

**TOPICAL QUALITY ASSURANCE REPORT**

TQR 9.0

**CONTROL OF SPECIAL
PROCESSES**

Rev. 12 Draft A

Date 10/21/96

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9.1 GENERAL REQUIREMENTS

Measures shall be established to assure that special processes such as welding, heat treating, and nondestructive examination items, are controlled and accomplished by qualified personnel using qualified procedures and equipment in accordance with applicable codes, standards, specifications, criteria, and other special requirements.

9.2 IMPLEMENTATION

Special process requirements shall be included in design outputs and changes thereto. Special process procedures shall be developed, reviewed, approved and controlled, and special process personnel and equipment shall be qualified.

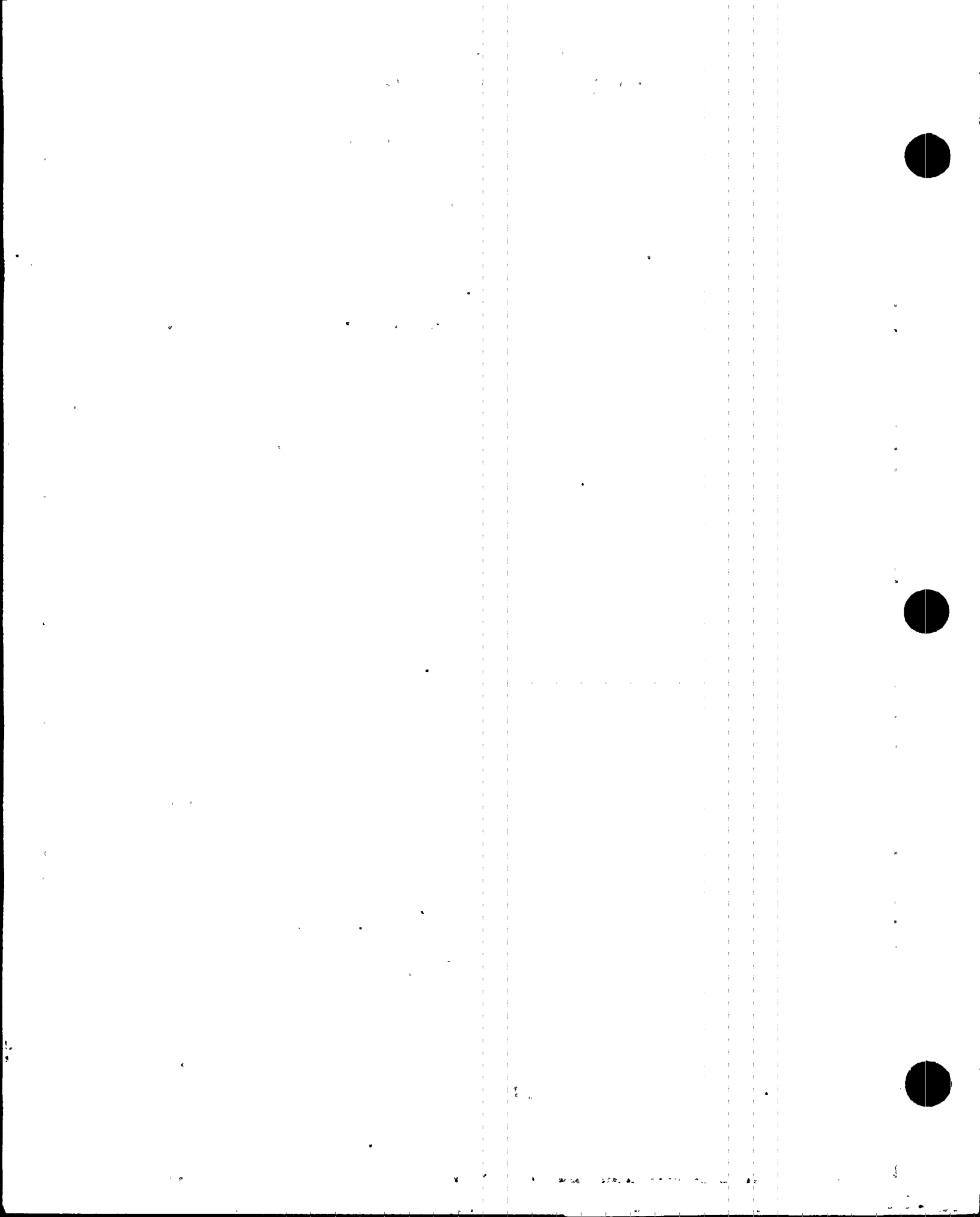
9.2.1 Identification of Special Processes

Special processes are those processes which must be qualified and controlled where quality is highly dependent on close control of process variables or operator skills, and objective verification (inspection, examination or testing) of end quality is difficult.

