U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-155/93011(DRP)

Docket No. 50-155 License No. DPR-6

Licensee: Consumers Power Company
212 West Michigan Avenue
Jackson, MI 49201

Facility Name: Big Rock Point Nuclear Plant

Inspection At: Charlevoix, Michigan

Inspection Conducted: July 16 through August 27, 1993

Inspector: E. A. Plettner
R. J. Leemon
R. L. Twigg

Approved By: _____ 9/9/93
M. P. Phillips, Chief Date
Reactor Projects Section 2B

Inspection Summary

Inspection on July 16 - August 27, 1993 (Report No. 50-155/93011(DRP))
Areas Inspected: Routine, unannounced inspection by the resident inspectors of operational safety verification, engineered safety feature system walkdowns, maintenance and surveillance activities, engineering and technical support activities, safety assessment and quality verification activities, followup of corrective action reports, and Temporary Instruction (TI) 2500/028, "Employee Concerns Program."

Results: Within the six areas inspected, no violations were identified. One unresolved item was identified and involved the loss of primary pressure control (paragraph 2.a.(2)). Three inspection followup items were also identified concerning the adequacy of corrective actions for safety-related issues in corrective action reports (paragraph 2.c), the failure to include two reactor head vent welds in the ISI program (paragraph 4.e), and the machining of two reactor vent system flanges to or below minimum thickness (paragraph 4.e). The following is a summary of the licensee's performance during this inspection period:

Operations: Overall performance in this area was mixed. Specific strengths included the expenditure of significant resources to remove fibrous material and other foreign material from surfaces inside the containment such as ventilation ducts and cable trays. The material condition of the steam piping tunnel was also improved through cleaning and painting. Where a strength was identified in the conduct of the "infrequent-activity" briefings for the core

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reload and the head-off criticality test, a significant weakness was noted in the "total-activity" briefing and work coordination for the primary system hydrostatic test (hydro). In this case, the crew lost control of primary system pressure.

Maintenance/Surveillance: Performance in this area was acceptable and was improving. Strengths included the strong adherence to the newly implemented outage schedule, which ensured all planned work was accomplished in the allotted outage time. The outage extensions were caused by unexpected work related to the replacement of a sticky fuel channel and by more extensive turbine repairs. A weakness was noted during replacement of a pilot valve assembly for a control-rod drive control valve when a slugging hammer was used to tighten the valve bonnet. Since "skill of the trade" is often used to perform work activities, the method of tightening the valve bonnet was questioned. Use of a torque wrench may have been more appropriate than a slugging hammer. Additional weaknesses concerned the coordination of troubleshooting and repair activities for returning safety-related equipment to service. The supervision and oversight of the EDG and SEDG maintenance activities were weak. Once the licensee held a diesel maintenance review meeting, the probable cause for the poor EDG cooling pump flow rate was rapidly diagnosed and corrected.

Radiation Protection: Overall performance in this area was good and was improving. Dose control was excellent during the outage. Excellent work and ALARA planning, and minimal use of respirators, reduced exposure to personnel by 30 percent from the dose received in previous outages.

Engineering/Technical Support: Performance in this area was acceptable and was improving. A specific strength concerned the methodology used to ensure plant systems were free from Zebra Mussels. The system temperatures were raised to 104°F for more than 5 minutes and chemically treated with "Clamtrol." A weakness attributable to engineering concerned the replacement of the No. 2 recirculation pump first-stage-inner seal, which was replaced in March and failed after only a few months of operation. The plant staff did not recognize the need for verifying flatness or correct pre-load for correct installation of the cartridge.

Safety Assessment/Quality Verification: Performance in this area was good. Strengths included outage event scheduling, staff meetings, and shutdown-risk assessments, which improved throughout the period and were considered to be good.

DETAILS

1. Persons Contacted

Consumers Power Company

*P. Donnelly, Plant Manager
*D. Hughes, Executive Engineer
E. Bogue, Chemistry/Health Physics Manager
G. Boss, Systems and Project Engineering Manager
*R. Scheels, Planning and Scheduling Administrator
W. Trubilowicz, Operations Manager
*D. Turner, Maintenance Manager
G. Withrow, Plant Safety and Licensing Director
*M. Bourassa, Senior Licensing Technologist
D. LaCroix, Nuclear Training Administrator
*G. Petitjean, Senior Staff Engineer
*L. Darrah, Operations Supervisor
*D. Moeggenberg, Engineering Supervisor
*R. Burdette, Senior Health Physicist

The inspectors also contacted other licensee employees including members of the technical and engineering staffs, and the reactor and auxiliary operators.

