U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-341/90014(DRP)

Docket No. 50-341 Operating License No. NPF-43

Licensee: Detroit Edison Company
2000 Second Avenue
Detroit, MI 48226

Facility Name: Fermi 2

Inspection At: Fermi Site, Newport, MI

Inspection Conducted: October 1 through October 19, 1990

Inspectors: P. B. Moore, Team Leader
S. D. Burgess
B. S. Drouin
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Approved By: R. W. DeFayette, Chief
Reactor Projects Section 2B

NOV 15 1990
Date

Inspection Summary

Inspection on October 1 to October 5 and October 19, 1990 (Report No. 50-341/90014(DRP))

Areas Inspected: Action on previous inspection findings in the area of maintenance; observations of maintenance activities conducted during the outage; follow-up on corrective actions taken to address weaknesses previously identified in a Maintenance Team Inspection (50-341/89024(DRS)); and a review of modification activities.

Results: Improvements in job planning and increased involvement of first line supervision were noted. The interface/communication between the various disciplines supporting maintenance activities was also improved. Post-maintenance testing did not exhibit any apparent deficiencies within the limited scope and duration of this inspection. A review of post-modification testing indicated no distinct weaknesses, but further inspection and evaluation are required to adequately assess this area. The Quality Assurance program has been revised to make more efficient use of resources. The program for identifying and correcting deficiencies was discontinued in favor of a direct approach to initiate work requests for identified deficiencies; this new approach could not be evaluated at this time. Overall, the licensee has taken positive and substantial actions to improve the maintenance program in response to past identified weaknesses. Some of these actions have already resulted in improvements, while others will require additional assessment or a longer post-implementation period to be adequately evaluated. Two examples of an NRC identified, non-cited violation involving the documentation of equipment test results were identified (paragraph 3). Neither example represented a programmatic deficiency and appropriate corrective action was undertaken.

DETAILS

1. Persons Contacted

a. Detroit Edison Company

*R. Anderson, Superintendent, Radiation Protection
&*P. Anthony, Licensing
*C. Cassise, General Supervisor, Mechanical Maintenance
*S. Catola, Vice President, Nuclear Engineering and Services
*G. Cranston, General Director, Nuclear Engineering
*R. Eberhardt, Outage Manager
*D. Gipson, Assistant Vice President, Nuclear Production
*L. Goodman, Director, Nuclear Licensing
*J. Hughes, General Supervisor, Electrical Maintenance
*A. Kowalczuk, Superintendent, Maintenance
*R. McKeon, Plant Manager
*R. Matthews, Assistant Superintendent, Maintenance & Modifications
*W. Miller, Quality Assurance Manager
&*D. Noetzel, Maintenance Effectiveness
*W. Orser, Senior Vice President
*J. Plona, Superintendent, Operations
&*T. Riley, Compliance Supervisor
*R. Thorson, Assistant to the Plant Manager
*J. Walker, General Supervisor, Plant Engineering

b. U.S. Nuclear Regulatory Commission

&*W. Rogers, Senior Resident Inspector
&*P. Moore, Team Leader
&*B. Drouin, Project Inspector
*S. Burgess, Reactor Inspector
*R. Mendez, Reactor Inspector
& S. Stasek, Resident Inspector

*Denotes those attending the exit meeting on October 5, 1990.

&Denotes those attending the telephone exit meeting on October 19, 1990.

The inspectors also interviewed others of the licensee's staff during this inspection.

2. Maintenance Implementation

The inspectors performed a review of the implementation of the maintenance program paying particular attention to previously identified weaknesses that included: availability and completeness of work packages; planning of work activities; involvement of first line supervision in work performance; and the effectiveness of interface activities between disciplines.