Special processes identified by applicable codes and standards shall be controlled, qualified, and implemented in accordance with those codes and standards. Examples of special processes include (but are not limited to) welding, heat treating, and nondestructive examination. Others, (e.g., flushing, protective coating, plating applications and nuclear cleaning) should be reviewed to determine if they are special processes.

9.2.2 Procedure Qualification and Control

Process control procedures written by FPL organizations or their contractors shall be used and qualified as required by applicable specifications, codes, or standards.



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Where FPL assigns work to outside contractors, the contractors shall make their procedures and personnel qualifications available for review to FPL prior to the start of work. The Architect/Engineer, Nuclear Steam Supply System vendor, or other organization designated by FPL shall be responsible for the evaluation and acceptance of on-site contractor special process procedures, and shall interface with the appropriate FPL department, as necessary, to resolve review comments with the contractor. The contractor shall also be responsible for the control and approval of sub-contractor procedures.

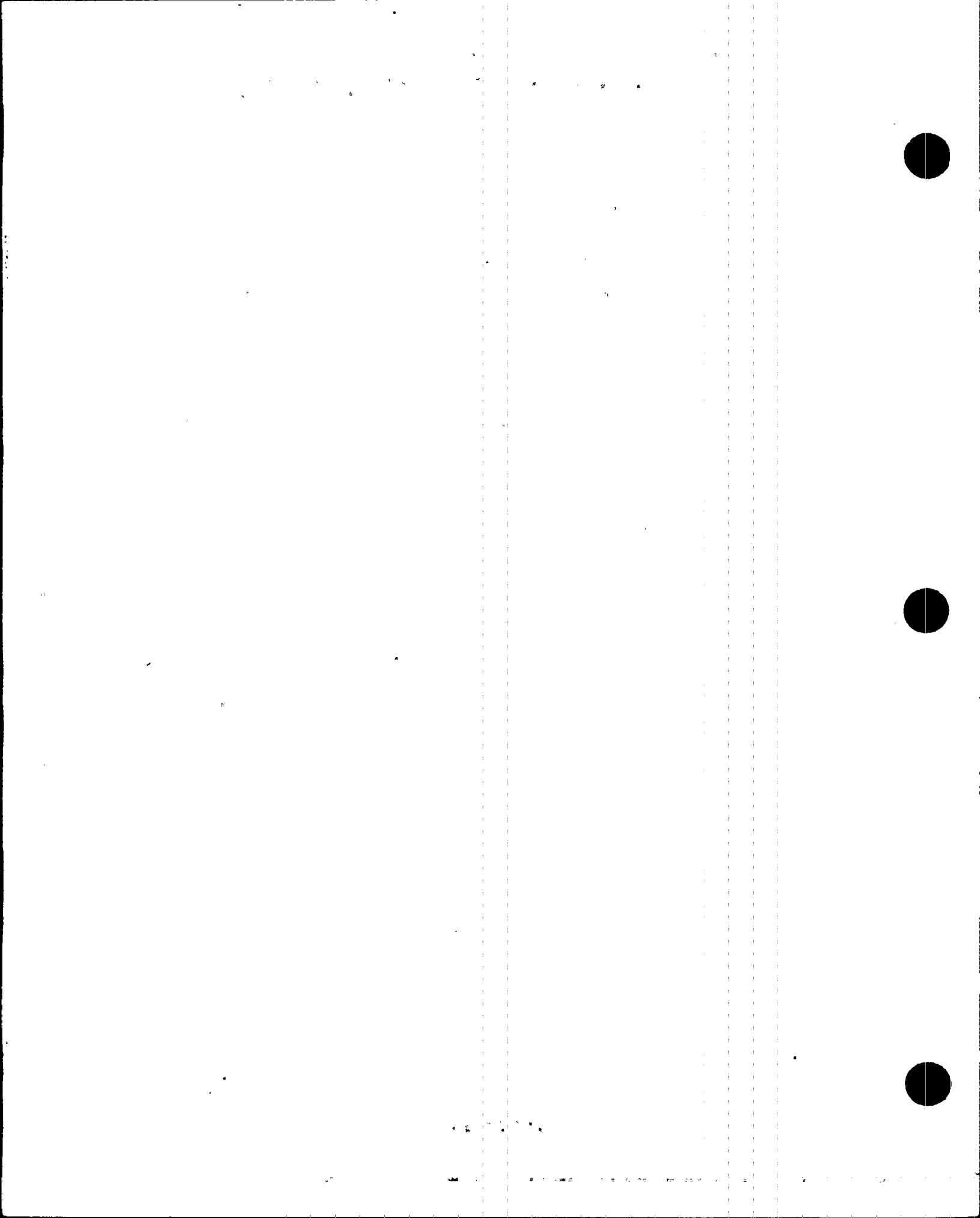
Special process procedures shall be:

- a. Sufficiently detailed for a qualified person to perform the technique and achieve the desired results;
- b. Reviewed and approved prior to use to ensure the procedure complies with applicable codes, standards, and specifications, and that specified materials, equipment, and techniques are suitable for the intended application;
- c. Qualified prior to, or during initial use.

Special process procedures and revisions thereto which specify acceptance criteria (other than those identified in the ASME code) shall have the concurrence of the acceptance criteria by Nuclear Engineering prior to issuance and use.

9.2.3 Personnel Qualification and Certification

Procedures or instructions shall specify personnel qualification and certification requirements. Personnel responsible for the performance and verification of special processes shall be trained, tested, and certified as required by applicable specifications, codes and standards. Requirements for the period of certification, retesting, and recertification of personnel shall also be specified. Contractors shall



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qualify personnel and maintain records of qualified personnel in accordance with applicable codes, standards, specifications, and contract or procurement document requirements.

9.2.4 Control of Equipment

Equipment that must be of a specific type, range, or accuracy to provide conformance to specified requirements shall be controlled to ensure that it is qualified, maintained, and calibrated in accordance with those requirements.

9.2.5 Special Process Records

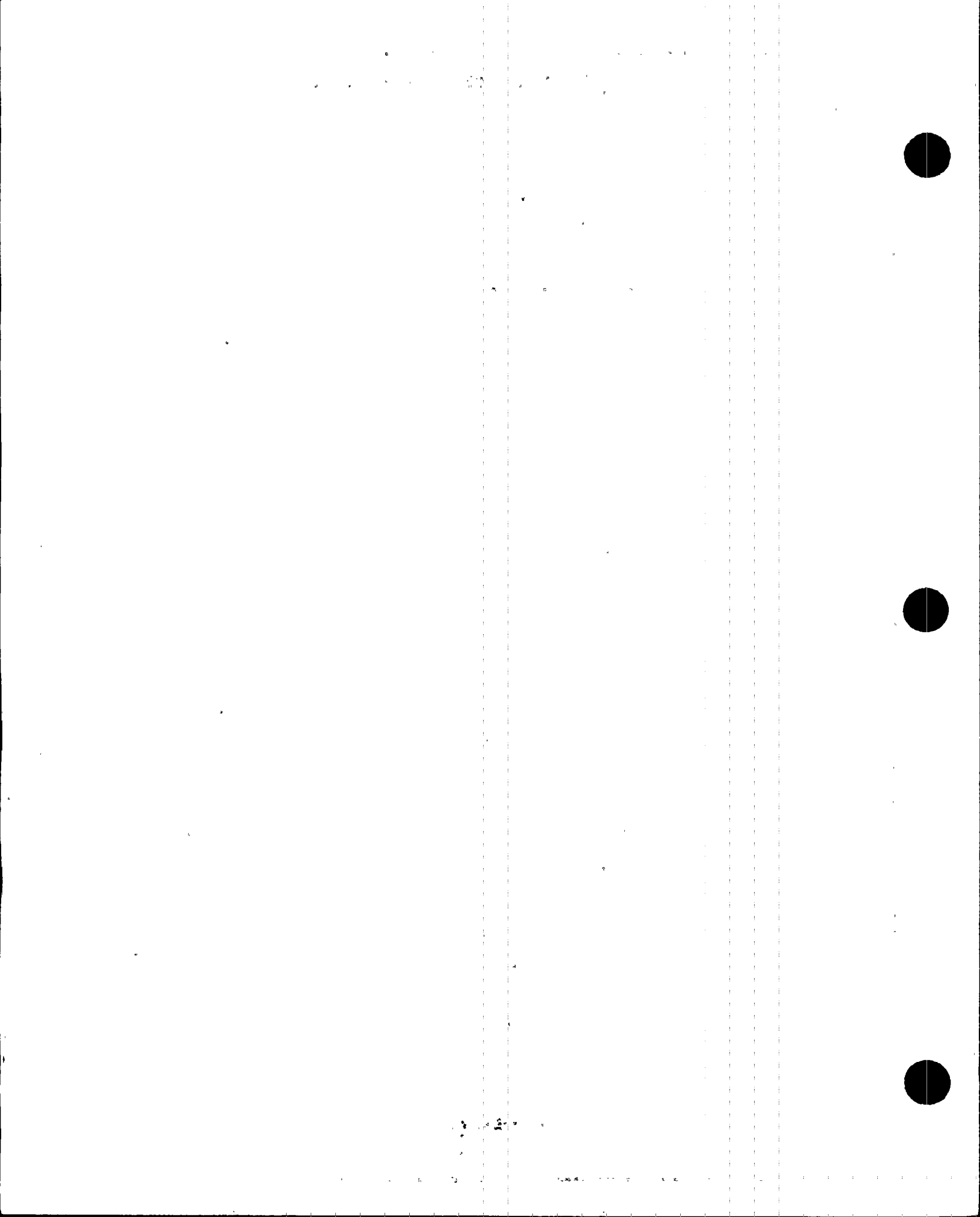
Records shall provide objective evidence that special processes were performed in compliance with approved procedures by qualified personnel and equipment.