*Denotes those attending the exit meeting on August 27, 1993.

2. Plant Operations

a. Operational Safety Verification (71707)

The inspectors verified that the facility was being operated in conformance with the license and regulatory requirements and that the licensee's management was effectively implementing its responsibilities for safe operation of the facility.

The inspectors verified proper control room staffing and coordination of plant activities, verified operator adherence to procedures and technical specifications (TS), monitored the control room for abnormalities, verified that electrical power was available, observed that management frequently toured the control room and the plant, and observed shift turnovers.

The inspectors reviewed various records, such as Caution-Tag books, switching- and tagging-order files, shift logs and surveillances, daily orders, and maintenance work orders.

Plant Status

At the beginning of the inspection period, the licensee was performing outage maintenance activities with the plant in a cold

shutdown condition. Surveillances, tests, and scheduled outage maintenance activities were performed in accordance with the outage schedule throughout the period. Major outage activities performed included: core reload, head off criticality test, and cold hydrostatic test. At the end of the period, the plant remained in cold shutdown with the licensee awaiting completion of contracted turbine work.

Pre-job Briefings

For both the core reload and the head-off-critical test, the operations department conducted excellent "infrequent-activity" briefings. The briefings highlighted reactivity management and included the lessons learned from the Palisades failure-to-uncouple control rod event. The following items were stressed: (1) take the time to do the job right; (2) maintain good communications while the activity is being performed; (3) document the activity as it is being performed; and (4) when questions are raised, stop the activity and discuss and resolve the questions before resuming the activity. The last item was most strongly stressed. The core reload and head-off-critical test were performed in a very professional manner.

In contrast, the "total-activity" briefing conducted before the primary system hydro on August 24, 1993, was not as structured as the above two briefings and did not require senior management participation. The briefing covered operation of a solid primary system and the need for good communications, but did not stress the rapid and large changes in pressure that could result from just a few degrees change in the temperature of a solid system or from small amounts of water pumped into a solid system. Additionally, the need for local control of the pump and the operator to remain at the pump and maintain continuous communications with the control room was not stressed. The local operator would be required to control primary system pressure, but would be unable to monitor the pressure directly with the required accuracy. With the hydro pump operating, the shift supervisor sent the local operator to check the area for leaks. Subsequently, the control room operator noted primary pressure was increasing, but was unable to communicate with the local operator. Primary system pressure increased from 1490 psig to 1570 psig and resulted in a steam relief valve lifting. Local control of the hydro pump was then re-established and primary system pressure was lowered. The unacceptable loss of effective control of the evolution is characterized as an unresolved item pending further investigation of the event (155/93011-01).

Radiation Protection/ALARA

The inspectors reviewed overall radiological control performance by monitoring cumulative exposures for the outage. The licensee had used approximately 70 percent of the original person-rem goal

for the outage. The low percentage was achieved by adhering to the outage schedule, which allowed for excellent ALARA (as low as reasonably achievable) planning. Additionally, the licensee implemented the new 10 CFR Part 20 requirements which minimized the use of respirators and the time required to perform tasks in radiation areas. To be proactive and to look for further improvements, the licensee reduced the outage goal from 160 to 115 person-rem. The licensee has used 113.5 person-rem to date.

b. Engineered Safety Feature System Walkdown (71710)

The inspectors performed walkdowns of various safety systems. The inspectors used procedures and piping and instrumentation drawings (P&IDs) to verify system line-ups and to ascertain that the systems were operable. During the inspections, housekeeping and the material condition of valves, pumps, supports, labeling, and major system components were assessed.

A walkdown of the containment was conducted with the Nuclear Safety and Licensing Director to identify loose material and poor plant cleanliness conditions. The specific areas inspected included three of five emergency core cooling (ECCS) suction strainers and the reactor refueling deck. Fibrous materials inside the containment had been removed to ensure the suction strainers would not become plugged. The cleanliness of the suction strainer areas was good. The only foreign material found was some duct tape. Improvements in material control were needed on the refueling deck. The licensee stated that all unnecessary items would be removed from the refueling deck prior to startup; plant cleanup would continue; and material storage, including storage of anti-contamination clothing, would be improved. The reactor recirculation pump room, another containment area with an ECCS suction strainer, was inspected by two regional health physics inspectors. Their findings were documented in Inspection Report 93012 and were similar to the findings in the other containment areas. The licensee also painted the Steam Pipe Tunnel and completed removal of loose fibrous material in the area.

