



PERRY NUCLEAR POWER PLANT
10 CENTER ROAD
PERRY, OHIO 44081
(216) 259-3737

Mail Address:
P.O. BOX 97
PERRY, OHIO 44081

Michael D. Lyster
Vice President - Nuclear

December 14, 1990
PY-CEI/NRR-1280 L

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

Perry Nuclear Power Plant
Docket No. 50-440
Response to Notices of Violation
50-440/90012-01, 02, and 03

Gentlemen:

This letter acknowledges receipt of the Notices of Violation contained within Inspection Report 50-440/90012 dated November 14, 1990. The report identified areas examined by the Region III special maintenance team led by H. Walker during the inspection conducted on September 17 through 21, and October 1 through 5, 1990.

Our response to the Notices of Violation, and to the three additional areas which we were requested to address in our response, are provided in Attachments 1 through 4.

If you have any questions, please feel free to call.

Sincerely,

Michael D. Lyster

MDL:DWG

Attachment

cc: NRR Project Manager
NRC Resident Inspector Office
USNRC Region III

Operating Units:
Cleveland Electric Illuminating
Toledo Edison

DEC 17 1990

910128003& 910118
PDR ADOCK 05000440
Q PDR

Violation I - Failure to Provide And Implement Appropriate
Instructions For Activities Affecting Quality

Restatement of Violation

10 CFR 50, Appendix B, Criterion V, as implemented by Section 5 of the Quality Assurance plan and Section 17.2.5 of the Updated Safety Analysis Report, requires that activities affecting quality be prescribed by documented instructions, procedures, or drawings of a type appropriate to the circumstances and that these activities be accomplished per these instructions, procedures, or drawings.

Contrary to the above:

- a. On September 18, 1990 the air pack for MSIV 1B21F022C was removed from the valve by a junior maintenance man utilizing a work package that did not contain detailed instructions appropriate to the circumstance for removal by an individual with this skill level. As a result, hold down bolts on the Norgren valves were partially removed resulting in partial disassembly of the air pack. The "as found" condition of the air pack was lost even though the licensee had made previous commitments to maintain the "as found" condition so NRC inspectors could witness the testing and disassembly of the air pack (440/90012-01A).
- b. Section 6.4 of Perry Administrative Procedure PAP-1912, Revision 3, "Burn Permits for Ignition Sources," required that the responsible supervisor verify all required inspections, signatures, notifications and compensating actions were complete prior to signing the burn permit. On October 2, 1990, the responsible supervisor signed a burn permit for burning, welding, and grinding on elevation 620 of the Off-Gas Building prior to verifying that all required inspections and signatures were complete (440/90012-01B).

This is a Severity Level IV violation (Supplement I).

Violation Background

With regards to the second example cited (440/90012-01B) in support of Violation (440/90012-01), the following factors should be considered.

1. Results of the event evaluation indicated that the responsible supervisor had signed and dated the spaces provided, but left the space for the time of verification blank. The work

supervisor and the fire watch person in the field had indicated that the supervisor had signed the way he did as he was intending to return before the job actually started to perform the verification and annotate the actual time of the verification. When the improperly signed permit was discovered, the burn permit had not been activated, and the hot work had not commenced. Since the work had not reached the point where the supervisor's verification was required, he did not believe that a procedural violation had occurred since the verification could have been performed as required. However, this method of verification is not an acceptable method of procedure compliance at Perry.

2. The work group had a burn permit for the activity to be performed. Additionally, the area was being set up in accordance with the burn permit, a trained firewatch person was present, and activation and deactivation steps of the hot work activity to be performed were progressing in accordance with procedure.

It should also be noted that the Fire and Security Inspection Unit had performed regular field inspections on plant hot work activities prior to this occurrence, and had not identified any procedural violations. During the month of September, 1990, fifty-five Burn Permit inspections had been performed. These inspections are part of the regular fire/life safety inspections that the Inspection Unit personnel perform each month. The results of these inspections and inspections performed subsequent to this event (see below) support the conclusion that this was an isolated case.

