak Detection in Secondary Containment   | 11/24/97             |           | 03/13/98 |                 |
| LAR 178-02: VC/VE Filter Testing   |                      | 09/26/97  | 01/23/98 |                 |
| LAR 258: Post-LOCA Hydrogen Instrument Channel Calibration Gas   |                      | 10/15/97  | 02/27/98 |                 |
| LAR 214: Control Room Rad Monitor Instrumentation  |                      | 07/01/97  | -----    | 10/09/97        |
| LAR 254: Change Definition of Channel Calibration to Exempt RTDs and Thermocouples                         |                      | 07/02/97  | -----    | 09/15/97        |
| LAR 252: Feedwater/Main Turbine Reactor Vessel Water Level High Trip                                       |                      | 04/04/97  | -----    | 07/29/97        |

## OTHER LICENSING ACTIONS

| Action  | Planned<br>Submittal | Submitted | Required | NRC<br>Approved |
|---|----------------------|-----------|----------|-----------------|
| Submittal of position on venting of leak chase channels during CILRT. NRC SER to be issued. | 11/26/97             |           | 3/13/98  |                 |
| Clarification of SBO SER regarding battery capacity margin                                  |                      | 10/3/97   | 3/13/98  |                 |