The inspection did not reveal any safety-significant deficiencies.

c. Followup of Licensee Reports (90712 & 92700)

The inspectors reviewed approximately 15 licensee event reports (LERs), deviation reports (DRs), and event reports (ERs) from 1992 and 1993. The reports were evaluated for compliance to reporting requirements, adequacy of root cause analyses, proposed corrective actions and schedule, and, as applicable, implementation of the associated corrective actions. Some safety related issues were identified that the reports had not specifically addressed. Although these issues were acceptably resolved, the failure to address them in the original reports may have reduced the

capability to track and trend deviations, thus complicating the determination of root causes and associated corrective actions. The inspectors questioned the adequacy of the root cause analyses and corrective actions for the following: DR 93-048, "Waste Hold Tank Manhole Leak"; LER 93-005, "Primary Containment Spray MOV Capability"; ER 92-025, "Failure of SV-4922 to Close a Containment Isolation Valve (CV-4117)"; and ER 93-005, "Reactor Water Level and Primary Pressure Sensors Out-Of-Calibration - MO-7070 Backup Core Spray Valve Automatic Operation Affected." The licensee's efforts to ensure the adequacy of root cause analyses and corrective actions for safety related issues in ERs, DRs, and LERs will be tracked as an inspection followup item (155/93011-02).

No violations or deviations were identified in this area.

3. Maintenance/Surveillance (61726 & 62703)

a. Work Observations

The inspectors observed station maintenance and surveillance activities and determined that they were conducted in accordance with approved procedures, regulatory guides, industry codes and standards, and in conformance with TS.

During this review, the inspectors considered the following: (1) were approvals obtained before initiating work; (2) were instruments calibrated; (3) were functional tests and/or calibrations performed; (4) were quality control records properly maintained; (5) were activities accomplished by qualified personnel; and (6) were results within specifications and properly reviewed with any identified deficiencies properly resolved before returning components or systems to service. The following maintenance and surveillance activities were observed:

Maintenance

MCRD-8 Control Rod Drive Hydraulic System Master Control Valves Inspection and Repair - A maintenance worker was replacing a pilot assembly which involved placing the unit on the valve body and tightening the bonnet ring (the unit uses a teflon o-ring). The procedure required tightening with a wrench, with no additional guidance (step 5.3.f.4). The worker used a slugging hammer on the wrench which caused vibration in the attached piping and control valves. When asked why he had not used a torque wrench, the worker stated that he had thought he should, but the procedure specified using a slugging hammer. The inspector later reviewed the procedure and could not find where a slugging hammer was required.

MGP-39 Post Modification Testing of Motor Operated Valves - Effective radio communications were observed, appropriate tag-outs were hung, and the workers displayed confidence in their work.

Number Seven Turbine Steam Admission Valve - Upon disassembly and inspection of all seven turbine admission valves, the No. 7 stem locking-clamp was found to be loose. This allowed the stem to unscrew and drop the valve onto its seat, stopping steam flow. When the valve closed, the turbine's output was restricted to less than design and the plant operated at a reduced power output for the remainder of the core cycle. The locking clamp had been verified tight after the No. 7 steam admission valve was replaced following the stem breakage in 1992.

Since the clamp met the original design requirements and had been verified to be tight during the previous maintenance, no clear root cause for the clamp loosening could be determined. One possible contributor was the high vibration of the No. 7 stem when the unit was operating at 70 Megawatts. The No. 7 stem was modified from a 1 inch to a 1¼ inch diameter to stiffen the valve and reduce vibration. In addition, loctite was used on the clamp bolt in an effort to prevent loosening.

Surveillance

Standby Emergency Diesel Generator Load Test - No discrepant or unacceptable items were noted in the engineered safety feature (ESF) surveillances. The inspectors monitored the surveillance testing of the SEDG and the licensee's repair efforts detailed in paragraph 5.a.

b. Outage Planning and Control

This was the first refueling outage for which a highly detailed schedule combining all work activities had been developed. Most work activities were well coordinated and were completed according to the schedule. The licensee's expectations of improved job performance and dose reduction were met.

No violations or deviations were identified.

