

**TOPICAL QUALITY ASSURANCE REPORT****APPENDIX C****BASELINE DOCUMENT MATRIX****RR905**

Rev. 14 Draft B

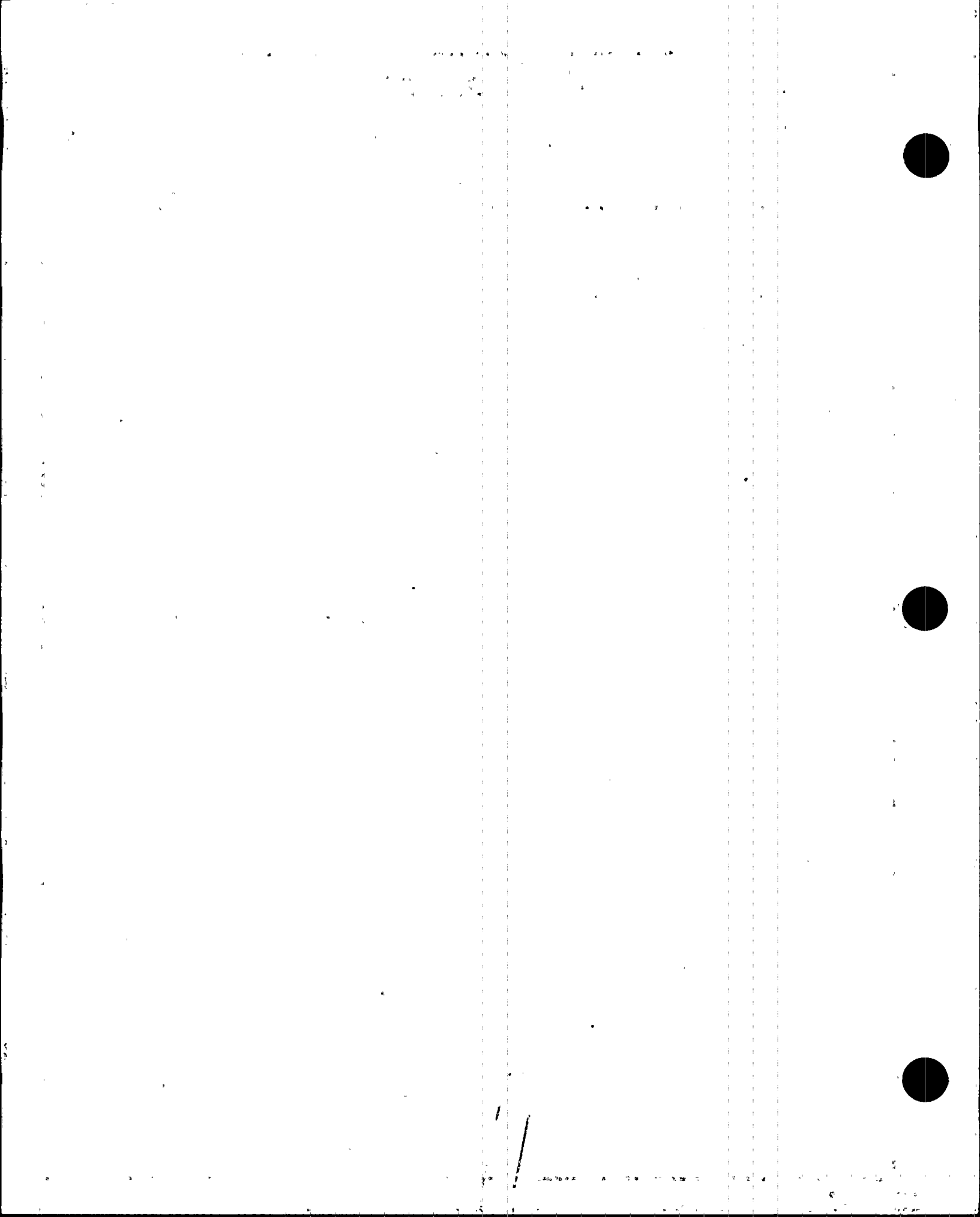
Date 09/18/96

Page 1 of 26

This topical report contains the program requirements for Florida Power & Light Company's Quality Assurance Program. The Quality Assurance Program is described in detail in the Florida Power & Light Company Quality Assurance Manual.

The Regulatory Guides, codes, and standards specifically listed in the matrix of this appendix (on page 2) represent the baseline documents used in the preparation of FPL's QA Manual and this topical report. These documents, therefore, provide the basis for the FPL QA Program, but they are not considered to be part of the QA Program unless specifically addressed in the applicable SAR, technical specifications, etc.

The FPL Quality Assurance Program meets the requirements of the documents referenced in this appendix. Any alternatives or clarifications made to the requirements contained in these documents are stated on pages subsequent to the second page of this appendix.





TOPICAL QUALITY ASSURANCE REPORT

APPENDIX C

BASELINE DOCUMENT MATRIX

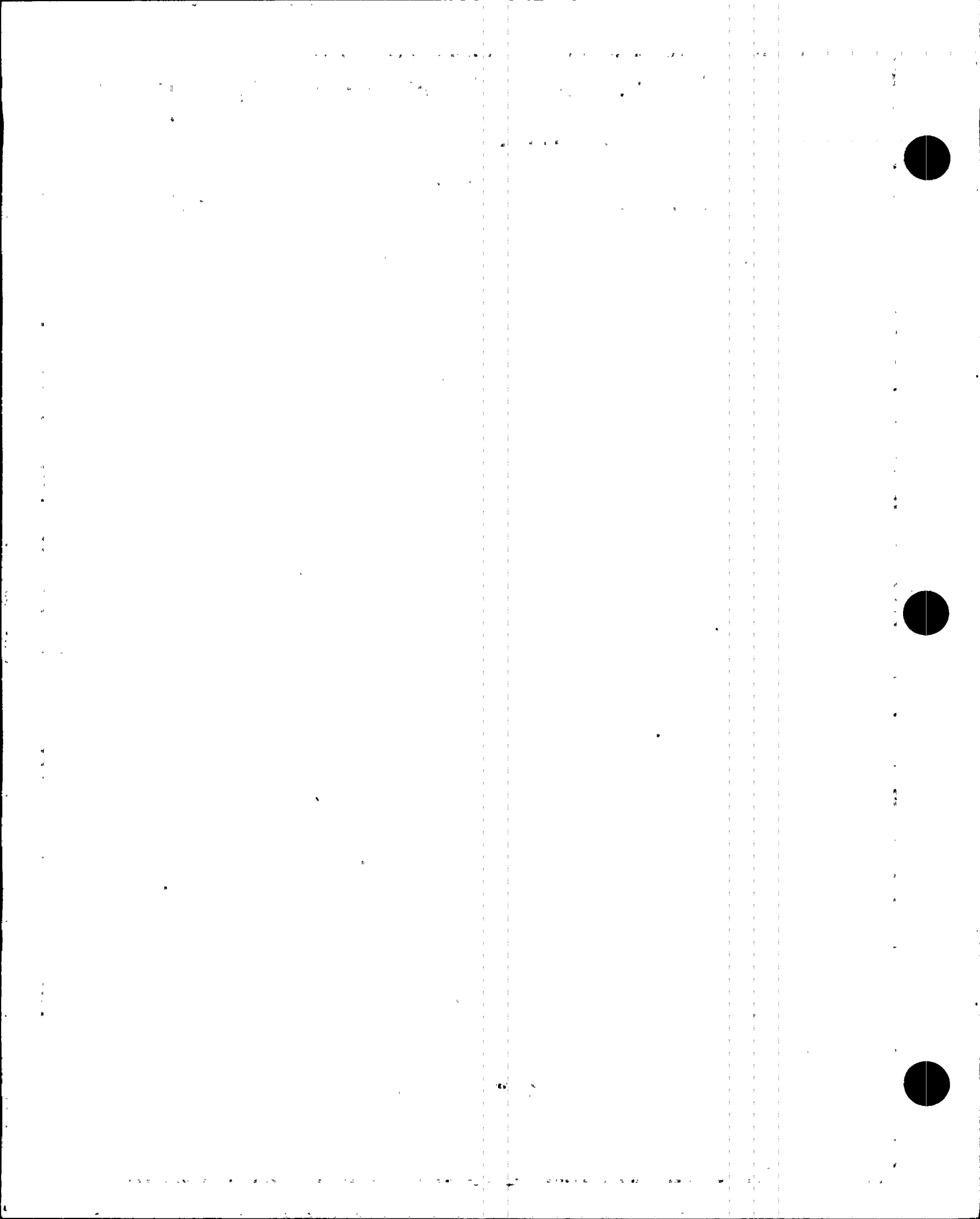
RR905

Rev. 14 Draft B

Date 09/18/96

Page 2 of 26

| <u>GOVERNMENT DOCUMENT</u> | <u>DATED</u> | <u>REFERENCE INDUSTRY STANDARD</u> | <u>DRAFT REV. ISSUED DATE</u> |
|-------------------------------|--------------|--|---|
| 10 CFR PART 50, APPENDIX B | 2/19/75 | ANSI-N45.2 | 1971 |
| 10 CFR PART 50.55a | | ASME B&PV Code Section III & XI | Specified in the SAR document of the respective plant |
| Regulatory Guide 1.8 Rev. 1 | 9/75 | ANSI-N18.1 ANSI/ANS 3.1 | 1971 1978 |
| Regulatory Guide 1.28 | 6/7/72 | ANSI-N45.2 | 1971 |
| Regulatory Guide 1.30 | 8/11/72 | ANSI-N45.2.4 | 1972 |
| Regulatory Guide 1.33 Rev. 2 | 2/78 | ANSI-N18.7 | 1976 |
| Regulatory Guide 1.37 | 3/16/73 | ANSI-N45.2.1 | 1973 |
| Regulatory Guide 1.38 Rev. 2 | 5/77 | ANSI-N45.2.2 | 1972 |
| Regulatory Guide 1.39 Rev. 2 | 9/77 | ANSI-N45.2.3 | 1973 |
| Regulatory Guide 1.58 Rev. 1 | 9/80 | ANSI-N45.2.6 | 1978 |
| Regulatory Guide 1.64 Rev. 2 | 6/76 | ANSI-N45.2.11 | 1974 |
| Regulatory Guide 1.74 | 2/74 | ANSI-N45.2.10 | 1973 |
| Regulatory Guide 1.88 Rev. 2 | 10/76 | ANSI-N45.2.9 | 1974 |
| Regulatory Guide 1.94 Rev. 1 | 4/76 | ANSI-N45.2.5 | 1974 |
| Regulatory Guide 1.116 | 6/76 | ANSI-N45.2.8 | 1975 |
| Regulatory Guide 1.123 Rev. 1 | 7/77 | ANSI-N45.2.13 | 1976 |
| Regulatory Guide 1.144 Rev. 1 | 9/80 | ANSI-N45.2.12 | 1977 |
| Regulatory Guide 1.146 | 8/80 | ANSI-N45.2.23 | 1978 |



**TOPICAL QUALITY ASSURANCE REPORT****APPENDIX C****BASELINE DOCUMENT MATRIX****RR905**

Rev. 14 Draft B

Date 09/18/96

Page 3 of 26

Florida Power & Light Company position regarding conflicting guidance and exceptions:

TOAR Appendix C Clarification, ANSI/ANS 3.1 - 1978 (PSL-2)

The Regulatory Guides and industry standards listed in Appendix C to the Topical Quality Assurance Report take precedence over any Regulatory Guide or industry standard which may be referenced in any one of these documents.

Regulatory Guide 1.8, Rev. 1, ANSI N18.1-1971, ANSI/ANS 3.1 (PSL-2)

ANSI N18.1 describes the training and education requirements for plant staff positions and is endorsed by Reg. Guide 1.8 with an exception. That exception is the requirement for the Supervisor - Radiation Protection. ANSI N18.1 is invoked by Technical Specifications (Appendix A of the Facility Operating License) at the Turkey Point plants and PSL-1. ANSI/ANS 3.1-1978 is invoked by Technical Specification at PSL-2. Reg. Guide 1.8 is also invoked by Technical Specifications at our St. Lucie plant and a license amendment has been approved for our Turkey Point plant to specify the Health Physics Supervisor qualifications addressed in Reg. Guide 1.8.

To avoid duplication of requirements, FPL will address Plant Staff Qualifications in only the Technical Specifications.

Regulatory Guide 1.30/ANSI N45.2.4-1972

ANSI N45.2.4-1972, Paragraph 2.3 addresses installation specifications and requires the inclusion of inspection and test objectives. FPL maintains that test values and inspection scope are inherently contained in the applicable procedures.



**TOPICAL QUALITY ASSURANCE REPORT****APPENDIX C****BASELINE DOCUMENT MATRIX****RR905****Rev. 14 Draft B****Date 09/18/96****Page 4 of 26**

ANSI N45.2.4-1972, Paragraph 6.1.2 requires that the inspection of installed equipment verify that "good and proper workmanship" has prevailed. FPL maintains that acceptable parameter compliance with codes and standards along with company preference is the verification of "good and proper workmanship".

ANSI N45.2.4-1972, Paragraph 6.2.1 requires that "Items requiring calibration shall be tagged or labeled on completion indicating date of calibration and identity of person that performed the calibration." In lieu of tagging or labeling equipment, FPL has chosen to control calibration of installed instrumentation and control equipment by maintaining records for each piece of equipment by instrument tag number (or equivalent) to show that established schedules and procedures for calibration have been followed.

Regulatory Guide 1.33, Rev. 2, ANSI N18.7 - 1976

FPL's method of addressing Paragraphs 4.0, 5.2.2, 5.2.15 and 5.3 of ANSI 18.7 - 1976 as modified by Regulatory Guide 1.33, Rev. 2 is covered in Section 6 of each individual plant's Technical Specifications.

