



**Consumers
Power**

**POWERING
MICHIGAN'S PROGRESS**

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February 17, 1989

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Washington, DC 20555

DOCKET 50-255 - LICENSE DPR-20 - PALISADES PLANT -
RESPONSE TO NOTICES OF VIOLATION PRESENTED
IN IE INSPECTION REPORT 88020

IE Inspection Report 88020 dated January 18, 1989 transmitted three Notices of Violation requiring a written response. Consumers Power response to the violations are presented in Attachment I.

Since 1985 the Palisades Maintenance Program has undertaken several significant improvement efforts. These efforts included the 1985 Maintenance Order Task Force, the 1986 Material Condition Task Force and the 1987 Maintenance Self Assessment. Along with these efforts, the effectiveness of the maintenance program has been evaluated by the NRC, the Institute of Nuclear Power Operations (INPO) and Consumers Power's Quality Assurance/Quality Control organization. As a result of these improvement efforts and evaluations, many corrective actions have been and are continuing to be implemented which resulted in the NRC inspection team concluding "that maintenance at the Palisades Nuclear Generating Plant appeared to be satisfactorily performed, effective and assessed.

During the inspection and in reviewing the subsequent report, Consumers Power noted that when positive activities and performances were identified, the activities were based on current work orders or observations of ongoing work. Further, deficiencies noted were often associated with maintenance activities conducted prior to implementation of many of the self initiated actions.

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Nuclear Regulatory Commission
Palisades Plant
Response to Inspection Report 88020
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Consumers Power, however, did identify several areas within the report, not associated with the violations, where additional corrective actions are warranted. These actions are presented in Attachment II.

Kenneth W Berry (Signed)

Kenneth W Berry
Director, Nuclear Licensing

CC Administrator, Region III, NRC
NRC Resident Inspector - Palisades

Attachments

ATTACHMENTS

Consumers Power Company
Palisades Plant
Docket 50-255

RESPONSE TO NOTICES OF VIOLATION
PRESENTED IN IE INSPECTION REPORT 88020

February 17, 1989

18 Pages

OC0289-0054-NL04

ATTACHMENT I

Violation (255/88020-01A-F)

1. 10 CFR 50, Appendix B, Criterion V, as implemented by Consumers Power Company Quality Assurance Program, Section 5, requires that activities be prescribed by procedures or drawings appropriate to the circumstances, and accomplished in accordance with those procedures or drawings.

This is a Severity Level IV Violation.

This violation is sustained by six examples. Consumers Power Company believes three of these are not supportive examples but the violation is valid. Each example and our detailed response follows:

Example

- a. A safety evaluation check of Temporary Modification 88-052 for 10 CFR 50.59 applicability was not performed as required by Administrative Procedure 3.07, "Safety Evaluation," Revision 1, Attachment 1. (255/88020-01A)

Reason For Violation

- a. On May 27, 1988 Temporary Modification (TM) 88-052 was initiated to jumper the leads from SPI number 17 to SPI number 16 data logger input. This action was initiated as a prelude to corrective maintenance on SPI number 16 which was providing sporadic, erroneous alarms to operators. Initiation of a TM was deemed to be the most appropriate course of action in that:
 1. Repairs could not be completed until Plant shutdown.
 2. Without the TM, operators would continue to be provided with erroneous alarms. Human Factors considerations requires this erroneous alarm be removed.
 3. Simply defeating the SPI number 16 data logger input would cause erroneous rod group alarms.
 4. The SPI system alarm annunciator does not have reflash capability such that operators may not be alerted to a valid alarm if SPI number 16 already had an erroneous alarm in.

A safety review was completed for TM 88-052 as required by Administrative Procedure 9.31, "Temporary Modification Control". In completing the safety review, individuals involved reviewed appropriate FSAR sections and TS and concluded that no change to the facility was involved. This conclusion was based on the guidance

provided in Administrative Procedure 3.07 and the determination that the system description provided in the FSAR was that of a completely operable SPI system. Therefore, the SPI system description provided in the FSAR, like that for other components described in the FSAR, is not accurate when structures, systems or components are inoperable. Further, no potential for an unreviewed safety question could exist since the requirements in the Plant TS were satisfied.

Administrative Procedure 3.07 Revision 2, "Safety Evaluations" provides guidance in the determination of need for and proper completion of the safety evaluation process to ensure compliance with 10CFR50.59. Step 5.2.6.b provides guidance for determining whether a proposed activity represents a change to the facility as described in the FSAR. This step states that most maintenance activities (including: calibration, refurbishment, replacement with identical components, etc) do not require review under 10CFR50.59 as systems of components removed from service for maintenance activities are covered by Plant TS for allowable outage times, permissible mode conditions and permitted redundancy reduction.

