

FIRE PROTECTION QUALITY ASSURANCE PROGRAM

NINE MILE POINT #1

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### 1.0 DEFINITION OF TERMS -

- 1.1 QUALITY ASSURANCE PROGRAM - The system of Niagara Mohawk Power Corporation activities established to provide a quality of product or service.
- 1.2 INSPECTION - The process of measuring, examining, testing, gaging, or otherwise comparing one or more units of product with the applicable requirements.

### 2.0 SCOPE -

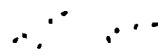
- 2.1 APPLICABILITY - This Document provides the general requirements to be met by the Niagara Mohawk Power Corporation Fire Protection Quality Assurance Program for Nine Mile Point Unit #1. All the requirements apply to the Nine Mile Point Unit #1 Fire Protection System, except to the extent that they are specifically deleted, supplemented, or amended in the program.
- 2.2 GENERAL PURPOSE - This Document requires the establishment and maintenance of the Fire Protection Quality Assurance Program. The Quality Assurance Program, including its procedures and operations, shall be documented and shall be subject to review by the Quality Assurance Department.  
  
The program provides that, as early as possible, discrepancies (defects and program deficiencies) shall be discovered and corrective action taken.

### 3.0 REQUIREMENTS -

#### 3.1 MANAGEMENT -

- 3.1.1 General - There will be adequate planning, direction and control of the Fire Protection Quality Assurance Program. Evaluation of the Fire Protection System effectiveness will be accomplished by audit/surveillance.

- 3.1.2 Organization - Administration of the Fire Protection Quality Assurance Program is delegated to the Quality Assurance Department, which has reporting access to corporate management with sufficient authority to carry out this program.
- 3.2 DESIGN CONTROL AND PROCUREMENT DOCUMENT CONTROL -
- 3.2.1 General - Design information (such as drawings, specifications, and standards) shall be maintained to ensure that items are fabricated, inspected and tested to the applicable requirements.
- 3.2.2 Modification Control - Design and procurement document changes, including field changes and design deviations, shall be subject to the same level of controls, reviews, and approvals that were applicable to the original document.
- 3.2.3. Design Documents - Quality standards shall be specified in the design documents such as appropriate fire protection codes and standards, and deviations and changes from these quality standards shall be controlled.
- 3.2.4 New Designs and Plant Modifications - New designs and plant modifications shall be controlled and reviewed by qualified personnel to assure inclusion of appropriate fire protection requirements.
- 3.2.5 Procurement Documents - Procurement documents shall be reviewed for adequacy of fire protection requirements by qualified personnel.
- 3.3 INSTRUCTIONS AND PROCEDURES - Inspections, tests, administrative controls, fire drills and training required by the Fire Protection System shall be accomplished by current approved instructions, procedures or drawings.
- 3.4 CONTROL OF PURCHASED MATERIAL, EQUIPMENT AND SERVICES -



- 3.4.1 General - Adequate control over procurement sources shall be maintained. Equipment/devices shall be procured in accordance with approved specification and/or purchase order and will be listed by a nationally recognized testing laboratory wherever practical. Otherwise, equipment/devices can be procured only from Quality Assurance Department approved vendors. Service contracts shall be placed with Quality Assurance Department approved vendors. Adequate records of inspections and tests when required will be maintained.
- 3.4.2 Source Inspection - The buyer and his authorized representative reserves the right to inspect, at the source, any supplies furnished or services rendered. Inspection at the source shall not necessarily constitute acceptance, nor shall it relieve the seller of his responsibility to furnish acceptable product.
- 3.4.3 Purchased Material - All purchased material will be evaluated to assure conformance with the requirements of applicable standards and specifications. Acceptability of material which bears identifiable manufacturer's markings or observable physical characteristics will be determined by receipt inspection. When manufacturer's markings are insufficient, or when material has been specially fabricated, or physical characteristics cannot be determined, a Material Certification or letter of Conformance will be required. Any material testing required will be specified in the purchase document. All documentation required by the purchase order or specification shall accompany or precede the shipment of materials/components. Provisions as specified in Section 3.9 of this document shall be followed with regard to withholding from use all incoming supplies pending acceptable completion of each required inspection and test or receipt of required documentation. The seller shall be notified whenever nonconforming materials are received, and corrective action shall be initiated when warranted.
- 3.5 MATERIAL CONTROL - Adequate methods and facilities shall be established for controlling the identification, handling, and storage of material. The identification shall include indications of the inspection/test status of the material. These controls shall be maintained from the time of receipt of the material until installation is complete in order to protect the material from damage, deterioration, loss or substitution.