ANSI N18.7-1976, Section 4.3, requires that personnel performing the independent review and audit be specified in number and technical discipline. This standard is invoked by the Technical Specifications (Appendix A of the Facility Operating Licenses) which have been approved for the FPL nuclear plants at St. Lucie and Turkey Point. Specifically this function is performed by the Company Nuclear Review Board (CNRB) identified in Section 6.5.2 of the Technical Specifications.

To avoid duplication of requirements, FPL will address the personnel and functions of this independent review and audit only in the Technical Specifications.



**TOPICAL QUALITY ASSURANCE REPORT****APPENDIX C****BASELINE DOCUMENT MATRIX****RR905**

Rev. 14 Draft B

Date 09/18/96

Page 5 of 26

RR914

FPL's method of addressing Section 5.2 of ANSI N18.7-1976, as modified by Regulatory Guide 1.33, Rev. 2, is by administratively controlling licensed operator hours on shift ~~and by our Duty Call Supervisor system.~~ Further, ~~FPL~~ FPL's has developed Radiological Emergency Plan is a response to NUREG 0654 which provides staffing availability.

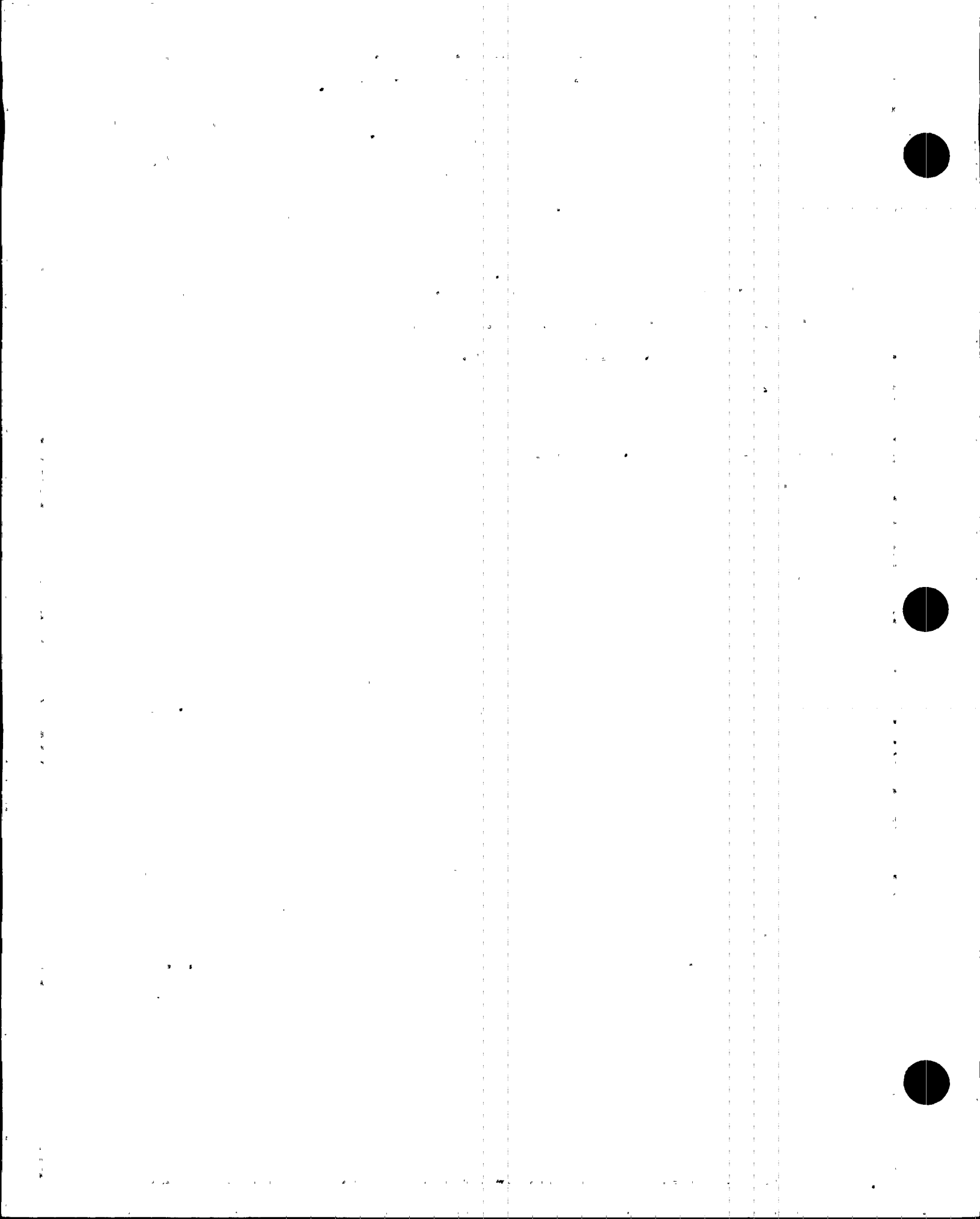
FPL's method of addressing Paragraph 5.2.8 of ANSI N18.7-1976, as modified by Regulatory Guide 1.33, Rev. 2, is covered in Section 4 of each plant's Technical Specifications.

FPL's method of addressing Paragraph 5.2.9 of ANSI N18.7-1976, as modified by Regulatory Guide 1.33, Rev. 2, is covered in 10 CFR 73 and each plant's Security Plan, and as such is not included in the Quality Assurance Program.

Chemical cleaning is not presently controlled as a special process per se; however, the requirements of ANSI N45.2.1-1973 and Regulatory Guide 1.37 dated 3/16/73 are part of the FPL QA Program and are met in our program. FPL proposes these requirements to be an alternative to the requirements of ANSI N18.7-1976, Paragraph 5.2.18. Further, TQR 9.0, Paragraph 9.2 explains the review of potential special processes and determination of their status as special processes.

RR914

FPL meets the intent of Section 5.2.19.3 of ANSI N18.7-1976 as modified by Regulatory Guide 1.33, Rev. 2, as applied to significant changes to operating procedures, by the technical review of the procedure change by knowledgeable plant professionals, by the safety review of the procedure change by the on-site facility review group, by the regulatory and QA review of the procedure by the plant Quality Control Department, by training the licensed operators in the change through the training report system, and by trained, licensed operators using the revised operating procedure and observing the proper result. In addition, procedure changes will be reviewed to assure 10 CFR 50.59 requirements are met.



**TOPICAL QUALITY ASSURANCE REPORT****APPENDIX C****BASELINE DOCUMENT MATRIX****RR905**

Rev. 14 Draft B

Date 09/18/96

Page 6 of 26

RR914

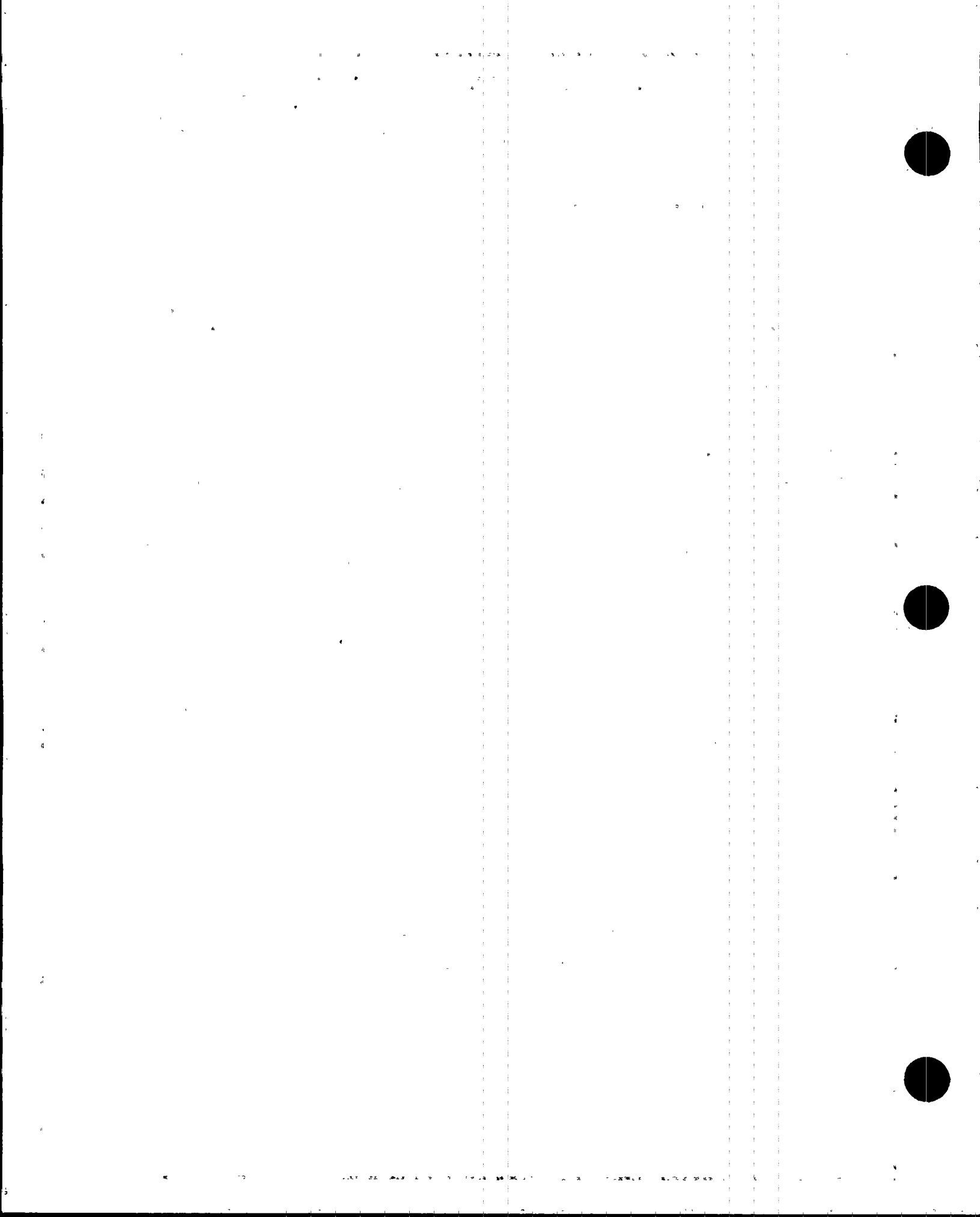
~~Paragraph 5.3.5(4) Clarification When FPL uses vendor manuals and drawings which provide adequate instructions for maintenance, these documents are attached or referenced with Plant Work Orders which are reviewed and approved by Supervisory and Quality Control personnel and are considered to be adequate procedures in themselves. These vendor manuals and drawings, when received at site, are controlled documents and changes to the applicable sections and instructions of these documents require the same level of review and approval as the operating procedures.~~

Appendix A of Regulatory Guide 1.33 lists "typical safety related activities which should be covered by written procedures". Regulatory Guide 1.33 is invoked by the Technical Specifications at FPL Nuclear Plants.

In order to avoid duplication of requirements invoked in our licensing documents, the FPL Quality Assurance Program does not list those required operating procedures specified in Appendix A.

Regulatory Guide 1.37/ANSI N45.2.1-1973

ANSI N45.2.1-1973, Paragraph 5 states in part that, "Fitted and tackwelded joints (which will not be immediately sealed by welding) shall be wrapped with polyethylene or other non-halogenated plastic film until the welds can be completed". The FPL QA Manual shall require that the weld be covered to prevent entry of moisture and contaminants but will not specify the material to be employed. Materials employed to cover openings shall meet the requirements of Regulatory Guide 1.37, Position 4.



**TOPICAL QUALITY ASSURANCE REPORT****APPENDIX C****BASELINE DOCUMENT MATRIX****RR905****Rev. 14 Draft B****Date 09/18/96****Page 7 of 26**

ANSI N45.2.1-1973, Paragraph 7.1 states in part, "provisions shall be made to collect leakage and protect insulation from being wetted". FPL Quality Assurance Program includes the above requirements. However, FPL's program allows the wetting of metallic type insulations which are not adversely affected by wetting.

ANSI N45.2.1-1973, Paragraphs 7.2.2, 7.2.3, and 7.3 address specific cleaning methods (Alkaline, Chelate, Acid) and make recommendations associated with several types of cleaning methods. FPL's QA manual does not specifically delineate these paragraphs. However, the procedure developed per Paragraph 2.2 of ANSI N45.2.1 will ensure that any specific cleaning method chosen will be properly considered and controlled.

Regulatory Guide 1.38, Rev. 2/ANSI N45.2.2 - 1972

FPL will meet the requirements of Reg. Guide 1.38, Rev. 2, Position 2C, D and E for safety related applications during preoperational and operational activities. Restrictions imposed for tapes to be color contrasting will only be applied to the extent that these colors are dissimilar or otherwise distinguishable. This does not preclude using other tapes when precautions are taken to ensure these tapes do not come in contact with austenitic stainless steel or nickel alloy materials.

Vapor barrier material (other than metal) shall be colored to contrast with or be otherwise distinguishable from safety related systems to prevent undisclosed entry into the system.

