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STATION ADMINISTRATIVE PROCEDURE 1019
QUALIFICATION OF PERSONNEL PERFORMING SPECIAL PROCESSES

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1.0 General

1.1 Purpose

This Administrative Procedure establishes the requirements to assure that special processes are controlled and accomplished by qualified personnel using approved and qualified procedures in accordance with applicable codes, standards, specifications, criterio, and other special requirements.

1.2 Scope

This procedure delineates the requirements for qualifying the personnel to perform the special processes such as Welding, non-destructive examination (NDE) and heat treating to comply with approved and qualified procedures in accordance with applicable codes, standards criteria and other special requirements which govern nuclear safety related (and non nuclear) structures, systems and components.

1.3 Referances

- 1.3.1 ASME Boiler & Pressure Vessel Codes All applicable sections.
- 1.3.2 A.S.N.D.T. Recommended Practice SNT-TC-1A
- 1.3.3 USAS B31.7 latest issue
- 1.3.4 Metropolitan Edison Technical Specifications
- 1.3.5 A.E.C. 10 CFR 50 Appendix B, Criterion IX.
- 1.3.6 ANSI 45.2
- 1.3.7 Attached Attachments 1 thru 5
- 1.3.8 Met-Ed OQA Plan Rev. 6

2.0 Responsibilities

2.1 The Manager Generation Maintenance and the Supervisor of Maintenance

shall be responsible for assuring that only qualified and certified personnel are assigned to perform the special processes such as welding, heat treating, etc.

- 2.2 The Manager-Operational Quality Assurance shall be responsible for assuring that only qualified and certified personnel are assigned to perform Non-Destructive Examinations. He shall fulfill this responsibility by means of surveillance and audits of performance and supporting certification. The Manager-OQA is further responsible for the training, examination, qualification and certification of the personnel who perform non-destructive examinations. He shall also be responsible for the maintenance of all the related documents which are subject to audit.
- 2.3 The Supervisor of Maintenance shall be responsible for the training, examination, qualification and certification of the personnel who perform the special processes such as welding, heat treating, and those other processes where assurance of process quality depends on the basic skill of an individual and cannot be assured by the inspection process per se. He shall also be responsible for maintaining the certification records, resumes, and other records which are subject to audit.
- 2.4 The Manager-Generation Maintenance, Supervisor of Maintenance, and the Manager-Operational Quality Assurance shall be responsible for maintaining the necessary records for their personnel which are required to meet the Met-Ed Technical Specifications and applicable code requirements. These records shall include the following (see sample forms attached).
 - 1. Weld procedure qualification Test Attachment No's 1 & 2

- 2. Welder or velding operator Qualifications Attachment
 No's 3 & 1.
- 3. Non-destructive Test Personnel Qualification Record Form Attachment No. 5.
- 4. List of equipment type, model and serial f's with maintenance and calibration history used for nondestructive examinations by the Quality Control Department (e.g., radiographic, ultrasonic and leak detection equipment.)
- List of <u>qualified</u> Testing Laboratories, their personnel and equipment whose services were used to perform N.D.E. where required in the T.M.I. Plant.

3.0 Requirements

3.1 Welding

- a. All velders for all types of manual and machine arc and gas welding processes permitted by the ASME Codes shall be qualified to ASME Sec. IX and certified by Metropolitan Edison Company, prior to performing any welding on structures, systems, or components built under the ASME Code.
- b. Records shall be maintained of the test results obtained in velding procedures and welder performance qualifications and the results of examinations of welding operators.
- c. These records shall be accessible to the authorized inspector and the Manager-Operational Quality Assurance for review and audit.
- d. Welders and welding operators shall be requalified when necessary per the requirements and conditions of Section IX ASME Code.

3.2 Heat Treating and Other Special Processes

- e. Special processes shall be performed in accordance with qualified and approved procedures developed by Met-Ed Engineering disciplines and by personnel who have proven to the Supervisor of Maintenance their knowledge and ability to carry out the process in accordance with the acceptance standard of the process being accomplished.
- b. Certification and periodic re-certification of special process personnel and equipment shall be done in accordance with Met-Ed procedure.
- c. The Supervisor of Maintenance, if necessary, shall set up a training program which will assure the availability of qualified personnel required to perform the special process involved in plant operations.