Corrective Actions That Have Been Taken and Results Achieved

With regard to Violation (440/90012-01A), the crews involved in the MSIV maintenance work received instruction concerning the proper removal of air packs from the MSIVs prior to any further work on the other MSIV's. As a result of this instruction to the maintenance work crews, no other solenoid valve hold down bolts on air packs were loosened when the air packs were removed from the other MSIVs during this outage.

With regard to Violation (440/90012-01B), the following activities were performed.

1. Immediately following the discovery in the field of the Burn Permit being improperly signed, various members of the Fire and Security Inspection Unit staff met with all parties involved in the improper signing of the permit. Included in this meeting were the hot work supervisor's general superintendent and the CEI contract administrator. The improper method of signing the Burn Permit was explained to all parties at the meeting, and they indicated that they understood what had been performed wrong, and what the correct procedural method was.

2. On October 3, 1990, a memorandum delineating this event was hand delivered to the two managers who have overall responsibility for all hot work activity on site. Both managers informed their respective work supervisors of this event, and reviewed with them the proper method for performing the hot work activity.
3. On October 3, 1990, the Fire and Security Inspection Unit personnel performed an unannounced field inspection on the particular work group, including the work supervisor, involved in the incident on October 2, 1990. The inspection showed that the work group was following all portions of the hot work activity procedure correctly.
4. The Fire and Security Inspection Unit personnel increased the number of field inspections of plant hot work activities during the months of October and November, when the majority of hot work activity was performed during the outage. During these two months, 901 inspections were performed. No major procedural or programmatic problems were discovered.
5. Contractor Services Section personnel completed retraining of their work supervisors and planners regarding the proper method of performing hot work activity including procedural compliance. This training was conducted over four days in October, 1990.
6. Quality Assurance Section issued an Action Request to Contractor Services Section for failure to follow Burn Permit Procedures, and conducted an ongoing field surveillance of plant hot work activities during the outage. This Quality Assurance surveillance was independent of the field inspections performed by Fire and Security Inspection Unit personnel. A total of forty-nine field inspections were performed from October 31 through November 12, 1990. All observed hot work activity was performed in accordance with approved procedures. As a result of these inspections, Quality Assurance Section has recommended that the Action Request be closed.

Corrective Actions That Will be Taken to Avoid Further Violations

With regard to Violation (440/90012-01A), GMI-0096, MSIV Disassembly, Repair, and Reassembly Instructions, will be revised to add more detail regarding the removal of the MSIV air packs. This activity will be accomplished by March 1, 1991.

With regard to Violation (440/90012-01B), no additional actions are considered necessary to preclude recurrence.

Date When Full Compliance Will be Achieved

With regard to Violation (440/90012-01A), full compliance was achieved on September 19, 1990, when trained personnel correctly removed the second MSIV air pack.

With regard to Violation (440/90012-1B), full compliance was achieved on October 12, 1990, as work was stopped prior to implementation of the Burn Permit.

Violation II - Nonconforming and Acceptable Fuses Located in the Same Storage Drawer

Restatement of Violation

10 CFR 50, Appendix B, Criterion XV, as implemented by Section 15.3.1 of the Quality Assurance Plan and Section 17.2.15.2.e of the Updated Safety Analysis Report, required that nonconforming material be segregated, where practical, to prevent inadvertent installation or use.

Contrary to the above, ten boxes of nonconforming fuses were located in the same storage drawer of a fuse cabinet in the main warehouse with several boxes of acceptable fuses of the same type (440/90012-02).

This is a Severity Level IV violation (Supplement I).

Reasons for the Violation

Previously, the implementation of segregated storage of nonconforming material consisted of the use of a combination of physical segregation and tagging. In reviewing this event, it has been decided that Perry will continue to utilize a combination of physical segregation and tagging, but will put a greater emphasis on segregation than in the past. This approach will also reduce the potential for issuing nonconforming material.