The following work requests (WR) were reviewed as they were implemented:

WR 014D900716	Calibration of position indicator for #3 turbine control throttle valve;
WR 012D900731	Head measurement and correction for torus level;
WR 014D900731	Disassemble, inspect/rework valve and actuator (F407 A);
WR 016D900731	Rework/repack valve and replace actuator seals (F407 B);
WR 017D900827	Investigate/repair tube leaks for 5 north feedwater (FW) heater;
WR 001D900828	Unexpected Isolation of Reactor Water Cleanup (RWCU) valve G33-F004, troubleshoot;
WR 001D900920	Clean filters and inspect stator/motor on heater drain pump motors;
WR 001D900922	Heater drain pump south drain valve (F415 B) - remove furmanite injectors and restore valve;
WR 001D900930	Fabricate 4 north FW heater support structure 4;
WR 004D901001	Troubleshooting of main steam isolation valves (MSIVs) B21-F028B/D, valves stroked too fast;
NPP-42.302.03	Functional check of 4160 volt emergency bus division II undervoltage circuits.

a. Job Planning

The inspectors assessed the overall quality of these work packages paying particular attention to the completeness, use of the most recent controlled drawings and vendor manuals, adequacy of written instructions, proper review by involved individuals, post-maintenance testing requirements, and adherence to required administrative and technical requirements.

Few delays or problems were noted on maintenance performed in the field that could be attributed to a lack of planning. Work was performed efficiently and maintenance personnel understood the assigned work instructions, indicating that adequate planning and pre-work briefings were performed by first line supervisors. Interviews with maintenance personnel disclosed that work package completeness had improved, which resulted in fewer work delays in the field. Pre-work briefings attended by the inspectors were thorough

and deliberate, facilitating maintenance personnel understanding. There were several examples of maintenance planners taking advantage of repair activities to plan future work on equipment that was disassembled (WR 001D900920). However, there was one example of poorly planned and coordinated work which is described in paragraph 2b of this report (WR 012D900731, Head Measurement and Correction for Torus Level).

Overall, the quality of the work packages implemented had improved in comparison to those reviewed during the Maintenance Team Inspection in November 1989. This improvement was partly attributed to changes made in March 1990 that removed 75 percent (17) of the planners from the individual work groups and placed them directly under the Assistant Superintendent of Maintenance and Modifications. The other 25 percent (5) of the planners remained aligned with the individual work groups under the General Supervisors. This change has allowed for more flexibility for the planners as well as better scheduling of work activities, especially those involving more than one discipline.

All of the reviewed work packages appeared complete and were well written. Of particular note were the written instructions for work on RWCU valve F004. These instructions were comprehensive, methodical, concise and contained appropriate caution statements. Pre-planning was evidenced by a memo issued on September 4, 1990, to the tool room supervisor from the planner regarding performance of this job and the tools that would be required for the work.

Work planning has also been improved through the incorporation of pertinent worker comments regarding previous work on the same equipment. Procedure NPP-MA1-01, "Work Control," Revision 3, requires that work group supervisors ensure that a work request feedback form (WRFF) be completed with each work package, and that work planners resolve all germane comments concerning the work performed. The inspectors interviewed maintenance personnel and determined that maintenance general supervisor involvement had given workers more confidence that comments included on the WRFF would be appropriately addressed. Maintenance personnel stated that they had noticed improvements in the work process based on previously submitted comments. A review of a previously completed preventive maintenance (PM) WR G480890822 (Solenoid Valve: Reactor Building heating, ventilation, air conditioning (HVAC) air intake isolation valve T4100F008, Division 2) indicated that the pertinent Instrument & Controls (I&C) comments on WRFF had been incorporated into the preventative maintenance (PM) job instructions.

b. Work Activities

The inspectors reviewed the work performance in the field for the previously mentioned work packages. The inspectors paid particular attention to the presence and involvement of first line supervision, Production Quality Assurance (PQA), and Radiation Protection (RP). Also noted were the availability of adequate procedures, calibrated

Measuring and Test Equipment (M&TE), and materials. Post-maintenance testing (PMT) and the qualification and training of personnel involved were also evaluated.

The improved quality of the work packages had a similar effect on the work performance. There was less time expended coordinating activities while work was in progress and more time spent performing the actual work.