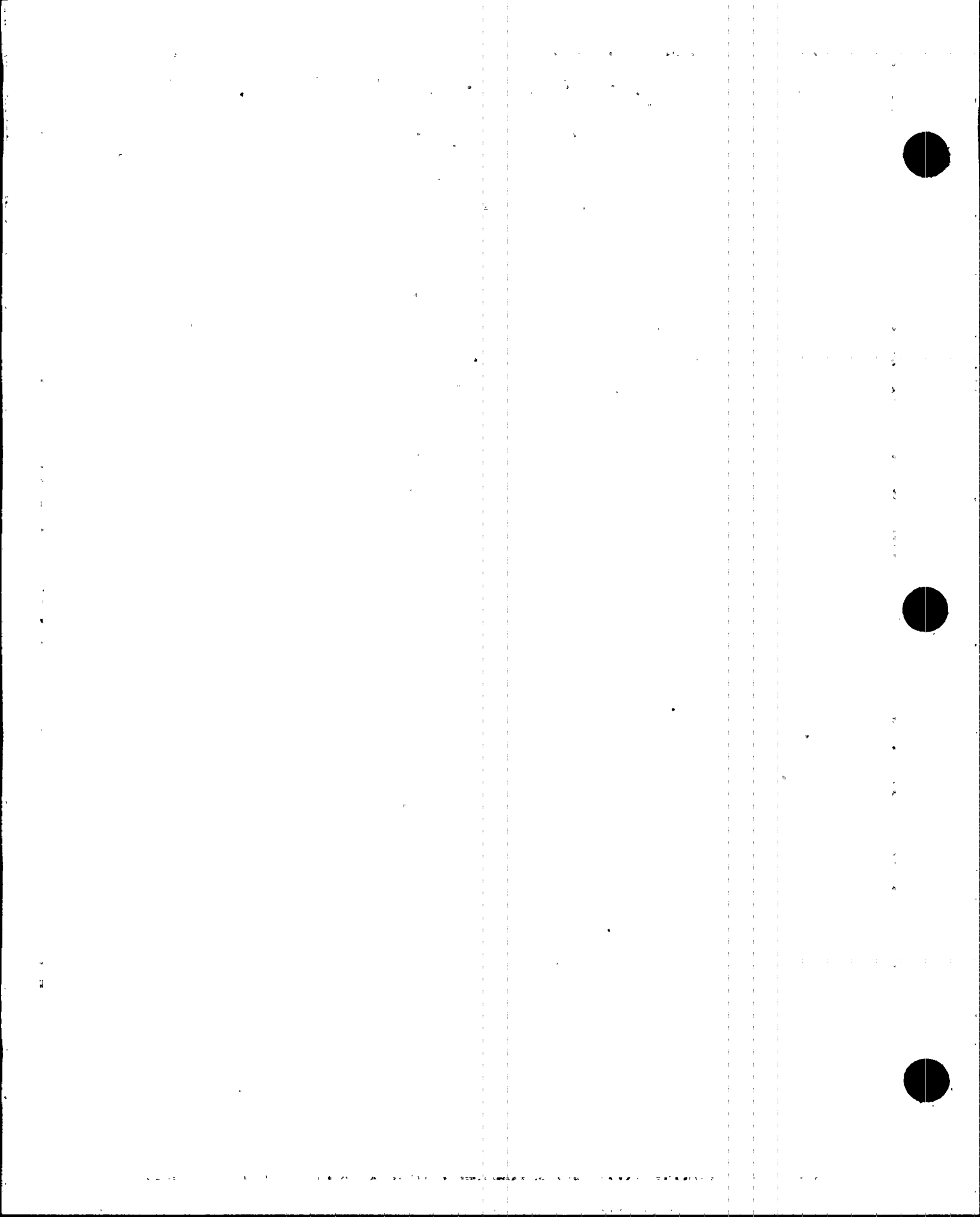
These requirements do not apply to components in storage which would require removal of such tapes and barriers to effect installation.

**TOPICAL QUALITY ASSURANCE REPORT****APPENDIX C****BASELINE DOCUMENT MATRIX****RR905****Rev. 14 Draft B****Date 09/18/96****Page 8 of 26**

ANSI N45.2.2-1972 Section 2.7 requires that items governed by this standard be classified into one of four levels by the buyer or the contractor. FPL intends to consider what care is appropriate for each item individually rather than generically classifying the material into protection levels and providing care required of that level. The following shall be considered when determining the handling, storage, and shipping requirements:

1. The vendor's recommended handling, shipping, and storage standards.
2. Environmental requirements which may include such requirements as inert gas atmosphere, humidity limits, temperature limits, chemical requirements, acceleration (g force) requirements.
3. Special tools or equipment which are provided and controlled as necessary to ensure safe and adequate handling. These tools or equipment shall be inspected and tested at specified times to verify that they are adequately maintained.
4. Packaging, covering or coatings required to meet environmental requirements such as barrier and wrap material, desiccants, pipe caps, plugs, contact preservatives, etc.
5. Container, crating, skids of sufficient strength to support the item (including stacking).
6. Cushioning, blocking, bracing, and anchoring to prevent movement during shipment or handling.
7. Special handling or storage procedures for unique situations.
8. Marking and identification of the item and its packaging.
9. Anticipated "shelf life" of the item.

FPL considers this to be a more effective approach since the quantity of spare and replacement material, parts and components governed by this standard will be afforded protection commensurate with the recommendations of Section 2.7 of this standard.



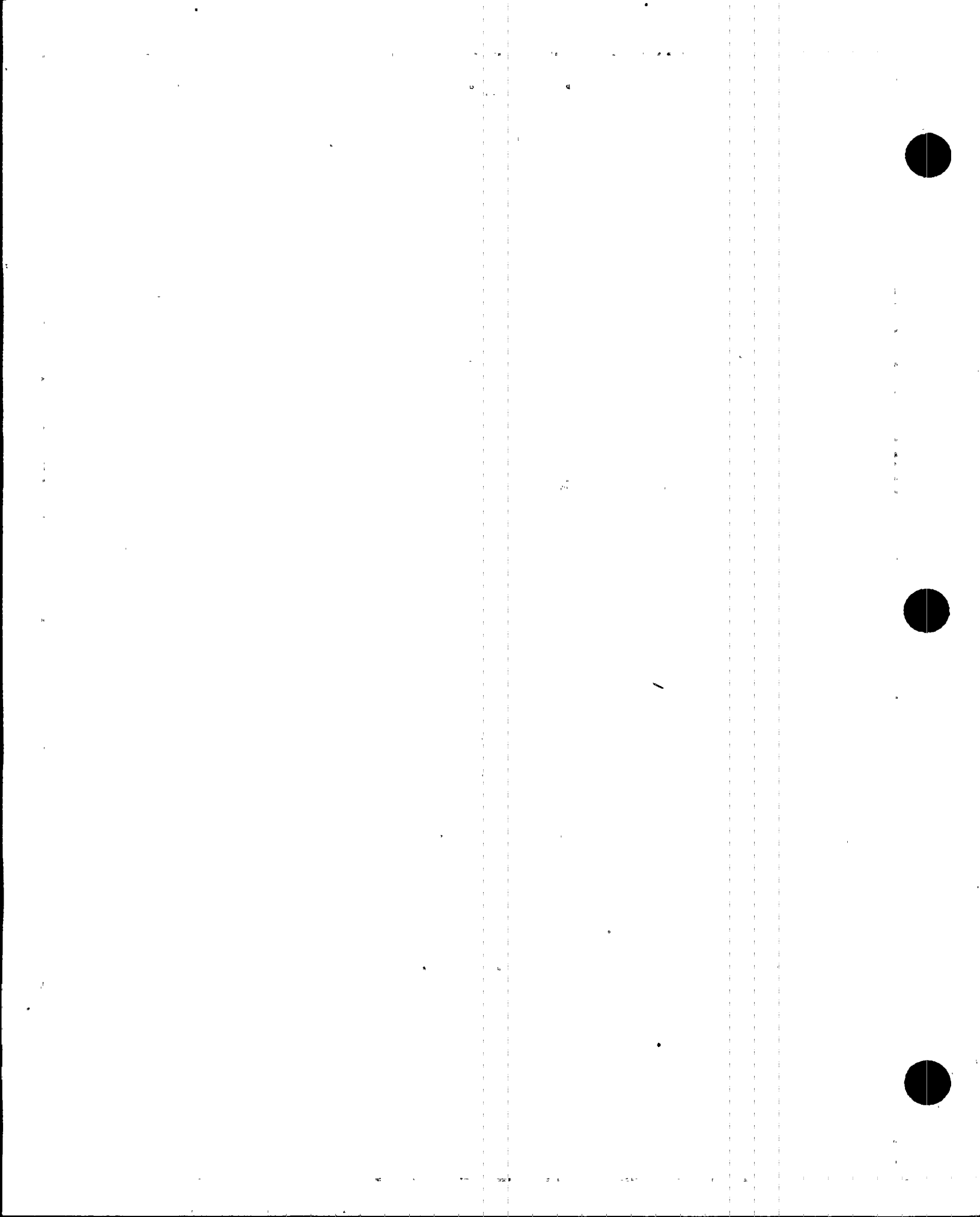
**TOPICAL QUALITY ASSURANCE REPORT****APPENDIX C****BASELINE DOCUMENT MATRIX****RR905****Rev. 14 Draft B****Date 09/18/96****Page 9 of 26**

ANSI N45.2.2-1972 Sections 3.0, 4.0, and the Appendix address all the requirements applicable to the packaging and shipping of material. FPL in general does not package or ship material governed by this standard. Suppliers of material are required by purchase order to provide adequate packaging and shipping protection. Isolated cases of material packaging or shipping are treated on a case-by-case basis and receive protection comparable to that required by the manufacturer of that material. Loading, rigging and handling precautions identified in Section 4.3 are applied to material unloaded by FPL from a transport vehicle.

ANSI N45.2.2-1972 Section 5.2 requires that specific attributes of material and components received by FPL be inspected. For plants with operating licenses FPL verifies conformance to procurement documents during receipt inspections. Any of these attributes identified in these procurement documents are verified during this inspection.

ANSI N45.2.2-1972 Section 5.2, paragraph 5.2.1, requires certain preliminary inspections to be done "prior to unloading" of material which is received. We believe that the sequence specified in the standard is to facilitate commercial claims, and should these preliminary inspections occur "after unloading" that control of materials quality would not be degraded. Accordingly, required shipping damage inspections may be performed after unloading.

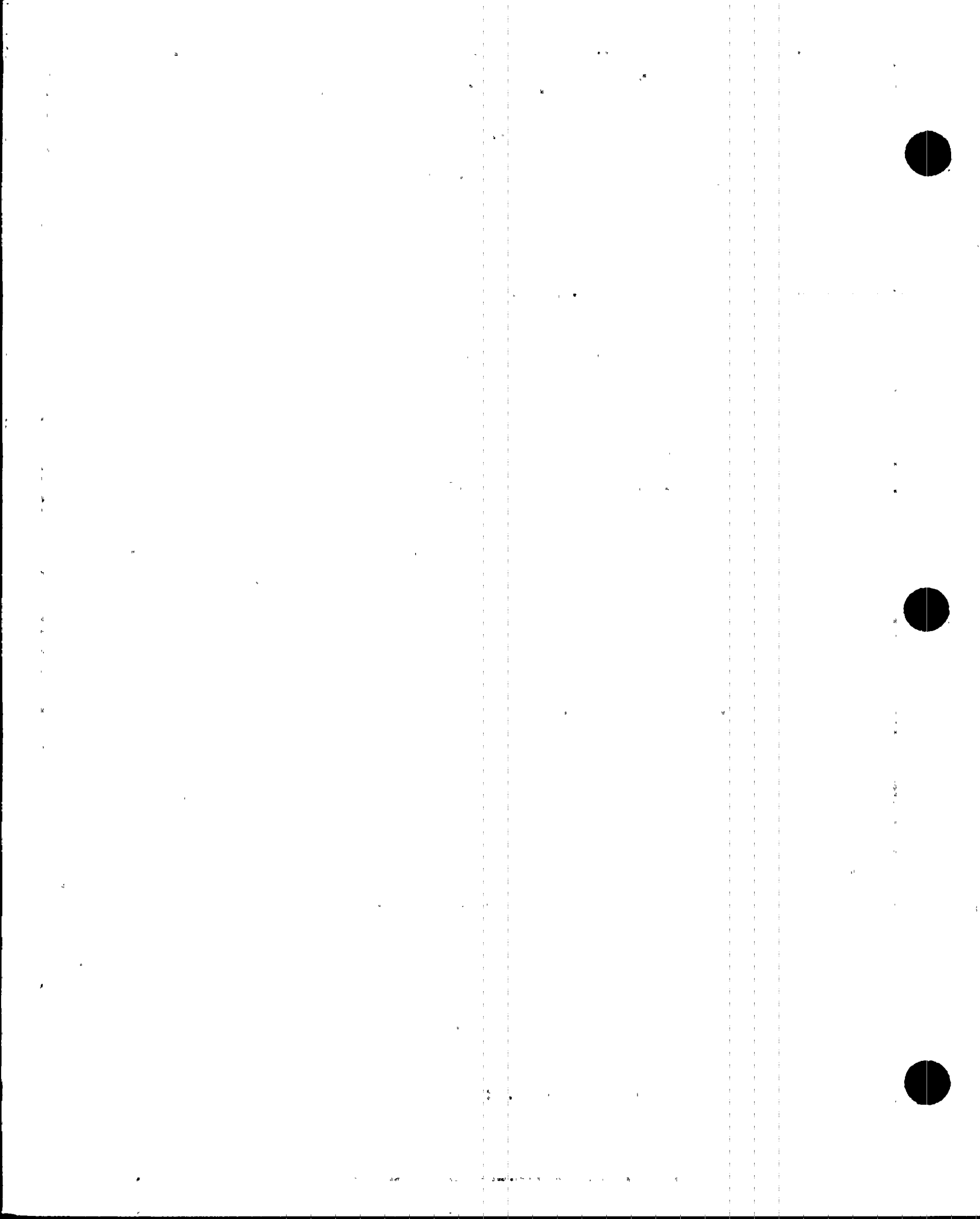
The requirements of ANSI N45.2.2, Paragraph 7.2 for items that require special handling instructions is clarified by FPL to be limited to those items covered in the scope of NUREG 0612, entitled "Control of Heavy Loads at Nuclear Power Plants".



**TOPICAL QUALITY ASSURANCE REPORT****APPENDIX C****BASELINE DOCUMENT MATRIX****RR905****Rev. 14 Draft B****Date 09/18/96****Page 10 of 26**

ANSI N45.2.2-1972, Paragraph 7.4 requires that an inspection program be established for handling equipment and rigging, including methods for identifying acceptable and nonconforming items. In lieu of having a program of periodic, documented inspections of rigging and handling equipment, FPL's practice is to have the individual user determine the equipment's acceptability prior to each use. This prior-to-use inspection is exactly the same as that required during periodic inspections, and uses criteria identified in ANSI N45.2.2-1972, paragraph 7.4. This practice also precludes the need for a system to indicate the acceptability of rigging and handling equipment. Implementation of this prior-to-use inspection will be assured through periodic surveillances and audits performed by Quality Assurance and Quality Control. Cranes are inspected on a periodic basis and will not be subjected to this prior-to-use inspection.