Corrective Actions That Have Been Taken and Results Achieved

The fuses in question were physically segregated upon discovery of this situation. Additionally, all non-conforming fuses were removed from the normal storage locations and placed in the Procurement Quality Hold Area. As a result of this action all non-conforming fuses are now physically segregated.

Corrective Actions That Will be Taken to Avoid Further Violations

Following the NRC inspection, all open nonconformance reports were re-evaluated and plans are currently underway to remove nonconforming items from the normal warehouse storage locations to physically segregated areas, when it is practical to do so. Note - these nonconforming items are currently tagged. A second hold area has been established for items which must be placed on a pallet rack because they are too large to fit into a storage cabinet. When items are too large to be physically segregated in either of the designated storage areas, they will be identified with nonconformance tags. This activity will be accomplished by February 1, 1991.

Date When Full Compliance Will be Achieved

Full compliance will be achieved on February 1, 1990, when all nonconforming items are physically segregated, where practical.

Violation III - Inadequate Testing of the Electric and Diesel Driven Fire Pumps

Restatement of Violation

Facility Operating License NPF-58, Section 2.C(6) required that the licensee comply with all provisions of the approved fire protection program as described in the Final Safety Analysis Report and approved in the Safety Evaluation Report dated May 1982 and Supplements Nos. 1 through 10 thereto. Final Safety Analysis Report, Section E.2(c) stated that the fire pump conformed to National Fire Protection Association (NFPA) Standard Number 20. NFPA Standard Number 20, Section 11-3.1 required an annual test of the fire pump to determine the ability of the fire pump assembly (pump, driver and controller) to perform satisfactorily at peak loads. Section 11-3.3 required that any significant reduction in the operating characteristics of the fire pump assembly be reported to the owners and that repairs be made immediately. Final Safety Analysis Report, Section E.2(e) indicated that the largest flow demand for a single pump was 3750 gallons per minute at 85 psi.

Contrary to the above:

- a. The electric driven fire pump and the diesel driven fire pump were not adequately tested in that the fire pumps were not tested at shutoff pressure during tests on September 2, 1987; March 12, 1989; and September 9, 1990 (440/90012-03A).
- b. Corrective actions were not initiated after the electric driven fire pump tests dated September 2, 1987; March 12, 1989; and September 9, 1990; indicated significant pressure reduction (30%, 33% and 35% respectively) in the operating characteristics of the fire pump assembly. In addition, the diesel driven fire pump test results dated September 2, 1987; March 12, 1989; and September 9, 1990, did not record the engine speed or the pump speed at over capacity to determine the operating characteristics of the fire pump (440/90012-03B).
- c. The electric fire pump test results dated September 2, 1987, March 12, 1989, and September 9, 1990, and the diesel fire pump test results dated March 12, 1989, did not demonstrate that each fire pump could meet the demand of 3750 gallons per minute at 85 psi (440/90012-03C).

This is a Severity level IV violation (Supplement I).

Violation Background

With regards to the first example cited (440/90012-03A) in support of Violation (440/90012-03), the following factors should be considered.

The referenced commitment in the USAR, Appendix 9A.5 to Chapter 9, Section E.2(c) had always been interpreted at Perry as referencing to design and installation requirements for the Fire Protection Water Supply Systems. Specifically, E.2(c) of NRC Branch Technical Position APCS 9.5-1 establishes the NRC position that "Details of the fire pump installation should as a minimum conform to NFPA 20, "Standard for the Installation of Centrifugal Fire Pumps." The Perry response was that "The fire pump installation conforms to NFPA 20." (emphasis added)

Commitments to testing are addressed in 9A.5 section C5 and 9.5.1.4.

These commitments were not intended to mean verbatim/100% compliance with the most current NFPA testing requirements; however, we failed to clearly state this qualification. We will do this.

We also did not address in our program description in the USAR how we would review and implement program changes when codes are revised. We will review the need for such program changes in conjunction with procedure revisions and revise the USAR accordingly.