3.3 Mon-Destructive Examinations

- a. Personnel, prior to performing any Non-Destructive Examinations,
 e.g., Magnetic Particle (MT), Liquid Penetrant (PT), Ultrasonic
 Test (UT), and Radiography (RT) shall be qualified and certified
 in accordance with the ASME Codes and SNT-TC-1A.
- b. The Manager-OQA shall establish a program hich will make available the personnel required to perform the N.D.E. required for the day to day activities in the TMI Plant. This will include training, examination, qualification and certification per the recommendations and requirements of SNT-TC-1A and the applicable codes. (ASME, 10 CFR 50, ANSI-45.2, etc.).
- c. At the option of the Manager-Operational Quality Assurance, an outside agency may be engaged to perform the NDE services required.

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This can include the services of a Level III examiner to qualify Level II and Level I personnel or to perform the actual NDE services required, e.g., MT or RT, etc. However, the Manager-OQA shall be responsible for the certification of his personnel and/or the documentation of the QC services performed by the outside agency.

Attachment #1 10/22/75 Rev. 1 Sheet 1 et 3 Stendard 3801.002 METROPOLITAN EDISON COMPANY Proc.Qual.Rec.(PQR) Date September 20, 1974 GENERATION DIVISION Revision No 1 WELDING PROCEDURE QUALIFICATION RECORD NO. DATE WPS NO. WELDING PROCESS(ES)___ WELDER EMP. NO. STAMP NO. TYPES (Manuel, Automatic, Semi-Aut.) JOINTS BASE METALS Material Spec.____ Type or Grade P No._____ to P No.____ Thickness Range Dismeter____Range Groove Design Used Other FILLER METALS POSITION Weld Metal Analysis A No.____ Position of Groove Weld Progression (Uphill, Downhill) Size of Electrode Filler Metal F No. SFA Specification___ Other AWS Classification PREHEAT Preheat Temp. Interpass Temp. Other_ POSTWELD HEAT TREATMENT Temperature Type of Gas or Gases Time Composition of Gas Mixture Other

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Attachment #1 Rev. 1 10/22/75 METROPOLITAN EDISON COMPANY Bignay's 3801,002 Proc.Qual.Rec.(PQR) Dete September 20, 1974 GENERATION DIVISION Revision No 1 ELECTRICAL CHARACTERISTICS TECHNIQUE Current String or Weave Bead____ Polarity____ Oscillation Multipass or Single Pass (per side) Amps_____Volts____ Travel Speed Single or Multiple Electrodes Other TENSILE TEST SPECIMEN ULTIMATE ULTIMATE NO. WIDTH CHARACTER OF THICKNESS AREA TOTAL LOAD UNIT STRESS FAILURE & LB. PSI LOCATION GUIDED BEND TEST TYPE AND FIGURE NO. RESULT FIGURE NO. RESULT TOUGHNESS TESTS

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SECTION IX - PART QB BRAZING

AP 1019 Attachment No. 2 Revision 1 10/22/75

QB-483 Bruzing Procedure Qualification Record

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METROPOLITAN EDISON COMPANY Signature 3801.00 Weld.Perf.Qual.Test GENERATION DIVISION Pote June 4, 1975 Welder or Welding Operator Qualification Tests Revision No 1 Welder Name Employee No. Welding Process Type (Fillet, Groove, Etc.) In accordance with kilding Procedure Specification (WPS)____ Backing ASHZ Material Spec._____ to ____ of P No._____ to P No.____ Thickness Die. ____ Filler Metal Spac. Eo. _____ F No. ____ Other Position Electrical Characteristics Current Polarity Amps _____ Volts ____ FOR INFORMATION ONLY Filler Metal Diameter and Trade Name Flux for Submerged Arc or Gas for Inert Gas Shielded Arc____ Weld Progression Approx. Travel Speed_____ipm GUIDED BEND TEST RESULTS Type and Figure No. Type and Result Figure No. Result Radiographic Results: For alternative qualification of groove welds by Radiography: Test Conducted by Laboratory-Test No. per_____ Test Date___

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QB-484 Brazing Performance Qualification Record

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