Certain mechanical components of the PSL-2 nuclear unit have been designed for a service environment of the site area because portions of the plant are exposed to the temperature, humidity, and ocean salt spray during operations. Extreme air temperature variations, snow or slush are not encountered during operations or in the out-of-doors storage environment. As an alternative to the rigid requirements of storage levels B and C in paragraph 6.1 of ANSI N45.2.2-1972, FPL proposes to store these particular mechanical components outdoors, but within controlled areas, with sufficient periodic surveillances and inspections to minimize the possibility of damage or lowering of quality due to corrosion, contamination, deterioration, or physical damage. In cases where special environmental conditions are present (i.e., hurricanes, paint sprays, concrete pours, etc.) precautions or additional steps will be taken to further protect the items.



**TOPICAL QUALITY ASSURANCE REPORT****APPENDIX C****BASELINE DOCUMENT MATRIX
RR905****Rev. 14 Draft B****Date 09/18/96****Page 11 of 26**Regulatory Guide 1.39, Rev. 2/ANSI N45.2.3-1973

For FPL's operating nuclear plants, alternative methods are followed to achieve equivalent objectives for the below listed sections of ANSI N45.2.3-1973:

The zone designations of Section 2.1 of N45.2.3 and the requirements associated with each zone are not consistent with the FPL Housekeeping requirements at our operating nuclear units.

In lieu of the zone designation, cleanliness is maintained at a level consistent with the work being performed, so as to prevent the entry of foreign material into safety related systems. Documented cleanliness inspections are performed immediately prior to system closure. Control of personnel, tools, equipment, and supplies is established with approved procedures when the safety function of a system, component, or item may be jeopardized and also while the reactor system is opened for inspection, maintenance, or repair.

Regulatory Guide 1.58, Revision 1/ANSI N45.2.6-1978

ANSI N45.2.6-1978, Paragraphs 1.1, 3.1, 3.2.2(a) and 4 (Table-1) identify requirements which apply to personnel who perform inspections, tests or nondestructive examinations or who participate in the approval of procedures, the handling of data or test results, or the control of reports and records.

FPL proposes an alternative to capability requirements for those who participate in: (1) the approval of procedures, (2) the handling of data or test results and (3) the control of reports and records. FPL accomplishes this by having personnel determined to be qualified and competent by management through consideration of education, training, and experience.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

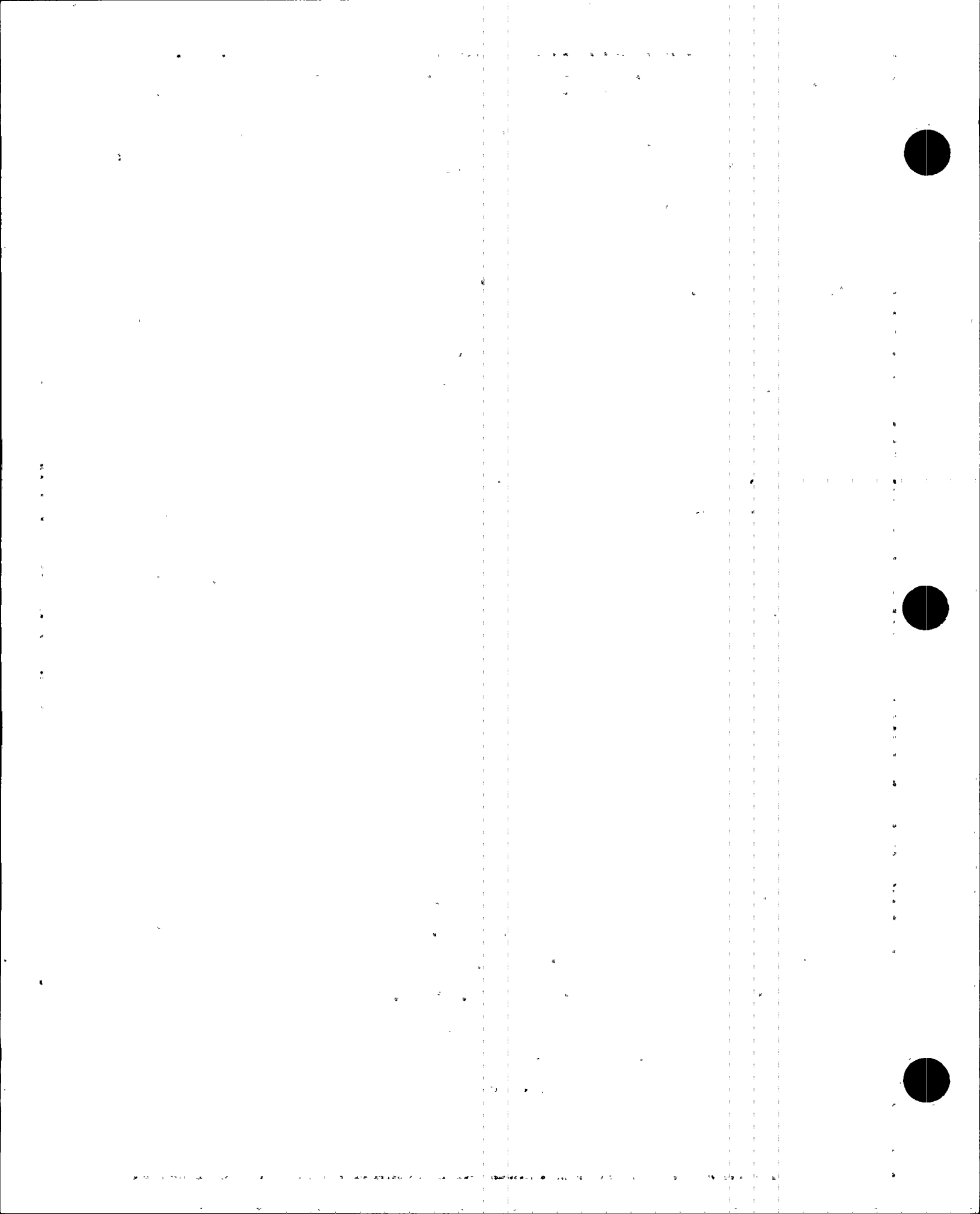
**TOPICAL QUALITY ASSURANCE REPORT****APPENDIX C****BASELINE DOCUMENT MATRIX
RR905****Rev. 14 Draft B****Date 09/18/96****Page 12 of 26**

The Florida Power & Light Company position on the scope of ANSI N45.2.6-1978 is that personnel participating in testing who take data or make observations, where special training is not required to perform this function, need not be qualified in accordance with ANSI N45.2.6 but need only be trained to the extent necessary to perform the assigned function.

For leak testing conducted as part of the preoperational and operational testing programs, FPL considers that the qualification requirements of Regulatory Guide 1.8 (ANSI N18.1-1971) and ANSI N45.2.6-1978; Paragraph 3.0 to be an acceptable alternative to SNT-TC-1A-1975 requirements for leak testing, except for leak testing defined in and performed under the ASME Code, where in such cases, the appropriate section of the Code shall govern.

For preoperational and operational inspection, examination and testing by Quality Control Inspectors, FPL considers that Position C.1 of Regulatory Guide 1.58, Revision 1 and ANSI N45.2.6-1978, Paragraph 3.0 are acceptable requirements for training and qualification, except for inspections, tests and examinations defined in and performed under the ASME Code, where in such cases, the appropriate section of the Code shall govern.

For all other preoperational and operational inspection, examination and testing performed by operating plant and support personnel, FPL considers that training and qualification to the requirement of ANSI N18.1-1971 and Regulatory Guide 1.8 are sufficient for the type and scope of activities performed and that qualifications to ANSI N45.2.6-1978 is unnecessary and redundant. These preoperational and operational inspections, examinations and tests shall be supervised or directed by personnel qualified to Position C.1 of Regulatory Guide 1.58, Revision 1.



**TOPICAL QUALITY ASSURANCE REPORT****APPENDIX C****BASELINE DOCUMENT MATRIX
RR905**

Rev. 14 Draft B

Date 09/18/96

Page 13 of 26

FPL shall comply with Position C.10 of Regulatory Guide 1.58, Revision 1, effective with Revision 4 of the Topical Quality Assurance Report, in that all new certifications issued for personnel shall meet the education and experience requirements or shall document objective evidence demonstrating that the individual indeed does have comparable or equivalent competence to that which would be gained from having the required education and experience.

FPL's position on ANSI N45.2.6-1978, Paragraph 2.3 is that an initial and periodic review (not to exceed two years) of personnel shall determine the capabilities in his qualified area. If during this review, or at any other time, it is determined that the individual's capabilities are not in accordance with the specified requirements, that individual shall be removed from that activity until the required capability has been demonstrated. In addition, during this review a determination shall be made that an individual has been actively involved in the inspection process in his qualified area.

Regulatory Guide 1.64, Rev. 2/ANSI N45.2.11-1974

FPL's exception to Regulatory Guide position C.2 is as follows:

Design verification shall be performed by technically qualified individual(s) or group(s) other than those who performed the design. The original designers and verifiers may both be from the design organization. Design verification by the designer's immediate supervisor shall be limited to those instances when the supervisor is the only qualified individual available within the design organization. These instances are further restricted to designs where the supervisor did not specify a singular design approach, or did not restrict design methods or alternatives, or did not specify design inputs (unless the specified design inputs have already been independently verified). Justification for verification by the designer's immediate supervisor should be documented along with the extent of the supervisor's involvement in the design.



**TOPICAL QUALITY ASSURANCE REPORT**

APPENDIX C

BASELINE DOCUMENT MATRIX

RR905

Rev. 14 Draft B

Date 09/18/96

Page 14 of 26

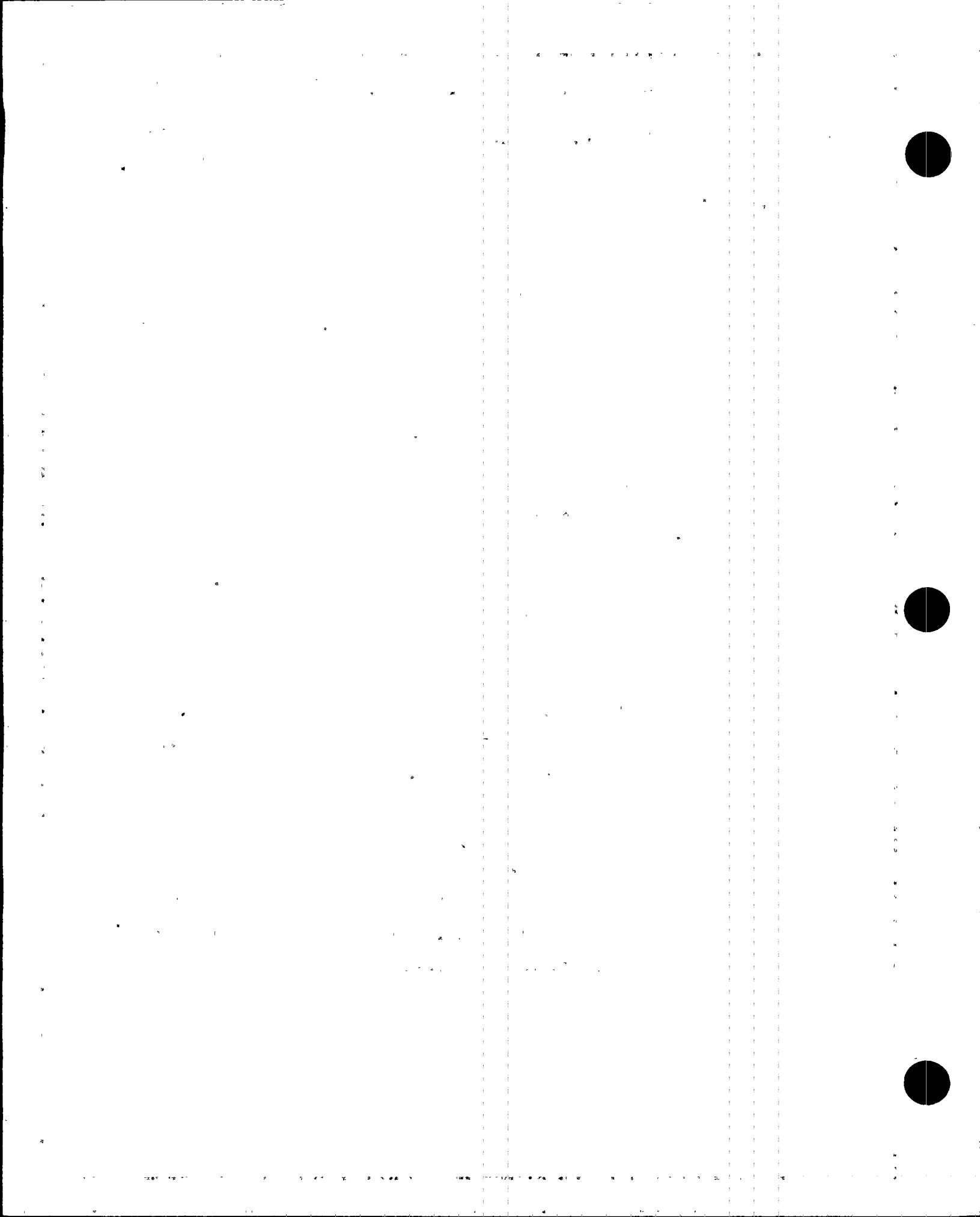
ANSI N45.2.11-1974, Paragraph 11.4 requires that "audits shall include an evaluation of design quality assurance policies, practices, procedures and instructions" FPL's design quality assurance (and all other QA elements) policies, procedures and instructions are included in FPL's Quality Assurance Program documentation. The Quality Assurance Department evaluates all of this documentation in reviews performed during its development and revision. Accordingly, FPL does not require subsequent (and redundant) evaluations of these Quality Assurance Program policies, procedures and instructions during audits. FPL audits will include evaluations of the adequacy of the practices which are the implementation of these policies, procedures and instructions.