Testing was performed in 1987, 1989, and 1990 to Revision 2 of Periodic Test Instruction (PTI) P54-P0036 which was prepared in 1985. The NFPA 20 code in effect at that time was the 1983 edition. Although Section 11-2.6.2 of that edition which addresses acceptance testing states that flows be performed at minimum (no flow or churn = shutoff pressure testing), rated (=2500 gpm for PNPP pumps), and peak (150% of rated=3750 for PNPP pumps) loads, Section 11-3.1 for annual testing requires only a flow to determine performance at peak loads be performed. Therefore, the PTI at the time it was prepared was in compliance with the provisions of NFPA 20 in effect at the time of test preparation.

Plant Administrative Procedure (PAP-0507), Preparation, Review and Approval of Instructions, requires instructions to be reviewed every two years in the periodic review process. Periodic Test Instruction P54-P0036 was reviewed in accordance with this process. As a result of this process and prior to the NRC Inspector's arrival on site, a revision was initiated to this PTI which includes testing at shutoff pressure. It should be noted that Fire Protection Engineering personnel had previously (prior to mid-1990) determined not to

include this testing at no flow conditions (shutoff pressure) because it is necessary to shut off the relief valve, then reset it after the test. This was not considered advisable at the time due to cavitation problems with the relief valve. Since there are no fire protection system demands that require the pump to perform at this end of the curve, it was not considered advisable at that time to subject the relief valve to unnecessary operation. These problems were corrected in July of 1990 with the installation of orifice plates. Revision 3 of PTI P54-P0036 was then processed to include this testing change along with other changes that were considered enhancements to this instruction.

With regards to the second example cited (440/90012-03B) in support of Violation (440/90012-03), the following factors should be considered when determining whether no corrective actions were taken following the September 9, 1990 test.

On September 13, 1990, the Responsible System Engineer (RSE) reviewed the test results. The RSE plotted the data against the pump shop curve and noticed that the results indicated poor pump performance. The RSE then contacted the on-duty Control Room Unit Supervisor to discuss the results of the test. With the known difference between the data obtained from previous tests using the flow meters and the data from previous tests using hydrant flows, operability of the pump was not suspected. This decision was based on known background information that the data obtained indicated that the flow meters were again not functioning properly and were providing erroneous data. Since the PTI late date was not until January 21, 1991, it was decided that credit for completion of the PTI would not be granted, and that the PTI would be re-performed utilizing the new revision (Revision 3) prior to its late date. Note - this PTI did pass all acceptance criteria delineated in the instruction. In hindsight, a more appropriate action at this time would have been to declare the pump degraded, prepare a work order or temporary test instruction, and immediately test the pump using hydrant flows.

However, the combination of strong background information on the unreliability of the flow meters, the availability of P54-C007 to act as a full back-up pump, and the heavy work load due to the start of the refueling outage two days earlier were major factors in the aforementioned decision.

Corrective Actions That Have Been Taken and Results Achieved

With regards to the second and third examples cited (440/90012-03B, 440/90012-03C) in support of Violation (440/90012-03), the following corrective actions were performed.

1. Since the full performance of the electric fire pump was questionable, an impairment permit was issued on October 4, 1990 and compensatory measures were established until an accurate test could be performed. An evaluation was conducted

to determine if either of the fire pumps could have been in a degraded or inoperable condition not recognized by the past testing. Past work history was reviewed for both P54-C0001 (diesel driven pump) and OP54-C0002 (electric fire pump) and any equipment associated with these pumps which could have affected the performance were evaluated. This was done to determine if a pump problem could have existed, and been unknowingly corrected. This would have meant that the fire pumps were in an inoperable state for some period of time without adequate compensatory measures in place. The only repairs or modifications which could have improved the pump performance involved the relief valves. Since the flow meter test results performed before and after this work showed no improvement, the work did not upgrade the fire pumps from an inoperable condition. The test results on October 5, 1990, and October 17, 1990 which show satisfactory performance using the pitot reading method are indicative of the past condition of these pumps.

