

April 20, 1982

TE HQ FILE COPY

Office of Inspection and Enforcement
Region I
Attention: Mr. Thomas T. Martin, Director
Division of Engineering and Technical Programs
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Mr. Martin:

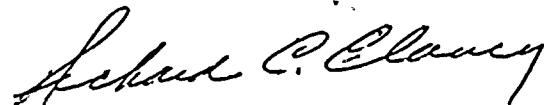
Nine Mile Point Unit 2
Docket No. 50-410

In compliance with the requirements of 10 CFR 2.201, attached is Niagara Mohawk's response to the items of noncompliance and the significant observation identified in Inspection Report No. 50-410/81-13.

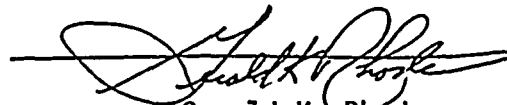
While we may not agree with all of the findings of your staff, and while none of the cited deficiencies have resulted in any reconstruction or repairs, nevertheless we welcome their constructive guidance. As you know responses and resolutions to some of these findings were addressed by Niagara Mohawk during our meeting in Washington on January 13, 1982 and in subsequent correspondence dated January 22, 1982. Resolutions and/or responses to the balance of your findings are contained herein.

Very truly yours,

NIAGARA MOHAWK POWER CORPORATION



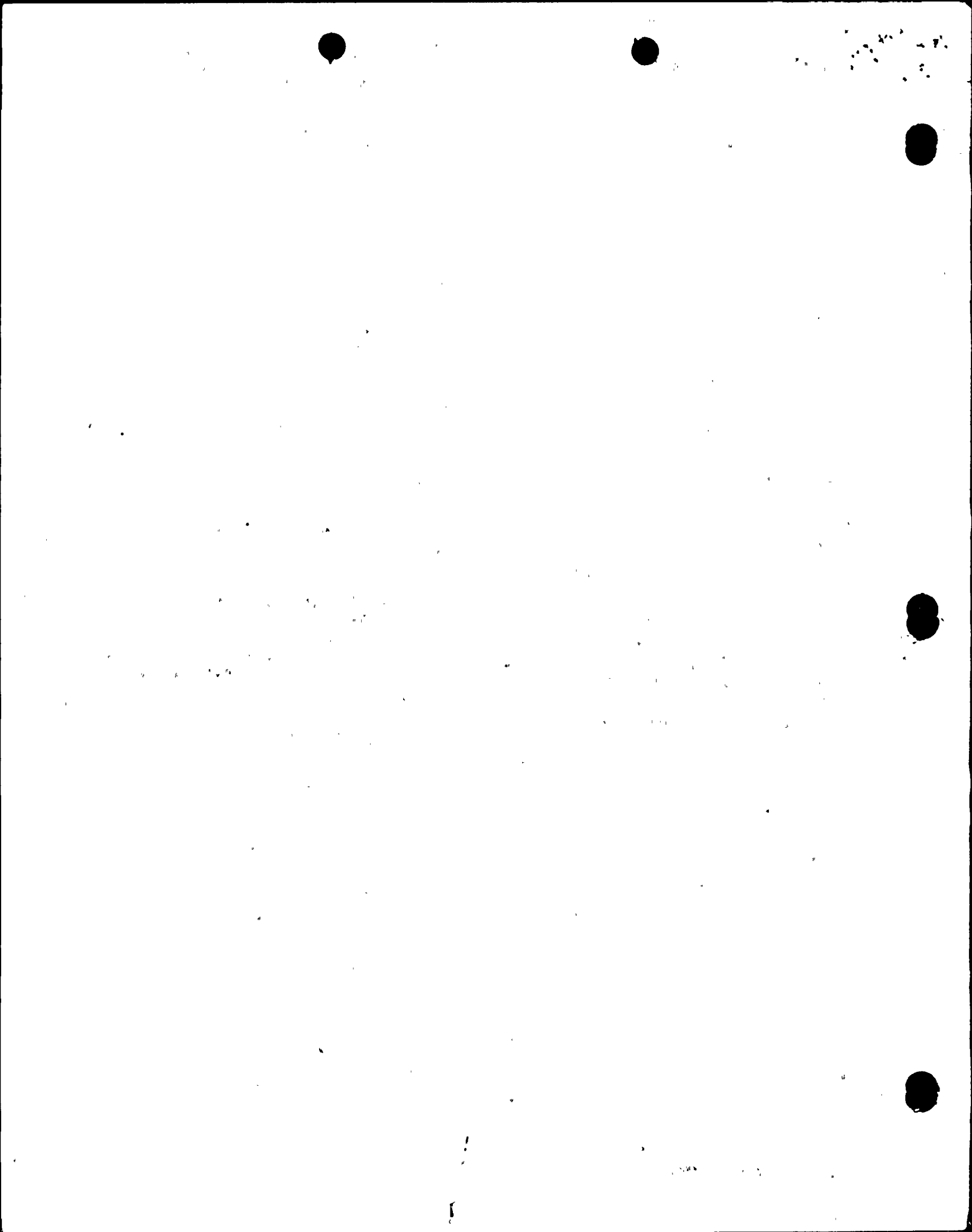
Richard C. Clancy
Senior Vice President



Gerald K. Rhode
Vice President-
System Project Management

RCC/GKR:hjc
Attachment

8211180375 821104
PDR ADDCK Q5000410
G PDR



STATE OF NEW YORK)
COUNTY OF ONONDAGA) . ss:

RICHARD C. CLANCY, being duly sworn says:

I am Senior Vice President of Niagara Mohawk Power Corporation, I have read the foregoing letter and attachment, and the information contained in the letter and attachment is true to the best of my knowledge, information and belief.

Richard C. Clancy

Sworn to before me this

20th day of April, 1982.

Hazel J. Carrick

Notary Public

HAZEL J. CARRICK
Notary Public in the State of New York
Qualified in Onon. Co. No. 4524460
My Commission Expires March 30, 1984



(NOV 12 1982)

IN THE SUPREME COURT OF PENNSYLVANIA

PENNSYLVANIA PUBLIC UTILITY
COMMISSION and CONSUMER
ADVOCATE OF PENNSYLVANIA,
Petitioners

Nos. 129 and 130 E. D. Misc. Dkt.
1982

v.

