

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-410/86-04

Docket No. 50-410

License No. CPPR-112 Priority -- Category B

Licensee: Niagara Mohawk Power Corporation

300 Erie Boulevard West

Syracuse, New York 13202

Facility Name: Nine Mile Point 2

Inspection At: Scriba, New York

Inspection Conducted: January 27-31, 1986

Inspectors: Team Leader: J. C. Linville, Chief RPS 2C, DRP
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Projects Section 2C, DRP

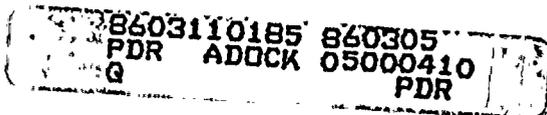
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Inspection Summary: Inspection on January 27-31, 1986
(Report No. 50-410/86-04)

Areas Inspected: Special unannounced assessment of the content and implementation of the licensee's Quality First Program. The assessment included a review of program procedures, implementation, and management oversight. The inspection involved 160 hours on-site by 2 region based inspectors, one senior resident inspector, one headquarters I&E representative and one section chief.

Results Summary: No violations were identified.

In several of the cases reviewed QIP was successful in properly resolving valid quality concerns which probably would not have otherwise been identified by the licensee. The program also has several noteworthy strengths such as: good publicity resulting in general employee awareness of the program; protection of the confidentiality of concernees; reliance on the opinion of both an investigator and an interviewer in classifying and determining the validity of most quality concerns; use of independent investigators for technical





concerns, and looking beyond the specific concern to the generic implications in some instances. In addition, management oversight of the program has resulted in improved program effectiveness since its inception as indicated by an improving trend in documentation of the basis for concern disposition, more direct contact with exiting employees to identify concerns, and improved tracking of the status of concerns by implementing a computerized system.

In contrast to the positive aspects of QIP noted above there remains considerable room for improvement in the areas indicated below with inspection report paragraph references for details:

- There are programmatic impediments to the effective investigation and disposition of potential wrongdoing issues. (Section 3.3 and 4.1)
- In some instances, the corrective actions and their verification by QIP as stated in program records were not complete. (Section 4.4)
- There is no formal trending of the nature of concerns nor of data on program performance to assess its effectiveness (Section 4.5).
- The program does not assure timely action by prioritization of concerns where appropriate. (Section 4.5)
- Some concerns reviewed were improperly classified as non quality issues (Section 4.1).
- In some cases the investigation to determine the validity of the concern apparently reached an incorrect conclusion due to a lack of familiarity with the requirements by the investigator, or a failure to contact an independent technical expert for an opinion. (Section 4.3).
- While there has been improvement in the content of the program case files with time, they do not in all cases provide adequate disposition of the concerns, in that, they do not contain a case specific plan for concern disposition or a summary of findings, and do not document the results of recontact with the concernee. (Section 4.2.)

In spite of the areas noted above the team was able to conclude that all 76 of the cases reviewed were ultimately adequately dispositioned.



1.0 Persons Contacted

Niagara Mohawk Power Corporation

J. Perry, Vice President-Quality Assurance
*A. Kovac, Manager, QIP
*J. White, Special Projects
C. Beckham, Manager QA Projects
*E. Manning, QIP Interviewer
*W. Hansen, Manager, Nuclear QA Operations
*R. Matlock, Deputy Project Director
*J. White, Special Projects
*E. Riley, QIP

NRC

* R. Gramm, Senior Resident Inspector, Nine Mile Point Unit 2
* Those present at Exit Interview

Many other licensee and contractor personnel were interviewed in conjunction with the QIP assessment and were present at the entrance and exit interview. The above list constitutes the principle contacts.

2.0 Scope

In late 1984, Niagara Mohawk Power Corporation (NMPC) implemented a Quality First Program (QIP) to provide Nine Mile Point employees an avenue to express confidential concerns about the quality of construction, modification, maintenance, or operation, and to obtain feedback regarding the resolution of their concerns.

The purpose of this assessment was to evaluate the effectiveness of the QIP in addressing, resolving and, where necessary, correcting conditions associated with these employee concerns. The approach to the assessment was to review the program and assess its effectiveness. The program review included a review of program description documents, interviews with QIP staff members and their superiors, a review of the program QA audit and discussions with the auditors.

