2.1 SCOPING AND SCREENING METHODOLOGY

Review Responsibilities

Primary - Branch responsible for quality assurance
Secondary - Branches responsible for systems, as appropriate

2.1.1 Areas of Review

This review plan section addresses the scoping and screening methodology for license renewal. As required by 10 CFR 54.21(a)(2), an applicant, in its integrated plant assessment, is to describe and justify methods used to identify structures and components subject to an aging management review (AMR). The structures and components subject to AMR are those which perform an intended function, as described on 10 CFR 54.4 and meet two criteria, namely: (1) they perform such functions without moving parts or without a change in configuration or properties, as set forth in 10 CFR 54.21(a)(1)(i), (denoted as "passive" components and structures in this SRP), and (2) they are not subject to replacement based on a qualified life or specified time period, as set forth in 10 CFR 54.21 (a)(1)(ii), (denoted as "long lived" structures and components). The identification of the systems, structures and components within the scope of license renewal is called "scoping". For those systems, structures and components within the scope of license renewal, the identification of "passive", "long lived" structures and components that are subject to an AMR is called "screening."

To verify that the applicant has properly implemented its methodology, the staff reviews the implementation results separately, following the guidance in Sections 2.2 through 2.5 of this standard review plan.

The following areas relating to the applicant's scoping and screening methodology are reviewed:

2.1.1.1 Scoping

The methodology used by the applicant to implement the scoping requirements of 10 CFR 54.4, "Scope," is reviewed.

2.1.1.2 Screening

The methodology used by the applicant to implement the "screening" requirements of 10 CFR 54.21(a)(1) is reviewed.

2.1.2 Acceptance Criteria

The acceptance criteria for the areas of review are based on the following regulations:

- 10 CFR 54.4(a) as it relates to the identification of plant systems, structures, and components within the scope of the rule .

- 10 CFR 54.4(b) as it relates to the identification of the intended functions of plant systems and structures determined to be within scope of the rule.

- 10 CFR 54.21(a)(1) and (a)(2) as it relates to the methods utilized by the applicant to identify plant structures and components subject to aging management review.

Specific criteria necessary to determine whether the applicant has met the relevant requirements of §54.4(a), §54.4(b), §54.21(a)(1), and §54.21(a)(2) are as follows:

2.1.2.1 Scoping

The scoping methodology utilized by the applicant should be consistent with the process described in Section 3.0, “Identify the SSCs Within the Scope of License Renewal and Their Intended Functions,” of NEI 95-10, “Industry Guideline for Implementing the Requirements of 10 CFR Part 54 - The License Renewal Rule,” Revision 2 (Ref. 1) or the justification provided by the applicant for any exceptions should be found to be acceptable by the reviewer.

2.1.2.2 Screening

The “screening” methodology utilized by the applicant should be consistent with the process described in Section 4.1, “Identification of Structures and Components Subject to an Aging Management Review and Intended Functions,” of NEI 95-10, Revision 2.

2.1.3 Review Procedures

Preparation for the review of the scoping and screening methodology employed by the applicant should include the following:

1. Review of the Commission’s Safety Evaluation Report that was issued upon receipt of the operating license for the facility. This review is conducted for the purpose of familiarization with the principal design criteria for the facility and its current licensing basis (CLB), as defined in 10 CFR 54.3(a).

2. Review of Chapters 1 through 12 of the Updated Final Safety Analysis Report (UFSAR) and the facility’s technical specifications for the purposes of familiarization with the facility design and the nomenclature that is applied to systems, structures, and components within the facility (including the bases for such nomenclature). During this review, the systems, structures, and components that are relied upon to remain functional during and after design bases events, as defined in 10 CFR 50.49(b)(1)(ii), for which the facility was designed to ensure that the functions described in 10 CFR 54.4(a)(1) are successfully accomplished should be identified. This review should also yield information regarding seismic Category I, systems, structures, and components as defined in Regulatory Guide 1.29, “Seismic Design Classification” (Ref. 2). For a newer vintage plant, this information is typically contained in Section 3.2.1, "Seismic Classification," of the plant's UFSAR consistent with the Standard Review Plan (NUREG-0800) (Ref. 3).

3. Review of Chapter 15 (or equivalent) of the UFSAR to identify the anticipated operational occurrences and postulated accidents that are explicitly evaluated in the accident analysis for the facility. During this review, the systems, structures, and components that are relied upon to remain functional during and after design bases accidents for which the facility was designed to ensure that the functions described in 10 CFR 54.4(a)(1) are successfully accomplished should be identified. However, events such as fire, floods, storms, earthquakes, tornadoes, or hurricanes are not explicitly considered in the review of anticipated operational occurrences and postulated accidents in Chapter 15 of the UFSAR,

even though their effect could result in potential offsite exposures comparable to the applicable guideline exposures set forth in §50.34(a)(1), §50.67(b)(2), or §100.11. Therefore, information pertaining to these events and the structures, systems, and components relied upon to mitigate or cope with their effects will be found in other chapters of the UFSAR.

4. Review of the facility's Probabilistic Risk Analysis (PRA) Summary Report that was prepared by the licensee in response to Generic Letter (GL) 88-20, "Individual Plant Examination for Severe Accident Vulnerabilities - 10 CFR 50.54(f)," dated November 23, 1988 (Ref. 4). This review should yield additional information regarding the impact of the Individual Plant Examination (IPE) on the CLB for the facility. While the LR Rule is "deterministic," The Commission in the SOC of the Rule also states: "in license renewal, probabilistic methods may be most useful, on a plant-specific basis, in helping to assess the relative importance of structures and components that are subject to an aging management review by helping to draw attention to specific vulnerabilities (e.g. results of an IPE or IPEEE)." For example, the reviewer should focus IPE information pertaining to plant changes or modifications that are initiated by the licensee in accordance with the requirements of 10 CFR 50.59 or 10 CFR 50.90.

