

J. A. JONES CONSTRUCTION COMPANY

CORPORATE STANDARD

NUCLEAR PROJECT OPERATING PROCEDURE

Modified to Fit Waterford Unit 3

Concrete Phase I Construction

Contract No. W3-NY-4

REVIEWED

W/ COMMENTS

W/O COMMENTS

REJECTED

EDASCO QUALITY ASSURANCE

BY:

DATE:

*[Signature]*  
*11-4-75*

POP-N-702

PERSONNEL TRAINING, QUALIFICATION AND CERTIFICATION

FREEDOM OF INFORMATION  
ACT REQUEST

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NUCLEAR PROJECT OPERATING PROCEDURE		PROCEDURE NO. POP-N -702
TITLE OF PROCEDURE: PERSONNEL TRAINING, QUALIFICATION AND CERTIFICATION		Issue Date: 10/15/75
PROJECT TITLE: WATERFORD UNIT NO. 3, PHASE I CONCRETE CONSTRUCTION		Rev. No. & Date: Revision 0 10/15/75
PREPARED BY: L. R. Wilson	DATE 12/2/74	APPROVED BY:  PROJ. MGR. 10-24-75 QA MGR. 10/25/75

1.0 PURPOSE

1.1 This procedure defines the methods of training, qualifying and certifying personnel performing inspection, examinations and testing of designed quality items.

2.0 SCOPE

2.1 The requirements of this procedure apply to those personnel who perform inspections, test and nondestructive examinations that assure the quality of nuclear power plants during construction.

3.0 DEFINITIONS

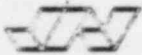
3.1 Certification (Personnel): The action of determining, verifying and attesting in writing to the qualifications of personnel.

3.2 Examination: An element of inspection consisting of investigation of materials, components, supplies or services to determine conformance to those specified requirements which can be determined by such investigation. Examination is usually nondestructive and includes simple physical manipulation, gaging, and measurement.

3.3 Inspection: A phase of quality assurance which, by means of examination, observation or measurement, determines the conformance of materials, suppliers, components, parts, appurtenance, system processes or structures to predetermined quality requirements.

3.4 Qualifications: The characteristics or abilities gained through education, training and experience that enable an individual to perform a required function.

3.5 Testing: The determination or verification of the capability of an item to meet specified requirements by subjecting the item to set of physical, chemical, environmental or operating conditions.



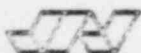
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#### 4.0 REFERENCES

- 4.1 Qualification and Certification of Personnel, POP-N-505.
- 4.2 Indoctrination and Training, POP-N-605.
- 4.3 J. A. Jones Construction Company's, "Quality Assurance Personnel Training and Certification Program."
- 4.4 ANSI N45.2.6 "Qualifications of Inspection, Examination, and Testing Personnel for the Construction Phase of Nuclear Power Plants."

#### 5.0 GENERAL

- 5.1 The Project Quality Assurance Manager shall evaluate and determine the need for formal training of quality assurance personnel assigned to the construction phase of nuclear projects.
- 5.2 The Project Quality Assurance Manager shall assure an adequate number of personnel are trained and certified to perform the required inspections, examinations and tests as reflected by the project work schedule in accordance with this procedure.
- 5.3 All quality assurance personnel assigned to a project shall be indoctrinated and trained in the project requirements and the J. A. Jones safety program by Industrial Relations in accordance with POP-N-605, "Indoctrination and Training."
- 5.4 Construction personnel performing special processes, proof and operational checkout test shall be trained, qualified and certified in accordance with POP-N-505, "Qualification and Certification of Personnel."
- 5.5 Quality Assurance personnel verifying that work activities conform to quality requirements shall be certified by the Project Quality Assurance Manager as being qualified to perform his assigned task in accordance with this procedure. He shall assure the initial and continued proficiency of quality assurance personnel by appropriate education, training, experience, testing, evaluation and periodic reviews.



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5.6 Quality Assurance personnel involved in the performance evaluation and/or supervision of nondestructive examination shall be certified in accordance with the requirements specified in SNT-TC-1A "Recommended Practices for Nondestructive Testing Personnel Qualification and Certification."

5.7 The extent to which the individual requirements of this procedure apply will depend upon the importance, nature and scope of the work to which the individual is assigned. The requirements are to be applied, as appropriate, to both the selection and utilization of these personnel.

5.8 It is the responsibility of the Project Quality Assurance Manager and his Supervisors to assure that personnel selected and assigned to their respective groups, meet the requirements of this procedure prior to performing Quality Assurance inspection, examination and testing activities.

#### 6.0 PROCEDURE

##### 6.1 Selection of Quality Assurance personnel:

6.1.1 The Project QA Manager with the assistance of his QA Supervisors shall evaluate and review the qualifications of and select Quality Assurance personnel. To the extent possible Quality Assurance personnel shall be selected for their knowledge of QA principles and practices, past experience, training and education for the primary construction discipline and activities to which they will be assigned.

##### 6.2 Project Indoctrination:

6.2.1 All new project Quality Assurance personnel shall attend the Industrial Relation Project Indoctrination and Training session.

6.2.2 Quality Assurance Supervisors shall assure that their assigned personnel are indoctrinated in the project QA program, QA principles and practices, applicable codes, standard procedure methods and instructions prior to any work activity assignment where these requirements are applicable.



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### 6.3 Qualifications:

The following requirements are considered minimum capabilities required to perform quality assurance functions.

- 6.3.1 All Training and Certification shall be in accordance with reference 4.3.
- 6.3.2 All personnel performing nondestructive examinations shall be qualified and certified in accordance with SNT-TC-1A, applicable for the technique and methods used.
- 6.3.3 Personnel performing inspections of structural, civil, mechanical, electrical and instrumentation systems shall demonstrate capability or proficiency to the satisfaction of the Project Quality Assurance Manager or his subordinate supervisors.

### 6.4 Training of Quality Assurance personnel shall be provided for by the Project Quality Assurance Manager, in conjunction with and assistance by the Corporate Quality Assurance Department.

- 6.4.1 Training shall be formal (classroom study) or informal (on the job, home study) at the discretion of the Project Quality Assurance Manager.

Note: Nondestructive examination personnel shall be trained and qualified in accordance with SNT-TC-1A.

- 6.4.2 Formal training courses shall be a minimum of 9 hours in length and may be presented in hourly sessions.

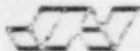
Note: Formal training courses, developed in complex areas, shall be based on:

The job description (functional) of the position

The objective of the course

The probable "entry level" skills of the participants

A course outline providing a means of fulfilling the stated objectives.



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- 6.4.3 Informal training may be combined with formal training or may be utilized to increase an individual's proficiency in a specific area.
- 6.4.4 The applicability of formal versus informal training programs is determined through comparing the individual's previous education and experience and his level of competence, as evidenced through oral examination during interview, references by previous employers, and certificates from training and educational institutions with the requirements of the position.
- 6.4.5 Formal training courses shall be supported by attendance records, lecture outlines, course objectives and test results.
- 6.4.6 Successful participants shall be certified by the Project Quality Assurance Manager in the areas covered by the course.
- 6.4.7 All individuals shall successfully complete an examination of the same type and degree as the formal course participants prior to being certified in a given area.

## 7.0 QUALITY ASSURANCE

See Procedure above.

## 8.0 RECORDS AND REPORTS

- 8.1 Individual records of qualification and certification training shall be maintained by the Site Quality Assurance Department.