Plant Administrative Procedure 3.07 Revision 1 was issued on February 25, 1988. In completing this revision, Plant personnel utilized a draft of NSAC-125, "Guidelines for 10CFR50.59, Safety Evaluations" to compose Step 5.2.5.b. This draft, prepared by a joint committee of the Nuclear Management and Resource Council (NUMARC) and the Nuclear Safety Analysis Center was reviewed by the NRC and comments provided to NUMARC via a memorandum from the director, Division of Operational Events Assessment, NRR dated May 12, 1988. No comments were noted regarding safety evaluation performance during maintenance activities. Therefore, Plant personnel believe that Step 5.2.5.b (Step 5.2.6.b in Revision 2) presents a prudent methodology acceptable to the NRC.

In summary, Consumers Power believes the safety review completed for TM 88-052 was performed accurately and in accordance with Administrative Procedure 3.07 and that this example does not constitute a violation of 10CFR50 Appendix B, Criterion V. It was noted that these administrative requirements apply specifically to removal of equipment as part of maintenance activities only. However, in that it is recognized that temporary modifications may change the facility as described in the FSAR and that the need to provide consistency was identified, a written Safety Analysis will be performed on all temporary modifications.

Corrective Action Taken And Results Achieved

- a. Consumers Power believes actions taken associated with TM88-052 to be in accordance with AP 3.07.

Corrective Actions To Be Taken To Avoid Further Non-Compliance

- a. Revise Administrative procedure requirements to require written Safety Analysis be performed for all temporary modifications.

Date When Full Compliance Will Be Achieved

- a. Appropriate Administrative procedures will be revised by September 1, 1989.

Example

- b. Various termination points in diesel/generator excitation panel C-22 had three terminal lugs secured by holding nuts that lacked full thread engagement, and engineering approvals had not been obtained as required by Permanent Maintenance Procedure MSE-E-12, "Cable Terminations," Revision 2. This condition existed for an indeterminate length of time. (255/88020-01B)

Reason For Violation

- b. During observation of maintenance and modification activities associated with Diesel Generator 1-1 the NRC inspector noted that 10 separate terminal blocks in panel C-22 had three wires connected to one termination point. Investigation found five cases where the three wire terminations occurred in C-22 and four in panel C-26, all of which are shown on design drawings. Industry practice normally calls for no more than two terminations at any one point. Maintenance Procedure MSE-E-12 states that no more than two terminal lugs shall be inserted under one screw unless approved by Engineering. Based on MSE-E-12 and observation of three wire terminations in C-22, the NRC inspector concluded Palisades was in violation of Plant procedure requirements.

Three wire terminations have previously been identified at Palisades and analyzed by engineering personnel as being acceptable for continued use. The majority of three wire terminations existing in the Plant, including those identified by the inspector associated with diesel generator excitation panel C-22, are from original construction or previous Plant modifications. When three wire terminations are found not to be on design drawings, engineering personnel evaluate the terminations against established criteria and, if applicable, will update prints to reflect actual configurations.

Cable termination procedure MSE-E-12 established in May 1983 requires that no more than two terminations be at the same point and that deviation from this requirement be approved and documented by engineering evaluation. The intent of MSE-E-12 is to provide requirements for proper termination of all types of wire connections. The procedure also requires specific action when three wire terminations are used. Should a three wire termination exist and be shown on design documentation it is concluded that analyses were previously performed and the termination approved for use.

Since all three wire terminations identified within panel C-22 and C-26 are shown on design documentation, Consumers Power concludes that no violation of procedure exists.

Corrective Action Taken And Results Achieved

- b. An investigation into the C-22 panel three wire terminations was performed and it was identified that these connections are represented on appropriate drawings.

Corrective Actions To Be Taken To Avoid Further Non-Compliance

- b. An evaluation will be undertaken to determine the need for the Configuration Control Project scope to be updated to include identification and engineering analysis of three wire terminations on all terminal blocks currently being inspected.

Date When Full Compliance Will Be Achieved

- b. The evaluation to determine the need for the Configuration Control Project to identify and analyze three wire terminations will be completed by May 1, 1989.