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### 3.6 INSPECTION -

3.6.1 General - A program for inspection of activities affecting fire protection shall be established and executed by, or for, the organization performing the activity, to verify conformance to documented installation drawings and test procedures.

3.6.2 Independence of Inspection Personnel - Procedures governing inspection activities require that inspections be conducted by personnel other than those who performed the work. Inspection personnel are selected on the basis of their qualifications, and documentation of their qualifications to established criteria. The requirements for independence of inspection personnel are imposed on vendors and contractors performing work for the plant.

The Quality Assurance Department assesses the adequacy of independence by means of its audits/surveillance.

3.6.3 Inspection Procedures - Inspection procedures, instructions, and checklists will provide the following:

1. Identification of characteristics and activities to be inspected.
2. Identification of the individuals or groups responsible for performing the inspection operation.
3. Acceptance and rejection criteria.
4. A description of the method of inspection.
5. Requirement that inspection results will be documented.

### 3.7 TEST AND TEST CONTROL -

3.7.1 General - A test program shall be established and implemented to ensure that testing is performed and that it be verified by inspection and/or audit/surveillance to demonstrate conformance with design and Technical Specifications. The tests shall be performed in accordance with written test procedures.

- 3.7.2 Test Verification - The Quality Assurance Department will verify the implementation of the test program and the required test personnel training by audit/surveillance.
- 3.7.3 Test Results - Test results will be documented, evaluated, and their acceptability determined by a qualified individual or group.
- 3.8 CONTROL OF MEASURING AND TEST EQUIPMENT - Validity of measurements and tests will be assured through the use of appropriate inspection measuring and test equipment of the range, validity, and type necessary to determine conformance requirements. At intervals established to ensure continued validity, measuring devices shall be verified or calibrated, if appropriate, against certified standards that have a known, valid relationship to national standards.
- 3.9 NONCONFORMING MATERIALS, PARTS OR COMPONENTS -
- 3.9.1 General - Measures will be established to control nonconforming materials, parts or components that do not conform to specified requirements.
- 3.9.2 Identification/Control - The identification (tagged or identified), documentation, segregation, review disposition, and notification to the affected organization of nonconforming materials, parts or components, shall be procedurally controlled.
- 3.9.3 Documentation - Documentation shall identify the nonconforming item and describe the nonconformance and the disposition.
- 3.9.4 Disposition - The Quality Assurance Department Procedures define the disposition routine for nonconforming items.
- 3.10 CORRECTIVE ACTION - Measures will be established to ensure that conditions adverse to fire protection such as failures, malfunctions, deficiencies, deviations, defective components, uncontrolled combustible material and nonconformances are promptly identified, reported and corrected.



3.11 RECORDS -

3.11.1 General - Records will be prepared and maintained to furnish evidence that the criteria enumerated in this program are met for activities affecting the fire protection program.

3.11.2 Record Control - Records are identifiable and retrievable. The records should include results of inspections, tests, reviews, and audits; nonconformance and corrective action reports; construction, maintenance and modification records; and certified manufacturers' data.

3.11.3 Record Retention - Record retention requirements are established by procedure.

3.12 AUDIT/SURVEILLANCE -

3.12.1 General - Audits/Surveillance will be conducted and documented to verify compliance with the Fire Protection Quality Assurance Program, including design and procurement documents, instructions, procedures, and drawings and inspection and test activities.

3.12.2 Audit/Surveillance Program - The following Audit/Surveillance Program will be implemented:

1. The Safety Review and Audit Board (SRAB) will perform an audit on the Facility Fire Protection Program and implementing procedures as required by the Technical Specifications.
2. An outside Qualified Fire Consultant will perform an inspection and audit on the Facility Fire Protection Program as required by the Technical Specifications.
3. A joint independent fire protection and loss prevention inspection and audit will be performed annually utilizing either qualified off-site licensee personnel or an outside Qualified Fire Consultant and Quality Assurance Department personnel. This audit shall be conducted in accordance with pre-established written checklists and shall be conducted by trained personnel. It will assess compliance with this Fire Protection Quality Assurance Program.



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3.12.2 Audit/Surveillance Program (Cont'd.)

4. Quality Control - Operations will perform fire protection surveillances as required.

3.12.3 Audit/Surveillance Results - Audit/Surveillance results will be documented and reviewed with management having responsibility in the area audited/surveilled.

3.12.4 Follow-up Action - Follow-up audits/surveillances will be taken to assure that responsible management corrects the deficiencies revealed by the audit/surveillance.