Regulatory Guide 1.68 (11/73)

Regulatory Guide 1.68 (11/73) entitled "Preoperational and Initial Start-up Test Programs for Water Cooled Power Reactors" is addressed in Section 14.2.1 of the St. Lucie Unit 2 FSAR which states in part, "The start-up test program is developed using the recommendations of Regulatory Guide 1.68". To avoid duplication of requirements, FPL will address Regulatory Guide 1.68 in the FSAR.

Regulatory Guide 1.74/ANSI N45.2.10 - 1973

ANSI N45.2.10 - 1973 identifies terms and their definitions important to the uniform understanding of the intent of required quality assurance practices for the construction of nuclear power plants. Regulatory Guide 1.74 (2-74) endorses these terms and definitions and extends them through the operational phase and includes a clarification of procurement documents.



**TOPICAL QUALITY ASSURANCE REPORT****APPENDIX C****BASELINE DOCUMENT MATRIX****RR905****Rev. 14 Draft B****Date 09/18/96****Page 15 of 26**

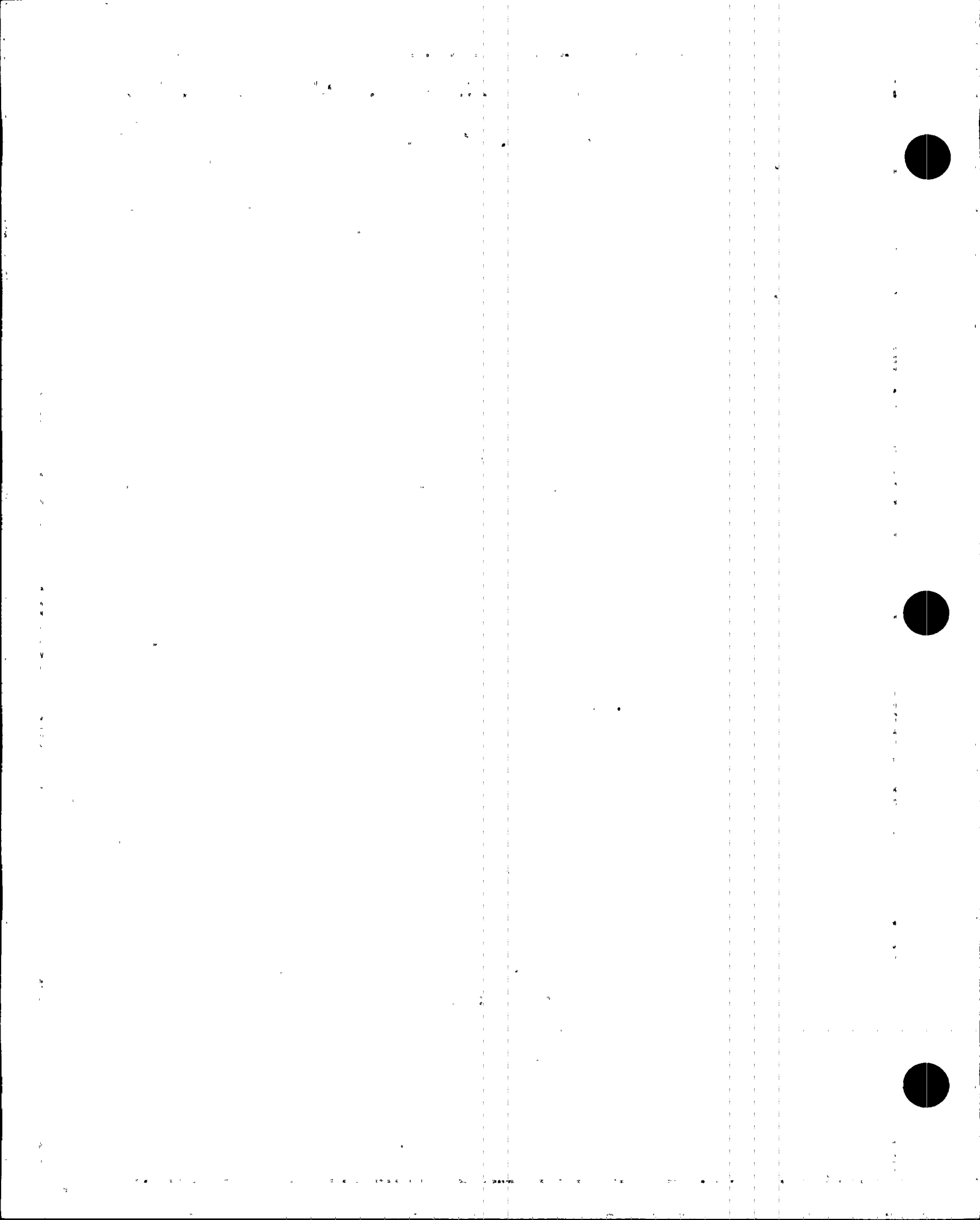
FPL has developed a glossary of terms and their definitions as part of the Quality Assurance Manual which is being used throughout its nuclear construction and operating plant activities.

The following definitions are currently listed in our glossary and are alternatives or clarifications to those listed in the ANSI Standard and Regulatory Guide:

Assembly A combination of subassemblies or components or both, fitted together to form a workable unit.

Audit A documented activity performed in accordance with written procedures or checklists to verify, by examination and evaluation of objective evidence, that applicable elements of the quality assurance program have been developed, documented and effectively implemented in accordance with specified requirements. An audit does not include surveillance or inspection for the purpose of process control or product acceptance.

Guidelines Particular provisions which are considered good practice but which are not mandatory in programs intended to comply with Standards. The term "should" denotes a guideline; the term "shall" denotes a requirement; and the word "may" denotes permission, neither a requirement nor a recommendation.



**TOPICAL QUALITY ASSURANCE REPORT****APPENDIX C****BASELINE DOCUMENT MATRIX
RR905****Rev. 14 Draft B****Date 09/18/96****Page 16 of 26**

Inspector (Owner's
or Installer's)

A qualified inspector employed by the Owner or Installer, whose duties include the verification of quality related activities on installations.

Inspection

Examination, observation, or measurement to determine the conformance of materials, supplies, components, parts, appurtenances, systems, processes, or structures to predetermined requirements.

Procurement
Documents

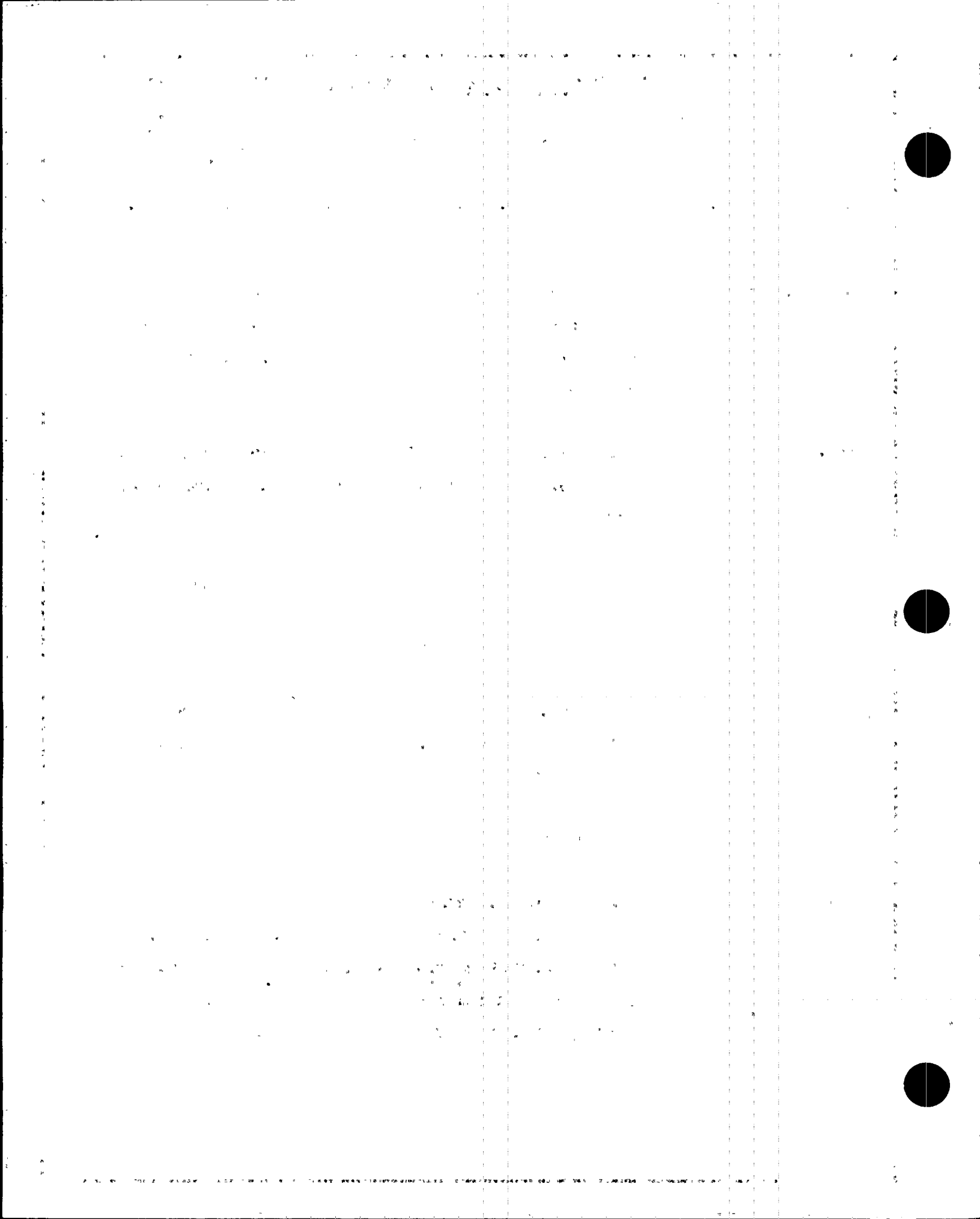
Purchase requisitions, purchase orders, drawings, contracts, specifications or instructions used to define requirements for purchase.

Qualification
(Personnel)

The characteristics or abilities gained through training or experience or both as measured against established requirements such as standards or tests that qualify an individual to perform a required function.

Quality Assurance

All those planned and systematic actions necessary to provide adequate confidence that a structure, system or component will perform satisfactorily in service. Quality Assurance includes quality control.



**TOPICAL QUALITY ASSURANCE REPORT**

APPENDIX C

BASELINE DOCUMENT MATRIX

RR905

Rev. 14 Draft B

Date 09/18/96

Page 17 of 26

Quality Control

Those quality assurance actions related to the physical characteristics or material, structure, component or system, which provide a means to control the quality of the material, structure, component or system to predetermined requirements.

Storage

That period following the release of an item for shipment until turnover for start-up preoperational testing. This would include inplace storage.

System

An integral part of a nuclear power plant comprised of electrical, electronic, or mechanical components (or combinations thereof) that may be operated as a separate entity to perform a specific function.

Testing

Performance of those steps necessary to determine that systems or components function in accordance with predetermined specifications.

"Requirements" Clarification for Glossary**REQUIREMENT:**

A mandatory action, denoted by the word shall. (See "Guidelines") Requirements are generally based on statutes or regulations, but may be internally generated within the company. "Shall" is therefore used for both external, legally enforceable actions and internal requirements not enforceable under current NRC practices.



**TOPICAL QUALITY ASSURANCE REPORT**

APPENDIX C

**BASELINE DOCUMENT MATRIX
RR905**

Rev. 14 Draft B

Date 09/18/96

Page 18 of 26

Regulatory Guide 1.88, Rev. 2/ANSI N45.2.9-1974

ANSI N45.2.9-1974, Section 3.2.5 requires Quality Assurance Records be classified as lifetime or non-permanent and further defines lifetime and non-permanent in Section 2.2 of the Standard. FPL provides the following definitions as an alternative to the above.