Program effectiveness was assessed by reviewing selected case files, interviewing the investigators and interviewers involved with some of these cases, discussing the program and corrective action with responsible interface organizations, verifying the corrective action in some cases, and discussing the program with licensee and contractor employees in the field.

3.0 Program Review

3.1 Program Description

The QIP is defined by Quality Assurance Procedure (QAP) 16.70. It provides a means to permit contractor and NMPC employees to express confidential concerns about the quality of construction, modification,



maintenance or operation, and to receive feedback regarding the results of the investigation of their concerns. QIP is applicable to all NMPC and contractor personnel associated with Nine Mile Point Units #1 and #2.

3.2 Organization

The QIP organization currently includes a QIP Manager, 2 QIP interviewers, 4 QIP Investigators, and 2 administrative clerical personnel. The QIP Manager reports to the Vice President-Quality Assurance.

The current Manager QIP indicated that the size of the staff has remained relatively constant since the program was established. He has been involved with QIP since it started but two other managers preceded the current Manager QIP since it began. In addition, there has been turnover in the QIP interviewer and investigator staff, but the Manager QIP can draw on other qualified investigators and interviewers from his site QA audit group to accommodate peak resource demands. While he does play a dual role, he indicated that he spends in excess of 80% of his time on QIP. For concerns related to the NMPC QA organization or personnel, the program provides for avoiding a conflict of interest by addressing them to the Administrative Assistant to the President of NMPC. To date only three concerns have been referred by this process of which two have been closed.

The Vice President Quality Assurance is responsible through the Manager QIP to publicize the program, control and investigate concerns, maintain employee confidentiality, interface with contractors and NMPC departments, and perform initial reviews for potential reportability. The responsibilities of QIP staff members are defined in Quality Assurance Instruction (QAI) 16.70-01.

3.3 Information Flow

QIP Concerns are identified by telephone, personal interviews or written correspondence. Interviews include voluntary drop-ins and exit interviews with all terminating site individuals. There are posters at the Nine Mile Point site describing QIP, including telephone numbers and blank form letters which can be used to transmit concerns. Telephones are manned most of the time during working hours by interviewers and are otherwise equipped with a message recording device when QIP personnel are unavailable and after normal working hours to permit follow-up calls. Concerns are classified as Category 1 (safety-related), BOP (non-safety related), Personnel, Safety (industrial), or Other. Based on QIP investigation, quality related Category 1 and BOP concerns are further classified as valid or invalid. All other concerns are referred to responsible organizations for followup without further QIP involvement. Quality related Category 1 or BOP concerns, which are determined to be valid by the QIP staff are also referred to the responsible organization for resolution. In these cases QIP establishes completion dates, reviews resolution, verifies completion of corrective action and reviews the item for generic implications.



Unless there are specific hardware or procedural concerns which result from potential wrongdoing issues such as intimidation, drug abuse, or falsification of records, these cases are referred to the appropriate NMPC department such as security or personnel for followup since the Q1P staff is not specially trained to address the issues. While results feedback for the concernee is requested for these issues it does not appear that it is being received consistently. The information flow problems with cases such as these are discussed further in section 4.1.

3.4 Documentation and Record Retention

Split files are maintained on each case, one of which provides only the details of the case followup activities and the other which contains documents which identify the concernees. Both files are kept locked when unattended.

3.5 Training

An uncontrolled training supplement has been developed to provide Q1P staff members with information on interview techniques, concern classification, program philosophy, contacts in other departments, etc. Although the Manager Q1P is thoroughly familiar with this material, there is nothing to indicate that it has been reviewed and approved by management. In addition there is substantial coverage of the Q1P in the General Employee Training (GET) program. This includes a 15 minute videotape in the QA portion of the program dedicated to Q1P.

3.6 Management Involvement

Senior licensee management, including the President, Vice President-QA, and Nine Mile Point Unit 2 Project Manager receive weekly routine statistical data reports showing the cumulative status of concerns and weekly numbers of contacts and types of concerns. Beyond this the only documentary evidence of management involvement in Q1P was QA audit SY-RG-IN-85022 conducted in October 1985 and a memorandum from the Vice President QA to the President summarizing the results of the first year of Q1P program operation dated October 15, 1985. This report indicated that Q1P is performing as expected with little impact on the project. The audit results indicated that the program was being implemented satisfactorily and effectively and noted that the method of getting input from employees was being revised. The scope of the audit was complete. It further noted the weaknesses that some files did not provide sufficient documentation to support the final case determination, and that specialized Q1P staff training was not formally documented. Timely effective corrective action was taken by the licensee to correct these program weaknesses.