The increased involvement of first line supervision, the job foreman assigned to the work package, was an apparent strength. All of the jobs observed demonstrated a high degree of involvement in ongoing work activities by the job foreman. The inspectors observed job supervisors involved in work activities, ensuring that work teams possessed the necessary materials and understood their work. This involvement also had a positive effect on the communications between the other maintenance disciplines, Operations, PQA, RP, and Technical Engineering.

An indication of the depth of supervisory involvement was the manner by which a supervisor chose work to be observed. One mechanical supervisor selected work to be observed by determining which work was undergoing the most critical steps. The inspectors had several opportunities to observe supervisors in the field and noted that problems identified by the work crews had more effective and timely resolution due to the increase in supervisor availability. Good interface between maintenance and operations was noted in clearing tags on valves to the 4 north feedwater heater. Good coordination between maintenance and RP was effected in preparation for the disassembly of valve N220OF415 B to ensure all radiological concerns were addressed prior to system breach.

Technical support and nuclear engineering support were evident. The system engineer played a major role in the testing and subsequent repair of the feedwater heaters. Nuclear engineering support was provided in several maintenance/modification activities, particularly the fabrication of the 4 north feedwater heater support structure.

Before installing the stator cover on Heater Drain Pump C under WR 001D900920, a planner used the opportunity to scope work that will be completed on the pump during the upcoming refueling outage.

During the performance of WR 004D901001, visual inspection of the MSIVs indicated that oil was leaking from the hydraulic manifold. The old and new system engineers were present and involved in the troubleshooting direction. The new system engineer discussed the problem with the appropriate vendor and determined the root cause of the MSIV fast closure to be the leaking oil. Once determined, a decision was made to inspect the other two outboard MSIVs as well as the other four inboard MSIVs for leaks and loose fittings. The inspectors considered the inspection of the other MSIVs an appropriate common mode failure inspection.

Attention to detail was evident when an I&C technician noted a missing set screw on a bushing during the calibration of the position indicator for the #3 turbine control throttle valve that had been omitted during previous mechanical maintenance. The set screw, which was not essential to the valve's proper operation, was later installed. The fact that the set screw was not installed during equipment reassembly was attributable to the absence of the set screw from the equipment drawing, rather than a lack of attention by maintenance personnel.

Planning for WR 012D900731, Head Measurement and Correction for Torus Level, could have been better. This work package involved head measurements and correction of the torus water level instrumentation. An inspector followed the work crew for the first half of the job which included the pre-job briefing and preparation through the first attempts to perform the measurement and calibration. A PQA inspector was present for the duration of the job. The pre-job briefing and preparation were thorough. The coordination of the activities could have been improved as evidenced by the work group which dressed in protective clothing and set up the test instrumentation, and then waited 45 minutes in the torus room while previous steps, including the calibration of the Emergency Response Information System (ERIS) plant process computer were completed. The ERIS computer point could not be calibrated because it had been removed from the readout to eliminate false alarms being generated by the errors that were being corrected by the subject WR. The poor planning resulted in an avoidable delay, an increased exposure to the work crew (an average of 5 mR/person), and occupied the crew for the better part of the day while accomplishing very little. The technicians, however, stayed in a low dose area waiting to perform the work and called off the job when it appeared that work would not proceed after the 45 minute wait.

Radiation protection practices were adhered to, and radiation protection personnel were knowledgeable and helpful concerning specific hazards associated with certain work. It was noted that there was an absence of friskers in the reactor building. The job that was observed in the torus room required workers to travel in a non-posted elevator, through the reactor building personnel airlock, to the dressout area where they used standup friskers. This could lead to a spread of contamination from high traffic which could be avoided by using a simple hand and foot frisk at the exit of the posted area.

One anomaly was noted concerning the use of procedures and the control of contractors. The licensee had incorporated a contractor's procedure into the plant's procedures to accomplish the explosive plugging of feedwater heater tubes. The contractor's procedure required: the use of bump caps while inside the heater if a hard hat could not be worn; and three blasts on an air horn warning other workers in the area of an impending explosion (exploding plug) prior to the detonation of the plug. Bump caps were not employed nor was an air horn utilized. The contractor personnel, however, provided adequate warning to all workers in the area prior to any detonation.