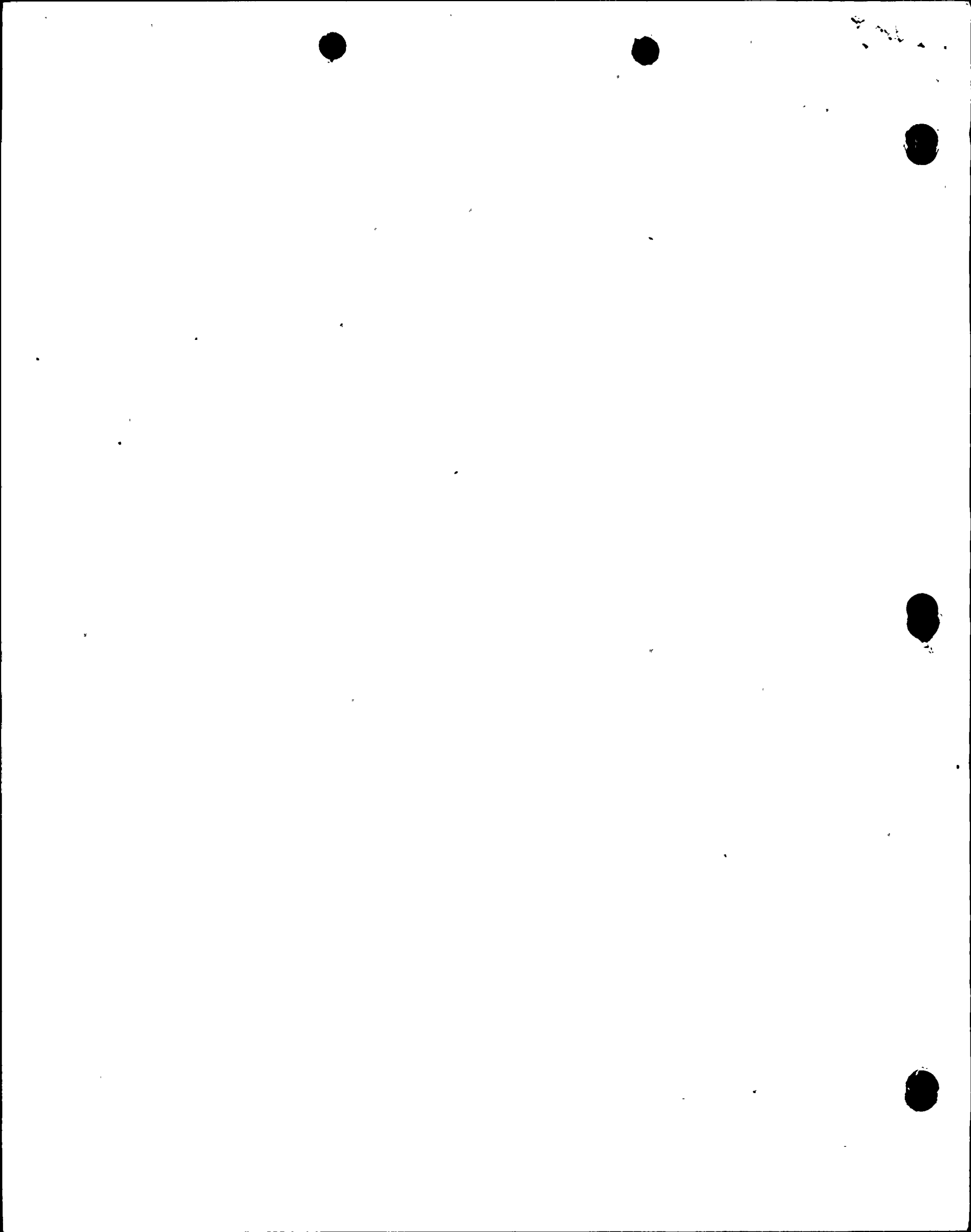
PHILADELPHIA ELECTRIC COM-
PANY

Applications for Review of Order
of Commonwealth Court at No. 2365
C. D. 1982, entered October 26,
1982

O R D E R

PER CURIAM

AND NOW, this 8th day of November, 1982, it being clear from the opinion accompanying the order of the Pennsylvania Public Utility Commission dated October 15, 1982, denying a stay of its order of August 27, 1982, that the order of August 27 does not prohibit construction at Limerick Unit 2, the stay entered by the Commonwealth Court on October 26, 1982, is vacated, the order entered by the Commission on October 15, 1982, denying a stay is reinstated, and the matter is remanded for expedited consideration.



NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT UNIT 2

DOCKET NO. 50-410

Response to Notice of Violations

Enclosed in NRC Region I Inspection

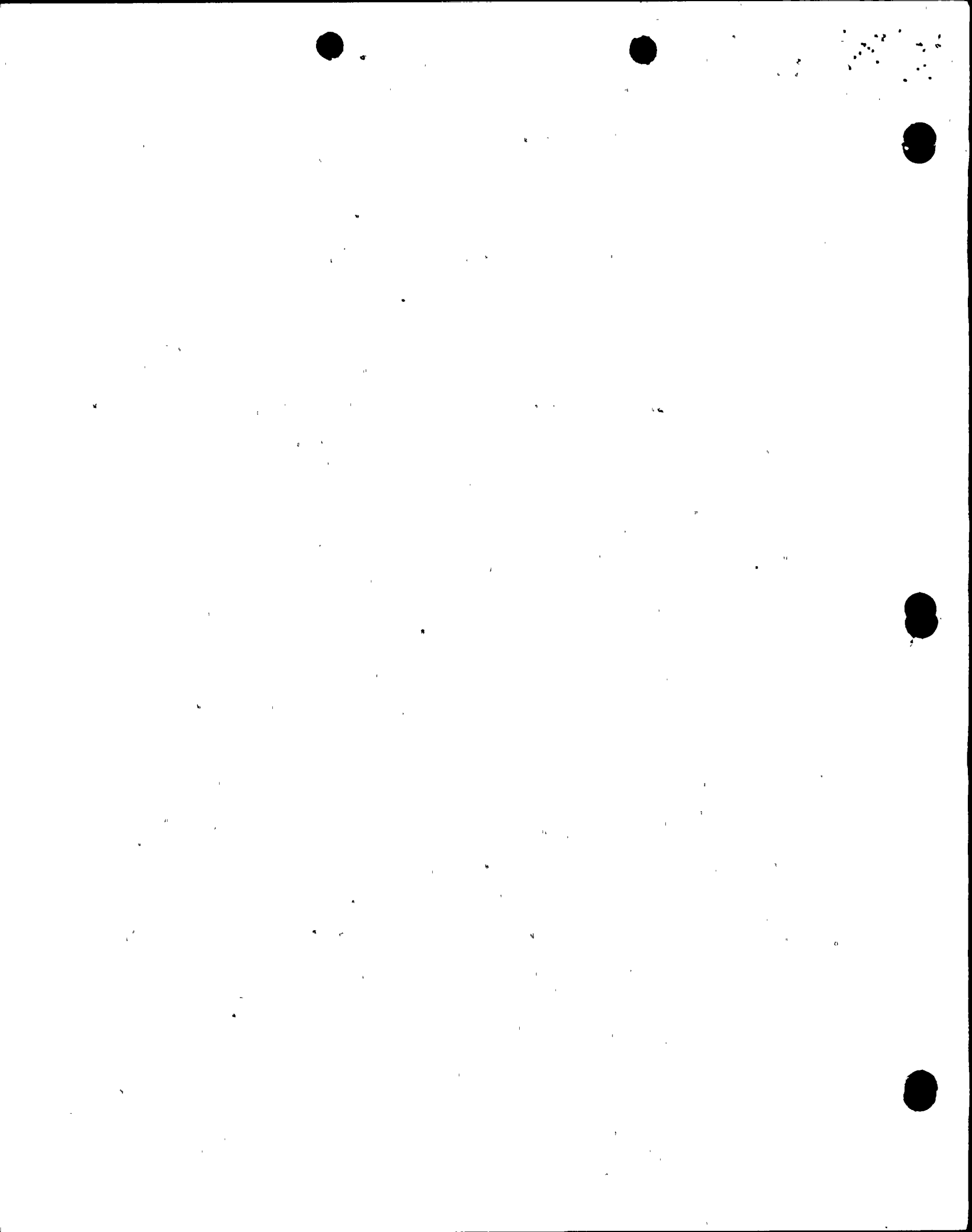
Report No. 50-410/81-13 dated

March 17, 1982

Niagara Mohawk's response to Item 1 of the Notice of Violation addresses first the examples a thru f as cited and second the general finding regarding the Quality Assurance Program implementation:

Item 1a

This item was corrected during the Nuclear Regulatory Commission (NRC) Region I's Construction Assessment Team (CAT) inspection. A meeting was held December 3, 1981, between Cives Steel Company personnel and Stone & Webster Engineering Corporation (SWEC) personnel. Cives Steel was informed that, effective December 4, 1981, SWEC would take over responsibility for site material control on all shipments of Cives' fabricated steel. Since December 4, 1981, Cives has requisitioned fabricated structural steel materials through SWEC as required by Construction Methods Procedure (CMP) 1.2 Receiving Material and Equipment and CMP 1.3 Storage of Equipment and Materials. CMP's 1.2 and 1.3 address the requirements of placing material in a hold area, use of stores requisitions to withdraw items from storage and identifies personnel with authority to issue materials. Regarding structural steel received onsite prior to December 4, 1981, Cives Steel Company provided SWEC with copies of



Item 1a (cont'd.)

its internal material receiving reports. All Quality Assurance Category I structural steel material supplied by Cives had been receipt inspected by SWEC Field Quality Control (FQC) prior to installation.

Item 1b

Niagara Mohawk's Nonconformance Report (NR) No. 315 recognized that while the existing procedure (CSI 21.1 Construction Training Program) was programatically sound as written and adequate to accommodate the training necessary to perform complex or quality sensitive tasks, implementation was not evident. SWEC has taken the following steps to satisfy Niagara Mohawk that it is complying with its training procedure:

- Names of applicable personnel are entered into a computer tracking system.
- Short term training for both SWEC and applicable contractor personnel has been identified and implemented on site.
- Applicable contractors have submitted training requirement matrices to SWEC.
- Development of long term training requirements are underway and will be implemented in a timely manner.

As a result of a meeting between SWEC training personnel and Niagara Mohawk Quality Assurance personnel on January 28, 1982, a satisfactory response was presented, verified and NR 315 was subsequently closed.



Item 1b (cont'd.)

In addition Niagara Mohawk's letter of January 22, 1982 dealing with its new Compliance and Verification Unit described related duties and responsibilities in this area which are separate and distinct from Corporate Quality Assurance activities.

Item 1c

Those areas of inspection identified as being deficient are addressed individually as follows:

- Structural Steel Inspection:

At the time of the NRC Region I CAT inspection, the number of weld preparation and fit-up inspections performed was not quantified since monitoring was based on the level of contractor activity, rather than total number of welds. However, a subsequent review of documentation by SWEC FQC for weld preparation and fit-up inspection revealed that up to the time of the CAT inspection, the number of inspections in this area had been exceeding 50 percent. Measures have been implemented to establish the frequency of SWEC FQC inspection for weld preparation and fit-up at a minimum of 50% as now outlined in SWEC FQC Inspection Plan #N2QCIPSUFB001 Rev: 0A. This item was initially identified in NRC Region I Inspection Report No. 50-410/81-12, as unresolved item no. 81-12-02 and subsequent follow-up by the NRC Region I Resident Inspector resulted in its recommended closure at the exit meeting for NRC Region I Inspection No. 50-410/82-02.



- Concrete Curing Inspection:

To establish a higher level of confidence in the concrete curing operations, Niagara Mohawk requested SWEC FQC to increase its monitoring and surveillance of required inspections and contractor activities. This item was initially identified in NRC Region I Inspection Report No. 50-410/81-12, as noncompliance item no. 81-12-04, and subsequent follow-up by the NRC Region I Resident Inspector resulted in its closure in NRC Region I Inspection Report No. 50-410/82-01.