Example

- c. Required procedures specified by Work Order 24802607 were not in the work package or at the diesel/generator panel G-21 work location as required by Administrative Procedure 5.01, "Processing Work Requests/ Work Orders," Revision 8, Attachment 5. (255/88020-01C)

Reason For Violation

- c. During the Maintenance Team Inspection's (MTI) pre-inspection visit, NRC inspectors observed modification work being performed on diesel generator 1-1 per work order 24802607. This work order addressed the installation of new contactors into panel EG-21 per Facility Change FC-627-02. Discussions with crafts, supervision and review of documentation at the job site lead to the conclusion that all procedures affecting the job were not at the job site as required by Administrative Procedure (AP) 5.01, "Processing Work Request/Work Orders". Documentation at the job site included the work order and drawings associated with FC-627-02. Procedure I-FC-627-02-001, MSE-E-12, MSM-M-23 and A-130 as required by work order 24802607, were not at the job site but were in the supervisor's office.

It is the practice of Consumers Powers' Energy Supply Services (ESS) organization to maintain control of the "working copy" portion of the modification package with the job supervisor and to distribute "controlled copies" of work documents to the field. Control and distribution of documents for modification activities occurs from the ESS Document Control Group in accordance with Project Management and Control (PMC) Procedure 8-4.1, "Document Control". Reviews of AP 9.02, "Facility Change - Major", AP 9.03, "Facility Change - Minor" and PMC-8-2.13, "Modification and Maintenance Work at Palisades" were performed to identify any additional requirements for maintaining

documentation at the work site. No additional requirements were found. Therefore, AP 5.01 contains the only requirements which clearly state that all the work orders and any required procedures shall remain at the work site.

The requirements of AP 5.01 is appropriate for routine maintenance activities controlled by a work order. However, when installing a modification the documents and procedures required often are far more in number. Also, multiple work locations for the same job are usually required. This makes accurate control and maintenance of documentation far more difficult. As a result, the ESS methods have evolved into a process in which one working copy of the package is kept under control by an individual. Instructions are then provided to the field in the form of controlled documents, based strictly on the work and location of the work being performed. The process is tightly controlled by ESS, however, is not clearly defined by Plant or PMC procedures.

During this investigation it was also identified that PMC procedures 8-2.13 and 8-4.1 were not reviewed and approved per the requirements of AP 10.41, "Procedure on Procedures". Though Nuclear Operations Department Standards (NODS) exempt PMC procedures from onsite review, these procedures, however, do affect the conduct of work by ESS on modification and maintenance activities.

In conclusion, the root cause of this issue is the failure to provide clear administrative requirements and proper reviews of procedures for the control and maintenance field documentation use in the modification process.

Based on the investigation, several contributing causes for the violation were identified:

1. Informal development of methods for controlling and maintaining field documents by ESS for the installation of modifications beyond that defined in PMC-8-4.1.
2. Lack of Plant administrative procedure requirements defining the full purpose and use of the maintenance order in controlling modification activities by non-Plant organizations.
3. Lack of appropriate Plant administrative procedure requirements defining the proper control and maintenance of field documentation and procedures used by non-Plant organizations during modification activities.
4. Lack of proper procedure reviews for offsite procedures as required by AP 10.41.

Corrective Action Taken And Results Achieved

- c. Letters identifying the need for contract personnel to maintain correct documentation at the job site were sent to supervisory

personnel, discussed with craft personnel, and all construction activities were verified to have the proper work packages at the job site.

Corrective Actions To Be Taken To Avoid Further Non-Compliance

- c. Administrative requirements will be developed within Plant modification procedures addressing the control of field documentation use during modification installation. AP 5.01 will be revised recognizing the difference between required documentation in support of maintenance and that required during the installation of modifications. Plant administrative procedures will be revised to clearly define the purpose, scope and use of the work order in controlling and documenting modifications.

Appropriate PMC procedures used in controlling site activities for modifications will be reviewed under the requirements of AP 10.41.

Date When Full Compliance Will Be Achieved

- c. Administrative requirements for the control of field documentation use during modification installation will be developed by July 1, 1989. Procedural revisions recognizing the difference between required documentation in support of maintenance and that required during modification installation will be complete by November 1, 1989.

Projects, Management and Control (PMC) procedures will be reviewed against the requirements of Administrative Procedure 10.41, "Procedures on Procedures", by July 1, 1989.