4.0 Q1P Implementation

The team reviewed 76 of the 336 concern files generated by Q1P. This included 64 of the 121 safety related Category 1 concerns and 12 of the



215 other concerns. In order to assure themselves of the adequacy of the licensee investigations, some degree of followup was required on 21 of 76 cases reviewed. The extent of followup varied from discussion with the QIP interviewer and investigator to field verification of the corrective action. None of the cases reviewed warrants further NRC followup.

4.1 File Classification

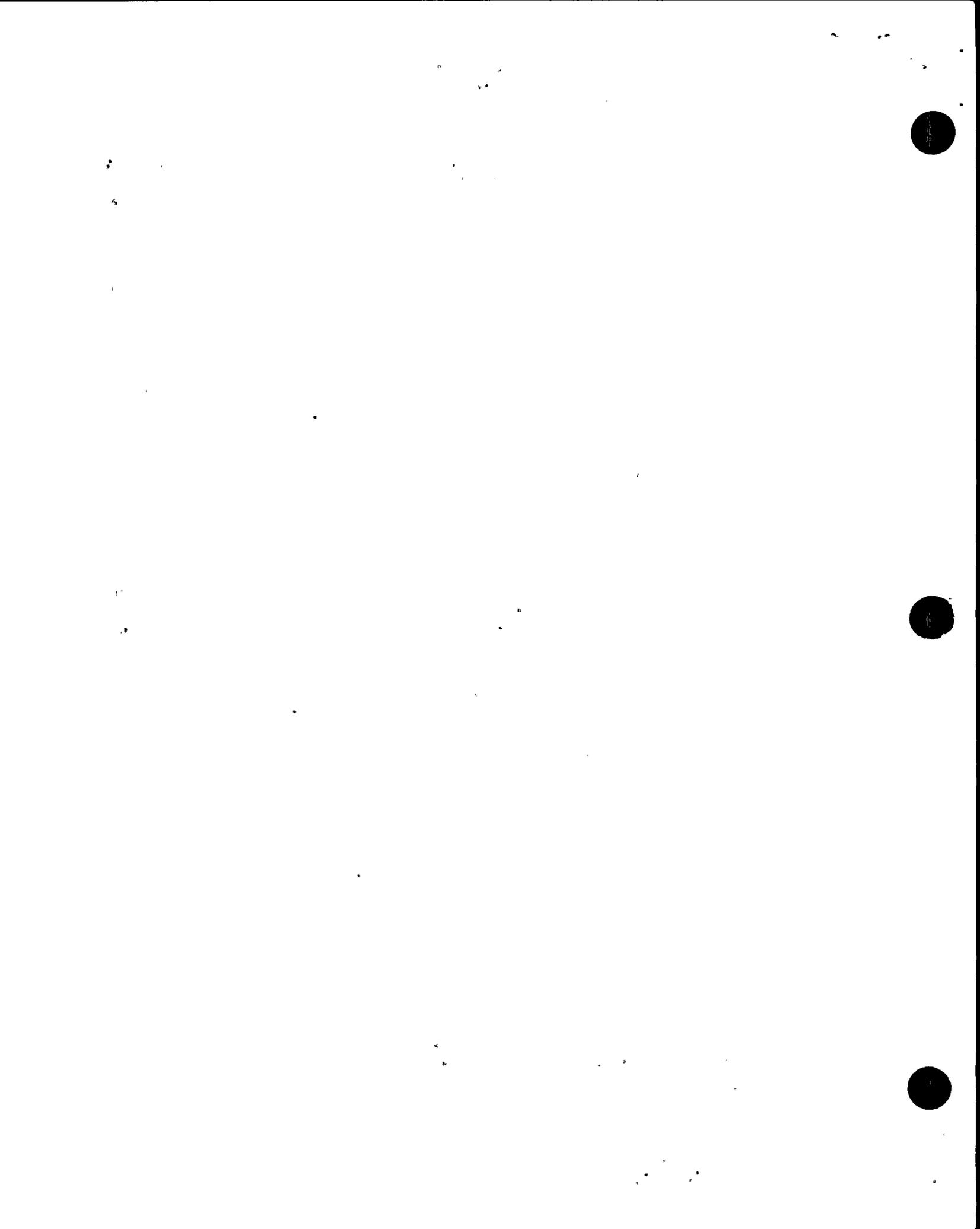
While all of the Category 1 safety-related files which were reviewed were properly classified, it appeared that 4 of the 12 other files reviewed had potential Category 1 implications and should have been classified as such, even though there were no specific Category 1 technical issues. Examples of such issues included alleged drug use by QC inspectors in the parking lot, two cases of stepping on snubbers, and traceability of small bore piping. While it appears that the particular cases reviewed were adequately dispositioned, it was not clear that this would always occur due to some dysfunctional aspects of the process for addressing them. Unless allegations like these are classified as Category 1, QIP immediately turns them over to the appropriate department without further independent investigation to determine the validity of the allegation. Furthermore to assure the integrity of the QIP confidentiality promise, the identity of the concernee is not revealed to the department tasked with review and disposition of the allegation, making it difficult to thoroughly investigate the issue through a third party. Finally, it is difficult for QIP to provide effective feedback to the concernee on the results of such cases since they do not have access to the investigative files of the organization performing the followup in some cases. Information flow problems like this are of particular concern when related to wrongdoing issues like harassment and intimidation, drug abuse, and falsification of records. In addition, for cases of this nature which are classified as Category 1, the QIP staff is not well trained or qualified to investigate such issues even though they are qualified as auditors.