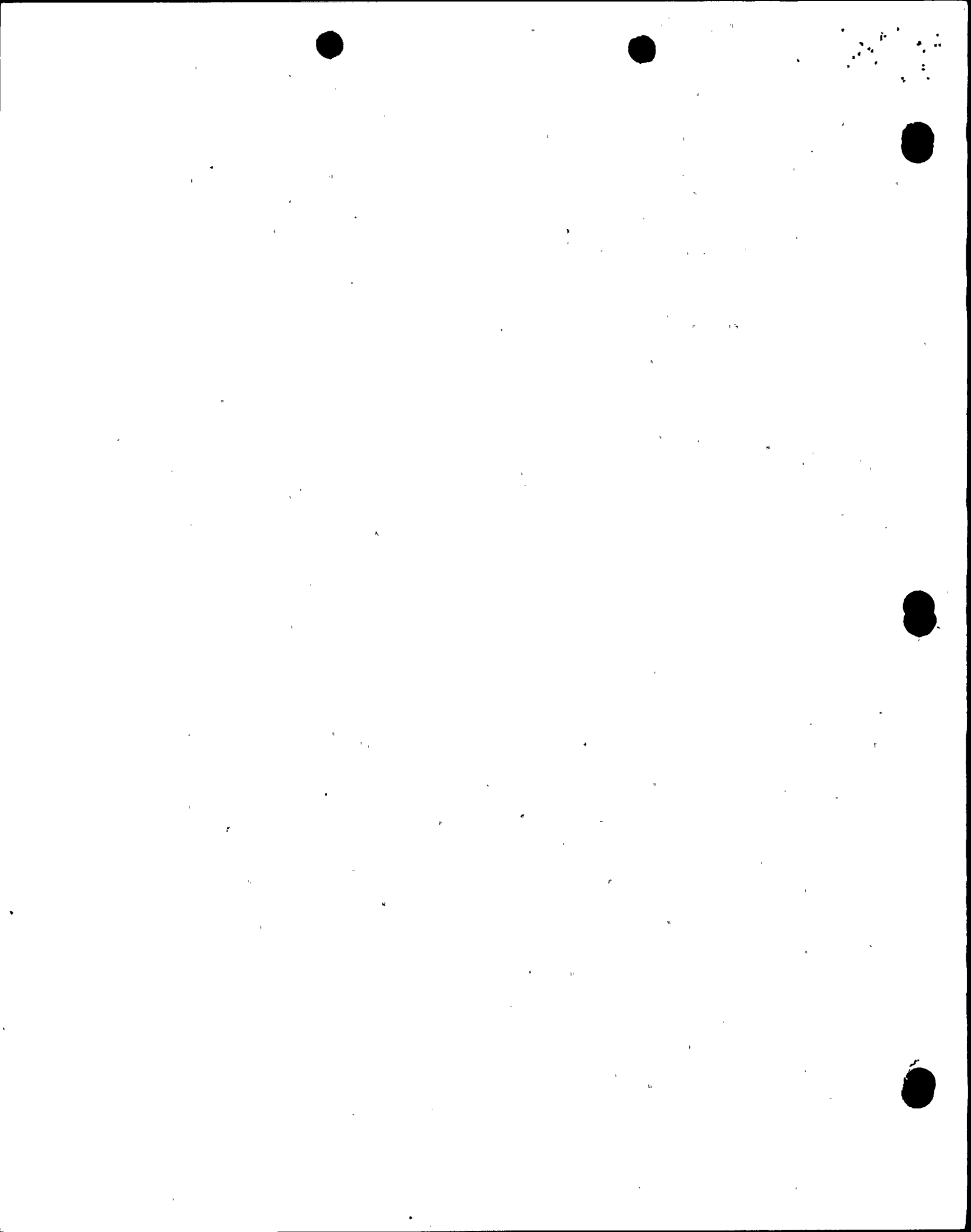
- Material Release:

This item is covered under response 1a above.

- Control of Measuring & Test Equipment (M&TE):

A review of Niagara Mohawk audits and surveillances in the area of M&TE program compliance has found that, while some minor implementation problems exist, the Niagara Mohawk Quality Assurance Department believes the overall program is basically sound. Nevertheless, at the request of Niagara Mohawk, the following areas will be incorporated into the existing SWEC M&TE program:

1. Ongoing training of applicable personnel on the special handling, storage and calibration requirements of M&TE. This will be implemented by June 15, 1982.
2. Increased documented surveillance by SWEC FQC/QA personnel of calibrated M&TE used by construction personnel. This will be implemented by May 1, 1982.



Item 1d

SWEC FQC has been documenting the apparent underlying cause of each N&D in the remarks section of the N&D form as of April 1, 1982. The responsible engineer dispositioning the N&D will be required to address the apparent underlying cause as well as the specific deficiency identified on the N&D. Procedures will be issued by June 1, 1982 to address this addition to the SWEC Unit 2 QA program.