4. Engineering and Technical Support (37700)

The inspectors evaluated the extent to which engineering principles and evaluations were integrated into daily plant activities. This was accomplished by assessing the technical staff's involvement in non-routine events, outage related activities, and assigned TS surveillances; by observing on-going maintenance work and troubleshooting; and by reviewing deviation investigations and root cause determinations.

a. System Engineering

A system approach to engineering will be formalized at the completion of the refueling outage. The system teams will be given

the authority and responsibility to manage their systems. The inspectors noted that engineers were heavily involved in outage activities, with a positive attitude toward this initiative.

b. Zebra Mussels

The licensee conducted two evolutions to ensure plant systems were free of Zebra Mussels before startup. The first was heating the fire and core spray system to greater than 104°F for 5 minutes with the auxiliary boiler. A flush into a strainer detected only one zebra mussel shell in the systems. The second evolution was a Clamtrol treatment of the circulating water system inlet structure. The Clamtrol was flushed through the complete circulating water and service water systems including all heat exchangers. As a test, live mussels were placed in the biological box (which receives a sample flow from the circulating water system, including the Clamtrol). The results of the test determined the treatment was effective.

c. Recirculation Water Pump Seal

The recirculation pump first stage inner seal failed after only a few months of service following its recent installation in March 1993. The seal manufacturer assisted in the removal, disassembly, and failure analysis of the seal. The first stage of the two stage seal was found to have failed. The major contributor to the failure was the seating surface of the first stage backup ring that serves as backing for the stationary carbon face. The seating surface had become "saddle shaped" and caused the stationary face to become distorted and eventually leak. The causes of the problem were related to the previous installation effort. Corrosion products were not a contributor to the seal failure. The manufacturer had revised the method of checking the seal surface for flatness, but this revision had not been incorporated into the plant procedures until after the seal failure. Another contributor to the failure was the low pre-load of the seal cartridge during installation. The pre-load setting had apparently been misadjusted during the last overhaul, probably during seal installation. The plant staff did not recognize the need for verifying flatness or correct pre-load for correct installation of the cartridge.

To reduce the chances of recurrence, the manufacturer suggested several changes to the repair procedures to simplify the change-out process. The manufacturer indicated that the short time from installation until failure of the seal made it unlikely that the other recirculation pump's seal would fail from the same cause.

d. Fuel Channel Replacement

While inserting the fuel bundle at location 08-60 on August 5, an obstruction was discovered in the fuel channel. The licensee

evaluated the situation and concluded the fuel channel needed replacement. The new fuel channel arrived onsite on August 9 and core reload was completed on August 10. The reactor engineers did a good job in resolving the fuel channel problem.

e. Reactor Vessel Vent Flange

While looking for a possible leak, the licensee found a flaw in the weld for the reactor vessel vent line flange, which is welded above the transition section of a stub tube on the reactor vessel. The flaw turned out to be an indication only, with no cracking found. This weld, and another weld in the head vent piping, were not included in the in-service-inspection (ISI) program. Both welds were subsequently added to the ISI program.

During the process of removing the vent line, the stub tube flange was found to have been machined to fit the existing vent piping flange at some time in the past. The surface of the stub tube flange was now out of parallel and one edge of the flange was at or below minimum-allowable thickness. After evaluating the possible repairs, the licensee decided to replace both the stub tube flange and a portion of the reactor head vent line. Another flange that was at or below minimum-allowable thickness was found when completing the corrective actions for the stub tube flange. How the two reactor head vent welds were omitted from the ISI program and the evaluation of the licensee's root cause analysis and corrective actions is an inspection followup item (155/93011-03). How and when the two flanges got machined to or below minimum-allowable thickness, the evaluation of the licensee's root cause analysis and corrective actions, and the evaluation of the interim operability is also an inspection followup item (155/93011-04).

No violations or deviations were identified.

5. Safety Assessment/Quality Verification (40500)

The inspectors evaluated the effectiveness of management control, verification, and oversight in the jobs observed during this inspection. The inspectors also attended management and supervisory meetings involving plant status to observe inter-departmental communications and coordination. Additionally, the inspectors routinely monitored the results of the licensee's corrective actions programs by attending routine meetings; through discussions with the plant staff; and review of deviation, event, and root cause evaluation reports.

a. Emergency Diesel Generator

On July 19, 1993, with the EDG out-of-service to replace its water pump seal, the SEDG was shutdown due to high cooling water temperature at full load during a surveillance test. A calcium buildup in the diesel cooling system radiator reduced the heat

transfer capability. The licensee performed a safety significance analysis and shutdown risk assessment, but did not communicate the results to the NRC until prompted. At the time, the reactor core was stored in the spent fuel pool (SFP). The shutdown risk assessment determined that outage operations could continue given the contingencies available, which included availability of offsite sources of water and electrical power, delaying work on the fire system to ensure diesel fire pump availability if offsite power was lost, and that with the existing heat load and with no external cooling, it would have taken over 53 hours for the SFP to heat up to a boiling condition.