4.2 Completeness of Case File

While improvement has been noted in the quality of QIP case files since the QIP audit in October 1985, there were instances of noteworthy exceptions, in that, QIP case files do not consistently provide sufficient documentation to justify the final disposition. The missing ingredients seem to be a detailed plan or outline for investigating and dispositioning the concerns, a summary of findings and more complete documentation of the followup with the concernee following final resolution.

4.3 Thoroughness of Concern Investigation

In several cases it did not appear that the investigation to determine the validity of quality concerns was thorough enough to assure the technically correct result. These cases seem to stem from a lack of familiarity of the investigator with the technical issues at hand, coupled with a failure to check the basic requirements or to get an independent opinion from a technical expert where warranted. An example includes asking the training



manager about a concern regarding the requirements for training individuals doing electrical terminations. Once again, cases reviewed which exhibited this tendency were ultimately determined to be properly dispositioned.

4.4 Corrective Action

In some of the cases reviewed QIP did not adequately verify the completeness or effectiveness of the corrective action for valid concerns. One example involved followup on bent instrument tubing. In this case the investigator observed that the tubing in question was no longer bent and that a sign had been hung to prevent people from stepping on it in the future, but he did not verify that the tubing which had been bent was properly documented and repaired or replaced.

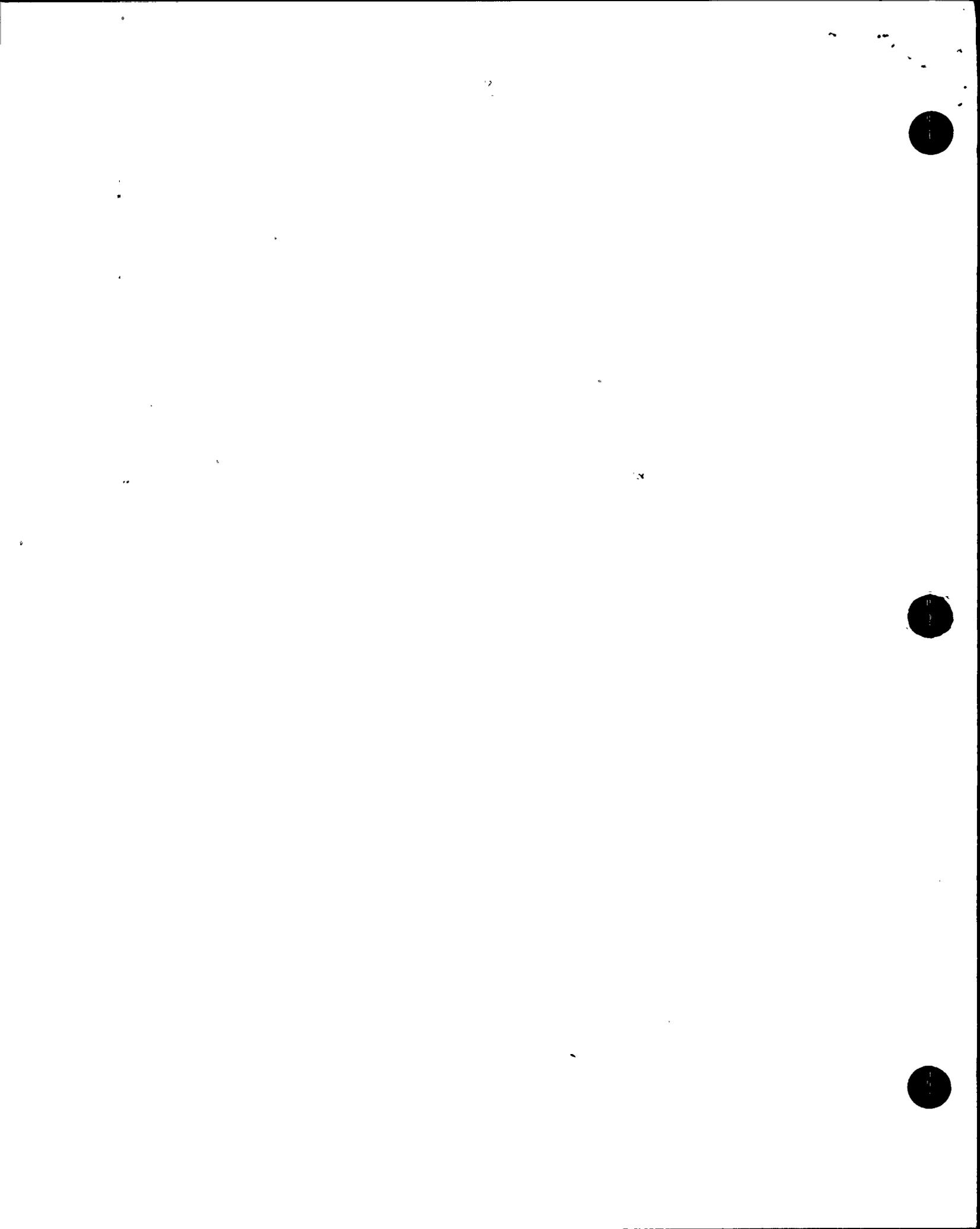
4.5 Status of Concern Resolution

To date there have been 5772 individuals who have been contacted in conjunction with QIP. Of these, 236 have identified 336 concerns. There have been 121 safety related concerns identified, of which 17 were found valid. All 17 of the valid safety related concerns have been closed and 316 of 336 total concerns have been closed. The implementation of a computer tracking system in late 1985 permitted more effective management of the program and enabled a reduction of the backlog of open cases by about 50%. This reduction was also attributed to a lower than expected influx in cases for the number of construction workers leaving the Nine Mile Point Unit 2 project.

