



Consumers
Power

**POWERING
MICHIGAN'S PROGRESS**

General Offices: 1945 West Parnall Road, Jackson, MI 49201 • (517) 788-0550

October 30, 1989

Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

DOCKET 50-255 - LICENSE DPR-20 - PALISADES PLANT -
COMMITMENT MADE IN RESPONSE TO INSPECTION REPORT 88020

Nuclear Regulatory Commission letter dated January 18, 1989 transmitted the Special Maintenance Inspection results as Inspection Report 88020. The results indicated that most areas of maintenance were reviewed during recent Quality Assurance (QA) audits, surveillances and inspection activity reports, however, the majority of findings were administrative in nature due to only a small amount of work activities actually being observed. Consumers Power letter dated February 17, 1989 provided our initial response to the inspection. In Attachment II of the response we committed to evaluate the current QA verification program and to identify potential changes such that performance based concepts are factored into verification activities. Subsequently, NRC letter dated March 20, 1989 requested we provide a docketed response describing the results of decisions made within 30 days of the decision date. Consumers Power Company's revised response dated April 14, 1989 committed to complete the performance based QA verification evaluation by the end of 1989 and to inform the NRC of decisions reached by October 30, 1989. The attachment to this submittal provides the evaluations and decisions made regarding performance based QA verifications.

Brian D Johnson
Staff Licensing Engineer

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

Attachment

8911080077 891030
PDR ADOCK 05000255
Q FDC

OC1089-0014-NL02

JE01
11

ATTACHMENT

Consumers Power Company
Palisades Plant
Docket 50-255

Results of Evaluation Regarding
Performance Based
Quality Assurance
Activities

October 30, 1989

3 Pages

Evaluation of Performance Based Quality Assurance Activities

As stated in Section 3.5.1 of Inspection Report 88020: "...audit reports indicated that most areas of maintenance were reviewed, including PM, Maintenance interface with System Engineers, modifications, Mechanical and Electrical Maintenance activities, I&C and ISI. The audits consisted of a review of records and documents, some observations of work activities, and Plant equipment walkdowns; however, only a small number of work activities were actually observed. The audits were not considered performance oriented because of the limited number of maintenance activities that were observed, and the limited evaluations of Work Orders and procedures for technical adequacy. Even though there were audit findings that related to performance, the majority were administrative in nature."

Consumers Power Company has reviewed its Quality Assurance (QA) Verification Program and feels that while progress has been made toward performance based inspections continuing efforts are still warranted.

The recent emphasis on NUREG/CR-5151 "Performance Based Inspections" by the NRC, will have a positive effect on improving the effectiveness and productivity of quality verification personnel. However, these changes in philosophy, attitudes, techniques and methodology do take a period of time to develop and implement. Consumers Power Company supports this concept and recognizes the need to move towards a more "performance-based" verification philosophy.

In reviewing the concepts outlined in NUREG/CR-5151 and reviewing a vendor performance-based inspection course, Consumers Power Company has determined that certain performance-based concepts already exists in QA Verification Program.

The concept of performance-based verifications (eg audits, surveillances, assessments and inspections) is based on having qualified personnel who have the necessary technical capabilities to accurately observe and evaluate an activity/area.

At Consumers Power Company we feel we have made significant improvements in training qualified personnel. Most of the individuals in the audit section have experience in areas other than Quality Assurance. This includes Operations, Chemistry, Reactor Physics, Engineering, Health Physics, Inservice Inspections, Security and Environmental Science. The Consumers Power Company Audit Section averages 17 years of nuclear experience. In addition, the Audit Section can draw upon expertise from within other sections of the General Office QA organization. When QA Department expertise is weak or lacking, Technical Specialists are obtained from our other nuclear plant, our offsite review group, various corporate organizations or they are contracted. The site verification groups at both Big Rock Point and Palisades are also comprised of individuals with experience other than Quality Assurance. This includes individuals which have had Senior Reactor Operator Training, Reactor Operator License, former Repairworkers, Auxiliary Operators, Chemistry, Health Physics and I&C Technicians, Maintenance Supervisors and Reactor Engineers.

Consumers Power Company has taken actions to contract vendor services to provide three training sessions on performance-based philosophies and methodologies. This was completed in February 1989. Also, the QA Audit Supervisor is actively involved with the ASQC Energy Division Subcommittee on Verifications. This committee is composed of approximately 20 nuclear utilities and contractors which are working on ways to improve the verification process through the use of performance-based concepts. Consumers Power Company utilizes a tiered verification process which is comprised of audits, surveillances, activity inspections and inspections. The site QA/QC verification groups are tasked with the day-to-day monitoring of Plant activities. Inspections are aimed at final hardware compliance verification and are performed by on-site QC personnel. The activity inspection (AI) process verifies that activities are properly performed. The AIs are usually conducted in the areas of Plant Operations, Maintenance, Chemistry and Health Physics and are performed by onsite QC personnel. The surveillances at Consumers Power Company are performed on an as needed basis and have the flexibility of being programmatic or activity oriented. The majority of surveillances are performed by onsite QA personnel.

Audits are aimed at functional areas (eg, Operations, Maintenance, Health Physics, Modifications, etc) and are performed on an annual or biennial basis. Audits are programmatic in nature with emphasis being placed on assuring if programs are properly defined and determining if management controls are adequate and effective for the function. Performance based methodologies can be applied to the audit program by determining what the important elements are to each functional area and verifying the effectiveness. Examples may include checking design calculations, comparing design outputs with design inputs, determining if critical or quality characteristics are appropriate, etc. These are coupled with observations of activities, Plant tours and system walkdowns/verifications when appropriate.

Each of the four different processes (ie, inspections, activity inspections, surveillances and audits) plays an important part in Consumers Power's verification program. However, our evaluation has indicated improvements can be made in integrating verification efforts of our onsite QA organization with those of our offsite QA organization. In addition, our evaluation of the verification program has indicated there are areas/activities which are not being monitored and in some instances we have found a duplication of effort between our verification processes, which indicates we may not be effectively utilizing our resources.

In order to correct these weaknesses, the Director of Quality Assurance has established a Verification Committee within QA to review and recommend improvements to the Consumers Power Verification Program. The committee is chaired by the QA Audit Supervisor and is composed of the Big Rock Point QA Superintendent, the Palisades QA Operations Supervisor and the Palisades QA Engineering Supervisor. This committee is tasked with determining:

1. What areas/activities should be covered by the verification program
2. What process (ie, Audit, Surveillance or Activity Inspection Program) should be responsible for verification
3. What is the appropriate frequency for verification of each area/activity
4. What methodology for verification should be utilized

While we believe progress has been made by the Quality Assurance Department in conducting performance-based verifications, Consumers Power Company concurs with the NRC observations and will continue to work at improving this area.