Results of nondestructive examinations shall be documented and shall be evaluated for acceptance in accordance with applicable specifications, codes and standards by an individual who is certified in the applicable method.

Records shall also be maintained for verification activities when required by procedure, code or specification. For contracted work, these records shall be retained by the vendor or supplied to FPL as required by contract or purchase order. If records are to be retained by the vendor, the contract or purchase order shall specify the retention period and instructions for final disposition of such records.

9.3 RESPONSIBILITIES

9.3.1 Direct reports of the President, Nuclear Division, and Department Heads of organizations supporting the Nuclear Division involved in special process activities are responsible for:



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- a. Ensuring that special process procedures used by their department are reviewed, approved, controlled, and are qualified prior to or during initial use;
- b. Ensuring that special process personnel in their department are qualified and certified;
- c. Ensuring that records associated with special processes under their control are reviewed and maintained;
- d. Performing special process inspections, examinations, and activities, when assigned to their department, as required by applicable codes, standards, criteria, or other special requirements identified;
- e. Ensuring that work documents under their control contain adequate requirements for the identification and control of special processes;
- f. Ensuring special process procedures and revisions which specify acceptance criteria (other than identified in the ASME code) have Nuclear Engineering concurrence of acceptance criteria prior to use;
- g. Ensuring nondestructive examination documents are reviewed for accuracy and adequacy.
- h. Ensuring that welding activities requiring a qualified program are implemented in accordance with the welding program developed by Nuclear Engineering and Licensing.

9.3.2 The Vice President Nuclear Engineering and Licensing is responsible for:

- a. Determining (as requested) if a specific activity constitutes a special process;
- b. Identifying applicable codes, standards, specifications, criteria, and other requirements related to special processes;
- c. Preparation, qualification, issuance, and control of Visual Test (VT) and Nondestructive Examination (NDE) procedures, instructions, and technique sheets for all ASME Section XI examination activities;



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- d. Direction, including technical direction to all personnel, of the welding program to meet the requirements of applicable codes and standards. This shall include the development, maintenance, and control of a welding program;
- e. Review and approval of contractor welding programs.

9.3.3 The Site Vice President is responsible for:

- a. Welding activities performed at the site including issuance and control of weld documentation packages, welding material and equipment;
- b. Maintaining a current report of qualified welders and weld operators and assigning welder symbols;
- c. Ensuring that the Authorized Nuclear Inspector/Authorized Nuclear Inservice Inspector (ANI/ANII) is permitted access to all parts of the plant site or supplier facilities while work on an item or system is being performed that concerns the welding fabrication, modification, repair, or replacement of the item or system; including inspections, examinations, and tests.