The tube plugging was well supervised, and there were no safety implications due to the minor procedural deviations. The licensee changed the procedure to reflect actual work practices immediately after being notified of the discrepancy by the NRC inspector. The observation highlighted the need for a thorough review of contractor procedures prior to adoption by the licensee and the need for the supervisor to be familiar with the procedure being worked to ensure compliance.

Weaknesses were observed with testing of reactor water cleanup (RWCU), HFA relays. On August 16, 1990, the RWCU outboard isolation valve, G3352-F004, closed and caused the RWCU pumps to trip (Licensee Event Report (LER) 90005). The licensee determined that isolation of G3352-F004 was caused by the loss of continuity across the segment of the logic contained in two HFA relays. The licensee issued WR 001D900828 to troubleshoot and test new relays in accordance with procedure NPP-35.318.017, "Inspection and Testing of Multi-Contact Auxiliary Relays," Revision 23. The procedure established a minimum dropout voltage of 36 volts and a maximum of 72 volts (30 to 60 percent of nominal voltage). The licensee tested HFA relays numbers 2757 and 2757E. One relay did not meet the acceptance criteria and the other relay was found acceptable by the licensee. However, the testing procedures did not contain M&TE identification numbers or calibration date information. The licensee rejected the tests and tested the relays again on October 4, 1990, with the inspector present. The inspector observed portions of the test and noted that the licensee did not document any as-found data.

On October 4, 1990, the licensee issued Deviation Event Report (DER) 90-0575 to resolve questions about the relevance of the dropout voltage (required by Detroit Edison's specifications) to the application of the relays in the RWCU logic. The licensee determined that the critical parameter was the pickup voltage and not the dropout voltage (the relays met the acceptance criteria for pickup voltage). The licensee planned to install the two relays back in the RWCU circuitry. The licensee's subsequent action to further review this matter through the DER process was found acceptable.

The inspectors ensured that post-maintenance testing (PMT) was conducted in accordance with applicable procedures and administrative requirements. None of the PMT observed was particularly extensive. A minor concern was raised regarding post-modification testing and is discussed in paragraph 5. Due to the limited scope and duration of this inspection, the inspectors were not able to adequately assess improvements made in PMT. Further inspection efforts are necessary to assess this area.

The training of the individual workers has improved over the past year. Electrical maintenance employees have completed 90 percent (184 out of 204, 6 per employee) of their On-The-Job (OJT) training requirements; Mechanical maintenance employees 73 percent (349 out of 480, 10 per employee); and Instrumentation & Control employees 100 percent (954 out of 954, 18 per employee). This compares

favorably with one year ago when the percentages for the disciplines were: Mechanical, 0 percent (due to waivers); Electrical, 54 percent; and I&C, 67 percent.

c. Housekeeping

The material condition of the plant was good. Although the inspection took place during a small maintenance outage, all areas appeared clean. The work areas appeared controlled, and proper personnel safety practices were observed.

Tours of the plant and specific work sites demonstrated an appropriate level of housekeeping with only two minor exceptions noted. In one case, on October 2, 1990, lagging was piled under the scaffolding for N2200F415 B valve work site before disassembly began. A mechanic noted the potential housekeeping problem and arranged to have the area cleaned. On another occasion, tools and equipment were piled adjacent to the step off pad leading to the N2200F415 B valve work site.