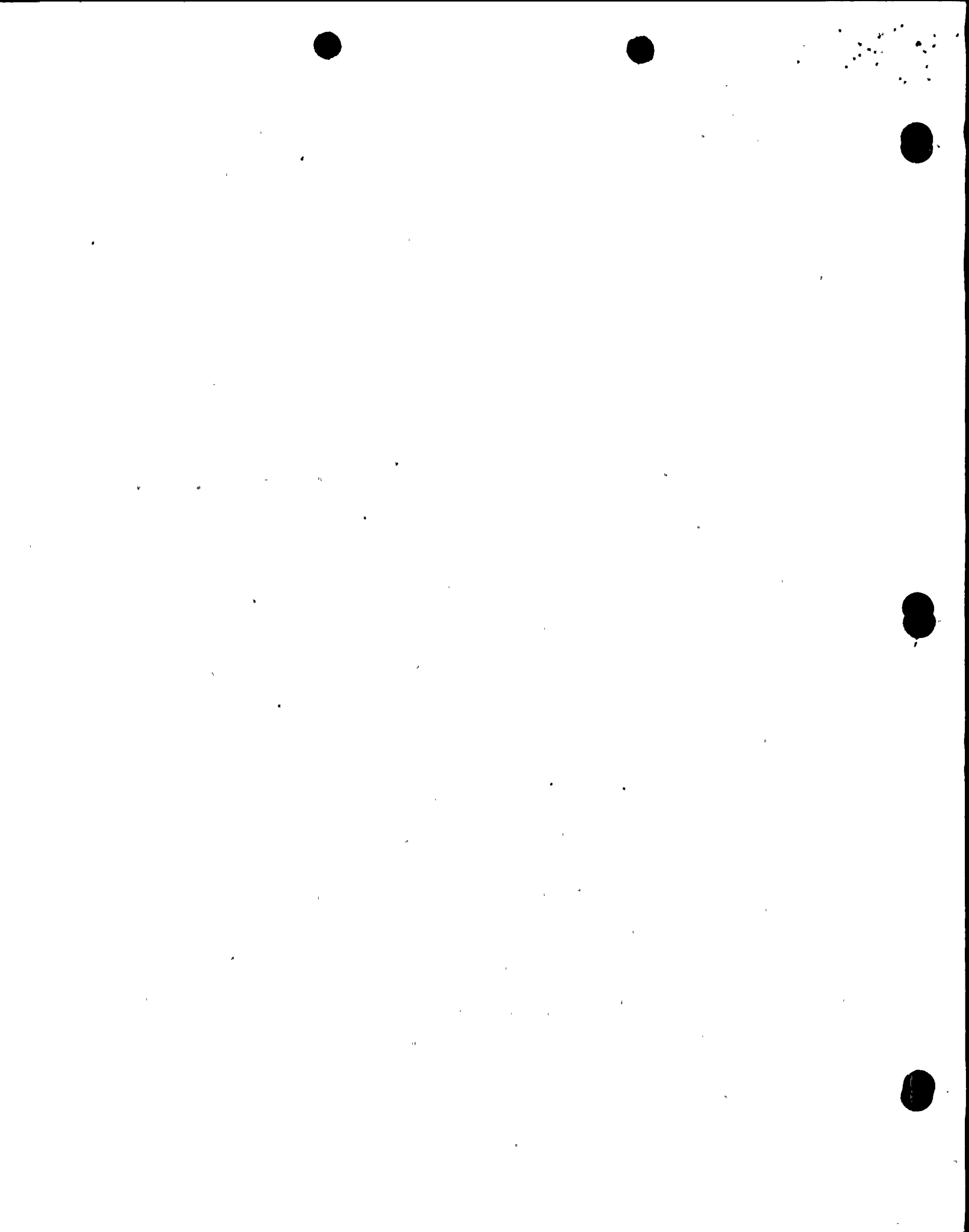
Additionally, significant items and/or trends are directed to management's attention as agenda items at the Potential Problem Review Meeting (PPRM) held between appropriate Niagara Mohawk and SWEC personnel. Corrective measures to assure continuing attention for this item were initiated during the NRC Region I CAT inspection.

In addition Niagara Mohawk's letter of January 22, 1982 dealing with its new Compliance and Verification Unit described related duties and responsibilities in this area which are separate and distinct from Corporate Quality Assurance activities.

Item 1e

Arrangements have been made with SWEC to streamline information processing which has been a contributor to delayed responses in the past.

Further, a Change Notice to Niagara Mohawk Quality Assurance Procedure 16.40 was issued on December 21, 1981, procedurally establishing an escalation method to ensure timely corrective action. The escalation method was



Item 1e (cont.d)

presented in a training class for new Niagara Mohawk lead auditors on January 29, 1982, and was also reiterated to present staff members. The method brings to bear increasingly higher levels of management attention within Niagara Mohawk upon failure to establish an acceptable resolution for a nonconformance.

Additionally, the Niagara Mohawk Supervisor Quality Assurance - Unit 2 has notified the SWEC Project QA Manager - Unit 2 of the basic policies for the handling and response of Niagara Mohawk nonconformance reports. Adherence to the foregoing will ensure the adequacy and timeliness of SWEC responses to Niagara Mohawk nonconformances.

This area will be monitored by Niagara Mohawk and SWEC to ensure adequate compliance.

Item 1f

As of April 16, 1982, the status of Sections 2.1 and 2.2 of the Unit 2 Project Manual is as follows:



Item 1f (cont'd.)

Of the 21 major sections for 2.1 and 2.2, 13 are subsets of 2.1 (Niagara Mohawk) and the remaining 8 are subsets of 2.2 (SWEC). Eleven of the Niagara Mohawk sections are currently issued. The remaining two Niagara Mohawk sections are expected to be issued by May 17, 1982. Of the eight SWEC sections, three have been approved by Niagara Mohawk and are ready for issue. The remaining five are expected to be issued by June 15, 1982.

In addition Niagara Mohawk's letter of January 22, 1982 dealing with its new Compliance and Verification Unit described related duties and responsibilities in this area which are separate and distinct from Corporate Quality Assurance activities.

Quality Assurance Program Implementation

Regarding your statement that Niagara Mohawk management policies and practices have resulted in inequitable pay and fringe benefits for certain onsite QA personnel, as discussed at our January 13, 1982 meeting, the temporary incentives for working at the Unit 2 construction site will be applied to all Niagara Mohawk departments. The details of this temporary incentive are as follows:

The ten percent temporary pay raise and mileage allowances were initiated by the System Project Management Department (SPM) for personnel under its supervision who were assigned to temporary positions at the construction site. Personnel from departments such as Nuclear Generation (who accept



permanent positions (the Operating Plant Staff) and Quality Assurance (who do not report to SPM) continued under standard corporate policies and practices. Subsequently, a policy applicable to all departments has been established. Regardless of departmental affiliation, personnel assigned to the construction site receive the ten percent premium and mileage allowance if they meet the conditions of this policy.

With regard to actions which could be construed as banning a Quality Assurance staff member from the site, no Niagara Mohawk quality assurance personnel has ever been banned from the Unit 2 site. All Niagara Mohawk Quality Assurance employees presently assigned to the Supervisor, Quality Assurance - Unit 2 are authorized for entry to the Unit 2 site.