Example

- d. Work steps 5.2.2.2, 5.2.4.1, and 5.2.5 of Procedure I-FC-627-02-001, "Installation of Diesel Generator 1-1 Contactors and Annunciator," Revision 0, were not signed off when the work was accomplished as required by Administrative Procedure 5.01, "Processing Work Requests/ Work Orders," Revision 8, Attachment 5. (255/88020-01D)

Reason For Violation

- d. During review of completed Modification Procedure I-FC-627-02-001, the NRC inspector noted that sign-offs on certain steps could not have occurred as indicated on the procedure when compared to the status of signatures of work performed noted a few weeks prior during the NRC pre-Plant visit. Investigation into the issue at the time of the NRC inspection concluded that certain steps of the procedure were signed off approximately two weeks after the work was performed. The individual involved knew the requirement, however, neglected to sign off after the work was performed. Later during a review, the individual signed off the step and back dated it, reflecting when the work was actually performed.

Procedure requirement pertaining to timely sign-off of steps are contained in AP 5.01, Attachment 5, Step 1.a. The requirements have not been found in any Modification or PMC procedures.

Corrective Action Taken And Results Achieved

- d. Letters identifying the need for contract personnel to perform timely sign-offs on all procedural steps were sent to supervisory personnel and expectations were reviewed with supervisory and craft personnel at the time this issue was identified.

Corrective Actions To Be Taken To Avoid Further Non-Compliance

- d. PMC procedures will be revised to require timely sign-off of procedural steps and training provided for new contractors will address the expectation to properly sign off procedure work steps immediately following completion.

Date When Full Compliance Will Be Achieved

- d. PMC procedures will be revised to require timely sign-off of procedural steps by May 1, 1989. The training program for new contract personnel addressing timely sign-off will be established by May 1, 1989.

Example

- e. As observed by the inspector, no authorization was obtained to perform work out of sequence as required by Procedure I-FC-627-02-001, "Installation of Diesel Generator 1-1 Contactors and Annunciator," Revision 0), Step 5. (255/88020-01E)

Reason For Violation

- e. During NRC review of the working package for Facility Change FC-627-2, specifically procedure I-FC-627-02-001, it was noted that certain steps had not been completed, yet the following steps in each case had been completed and verified. During discussions with the job supervisor, it was stated that authorization to perform the work out of sequence had been given by the project manager. No written authorization was immediately available in the work package to document this authorization.

Step 5.0 of Procedure I-FC-627-02-001 states the following: "This procedure shall be performed in sequence unless authorized differently by the originator". The intent of this statement is to allow the procedure originator, in this case the project manager, to adjust the sequence of work should it be necessary without performing a procedure revision. In the case of the steps in question, authorization was given by the originator via an internal "speedy memo" on August 18, 1988. The authorization was produced by the originator during later discussions on the issue.

In parallel and unknown to the NRC inspector at the time the concern was raised, the Projects Engineering organization and ESS representatives were discussing improved ways in which to handle and communicate changes in sequence of this nature. The results of this discussion was to handle all changes in direction, whether a procedure change is required or not, per the Engineering Design Change (EDC) process. Procedure requirements are in place for the EDC per AP 9.03. An EDC was processed on September 6, 1988 revising step 5.0 to allow the steps to be performed in any sequence as long as tagouts and precautions are met.

In conclusion, Consumers Power concludes that no actual procedure violations occurred, and that actions taken to resolve the ineffective communication will ensure these types of activities are performed efficiently in the future.

Corrective Action Taken And Results Achieved

- e. The Engineering Design Change (EDC) process is now being utilized for all changes in the sequencing of activities defined in modification procedures.

Corrective Actions To Be Taken To Avoid Further Non-Compliance

- e. No further actions are considered necessary. With the current use of an EDC for all changes in the sequencing of activities defined in modification procedures.

Date When Full Compliance Will Be Achieved

- e. Complete.

Example

- f. All prerequisites to performance of work, and work steps for completion of work were not accomplished as required by the procedures referenced in Work Order 24803875, "E-54-A CCW Heat Exchanger Inspection." (255/88020-01F)

Reason For Violation

- f. As part of the Preventive Maintenance Program the component cooling water (CCW) heat exchangers are opened and cleaned every refueling outage. The work is initiated by the Predetermined and Periodic Activity Control (PPAC) program with specific instructions defined in PPAC activity #CCS010 for the cleaning activities. The work this outage also included eddy current inspection and plugging of tubes in the "A" heat exchanger. The work orders associated with the most recent cleaning and inspection were 24803874 ("B" heat exchanger) and 24803875 ("A" heat exchanger). Planning and work execution were performed entirely by Consumers Powers' Field Maintenance Services (FMS) with interfacing back to Plant System Engineering.