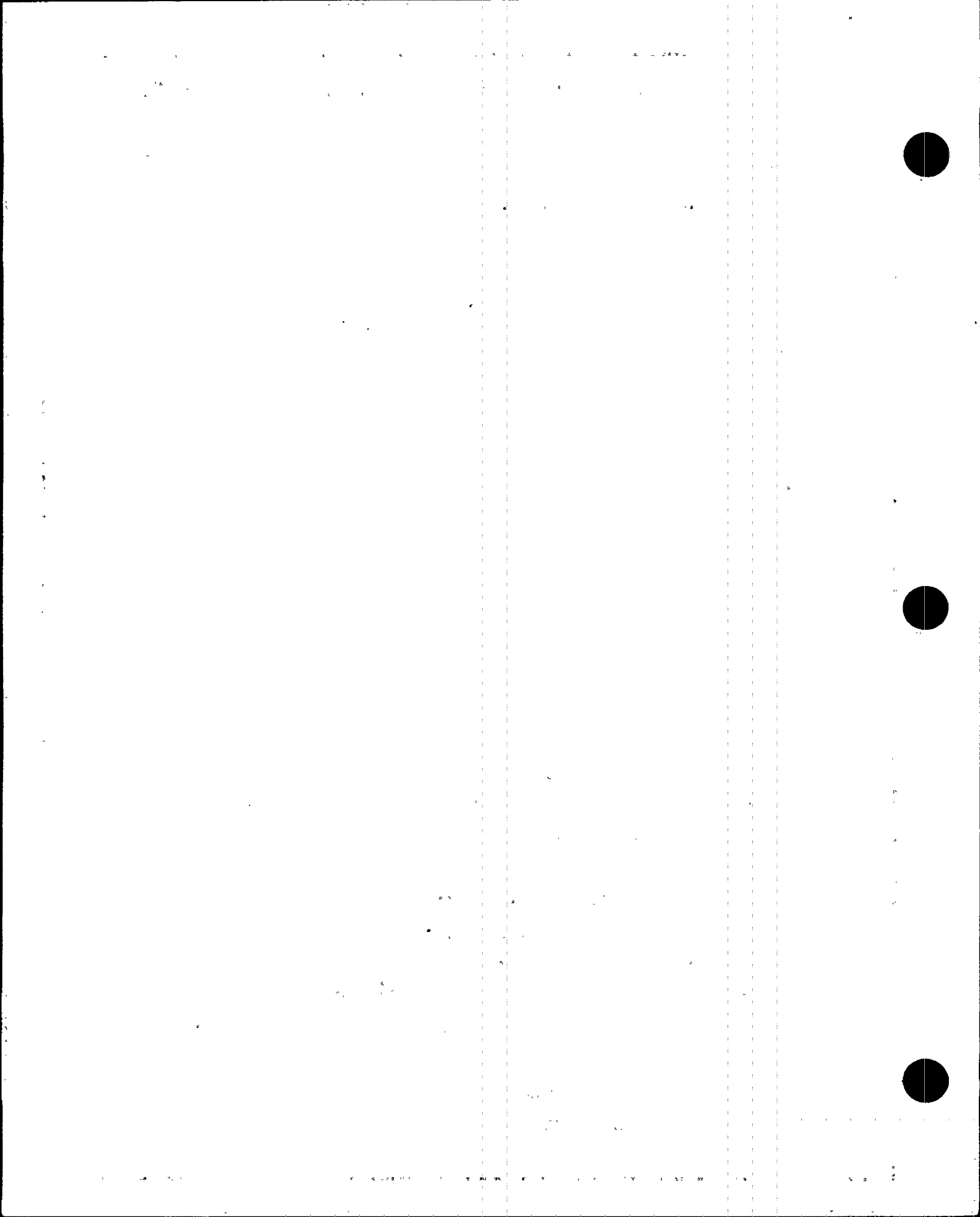
Lifetime Records: Records which are required by the NRC facility operating license, the NRC construction permit, applicable parts of 10CFR, the FSAR, or other NRC commitments to be retained for the life of the plant.

Non-permanent Records: Records which are required by the NRC facility operating license, the NRC construction permit, applicable parts of 10CFR, the FSAR, or other NRC commitments to be retained for periods of time less than the life of the plant.

ANSI N45.2.9-1974, requirements for Section 5.6, "Facility", are clarified by FPL as follows:

QA Records shall be stored in a manner as to protect contents from possible destruction by causes such as fire, flooding, tornados, insects, rodents, and from possible deterioration by a combination of extreme variations in temperature and humidity conditions.

A QA Record Storage Evaluation Team (QARSET) shall be responsible for determining methods utilized to assure that QA Records are adequately stored and protected.



**TOPICAL QUALITY ASSURANCE REPORT****APPENDIX C****BASELINE DOCUMENT MATRIX
RR905**

Rev. 14 Draft B

Date 09/18/96

Page 19 of 26

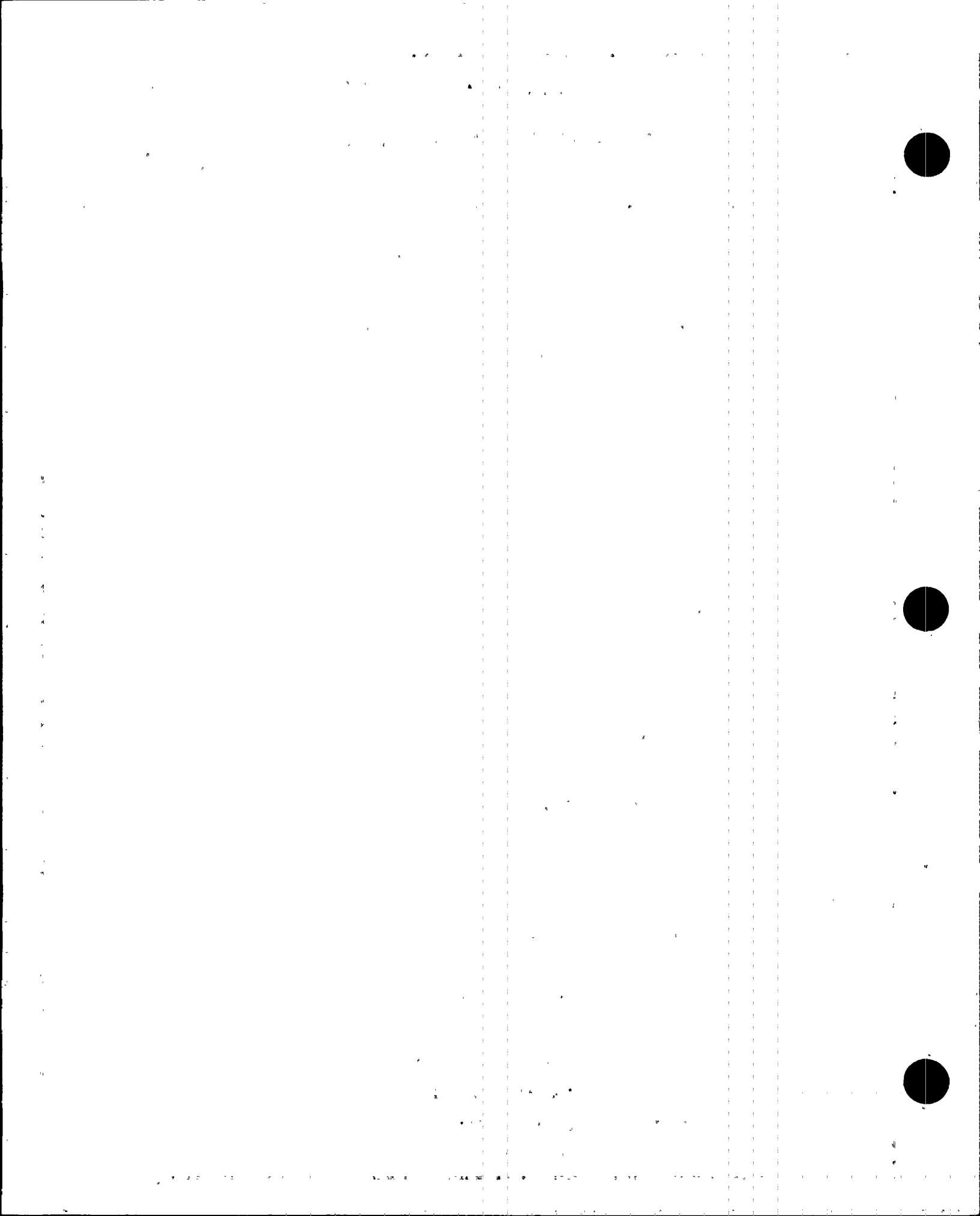
RR911

The QARSET shall consist of the following: the ~~Quality Manager—Juno Beach~~ QA Supervisor Performance Assessment, a Risk Management Representative and the Nuclear Records Official, who shall be responsible for maintaining records of evaluations and establishing schedules to assure that reevaluations are performed every two (2) years. If necessary, the QARSET may delegate appropriate designees to serve as team members.

As part of their responsibility, the QARSET shall evaluate the status of existing facilities and the adequacy of additional records facilities prior to the construction of a new facility or the conversion of existing structures. Preferably, such evaluations should be performed during the design phase.

ANSI N45.2.9-1974 will be utilized in the evaluation of potential record storage facilities. Section 5.6 "Facilities" is modified as follows and shall be the basis for QARSET approved QA Record Storage Facilities.

1. A 2-hour vault meeting NFPA No. 232 without additional provisions.
2. 2-hour rated fire resistant file room as defined in NFPA No. 232- 1980 if the following additional provisions are provided:
 - a. Early warning fire detection and automatic fire suppression shall be provided, with electronic supervision at a constantly monitored central station.
 - b. Records shall be stored in fully enclosed metal cabinets. Records shall not be permitted on open steel shelving. No storage of records shall be permitted on the floor of the facility. Adequate access and aisle space shall be maintained at all times throughout the facility.
 - c. Work not directly associated with records storage or retrieval shall be prohibited within the storage facility.



**TOPICAL QUALITY ASSURANCE REPORT****APPENDIX C****BASELINE DOCUMENT MATRIX****RR905****Rev. 14 Draft B****Date 09/18/96****Page 20 of 26**

- d. Smoking, eating and drinking shall be prohibited throughout the records storage facility.
 - e. Ventilation, temperature, and humidity control equipment shall be provided with approved fire dampers where they penetrate fire barriers.
3. Other conditions from the above may be approved by the QARSET if, in their judgement, the condition meets the established level of protection defined above.

There are two acceptable alternatives to the establishment of an approved QA Record storage facility:

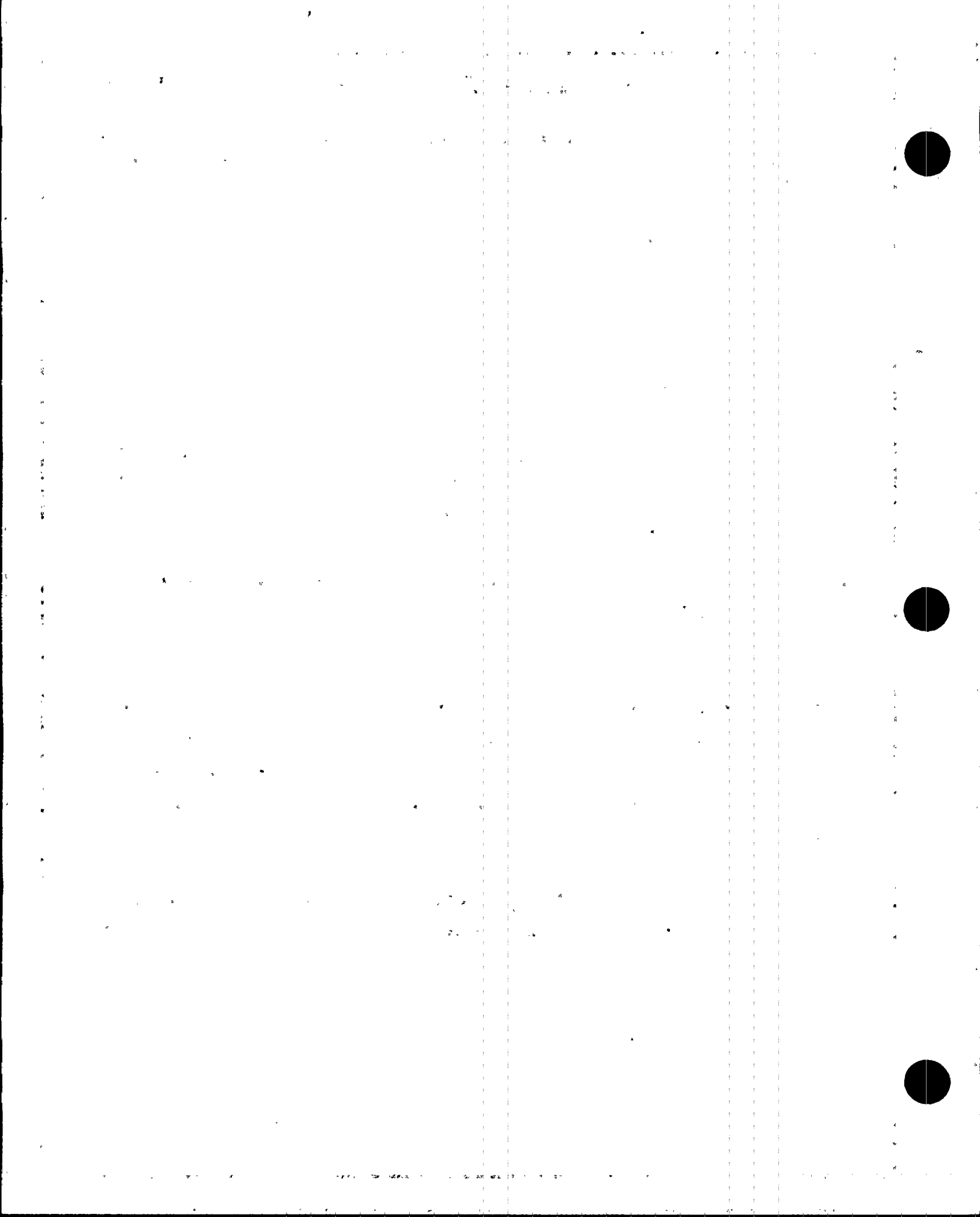
- 1. The maintenance of duplicate QA Records stored in separate locations which are not subject to the same destructive force at the same time.

RR911

- 2. ~~The~~ For temporary storage, the use of QARSET approved factory built record protection equipment, such as insulated record containers, fire-resistive safes, and insulated filing devices.

Where a specially constructed storage room is maintained to store the only copy of QA records, at least the following features should be considered in its construction:

- (1) Reinforced concrete, concrete block, masonry, or equal construction.
- (2) Concrete floor and roof with sufficient slope for drainage; if a floor drain is provided, a check valve (or equal) shall be included.
- (3) Structure, doors, frames and hardware should be fire-rated with a recommended two hour minimum rating.
- (4) Sealant applied over walls as a moisture or condensation barrier.
- (5) Surface sealant on floor providing a hard-wear surface to minimize concrete dusting.
- (6) Foundation sealant and provision for drainage.
- (7) Forced-air circulation with filter system.



**TOPICAL QUALITY ASSURANCE REPORT****APPENDIX C****BASELINE DOCUMENT MATRIX****RR905**

Rev. 14 Draft B

Date 09/18/96

Page 21 of 26

- (8) Adequate fire detection and/or suppression system.
- (9) No pipes other than those providing fire protection to the storage facility are to be located within the facility.