2. All past performances of fire pump tests (PTI-P54-P0036 and PTI-P54-P003) have been plotted against the pumps' acceptance test curves. For all test results, all fire protection system demands for systems protecting safe-shutdown capability were able to be met by the data generated. The largest of these systems is the Unit 1 Cable Spreading system with a demand requirement of 2338 gpm (including 500 gpm for hoses) with a pump discharge pressure of 116 psi. Therefore, the operability of the fire pumps to provide protection of safe shutdown equipment was demonstrated within the 18-month period as required by Perry commitments and applicable regulations.
3. Condition Report 90-347 was initiated to document and evaluate this event.
4. Revision 3 to PTI P54-P0036 was issued, and performed satisfactorily to demonstrate the operability of the fire pumps. This revision includes a test at no flow (shutoff pressure) performed by closing the relief valve.
5. Results of this event evaluation indicate that some of the testing performed on the fire protection systems does not have a simple acceptance criteria for operability. The PTIs in which acceptable performance is based on an analysis of the test data rather than a single pass/fail criteria include PTI P54-P0003 Fire Main Flow Test, and P54-P0036. Therefore, both of these tests will now require review and verification by the Fire Protection Engineer for operability. This will also allow for an evaluation of the extent of system problem, degree of system operability, and appropriate compensatory measures.

Corrective Actions That Will be Taken to Avoid Further Violations

Ferry will modify the USAR to clarify how and when future Code changes will be incorporated into the Fire Protection Program.

Date when full compliance will be achieved

Full compliance was achieved upon successful performance of PTI P54-P0036 on October 17, 1990 which verified operability of the fire pumps to provide protection of safe shutdown equipment within the 18-month period as required by Perry commitments and applicable regulations.

Response to request to address three additional areas

Use of emergency work authorizations to allow maintenance work to begin prior to issuance of an approved maintenance work order

NRC Inspection Report 50-440/90012 identifies the practice of beginning non-emergency maintenance prior to issue of the Work Order as a weakness of Perry's Work Control Program. Two specific concerns are mentioned in Section 3.4.2.3, Past Instrumentation and Control Maintenance. The concerns specifically identified are (1) troubleshooting without a Work Order and (2) improper troubleshooting methods. This response addresses the first concern; more appropriately referred to as Immediate Troubleshooting using the Troubleshooting Log, which is further broken down into two items; (1) the intent of PAP-0905, Work Order Process, when using the Troubleshooting Log and (2) the use of a Troubleshooting Log instead of a Work Order.

The first item to be addressed is a statement written in the inspection report which concludes that the intent of PAP-0905 is apparently not being met because troubleshooting began on Work Orders which were assigned a priority that was not consistent with the need to immediately repair the component.

The criteria for the initiation and use of the Troubleshooting Log is administratively addressed and controlled under PAP-0905, Work Order Process, Sections 2.4 and 6.11. Section 2.4 of PAP-0905 states, "A Work Order is not required to initiate troubleshooting on a failed component or system. A verbal request from the Control Room Unit Supervisor is sufficient to initiate troubleshooting in accordance with Section 6.11." Section 6.11, Troubleshooting Log, provides the details for initiating the Troubleshooting Log and control of the work in the field. This Section of PAP-0905 starts with paragraph 6.11.1, and states, "when immediate corrective action is required, the Control Room Unit Supervisor may initiate use of the Troubleshooting Log by performing the following;..."

The intent of PAP-0905 is very clearly stated in both the above reference sections. The Control Room Unit Supervisor may initiate use of the Troubleshooting Log when he deems immediate corrective action is required. There are no conditional restrictions which require the Work Order to be assigned a specific priority. To interpret the priority codes of PAP-0902, Work Request System, as somehow restricting the use of the Troubleshooting Log is not consistent with Perry's administrative controls for the Work Order Process.

The second and more important item is the practice of using the Troubleshooting Log prior to issuance of a work order for non-emergency maintenance work.