During performance of the work on "A" heat exchanger, a review of the work package, work activities and discussion with repairworkers was conducted by the NRC inspector. Following this review and discussion, a number of questions were raised relating to adequacy of work order instructions and knowledge of the repairworkers about the work being performed. In response, Mechanical Maintenance stopped the work and initiated a Deviation Report entitled, "Inadequate Work Package". Work order package instructions were then revised and the package reviewed by the repairworkers with their supervisor and the cleaning activities were resumed. In addition, a letter went out to all FMS supervisors requiring that all supervisors ensure job briefings are conducted before work is performed.

PPAC #CCW010 is a preventative maintenance activity which is to be performed every refueling outage. In preparation for a major outage, a list of all refueling PPACs is generated and reviewed by appropriate departments. Activities which are to be performed are identified from the list and work orders for the activities are then generated. In the case of the CCW heat exchanger PPAC, the decision was made to clean and inspect the heat exchangers. The work was then assigned to FMS. The FMS planner developing the work order used the Advanced Maintenance Management System (AMMS) history instead of creating the work orders from the PPAC, and cloned new work orders based on the previous time the work was performed. The planner did not go back and question or review adequacy of the determinations on the work or the instructions provided. The two work orders went through the normal review cycle, were approved and then issued. Consequently, the instructions on the work orders were not the same instructions on the PPAC sheet defining the cleaning activities. Further investigation into the planners activities showed the individual involved knew how to plan work orders, but may not be fully aware of the special requirements of planning work orders at Palisades. The individual was given Plant administrative procedures to work to, but was not trained on the procedures. Further, many of the specific details associated with planning work orders are not contained in procedures, rather they are contained in policies or guidelines which also were not available. It was also noted, but not confirmed, that the planner was not using the current revision to AP 5.01. Forms from AP 5.01 used in the planning of the work orders were Revision 7, whereas, AP 5.01 Revision 8 had been issued several months prior to the planner coming onsite.

The failure of the repairworkers to follow the written procedures for the CCW heat exchanger work has been attributed to personnel error and the lack of a pre-job briefing. The failure in developing adequate work orders is the result of inadequate instructions and training provided to the FMS planner pertaining to the planning of work orders at Palisades.

Corrective Action Taken And Results Achieved

- f. The work was stopped until an evaluation was conducted. The evaluation determined that the repairworkers had not received a

pre-job briefing prior to starting work. Work was restarted after the supervisor, the job planner and repairworkers involved conducted a pre-job briefing. Guidance was given to all associated work group supervisors that pre-job briefings with the repairworkers were to be conducted prior to the start of the maintenance activity. This guidance also contained direction on what issues will be discussed in the briefing and how the briefing will be documented.

Corrective Actions To Be Taken To Avoid Further Non-Compliance

- f. Plant administrative procedure requirements will be established for the conduct and documentation of pre-job briefing activities.

A training program for non-Plant planners which addresses use and content of current administrative procedures, department policies and planning guidelines will be developed.

PPAC CCW010 will be reviewed and revised to provide clear instructions pertaining to the cleaning, eddy current inspection and plugging of the CCW heat exchangers. In addition, guidelines for the proper cloning of work orders will be developed.

A review of the PPAC program will be conducted to establish appropriate requirements to process PPACs which are tied to events. Topics to be discussed are scheduling, grace periods, performance justification and postponement and instruction quality, etc.

Date When Full Compliance Will Be Achieved

- f. Administrative procedure requirements regarding the conduct and documentation of pre-job briefing activities will be established by November 1, 1989.

The training program for non-Plant planners addressing the use and content of Plant Administrative procedures and department and planning guidelines will be developed by June 1, 1989.

PPAC CCW010 will be reviewed and revised to provide clear instructions pertaining to the cleaning, eddy current inspection and plugging of the CCW heat exchangers by September 30, 1989. A review of the PPAC program to establish appropriate requirements for processing the PPACs tied to events, similar to those for PPACs having specific durations, will be completed by September 1, 1989.

Description of Violation (255/88020-04)

2. 10 CFR, Appendix B, Criterion VI, as implemented by Consumers Power Quality Assurance Program, Section 6, requires in part that measures be established to control the issuance of drawings, including changes thereto, and that these measures shall assure that drawings, including changes, are distributed to and used at the location where the prescribed activity is performed.

Contrary to the above, the licensee failed to establish measures to inform the document control center about changes to drawings caused by modifications to hardware. As a result, the inspectors observed that work on diesel/generator Panel C21 was accomplished in accordance with the incorrect revision of Drawing 950W48M12, Sheet 96. (255/88020-04)

This is a Severity Level IV violation.