On July 21, the SEDG was made available for reduced load operations. On July 23, the EDG was satisfactorily load tested and was available, thus making both diesels available for emergency power supply; however, on August 9, 1993, the cooling water pump for the EDG again failed. The licensee had rebuilt the EDG water pump seal when it became apparent that a new seal was not going to be delivered as expected. The pump was sent offsite for repairs, and returned on August 17, 1993; however, when initially tested, it only developed about 10 psig discharge pressure. After the casing was refurbished and a new impeller was installed, the same thickness of gasket material was found to pull the impeller out of the optimum area. The gasket was reworked and the pump retested at 84 gpm. The pump now exceeds the fluid flow and discharge pressure requirements.

On August 12, a new radiator was installed on the SEDG and it was returned to full service.

The supervision and oversight of the EDG and SEDG maintenance activities were weak. Trouble shooting activities into why the rebuilt water pump would not develop the required discharge pressure and flow rate were not well managed. This resulted in delays in correcting the flow problems with the water pump. Once the licensee held a diesel maintenance review meeting, the probable cause was rapidly diagnosed and corrected.

b. Outage Planning and Shutdown Risk Assessments

The organization and content of the daily outage-pre-shift, outage-management, outage-scheduling, and shift-turnover meetings improved greatly throughout this inspection period. The greatest improvement was the stressing of shutdown risk assessment (SDRA) considerations at the beginning of each meeting. Site equipment and electrical supplies needed to ensure core cooling were carefully itemized. This helped to ensure that when discussions occurred as to what equipment was to be worked on, proper considerations would be taken before placing any core-cooling equipment out-of-service. Examples were the diesel generators, fire pumps, and the service water system. These SDRAs matured as the outage progressed and are now considered to be very good.

c. Corrective Action Review Board

The corrective action review board (CARB) activities improved during this inspection period. Root cause analysis discussions covered a wider depth and scope, including evaluating similar pieces of equipment for the same possible fault and similar events and plant activities that may have resulted in similar faults on other pieces of plant equipment. An example was the CARB on the reduction in thickness of the reactor vessel vent flange.

d. Licensee Assessments

During this inspection period, the licensee conducted self assessments on the scheduling of and adherence to the outage critical path and on the maintenance activities supporting the outage. These assessments continued throughout the outage and were ongoing at the end of the inspection period. The resident staff will review the effectiveness of these assessments.

No violations or deviations were identified in this area.

6. (Closed) Temporary Instruction (TI) 2500/028

Temporary Instruction (TI) 2500/028 was issued to determine the characteristics of the employee concerns program implemented by the licensee to provide employees an alternate path from their supervisor or normal line management to express safety related concerns without fear of retribution. The TI was completed and the related questionnaire has been attached to this report. The licensee has not implemented a formal employee concerns program. However, interviews with management indicated that an open door policy existed for resolving issues and the various corrective action report forms were available to all employees. The open door policy was verified in a discussion with a maintenance worker who stated that he knew of no official employee concerns program, but had never had any problems resolving issues with his supervisor. He also stated he would have no problems coming to the NRC if necessary. The BRP Site Specifics training handout stated, "If you file a corrective action report and it is not acted upon, you may contact the NRC. Such contacts will not jeopardize your job." This issue is closed.

7. Exit Interview

The inspectors met with licensee representatives (denoted in paragraph 1) on August 27, 1993. The inspectors summarized the purpose and scope of the inspection and the findings. The inspectors also discussed the likely informational content of the inspection report, with regard to documents or processes reviewed by the inspectors during the inspection. The licensee did not identify any such documents or processes as proprietary.

Attachment: Employee Concerns Program

Attachment

EMPLOYEE CONCERNS PROGRAMS

PLANT NAME: Big Rock Pt. LICENSEE: CPCo DOCKET #: 50-155

NOTE: Please circle yes or no if applicable and add comments in the space provided.