3. Review and Evaluation of Completed Maintenance Activities

The inspectors reviewed completed work packages that were closed out within the previous six months to assess the adequacy of planning, scope, review, closeout, and PMT. The following WRs were reviewed:

WR 004D900524	T41 - Div. II Control Complex HVAC (CCHVAC) normal pressure control;
WR 004D900220	High Pressure Core Injection (HPCI) E41N014 LSE Source Valve;
WR 004D900524	Unable to maintain control room pressure;
WR T375890922	Replace entire solenoid valve assembly;
WR 005C890923	Implement engineering design package (EDP) 10512;
WR 003D900627	Repair leaks in 5 north feedwater heater;
WR 004D900704	Fan E1156C001 tripped once in slow speed and twice in fast speed;
WR E093900126	Perform PM on Reactor Core Isolation Cooling (RCIC) turbine;
WR 009C891102	Repair many oil leaks on B Control Rod Drive (CRD) pump;
WR 004D900220	Replace HPCI level element source valve;
WR 013C890914	Unqualified splice at junction box;

WR E008900419	Perform loop calibration for IST pump performance;
WR E357891215	Inspect, lube, and test motor operated valve (MOV) E1150F004A;
WR 007D900824	Diesel fire pump cranked 5 to 6 times and failed;
WR 003D900824	RWCU pump seized;
WR 003C891109	Pressure control valve hunts;
WR E2101C001B	Calibrate core spray relays;
WR R086890705	Perform preventative maintenance (PM) of voltage regulator R086890705;
WR R953890628	Calibrate diesel generator division II differential relays;
WR S490890713	Calibrate diesel generator division II bus differential relays.

The WRs reviewed were satisfactory in scope and content. Prioritization and adequate planning were proper. The calibration data for M&TE was included in the work packages. However, failure to evaluate potential relay test failures and the absence of documentation for two of the reviewed work packages were noted as described below:

On August 2, 1989, the licensee checked the calibration of current differential relays X-87G, Y-87G, and Z-87G in accordance with WR R953890628 and procedure NPP-35.318.014, "Testing of CA and CA-16 Differential Current Relays," Revision 20. The inspector noted several problems with the procedure. Section 4.4.1 of the procedure required a pickup current of 3.75 to 6.25 amps; however, this section was in error since the actual pickup current should have been 0.42 to 0.47 amps. The licensee agreed the acceptance criteria was in error and committed to revising the procedure. The inspector also noted that all diesel generator #13 relays were found outside the acceptance criteria. The as-found pickup valves were as follows: relay X-87G: 0.34 amps; relay Y-87G: 0.34 amps; and relay Z-87G: 0.27 amps. Procedure NPP-MA1-04, "Conduct of Maintenance," Revision 3, requires that any person identifying a condition adverse to quality while performing a maintenance activity shall initiate a DER. Procedure FIP-CA1-01, "Deviation and Corrective Action Reporting," Revision 8, defined test failures as conditions adverse to quality. However, a DER was not initiated nor was an evaluation performed to determine the impact of operating the diesel generator with all three relays testing at lower pickup valves than that specified in the acceptance criteria. In addition, the licensee's program required initiation of a DER since root cause failure analysis was accomplished though the DER process. The licensee agreed that a DER should have been written.

On July 13, 1989, WR S490890713 was also issued to check the calibration of diesel generator #13 bus differential relays X-87B, Y-87B, and Z-87B in accordance with Step 4 of the WR and procedure NPP-35.318.004. However, there was no documented evidence that the relays were calibrated or that the as-found values were checked. The licensee stated that they were aware that some procedures from WR S490890713 were identified as missing; however, the licensee's review and closeout was not adequate since procedure NPP-35.318.004 was not identified as missing from the WR package.

The failure of the licensee to follow and have documented procedures in the above two instances for activities affecting quality is normally considered an example of a Severity Level V violation of 10 CFR 50, Appendix B, Criterion V. However, in the instance where a DER was not initiated when test acceptance criteria was not achieved, the licensee took appropriate corrective action in response to a similar violation noted in an NRC inspection report (50-341/89024) subsequent to this occurrence. In the other instance of missing test results, the missing documentation appeared to be an isolated event.