Reason for Violation

On August 8, 1988, Plant modification FC-627-2, "Replace Diesel Generator Annunciators and Contactors" was authorized for implementation. The modification involved the removal of existing local annunciator panels and replacement with new panels which contain reflash capabilities. Additionally, existing starters in local diesel generator starter panels were being replaced as an electrical equipment upgrade.

As part of FC-627-2, work requiring outage conditions was initiated for Diesel Generator 1-1 panel G-21 on August 23, 1988. By September 22, 1988 Drawing Change Requests (DCRs) were initiated for affected schematics and Plant Piping and Instrumentation Drawings (P&IDs), post modification tests were completed and equipment operability authorizations granted. As noted in the inspection report, the NRC inspector observed Plant electricians troubleshooting diesel generator panel G-21 circuitry on September 23, 1988 utilizing record wiring diagrams not yet revised to reflect the modifications of FC-627-2 completed the day before. Subsequently, a DCR for the affected diagram was completed and transmitted for update on October 19, 1988. Revisions were completed and the affected diagram transmitted to the Palisades Document Control Center on December 12, 1988.

The failure to initiate a DCR for the affected wiring diagram was the result of Administrative Procedure 9.03, "Facility Change - Minor", not requiring the initiation of revision to affected record wiring diagrams until just before modification package close-out. As indicated in the following Modification Milestone Summary, this stage of Plant modification comes after operability authorization of affected structures, systems and components. The failure to maintain accurate drawings was compounded by the fact that Administrative Procedures do not require notifications be made and maintained of upcoming drawing revisions resulting from physically completed modifications.

Corrective Actions Taken and Results Achieved

In response to the difficulties identified by the NRC at the time of the inspection exit, and the realization that an extended period of time (up to 90 days) could expire between operability authorization being granted for a completed modification and modification package closeout (the latest time DCRs for all affected drawings are to be initiated), Administrative Procedure 9.03 was revised. This revision now requires that a more complete DCR be submitted as part of the "Critical Document Update" stage of a Plant modification, which includes a) full markup of affected record schematics and P&IDs, and b) stamping all Plant Document Control Center (DCC) filed record drawings (including wiring diagrams) which are affected by the modification to indicate that revisions are in progress per a particular Plant modification. These actions ensure that Plant staff are aware of the status of filed record as-built drawings that may have been affected by Plant modifications.

Administrative Procedure 10.44, "Design Document Control and Distribution", was also revised to align with the changes made to Administrative Procedure 9.03. Consumers Power believed that stamping of drawings just prior to operability authorization being granted was the appropriate point for such actions as construction and testing activities would be complete. Therefore, the actual impact on record drawing files would be known with confidence.

Corrective Actions To Be Taken To Avoid Further Noncompliance

Although the period of time between the initiation of physical modification activities and stamping of affected record drawings is relatively short (typically two to four weeks), Consumers Power recognizes that a small potential still exists during this time period for troubleshooting activities involving wiring alterations utilizing record drawings not yet reflecting modification status. As a result, the aforementioned procedures will be revised to require the stamping when a modification is authorized for implementation.


Date When Full Compliance Will be Achieved

This change to Administrative Procedures 9.03 and 10.44 will be incorporated by June 1, 1989.

Modification Milestone Summary

<u>Modification Milestone</u>	<u>Comments</u>	<u>Impact On Record Dwg</u>
Authorization to Implement	The design package is "Approved for "Construction"	<div style="text-align: center;"> <div style="border-top: 1px solid black; width: 100px; margin: 0 auto; position: relative;"> <div style="position: absolute; top: -10px; left: 50%; transform: translateX(-50%); border-left: 1px solid black; border-right: 1px solid black; height: 10px;"></div> <div style="position: absolute; top: 0; left: 50%; transform: translateX(-50%); border-bottom: 1px solid black; width: 100%; height: 10px;"></div> </div> <p>Intended impact is known. Impact is subject to potential design change.</p> <div style="border-top: 1px solid black; width: 100px; margin: 0 auto; position: relative;"> <div style="position: absolute; top: -10px; left: 50%; transform: translateX(-50%); border-left: 1px solid black; border-right: 1px solid black; height: 10px;"></div> <div style="position: absolute; top: 0; left: 50%; transform: translateX(-50%); border-bottom: 1px solid black; width: 100%; height: 10px;"></div> </div> </div>
Notice of Modification	The Responsible Engineer (RE) informs Plant staff of upcoming changes and dates for installation & testing. RE also identifies affected procedures.	
System Turnover to Construction	Isolation points are set to confine the modification and its effects.	
Installation and Testing Complete	The modification is now "serviceable" but not yet counted on for performing its safety function.	
Critical Document Update	Documents used to operate modified system are fully revised by markup. (These include record schematics, P&IDs, One-Lines.) All record drawings* affected by the modification are stamped "Being Revised".	
Operability Authorized	The modified system is turned back over to Operations for use and to be relied upon for design function. "Operability" is authorized only after verifying that critical record documents are revised to reflect modification.	<div style="text-align: center;"> <p>Actual impact is known and fixed (not subject to change).</p> </div>
Documents Updated	All project drawings* are sent to drafting via Document Change Request for inclusion of modification into record drawings.	