As previously stated, PAP-0905 provides a means for the Control Room Unit Supervisor to direct I&C and Maintenance personnel to begin troubleshooting a problem prior to the planning and review of a Work order. The means is called the Troubleshooting Log and can be applied when emergency or non-emergency actions are required. The only criteria is that the Control Room Unit Supervisor believes immediate action is warranted.

The Troubleshooting Log is a very valuable tool when used correctly. It allows the work groups a means of ascertaining a problem and/or stabilizing an unwanted condition while a Work Order is simultaneously being processed. In almost all cases, the Work Order is issued to the field prior to corrective action taking place. In many cases, once the problem is identified, work is actually stopped until a Work Order is written to specifically address the problem identified through the use of the Troubleshooting Log.

The use of the Troubleshooting Log does not differ greatly from the use of a Work Order written to perform troubleshooting. In accordance with Section 6.11 of PAP-0905, while working with the Troubleshooting Log the work organization is required to assemble vendor manuals, instructions, instrument file folders or drawings. Each of these documents are reviewed and approved for use at the Perry Plant and have a procedure which details how it is to be used when performing maintenance activities.

As with a Work Order, the Control Room Unit Supervisor must authorize work to begin via his signature and may restrict the amount of work performed. Also like the Work Order, the Control Room Unit Supervisor is required to review the work performed and sign acceptance of the Troubleshooting Log. This acceptance signature, however, seldom needs to be obtained since in most cases the Work Order is issued to the field prior to any repairs taking place.

Although the Troubleshooting Log does not go through the same review as a Work Order, the Quality Control Section is notified prior to starting a job when using the Troubleshooting Log under those circumstances which would normally require their review of a Work Order. The work groups recognize that the use of the Troubleshooting Log requires more stringent controls and communications with the Control Room Unit Supervisor than does a Work Order. These additional controls are addressed in Section 6.11.3 of PAP-0905.

In conclusion, the Control Room Unit Supervisor uses his judgment to determine if immediate action is warranted, and directs plant personnel to begin troubleshooting a problem prior to the planning and review of a work order. Additionally, the Control Room Unit

Supervisor is required to review the work performed and sign acceptance of the Troubleshooting Log, as he would a Work Order. We, therefore, believe that the use of the Troubleshooting Log in non-emergency conditions (instead of a work order) is adequately controlled and provides much the same assurance of quality control as a work order.

Use of temporary changes such as lifted leads and jumpers rather than using the modification process

We agree that the total number of temporary modifications (i.e. lifted leads, jumpers, electrical devices, and mechanical foreign items) installed at Perry needs to be reduced, and that the majority of these modifications have been in effect for over six months. Although this number requires reduction, the specific Category I Temporary System Alteration (TSAs), which by definition affects system operability (total of 20), falls within the allowable range as established by management.

On August 29, 1990, the Plant General Manager, and the Director of Perry Nuclear Engineering Department issued a memorandum to Perry Managers acknowledging this unacceptable condition, and provided guidance for immediate actions to strengthen our modification program, and reduce and maintain a minimal level of temporary modifications. Specific provisions of the memorandum include:

1. Temporary modifications will not be permitted as interim alternatives to permanent design changes, unless absolutely needed to support continued plant operation. Established Design Change Package (DCP) and Work Order (WO) priorities will be used to expedite modifications as required.
2. Temporary modifications will be used only for items which are truly temporary.
3. The Manager of Systems Engineering Section will be responsible for approval of each temporary modification prior to implementation.
4. A management review of outstanding temporary modifications will be conducted to establish appropriate priority and scheduling codes for associated Design Change Notices, DCPS, and WOs. Emphasis will be placed on modifications installed for greater than six months, with the goal of permitting no temporary modifications to remain outstanding longer than one operating cycle. A Senior Engineer, Electrical Design Section, was assigned the responsibility for coordination of this effort.

The renewed emphases and management recognition of the weaknesses associated with the LLJED/MF Temporary Alteration Program provided the support necessary to actively pursue and initiate corrective actions. Issuing the interim policy statement directly addressed and focused attention to these problems.