The NRC decided not to issue a notice of violation because the criteria identified in 10 CFR 2, Appendix C, Section V.A. were satisfied. (NCV 341/90014-01)

A minor discrepancy was noted on the work request planning checklist for WR 004D900220 wherein the yes/no checklist for the Insulation, Interim Alteration, Relay Setting, Torquing, and Secondary Containment Integrity requirements was not marked. This was a concern as there was a requirement in the work instructions (Step 6) to torque the bolts on the bonnet of the valve as required per NPP 35.000.240, chart B. The inspector considered this discrepancy to be a minor oversight of no significance to the work performed.

The 1989 Maintenance Team Inspection noted that the non-outage corrective maintenance backlog was high at 882 on November 12, 1989. Since January 1990, the non-outage corrective maintenance backlog has had a downward trend. As of September 18, 1990, the backlog had decreased to 561. The licensee had made a notable improvement in completing the backlogged maintenance.

4. Quality Assurance (QA) of Work Activities

The licensee has made significant changes in its PQA group, which performs the quality control (QC) function as well as routine and random surveillances on work being performed in the plant. The licensee submitted a correspondence to the NRC on October 5, 1990, detailing some of these changes under the subject: "Revision for the Production Quality Assurance Review Process for Work Requests."

One of the more significant changes included the elimination of the PQA work package closeout signoff. The change is expected to result in manpower savings which will be used to support roving surveillances (RS). An RS grants QA inspectors greater freedom regarding the work observed and the depth of review. The change provides inspectors with additional flexibility to pursue a problem that may be outside of the

scope of a routine surveillance. The change will allow the PQA inspectors to observe more field work and cover more jobs vice spending time behind a desk reviewing work packages. One benefit has been an increase in the amount of attention paid to balance of plant work.

PQA will continue to conduct surveillances of completed work packages using performance based sampling techniques. The PQA organization will also continue to conduct audits in this area. The responsibility for the completeness and accuracy of the work packages is with the maintenance groups. Likewise, the responsibility for determining whether equipment is operable and can be returned to service is with operations.

The inspectors observed a more pronounced PQA presence at jobsites than had been noted in the past. Interviews with maintenance personnel indicated that PQA inspectors were observing more work, including balance of plant work. The shift in the QA/QC program away from paperwork review to field oriented, performance-based inspections appeared to have the potential to improve the effectiveness of the PQA group. It also had a positive effect on the PQA support interface with the maintenance department by improving the availability of PQA inspectors.

5. Engineering and Technical Support

The inspectors reviewed the following Engineering Design Package (EDP) modifications:

EDP 11115	Modify the Control Complex Heating Ventilation and Air Conditioning (CCHVAC) circuitry and change panel indicating lights to LEDs.
EDP 11819	Install capacitors across the output of the HPCI steam flow transmitters.

The implementation of the modification packages was acceptable and system engineer involvement was evident. A concern regarding an operability determination made through post-modification testing is discussed below.

The most significant change in the modification area since the maintenance team inspection was in the development of Plant Modification Review Groups (PMRG). The PMRG is defined and controlled under procedure NEP-CM1-08, Revision 0. A PMRG is formed for each plant modification and consists of mandatory membership of an individual from the Nuclear Engineering group, System Engineering group, and Operations. There are also provisions to include a member from any other affected group such as Radiation Protection, Maintenance, Materials Engineering, Training, Security, QA, or Licensing. The PMRG addresses: the scope of the modification; plant impact; design bases; implementation; testing requirements and acceptance criteria; affected programs and procedures; procurement; and licensing basis including technical specification impact. The inspectors were unable to observe this process or to review a substantial sample of documentation.

Other enhancements to procedures governing the modification process include FIP-CM1-18, Implementation of Modifications, which was revised to incorporate PMRG task force comments including review by the responsible design organization of all testing. A section providing instructions to clarify design change testing requirements was added to FIP-CM1-12, Engineering Design Packages.