Modification Milestone Summary

<u>Modification Milestone</u>	<u>Commentary</u>	<u>Impact On Record Dwg</u>
Package Closeout.	The modification package submitted for "Completeness review and then filming.	
*Record Drawings - Drawings on file in the Plant DCC and General Office Engineering Records Center (ERC) representing Plant as-built condition.		
*Project Drawings - Drawings copied from existing record drawings. Project drawings are given project-specific numbers and represent intended as-built until such time that the modification is constructed and tested. Project drawings are then sent to ERC via Drawing Change Request for revision and issue of new associated record drawings.		

Description of Violation (255/88020-06A-B)

3. 10CFR50, Appendix B, Criterion XVI, as implemented by Palisades Quality Assurance Program, Section 16, requires that conditions adverse to quality be promptly identified and corrected, and action be taken to preclude repetition.

Contrary to the above:

- a. As of October 20, 1988, the licensee failed to correct and resolve discrepancies with approximately 300 electrical drawings identified in early 1988 by Configuration Control Project during electrical plant walkdown inspections. (255/88020-06A)
- b. The licensee failed to take prompt corrective action to resolve a wiring discrepancy in Diesel Generator Panel G-31 identified in March 1988 that resulted in bypassing the lubrication oil heater flow switch of Diesel/Generator 1-2 for eight months; a deviation report was not initiated by the licensee until October 12, 1988. (255/88020-06B)

This is a Severity Level IV violation.

Reason For Violation

A management decision was made in July 1988 to temporarily defer the evaluation of the significance of drawing discrepancies identified during craft walkdowns. This deferral was made so that available resources would be focused on preparing for drawing verification work in the upcoming outage and other aspects of the Configuration Control Project. This decision was based on the significance of discrepancies evaluated up to the date of the decision. As of that time, 770 discrepancy reports (one discrepancy report per drawing walked down), representing several individual discrepant items on each drawing, had been evaluated and none of the discrepant items had been found to affect equipment operability or a licensing commitment. Consumers Power (CPCo) therefore maintains that no condition adverse to safety was created and that no affect on the scope or schedule of the Electrical Drawing Verification and Correction Task, which is an NRC accepted corrective action to findings in IE Inspection Report 86-028, was created by this management decision.

NRC IE Inspection Report 86-028 identified conditions were the as-built configuration of internal electrical panel wiring did not conform to design drawings. CPCo letter dated December 12, 1986, which was further clarified by CPCo letter dated April 16, 1987, provided Consumers Power's commitments regarding the Electrical Drawing Verification and Correction Task of the Configuration Control Project. The Electrical Drawing Verification and Correction Task is intended to correct certain electrical drawings, including those identified in IE 86-028, to as-built conditions. This program is to be completed in March, 1991.

At the end of September, week one of the inspection, the NRC inspector was provided with information that 300 drawings had been walked down but not

categorized. This number was later corrected to approximately 400 to 500 based on the addition of the estimated number of discrepancy reports that would be required on seven panels for which reports had not been generated. The actual number of discrepancy reports remaining to be categorized and evaluated as of October 20, 1988, was 350. Of these, 240 on the seven panels had yet to be generated. One hundred forty reports had been categorized and evaluated during the maintenance inspection period.

At the present time a total of 1350 discrepancy reports have been generated and categorized as a result of completed walkdowns through 1988, and fewer than 50 remain to be evaluated for corrective action. This represents all drawings completed through 1988. However, as of February 13, 1989, only three discrepancy items have resulted in a Deviation Report being generated because the condition potentially affected operability. Consumers Power considers that this supports the management decision to temporarily defer the discrepancy report evaluation effort to take advantage of occurring outage conditions and to focus additional resources on the design basis reconstitution effort. However, in recognizing that one condition can be serious enough to stress safety related systems or can have the potential to cause a plant shutdown, the CCP discrepancy categorization and evaluation process is being brought closer into step with the actual drawing walkdown. This will be accomplished by changing the methodology to perform assessments on each completed drawing rather than waiting for a package (component) to be completed, as well as providing a more resource levelized management approach to the walkdown and discrepancy report evaluation process.