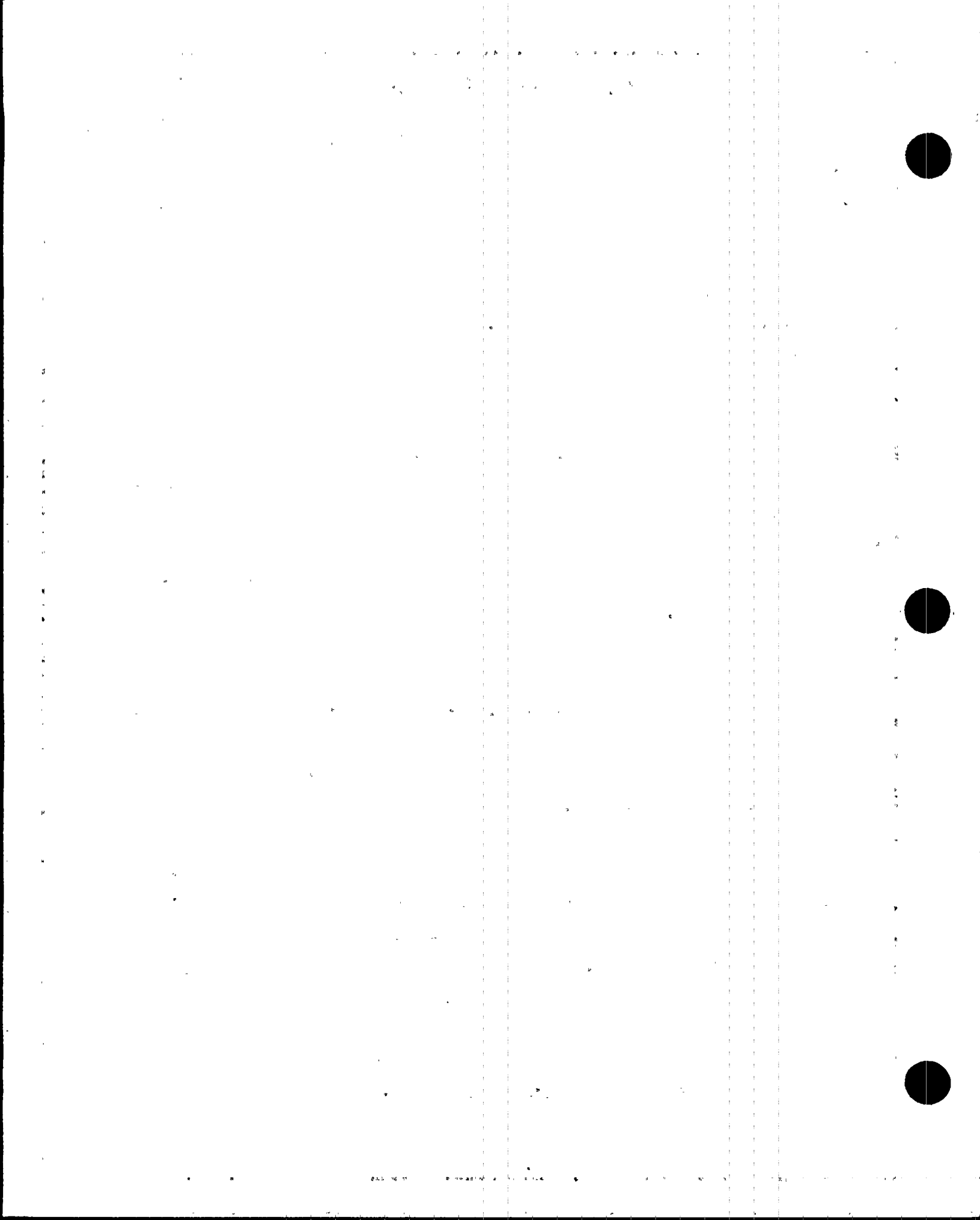
Regulatory Guide 1.116/ANSI N45.2.8-1975

ANSI N45.2.8-1975, Paragraph 2.3 requires that Measuring and Test Equipment (M&TE) used for inspection be identified on the Inspection Report. FPL may, as an option, employ a M&TE issue log which provides traceability between M&TE and the applicable inspections.

ANSI N45.2.8-1975, Paragraph 4.6 addresses care of items to the extent that temporary use of equipment or facilities to which the standard applies that are to become part of the completed project may be desirable.

The following clarification applies to the above statement. For FPL plants in the construction phase (to the point of plant operation license) temporary use of equipment and facilities may be required according to need and/or situation. In this case, authorization for usage shall be provided along with all the documents, conditions, safeguards and evaluations to verify permanent plant equipment adequacy.

In the operations phase all equipment, including temporary equipment, is subject to identical controls to preclude adverse effects on safety and suitability for use.



**TOPICAL QUALITY ASSURANCE REPORT****APPENDIX C****BASELINE DOCUMENT MATRIX****RR905**

Rev. 14 Draft B

Date 09/18/96

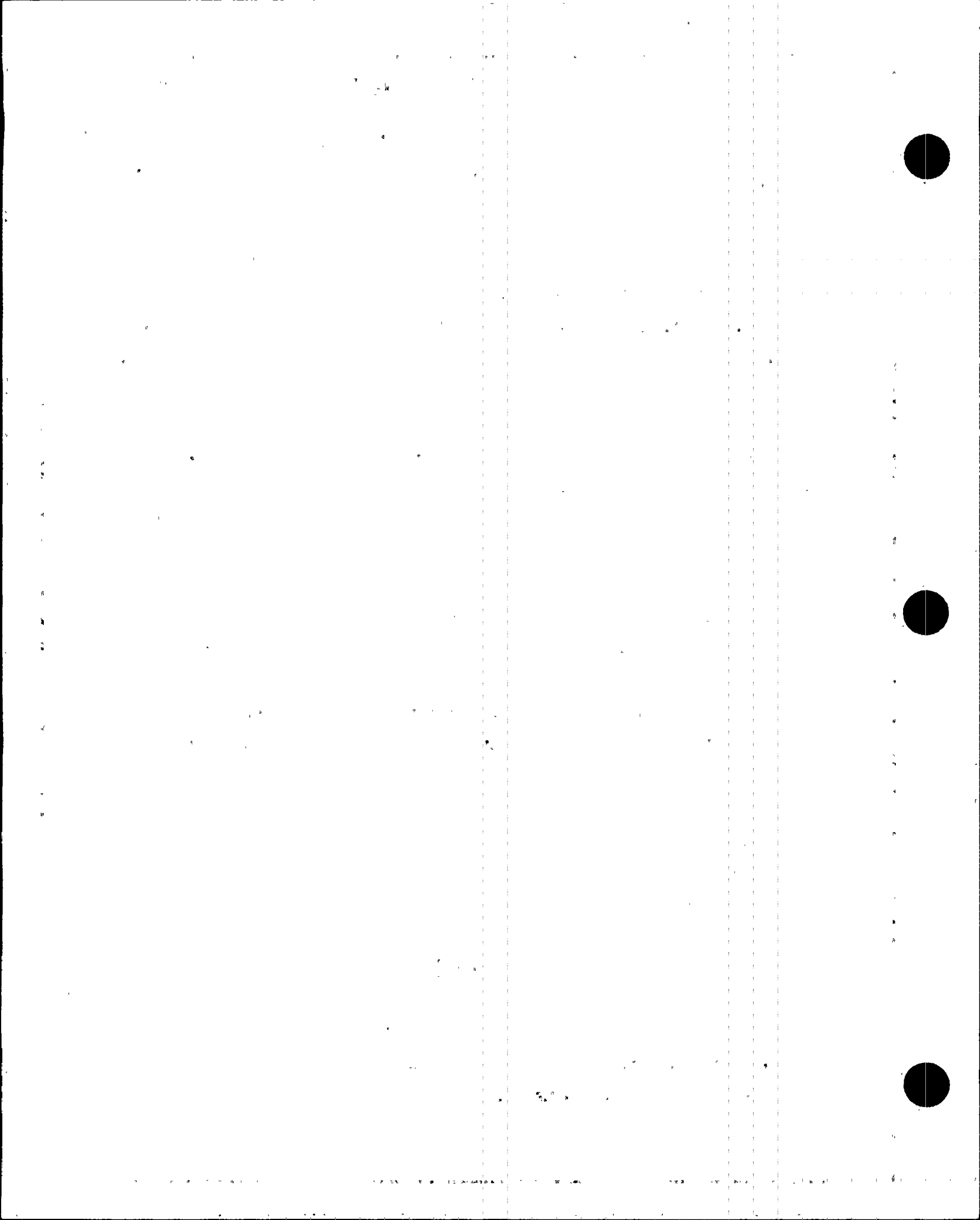
Page 22 of 26

RR905Regulatory Guide 1.123, Rev. 1/ANSI N45.2.13-1976

ANSI N45.2.13-1976 Section 1.1 states that the extent to which the individual requirements of this standard will apply will depend upon the nature and scope of the work to be performed and the required quality of the items or services purchased. For commercial grade items, FPL has determined that certain aspects of the individual requirements of ANSI N45.2.13 need not apply. ~~Commercial~~ The term commercial grade items are item is defined in the QA Manual Glossary. ~~those (1) not subject to design or specification requirements that are unique to facilities or activities licensed by the NRC, and (2) used in applications other than facilities or activities licensed by the NRC, and (3) to be ordered from the manufacturer/supplier on the basis of specifications set forth in the manufacturer's published product description. These~~ ~~commercial~~ Commercial items are subject to varying degrees of control as indicated in the ~~FPL Quality Assurance Manual~~ quality instructions.

As a minimum, an evaluation is performed by qualified personnel to assure that the commercial item satisfies the necessary technical and quality requirements and the item is checked upon receipt to assure that the item received was the one ordered, damage was not sustained during shipment, and documentation, if required, was received.

ANSI N45.2.13-1976 Section 3.3.(a) requires that procurement documents be reviewed prior to release for bid and contract award. The FPL Quality Assurance Program requires procurement document reviews prior to bid and contract award for all safety related purchases. A "Confirming Purchase Order" is an order which is initially placed verbally with the supplier and then later confirmed with a written Purchase Order. A "Confirming Purchase Order" is only used when time restraints would prohibit the issuance of a written purchase order. The following controls are provided in the FPL Quality Assurance Manual to assure that the intent of ANSI N45.2.13 is satisfied for "Confirming Purchase Orders".



**TOPICAL QUALITY ASSURANCE REPORT****APPENDIX C****BASELINE DOCUMENT MATRIX
RR905**

Rev. 14 Draft B

Date 09/18/96

Page 23 of 26

- (1) Prior to verbally placing the order, it must be verified that the intended supplier is on the FPL Quality Assurance Approved Supplier List.
- (2) The verbally placed order must be promptly followed-up (confirmed) with a written procurement document which is subject to all reviews and approvals required for safety related purchases.

Section 8.2 of ANSI N45.2.13 identifies those nonconformances which shall be submitted to the Purchaser. Florida Power & Light's (FPL) position regarding the nonconformances to be reported is as follows. Suppliers (including A/E's and Contractors) shall submit all nonconformances which consist of one or more of the following:

- 1) Technical or material requirements are violated.
- 2) Requirement in supplier documents which have been approved by the Purchaser is violated.
- 3) Nonconformances which would affect the quality of the item in regard to function of safety related features. In cases where the supplier cannot make this determination, they shall be submitted to the Purchaser for evaluation.

This policy assures that all nonconformances affecting safety related functions will be reviewed and approved by FPL. In all cases, the supplier's documentation on nonconformances is available for FPL's review.

Regulatory Guide 1.144, Rev. 1/ANSI N45.2.12-1977

Regulatory Guide 1.144, Positions C.3 a&b, states in part that applicable elements of an organization's Quality Assurance Program should be audited at least annually or at least once within the life of the activity, whichever is shorter.



**TOPICAL QUALITY ASSURANCE REPORT****APPENDIX C****BASELINE DOCUMENT MATRIX****RR905**

Rev. 14 Draft B

Date 09/18/96

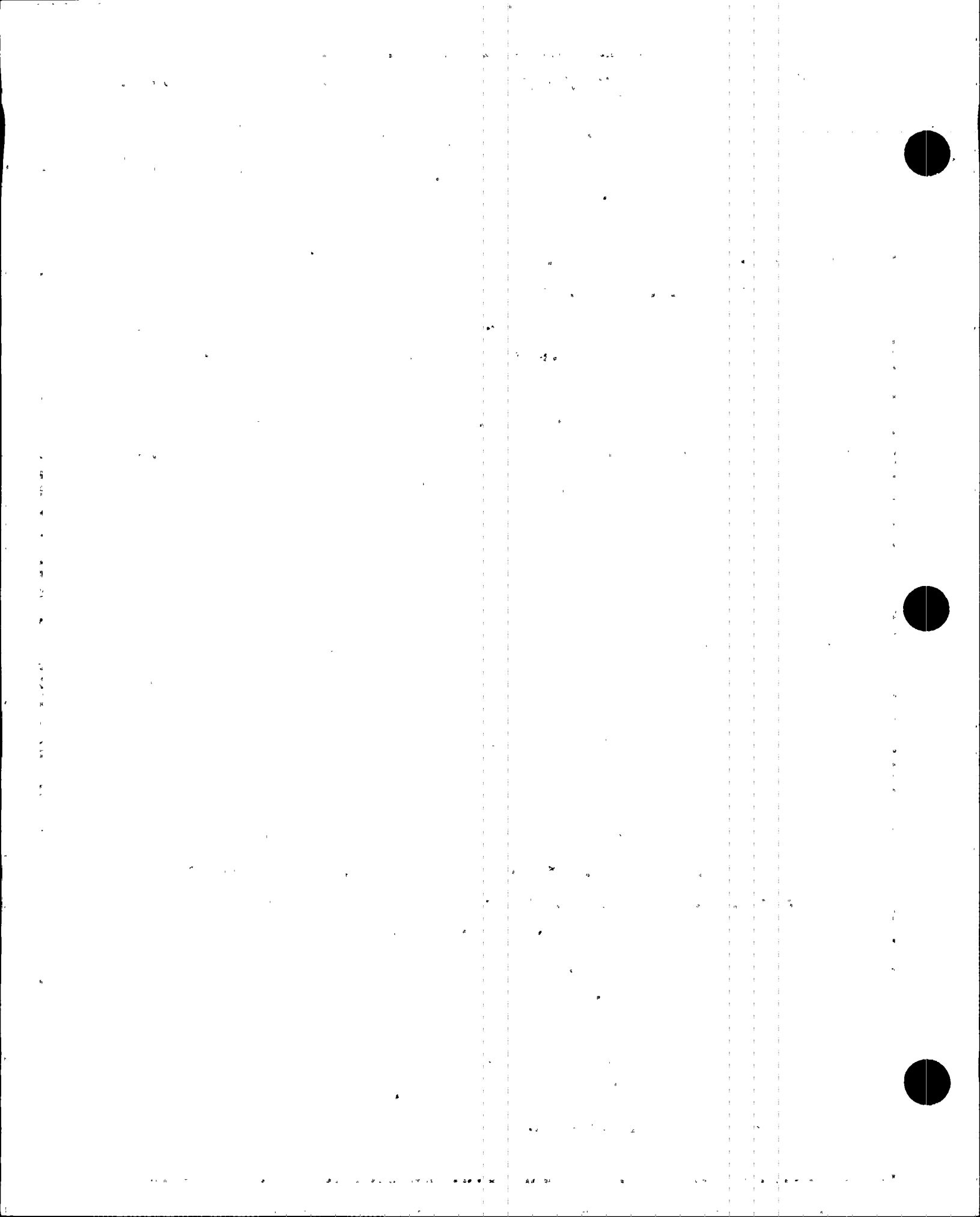
Page 24 of 26

ANSI N18.7-1976/ANS-3.2, Paragraph 4.5 (endorsed by Regulatory Guide 1.33 Revision 2) states in part; "Audits of selected aspects of operational phase activities shall be performed with a frequency commensurate with their safety significance, and in such a manner as to assure that an audit of safety related functions is completed within a period of two years."