There is currently no formal trending of cases for generic concerns and no formal scheme for prioritizing case work. Two pairs of common cases were reviewed, one pair involving cold springing of piping and the other involving stepping on snubbers, which indicate there have been recurring issues. While QIP did improve in its handling of the cold springing issue, there is no evidence which suggests that any trending effort was responsible for this improvement. There is also no use of the statistical data available in the computer to trend overall program performance by looking for patterns in sources of concerns, changes in the volume of concerns for a given period, etc. While the need to prioritize concerns has not been an issue to date, the ability to correct conditions adversely affecting quality in a testing or operating environment and the need to resolve concerns before fuel load on a priority basis warrants consideration by the licensee.

4.6 QIP Awareness

The team interviewed 18 licensee and contractor personnel in the field to determine if they were aware of the program, if they had addressed quality concerns to it, if such quality concerns were properly dispositioned, if they would address any further quality concerns to the program, and if they were confident that such quality concerns would be properly dispositioned. All but one of the individuals who has just started work that day were aware of the program, would use it if they could not get



satisfaction through their line organization on quality concerns, and were confident that the program could satisfy them. One individual had addressed a concern to the program and was satisfied with the resolution. Even though this is admittedly a small sample, this result coupled with the positive comments of several responses to exit letters soliciting concerns, and the small number of concerns relative to the total number of contacts (336 from 5773) seems to indicate that overall awareness of and confidence in, the program is positive.

5.0 Exit Interview

Daily during the assessment and at its conclusion on January 31, 1986, the team leader met with licensee management to discuss the assessment scope and findings.

Based on NRC Region I review of this report, it has been determined that this report does not contain information subject to 10 CFR 2.790 restrictions.