The licensee implemented EDP 11115 to correct a problem associated with the CCHVAC. The licensee had issued two LERs (89-026 and 90-007) due to the inadvertent actuation of the CCHVAC into the recirculation mode. The design package and associated WR 010090091 separated the 120 VAC indicating lamp circuit from the radiation monitoring trip relay circuit and replaced the filament indication lamps with LED cluster type lamps. The inspector reviewed the design package and found adequate system engineer involvement and drawing controls. However, the WR required that each LED be bench tested to verify color and voltage rating prior to installation. The inspector noted that there was no documentation, sign-off, or checklist to indicate that the LEDs had been tested. In addition, the inspector found that the licensee tested the CCHVAC to determine that the radiation monitors did not alarm. However, the EDP did not specifically address an operability determination of this engineered safety feature (ESF) system. The licensee performed a Technical Specification surveillance of the CCHVAC on October 4, 1990, in response to the inspector's concerns. The CCHVAC system performed satisfactorily.

Subsequent discussions and analysis of the modification between the inspectors and the licensee indicated that the operability of the CCHVAC system could be inferred from the post-modification testing that was performed. The licensee agreed that the documentation regarding the testing and the operability of the CCHVAC could have been more detailed.

Due to the limited scope and duration of this inspection and the significant program changes as earlier described, the inspectors could not accurately assess the adequacy of the post modification testing program.

6. Outage Planning and Scheduling

This inspection was performed during a maintenance outage that repaired balance of plant equipment such as feedwater heaters. The outage provided the inspectors with an ample opportunity to observe the licensee planning group's ability to control the work being performed as well as incorporate emergent work into the schedule. The inspectors observed several "plan of the day" meetings, which were held every eight hours. During these meetings, each work and surveillance item was discussed and any problems that had arisen were addressed. The meetings were well ordered and helped to maintain close contact between the work groups, management, and operations. The ability of the licensee to complete all pre-planned and emergent work within the original outage schedule was testimony to improved planning.

On the maintenance worker level, other positive aspects were noted by the inspectors. While observing work being performed on the heater drain tank pumps that required removal of filter baskets, the job foreman stopped work. The foreman contacted a planner to pre-plan a modification to the filters to be performed during the next refueling outage. The supervisor's action demonstrated foresight and illustrated another benefit of increased involvement of first line supervision in the field.

7. Deficiency Identification and Control

The licensee until recently had in place a Deficiency Notice Tag (DNT) program that would require workers to hang tags on deficient equipment and initiate WR's. The DNTs hanging on equipment would act as a "tickler" and an indication of the material condition of the plant. The licensee performed an audit of their DNT system and found that 15 percent of the tags were not in the work order system. In addition, 20 percent of the tags were not always reviewed or removed after work to resolve the deficiency had been completed. Management determined that the present system was not effective and was providing a false sense that equipment deficiencies were addressed.

In response to this, the DNT program was discontinued. All outstanding tags were collected and WR's were generated. The licensee's present program, defined in NPP-MA1-01, "Work Control," Revision 3, requires any plant personnel who identifies a deficiency to ensure that a WR has been generated to address the deficiency by travelling to the control room and reviewing a computer listing of all existing WRs on plant equipment arranged by PIS number. An individual would then request that a WR be initiated on any identified equipment deficiency not contained in the listing. However, the equipment would not be tagged to indicate that a WR had been requested.

The inspectors were unable to evaluate the program due to its recent implementation. The inspectors did comment to the licensee on the potential shortcomings of the system. Further review of the program will be necessary to assess its effectiveness.

8. Exit Interview (30703)

The inspectors met with licensee representatives (denoted in paragraph 1) on October 5, 1990, at the conclusion of the onsite inspection, and informally throughout the inspection period and summarized the scope and findings of the inspection activities. 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/processes as proprietary. The licensee representatives were also informed that information on certain potential findings was still being collected and evaluated. The inspectors stated that the appropriate licensee representatives would be notified of the final determination on the potential findings. On October 19, 1990, licensee representatives (denoted in paragraph 1) were notified of two examples of procedural noncompliance, inadequate documentation of equipment test results.

ENRICO FERMI
341/90014

PRESENTATION TREE
MAINTENANCE INSPECTION TREE