As for the apparent high turnover rate of Quality Assurance personnel, additional management attention has been directed to this situation. As indicated to NRC representatives at our meeting in Washington on January 13, 1982, the President of Niagara Mohawk now has the final approval of Quality Assurance personnel requirements.

With regard to providing clear and effective communication of policies regarding the proposed Project Quality Organization, Niagara Mohawk has taken steps to improve effective communication of policies by withdrawing, at a January 13, 1982 meeting with the NRC, its proposed plan for a Project Quality Organization. Instead the Niagara Mohawk Quality Assurance Program for Unit 2 will remain unchanged from that which was approved at the construction permit stage. This was recorded in a letter dated February 9, 1982 from Mr. A. Schwencer, Chief Licensing Branch No. 2, Division of Licensing, to Mr. G. K. Rhode. The substance of this action has been made known to the Niagara Mohawk Quality Assurance Department and to major project participants.



The following is provided in response to Items 2a, b and c of the Notice of Violation:

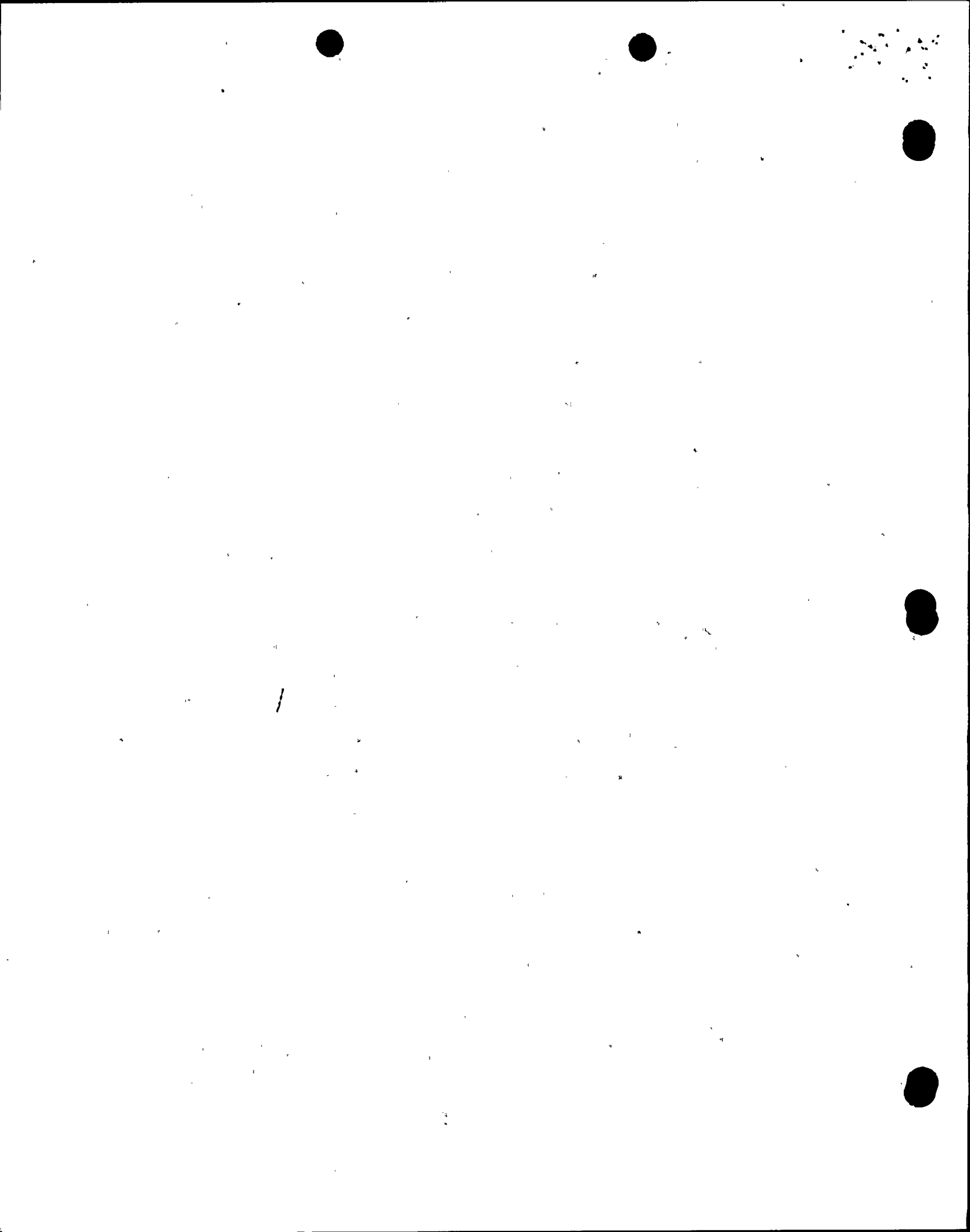
Item 2a and b

Substitution of Grade 60 reinforcement for Grade 40 reinforcement, on a one-to-one basis, in concrete structure designs was not checked for balanced steel ratio by a set of project unique calculations because, based on engineering judgement, it was concluded that the balanced steel ratio requirements of ACI 318-71 were satisfied. The SWEC engineering judgement was based on the following:

1. The substitution of Grade 60 reinforcement on a one-to-one basis for Grade 40 reinforcement does not invalidate the original design. The structure will perform in the same manner with the Grade 60 reinforcement as it would have with Grade 40 reinforcement and the stress levels in all elements are unchanged for the design loads.
2. SWEC experience on their other nuclear projects has shown that this substitution was acceptable by calculation.
3. The design requires more concrete thickness in members for shielding purposes than required for structural strength.

The existing concrete structure designs have since been checked and SWEC has assured Niagara Mohawk that the balanced steel ratio requirements of section 10.3 of the ACI code are satisfied.

Future concrete structure design calculations will include balanced steel ratio calculations to demonstrate compliance with section 10.3 of ACI 318-71.



In addition Niagara Mohawk's letter of January 22, 1982 dealing with its new Compliance and Verification Unit described related duties and responsibilities in this area which are separate and distinct from Corporate Quality Assurance activities.