FPL has chosen a two year cycle for auditing elements of the internal and on-site QA Program during the operation phase of plant life following initial fuel loading. FPL's position is that the two year cycle: (1) allows more in-depth and meaningful audits in each regularly scheduled area, (2) permits more audits of ongoing activities, and (3) in conjunction with the planning and scheduling requirement of TQR 18.0 provides for a comprehensive audit program. The audit frequency requirements of Regulatory Guide 1.144 will be followed during other plants' phases.

In the case of suppliers, an annual evaluation of quality performance history shall be performed to determine reaudit requirements. Reaudit requirements for suppliers shall be based on the quality performance, and the complexity and criticality of the equipment or service being procured.

ANSI N45.2.12, Paragraph 4.3.1 states: "A brief pre-audit conference shall be conducted at the audit site with cognizant organization management. The purpose of the conference shall be to confirm the audit scope, present the audit plan, introduce auditors, meet counterparts, discuss audit sequence and plans for the postaudit conference, and establish channels of communication." FPL will not require the pre-audit conference for audits of limited scope and of specific site activities conducted by the Construction and Operations Groups. This conference is omitted because the day-to-day contact of the auditors and plant management, the awareness on the part of plant management that these audits are conducted without pre-audit conferences, and the limited scope of the audits meet the intent of a pre-audit conference.



**TOPICAL QUALITY ASSURANCE REPORT****APPENDIX C****BASELINE DOCUMENT MATRIX
RR905**

Rev. 14 Draft B

Date 09/18/96

Page 25 of 26

ANSI Standard N45.2.12-1977, Paragraph 4.5.1 states in part "The audited organization shall provide a follow-up report stating the corrective action taken and the date corrective action was completed". The FPL QA Program requires the QA Department to followup on all action taken by the audited department. This is documented on the corrective action followup form by the QA Department and closed by the QA Department instead of the audited department. This assures that all actions taken by the audited department are verified by the QA Department and that the QA Department concurs with the resolution. We feel that it is appropriate for this to be documented by the QA Department instead of the audited department.

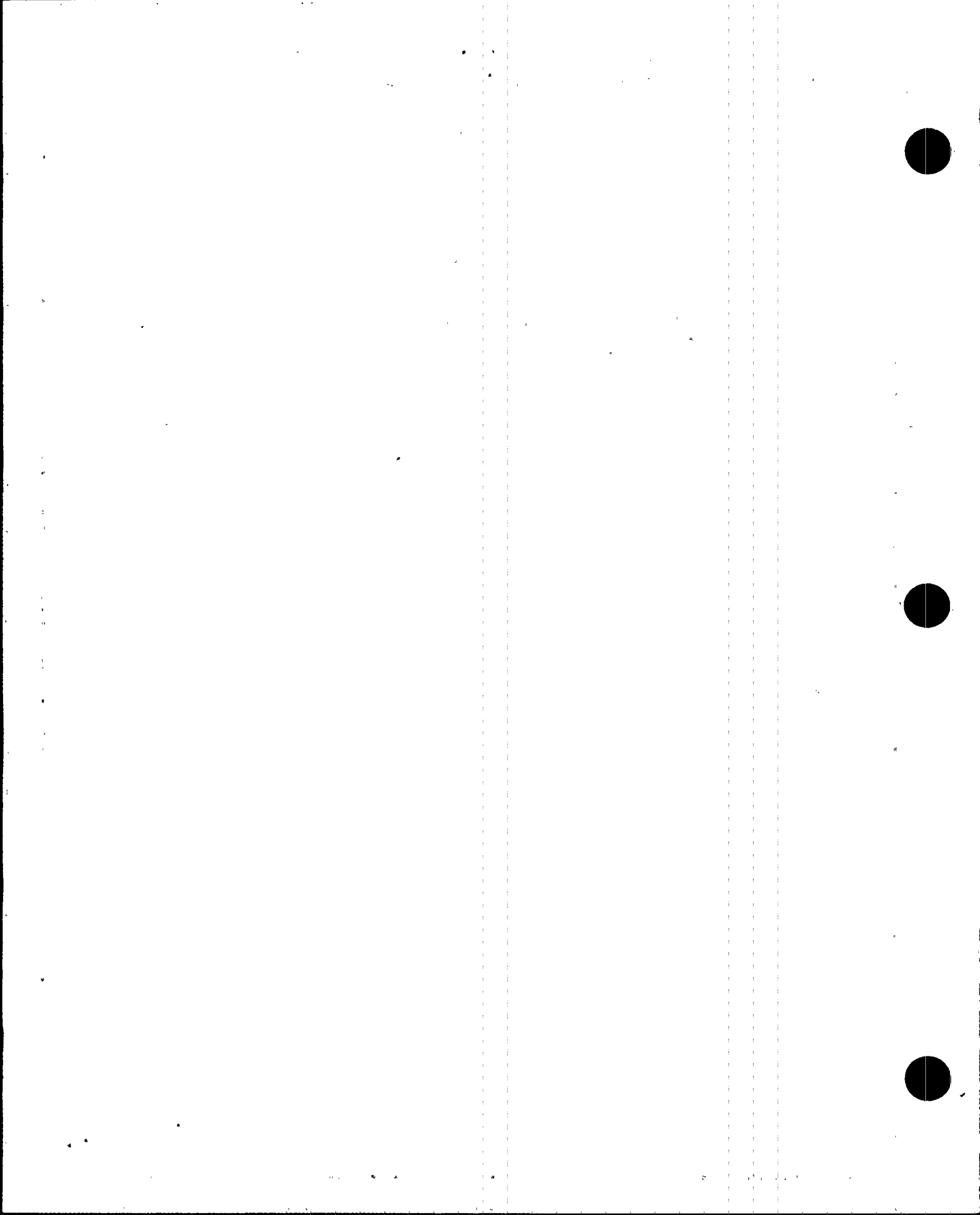
Planning Clarification

ANSI N45.2.4-1972, Paragraph 2.1; ANSI N45.2.6-1973, Paragraph 2.1;
ANSI N45.2.13-1976, Paragraph 7.2; ANSI N18.7-1976/ANS 3-2, Paragraph 5.2.7.1; ANSI
N45.2.8-1975, Paragraph 2.1 and Paragraph 2.2 include plans and/or planning as required.

The terms plan and/or planning are included in FPL's activities as indicated in the following clarification:

Planning is considered to be a management process or analytical tool used as an aid to help develop identification and/or development of program requirements, implementation activities, assignments and staffing, inspections, surveillances and audits, controls and other activities to assure completeness of the requirements. Planning, as such, is not always documented nor addressed as an end item and is considered to be an integral "process" within the developed item.

Plans which are considered to be end type or output type documents have the term "plan" in the title, such as ISI Master Plan, Audit Plan, Start-up Plan, and others, which as such will reflect directly the requirement of these standards in the appropriate documents.



**TOPICAL QUALITY ASSURANCE REPORT****APPENDIX C****BASELINE DOCUMENT MATRIX****RR905****Rev. 14 Draft B****Date 09/18/96****Page 26 of 26**

Plans which are not considered to be end type or output type documents do not have the word plan in the title. However, certain procedures, instructions, flow charts, schedules and checklists may be considered to be plans reflecting planned actions which especially require step-by-step accomplishments. In these cases, the term plan may not appear in the title but considered to be a plan only in the indirect sense and identified as a procedure or other document. FPL considers the above practice to be in compliance with the "plan" requirements of these standards.



ENCLOSURE III



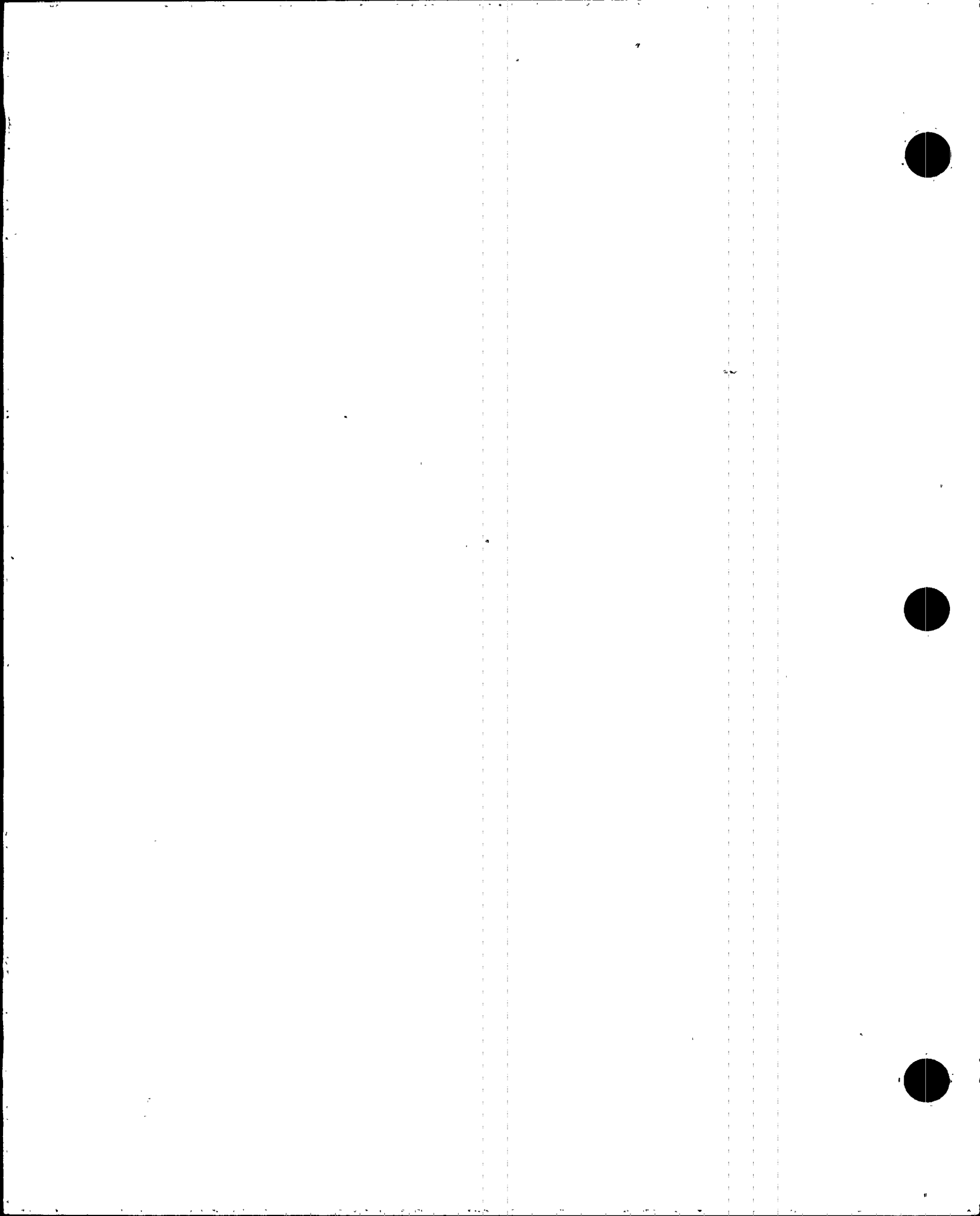
FPLTQAR 1-76A

(FPL-NQA-100A)
REVISION 16
JUNE 12, 1990

TOPICAL QUALITY ASSURANCE REPORT



FPL





FPL

TOPICAL QUALITY ASSURANCE REPORT

ABSTRACT

Rev. 4

Date June 24, 1988

Page 1 of 1

Florida Power & Light Company (FPL) has established and implemented a Quality Assurance Program to provide assurance that the design, procurement, modification and operation of nuclear power plants conform with applicable regulatory requirements. The FPL Quality Assurance Program described in this Topical Report is in compliance with the requirements of Appendix B to 10 CFR Part 50.

The FPL Quality Assurance Program meets the requirements provided by the NRC Regulatory Guidance and Industry Standards as listed in Appendix C of this Topical Quality Assurance Report.