A. PROGRAM:

1. Does the licensee have an employee concerns program? (Yes or (No)/Comments) Not specifically. The subject is discussed in General Employee Training, contractor training during outages, and through the open door policy and corrective action systems.
2. Has NRC inspected the program? Report #No program to inspect.

B. SCOPE: (Circle all that apply)

1. Is it for:

   a. Technical? (Yes, (No)/Comments) N/A - No program.

   b. Administrative? (Yes, (No)/Comments) N/A - No program.

   c. Personnel issues? (Yes, (No)/Comments) N/A - No program.

2. Does it cover safety as well as non-safety issues? (Yes or (No)/Comments) N/A-No program.

3. Is it designed for:

   a. Nuclear safety? (Yes, (No)/Comments) N/A - No program. Deficiencies can be input into corrective action system.

   b. Personal safety? (Yes, (No/Comments) Near Miss personal safety issues qualify for inclusion in corrective action system, and as such are addressed.

   c. Personnel issues - including union grievances? (Yes or (No)/Comments) N/A - No program.

4. Does the program apply to all licensee employees? ((Yes) or No/Comments) N/A - No program.

5. Contractors? ((Yes) or (No)/Comments) N/A - No program

6. Does the licensee require its contractors and their subs to have a similar program?
(Yes or (No)/Comments) NO, nor does it have its own program.

7. Does the licensee conduct an exit interview upon terminating employees asking if they have any safety concerns? NO.
(Yes or (No)/Comments)

C. INDEPENDENCE:

1. What is the title of the person in charge? There is no person in charge, no program.

2. Who do they report to? N/A - No program.

3. Are they independent of line management? N/A - No program.

4. Does the ECP use third party consultants? N/A - No program.

5. How is a concern about a manager or vice president followed up? No program, I guess the individual would have to come to DOL or NRC.

D. RESOURCES:

1. What is the size of the staff devoted to this program? 0 (None)

2. What are ECP staff qualifications (technical training, interviewing training, investigator training, other)? N/A - No staff

E. REFERRALS:

1. Who has followup on concerns (ECP staff, line management, (other)? They are assigned via the corrective action system to the appropriate department/individual.

F. CONFIDENTIALITY:

1. Are the reports confidential? NO.
(Yes or (No)/Comments)

2. Who is the identity of the alleger made known to (senior management, ECP staff, (line management), other)? (Circle, if other explain) Generally, Line Management except for fitness for duty or other sensitive personnel issues (e.g., sexual harrassment).

3. Can employees be:

   a. Anonymous? (Yes, (No)/Comments) Generally not, however direct calls to management likely get some followup.

   b. Report by phone? ((Yes), No/Comments) Yes. See section 3.A. above.

G. FEEDBACK:

1. Is feedback given to the alleger upon completion of the followup? ((Yes) or No - If so, how?) Yes, through direct contact.

2. Does program reward good ideas? Yes, for the "Bright Ideas" program

3. Who, or at what level, makes the final decision of resolution? Plant Manager is generally the highest level.

4. Are the resolutions of anonymous concerns disseminated? Yes. General 3rd person is used even when the people are all known.

5. Are resolutions of valid concerns publicized (newsletter, bulletin board, all hands meeting, other)? Yes, via the newsletter.

H. EFFECTIVENESS:

1. How does the licensee measure the effectiveness of the program? N/A - No program

2. Are concerns:

   a. Trended? (Yes or (No)/Comments) N/A - No program

   b. Used? (Yes or (No)/Comments) N/A - No program

3. In the last three years how many concerns were raised? N/A Of the concersn raised, how many were closed? N/A What percentage were substantiated? N/A

4. How are followup techniques used to measure effectiveness (random survey, interviews, other)? N/A

5. How frequently are internal audits of the ECP conducted and by whom? N/A

I. ADMINISTRATION/TRAINING:

1. Is ECP prescribed by a procedure? (Yes or No/Comments) N/A

2. How are employees, as well as contractors, made aware of this program (training, newsletter, bulletin board, other)? N/A

ADDITIONAL COMMENTS: (Including characteristics which make the program especially effective, if any.)

AS NOTED THROUGHOUT, THE LICENSEE HAS NO FORMAL PROGRAM!

NAME: Ricky Twigg / TITLE: Reactor Engr./ PHONE #: (708)790-5784 DATE COMPLETED: 8/20/93