Item 2c

The following is provided to clarify the cable tray separation criteria for Unit 2:

1. The 12-in. criterion stated with respect to vertical separation "between top of tray below and bottom of tray above" will be deleted from the PSAR via a Change Notice, since item no. 3 below stipulates the vertical separation requirements. This statement does not apply to separation of trays of different divisions as addressed in IEEE 384-1977. This PSAR Change Notice will be issued by June 1, 1982. }
2. The 18-in. criterion stated with respect to separation in tray crossovers was intended to apply only to crossovers of trays of different divisions. This has been clarified through a PSAR Change Notice which was approved by Niagara Mohawk on April 14, 1982.
3. The 17-in. and 16-in. criteria stated for separation of 4-in. deep and 3-in. deep trays, respectively, are not inconsistent with the 18-in. tray crossover criteria, since these criteria apply only to trays which are not of different divisions. These criteria do not apply to separation of redundant raceways as addressed in IEEE-384-1977. The purpose of these criteria is to facilitate cable pulling by ensuring adequate access to trays. }



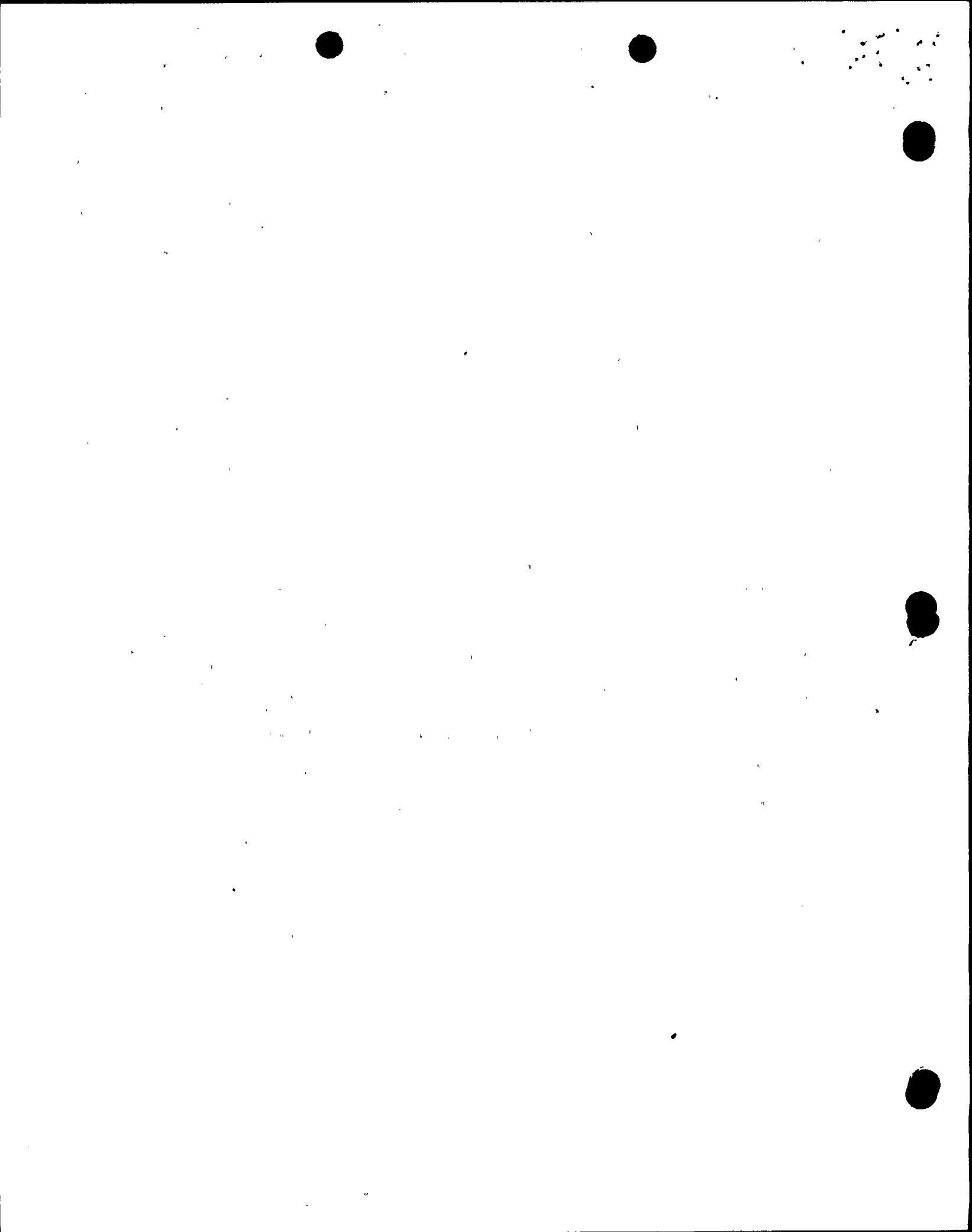
Separation Criteria for the Unit 2 project are defined in the Criteria for Identification and Separation of Cables and Raceway Systems, Criterion No. EDC-5.

To assure that the criteria defined in EDC-5 are followed, the project has been implementing the following measures:

- 1) Prior to issuing any drawings for construction, Engineering reviews the drawings to assure the design is in accordance with EDC-5.
- 2) Applicable portions of EDC-5 that are necessary for construction and SWEC FQC to perform its function have been incorporated in the Electrical Installation Specification, NMP2-E061A.

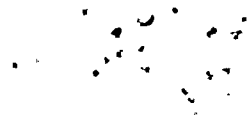
The following is provided in response to Item 3 of the Notice of Violation:

The support arrangement required in NEMA Publication No. VE1 requires the test span to be a simple beam span with unrestricted ends. This type of support does not represent the Unit 2 system of supports. Therefore, the vendor was permitted to test specimens held down by clamps as this represents the manner in which the cable trays will be installed in the field. The tests performed by the vendor reflect the Unit 2 design and they demonstrate the adequacy of the cable tray.