Regarding the second example of the violation presented, Consumers Power does not agree that it failed to take prompt corrective action to resolve the specific concern with the diesel generator panels. These panels were part of the equipment that remained to be categorized and evaluated at the time of the inspection. During the period between September and October, when the NRC team was not on site, all of the Diesel panel discrepancies were categorized and evaluated. This work was undertaken because of two factors: a) the CCP outage work was nearly complete and resources were now available to begin the assessments and evaluation already planned and b) the NRC inspector's concern with Diesel Panels caused us to place a higher priority on them. The results of this effort showed a condition of incorrect wiring associated with a diesel generator lubrication oil heater alarm switch. This condition was promptly evaluated and resulted in the generation of a Deviation Report to assure prompt root cause analysis and corrective action.

The condition identified was determined to have the potential to cause additional or more frequent maintenance over time, but did not affect diesel operability. In accordance with Consumers Power's corrective action program, prompt corrective action was taken to restore the flow switch. In accordance with the CCP discrepancy program, Consumers Power maintains the condition was identified when categorized and evaluated in October 1988, and corrective action was promptly taken at the same time.

Corrective Actions Taken and Results Achieved

As described in the above, Consumers Power does not consider it necessary to implement any additional corrective action, but merely implement the CCP plan. All Discrepancy Reports on the completed walkdowns through 1988 have been formalized and initially categorized, and are being processed in accordance with the CCP project plan. No conditions affecting the operability of equipment required by Technical Specifications or licensing commitments have been identified to date.

Corrective Action To Be Taken To Avoid Further Noncompliance

Although Consumers Power does not believe a condition adverse to safety existed, the CCP project is taking steps to provide a more resource levelized approach to the Electrical Drawing Verification and Correction Task and making a minor methodology change to provide categorization and evaluation of discrepancies in closer step with the walkdown effort.

Date When Full Compliance Will Be Achieved

As the Electrical Drawing Verification and Correction Task of the CCP is part of an already NRC approved corrective action plan, no further due date commitments beyond the March 1991 date are believed prudent or necessary.

ATTACHMENT II

As a result of a detailed review of IE Inspection Report 88020, Consumers Power will perform the following additional actions in order to resolve NRC inspector concerns, improve the material condition of the Plant and/or the maintenance program.

1. Complete an investigation into changes made to the fan blade pitch on V6A&B and properly document acceptable configuration for the blades. Continue to monitor motor performance for reliable operation. Reference IE Inspection Report 88020, Section 3.3.2.1.
2. Evaluate breaker measurement specifications for 2400 VAC breakers. Identify those specifications which require adjustment based on past experience. Redefine proper tolerances where necessary and document the basis for the change. Reference IE Inspection Report 88020, Section 3.3.2.1.
3. Evaluate engineering documentation of directions and decisions related to maintenance activities. Ensure direction and basis for the direction or decision are properly documented. Reference IE Inspection Report 88020, Section 3.3.2.2.
4. Develop a plan/method or other appropriate means which will improve the condition of containment cleanliness during major outage activities. Reference IE Inspection Report 88020, Section 3.4.1.1.
5. Update Control Rod Drive Mechanism (CRDM) work order history and/or maintenance procedures to state the types of lubricants to use during CRDM maintenance. Reference IE Inspection Report 88020, Section 3.4.2.1.
6. Revise work order instructions in the preventative maintenance activities associated with motor operated valves (MOV) to ensure instructions are specific to particular MOV applications.
7. Evaluate the current Quality Assurance inspection program and identify potential changes to audit plants such that inspection activities are focused into performance based concepts. Reference IE Inspection Report 88020, Section 3.5.1.
8. Evaluate the adequacy of problem descriptions on work orders and the use of troubleshoot and repair type instructions. Evaluate the feasibility of developing generic troubleshoot and repair maintenance procedures which summarize the basic steps for most common types of troubleshooting activities. Reference IE Inspection Report 88020, Section 3.3.2.6.
9. Investigate methods to stop or control tar pump leaks in the Asphalt Solidification System. Reference IE Inspection Report 88020, Section 3.4.1.1.
10. Establish and communicate requirements for the cloning of work orders. Ensure all determinations on the new work order are reevaluated, eg ISI, operability testing, etc. Reference IE Inspection Report 88020, Section 6.3.2.3.