Under the coordination of Electrical Design Section personnel, the active Type I & II temporary alterations have been reviewed and

prioritized for field implementation based on scheduling constraints and system configurations. The major thrust was to review the older temporary alterations and attempt to have these completed, along with all Type I alterations. Efforts as of December 12, 1990, indicate that the backlog (154) has been reduced to 95.

The following items will be incorporated in a revision of PAP-1402, Control of Lifted Leads, Jumpers, Temporary Electrical Devices and Mechanical Foreign Items. This procedure revision and associated instructions are scheduled for implementation by January 31, 1991.

1. Up-front engineering involvement for all LLJED/MFI temporary alterations.
2. An adequate multi-discipline engineering review and follow-up when a LLJED/MFI temporary alteration must be installed.
3. A limit to the time period of installed LLJED/MFI temporary alterations to one operating cycle.
4. Establishment of a plan to prioritize and schedule the issuance of Design Change Packages to make the LLJED/MFI temporary alterations permanent where warranted.
5. Define when and how the LLJED/MFI temporary alteration may be use.
6. Re-enforcement of the LLJED/MFI Technical Evaluation Form.

Finally, LLJED/MFI temporary alternations have in the past and in the future will be tracked monthly via the Monthly Performance Report. The report is reviewed monthly by all site managers.

Use of temporary change requests to revise procedures rather than the normal procedure revision process

The Maintenance Team inspectors were concerned over the "unusually high number of TCNs" written against I&C Surveillance Instructions. Their main concerns appeared to be (1) a TCN results in a limited scope of instruction review due to the number of pages affected, (2) a TCN is not subject to the multi-discipline revision review process, and (3) in addition to the high number of TCNs, many of the TCNs have been in place for several years.

The first item's scope could be limited to the instruction review that occurs when a TCN is written in lieu of a revision. Temporary Changes to Technical Instructions (PAP-0522, Section 6.5.2 and 6.5.3) list specific criteria for the discipline and in-depth reviewers to verify when given a TCN for review. These criteria are identical to those listed in PAP-0507 (Preparation, Review and Approval of Instructions), Section 6.3.7 for an instruction revision review. There is no statement that limits a TCN review to only the specific pages changed by that TCN. The reviewer has access to all instruction materials and the I&C "Yellow-Line Drawing" Program, therefore, the review of a TCN should in no way be of a lesser overall quality than a revision review.

The second item to be addressed is the TCN review process versus the multi-discipline revision review process. As delineated above, the processes are the same. All I&C TCNs, Intent and Non-intent, are distributed for review per the Responsibility/Approval/Discipline Review Matrix, Attachment 2 to PAP-0507, Preparation, Review and Approval of Instructions. This is the same matrix that is used to distribute revisions for the review process. Therefore, TCNs receive the same multi-discipline review as any I&C Surveillance Instruction revision.

The third item to be addressed is the high number of TCNs to some instructions, and the fact that many of them have been in place for several years. This is a problem that I&C management has identified for some time and they have been addressing the issue. Note - Perry's Administrative Procedures do not limit the amount of Temporary Changes to their procedures. At the time of the Maintenance Team inspection, 46 of 1400 instructions were identified as having 10 or more TCNs issued since the last revision. This represents about 3% of the overall number.

The previous I&C philosophy has been to revise instructions only when time allowed complete update to the current format. However, a new approach has already been implemented that will help reduce the numbers of TCNs and promote more revisions instead. I&C personnel have re-evaluated and re-prioritized all backlogged TCN requests, to try and consolidate them and reduce the numbers of new TCNs generated. I&C management has directed their personnel to

factor those SVIs with 10 or more TCNs written against them into the revision priority schedule. Since that time, 15 Revisions/TC revisions have been completed on those "high number TCN" SVIs and another 21 are in process and are scheduled to be completed by the end of 1991. The overall process of reducing TCN numbers and revising all instructions to current format is being given much greater attention. Positive results have already and will continue to be realized.