In view of the above, and in order to eliminate the apparent conflict between the specification and the qualification report No. 24781, the specification has been changed to include the following:

"Contrary to VE1-3.01, tray splice devices shall be located at mid-span during the deflection and destruction tests. Also, the cable tray test specimen shall be clamped as in-service."



Response to Significant Observation

Enclosed in NRC Region I Inspection

Report No. 50-410-81-13 dated

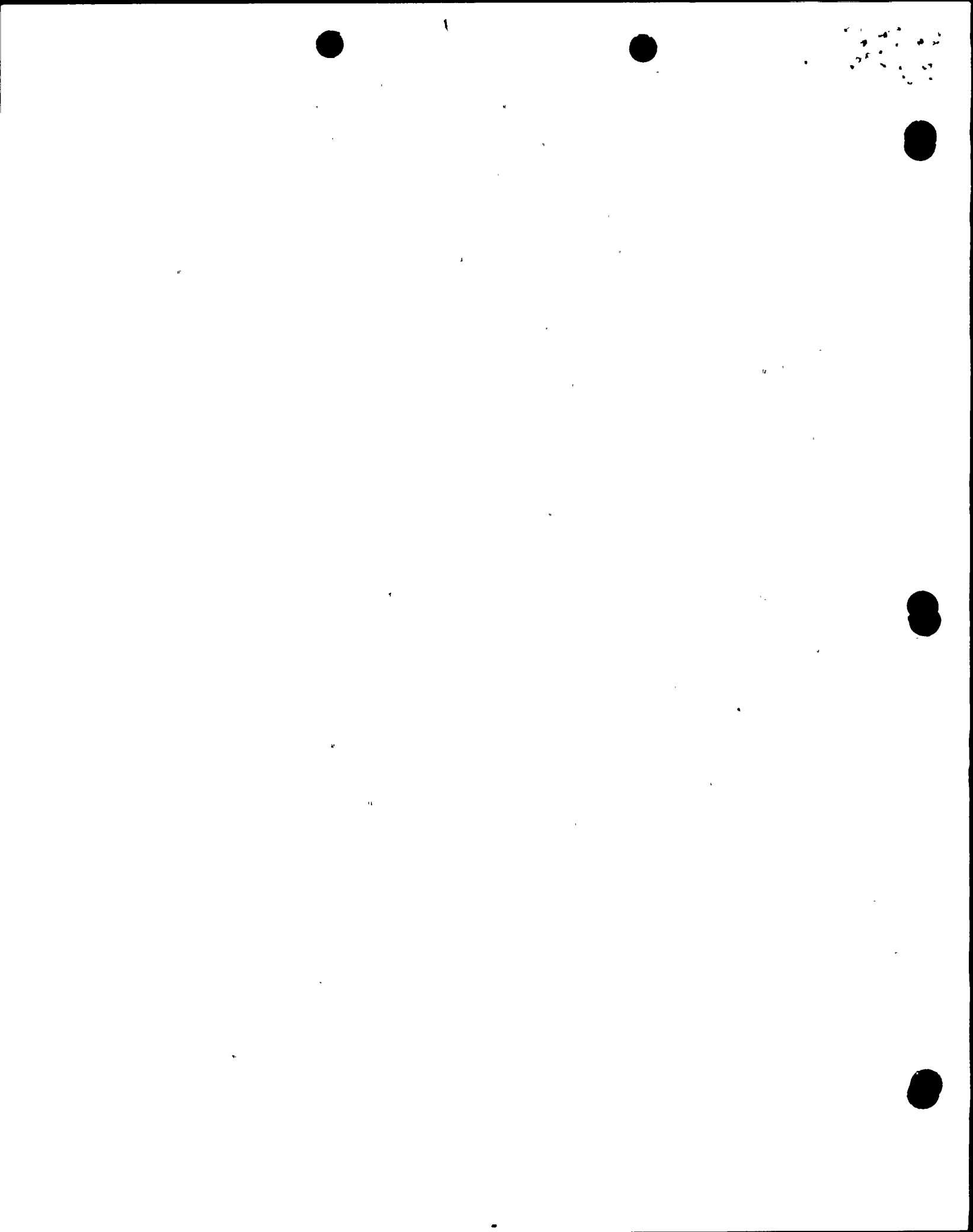
March 17, 1982

Although CCCP will continue to be outlined in the Unit 2 Quality Assurance Procedure Manuals (Quality Standards and Construction Method Procedures), it is neither a substitute for nor considered part of the inspection requirements of Criterion X of Appendix B to 10CFR 50.

The primary objective of SWEC's CCCP is to ensure that completed work activities are in compliance with Engineering requirements prior to the performance of the SWEC's FQC required inspection. CCCP is a construction management tool whose main purpose is to substantially reduce the number of potentially unsatisfactory conditions that would otherwise be identified at the time of SWEC's FQC inspection.

Monitoring of in-process work by the Construction Supervisor and timely correction of unsatisfactory conditions prior to SWEC's FQC inspection are documented only if certain predefined conditions are met. FQC inspection identifies unsatisfactory conditions not previously identified and corrected by construction. Niagara Mohawk believes this would account for the apparent low percentage of construction identified unsatisfactory conditions.

However, the following actions are being undertaken to improve the effectiveness of CCCP:



1. SWEC's CCCP Department is distributing copies of FQC Inspection Reports documenting unsatisfactory conditions to the applicable Contractor and SWEC Supervisor on a daily basis to assist in root cause analysis and the initiation of timely corrective/preventive action.

2. CCCP Department is providing a weekly summary of unsatisfactory conditions identified on FQC Inspection Reports and Nonconformance and Disposition Reports to SWEC Construction Superintendents to assist in focusing on problem work activities. Niagara Mohawk is routinely monitoring these reports. The quality accountability meetings between SWEC Construction, FQC and applicable contractors for the first quarter of 1982 have indicated a decrease in the number of unsatisfactory conditions found by FQC inspections.

3. SWEC has presented 13 formal training sessions on CCCP Orientation in the first quarter of 1982. Ongoing training in this area will be conducted on a regular basis.

In addition, our January 22, 1982 letter indicated that the new Compliance and Verification Unit will evaluate the effectiveness of the CCCP.