5. Review of the results of facility's Individual Plant Examination of External Events (IPEEE) study conducted as a follow-up to the IPE performed as a result of GL 88-20 in order to identify any changes or modifications made to facility in accordance with the requirements of 10 CFR 50.59 or 10 CFR 50.90.

6. Review of the facility's CLB records to assess the impact of any NRC orders, exemptions, or license conditions on the classification of the facility's systems, structures, and components.

7. Review of the applicant's docketed correspondence related to the following regulations: (a) 10 CFR 50.48, "Fire Protection" (FP), (b) 10 CFR 50.49, "Environmental Qualification of Electric Equipment Important to Safety for Nuclear Power Plants" (EQ), (c) 10 CFR 50.61, "Fracture Toughness Requirements for Protection Against Pressurized Thermal Shock Events" (PTS), (d) 10 CFR 50.62, "Requirements for Reduction of Risk from Anticipated Transients without Scram (ATWS) Events for Light-Water-Cooled Nuclear Power Plants" (ATWS), and (e) 10 CFR 50.63, "Loss of All Alternating Current Power" (SBO). PTS is only applicable to pressurized water reactor (PWR) plants.

There are other staff members reviewing the applicant's scoping and screening results separately following the guidance in Sections 2.2 through 2.5 of this standard review plan. The reviewer should keep these other staff members informed of findings that may affect their review of the applicant's scoping and screening results. The reviewer should coordinate this sharing of information through the license renewal project manager.

2.1.3.1 Scoping

Once the information delineated above has been gathered, the reviewer reviews the applicant's methodology to determine whether its depth and breadth is sufficiently comprehensive to identify the systems, structures, and components within the scope of license renewal and the structures and components requiring an aging management review. Because "[t]he CLB represents the evolving set of requirements and commitments for a specific plant that are modified as necessary over the life of a plant to ensure continuation of an adequate level of

safety" (60 FR 22465), the regulations, orders, license conditions, exemptions, and technical specifications defining functional requirements for facility SSCs that make up an applicant's current licensing basis (CLB) should be considered as the initial input into the scoping process. Section 50.49 defines design-basis events as conditions of normal operation, including anticipated operational occurrences, design-basis accidents, external events and natural phenomena for which the plant must be designed to ensure (1) the integrity of the reactor pressure boundary, (2) the capability to shut down the reactor and maintain it in safe shutdown condition, or (3) the capability to prevent or mitigate the consequences of accidents that could result in potential offsite exposures comparable to those referred to in §50.34(a)(1), §50.67(b)(2), or §100.11 of 10 CFR part 50, as applicable. Therefore, to determine the safety-related systems, structures and components that are within the scope of the rule under 10 CFR 54.4 (a)(1), an applicant needs to identify those systems, structures, and components that are relied upon to remain functional during and following these design-basis events, consistent with the CLB of the facility.

With respect to technical specifications, the Commission stated (60 FR 22467) the following:

> The Commission believes that there is sufficient experience with its policy on technical specifications to apply that policy generically in revising the license renewal rule consistent with the Commission's desire to credit existing regulatory programs. Therefore, the Commission concludes that the technical specification limiting conditions for operation scoping category is unwarranted and has deleted the requirement that identifies systems, structures, and components with operability requirements in technical specifications as being within the scope of the license renewal review.

Therefore, an applicant need not consider its technical specifications, and applicable limiting conditions of operation when scoping for license renewal. This is not to say that the events and functions addressed within the applicant's technical specifications can be excluded in determining the SSCs within the scope of license renewal solely based on such an event's inclusion in the technical specifications. Rather, those systems, structures, and components governed by an applicant's technical specifications that are relied upon to remain functional during a design basis event as identified within the applicant's UFSAR, applicable NRC regulations, license conditions, Commission orders, and exemptions need to be included within the scope of license renewal.

For licensee commitments, such as licensee responses to NRC bulletins, generic letters, or enforcement actions, and those documented in staff safety evaluations, or license event reports, and which make up the remainder of an applicant's CLB, many of the associated systems, structures, and components need not be considered under license renewal. Generic communications, safety evaluations, and other similar documents found on the docket are not regulatory requirements, and commitments made by a licensee to address any associated safety concerns are not typically considered design requirements. However, any generic communication, safety evaluation, or licensee commitment that specifically identifies or describes a function associated with a system, structure, or component necessary to fulfill the requirement of a particular regulation, order, license condition, and/or exemption may need to be considered when scoping for license renewal. For example, NRC Bulletin 88-11, "Pressurizer Surge Line Thermal Stratification," states the following:

The licensing basis according to 10 CFR 50.55a for all PWRs requires that the licensee meet the American Society of Mechanical Engineers Boiler and Pressure Vessel Code Sections III and XI and to reconcile the pipe stresses and fatigue evaluation when any significant differences are observed between measured data and the analytical results for the hypothesized conditions. Staff evaluation indicates that the thermal stratification phenomenon could occur in all PWR surge lines and may invalidate the analyses supporting the integrity of the surge line. The staff's concerns include unexpected bending and thermal striping (rapid oscillation of the thermal boundary interface along the piping inside surface) as they affect the overall integrity of the surge line for its design life (e.g., the increase of fatigue).

Therefore, this bulletin specifically describes conditions that may affect compliance with the requirements associated with 10 CFR 50.55a and functions specifically related to this regulation that need to be considered in the scoping process for license renewal.

An applicant may take an approach in scoping and screening which combines similar components from various systems. For example, containment isolation valves from various systems may be identified as a single system for purposes of license renewal

Staff from branches responsible for systems may be requested to assist in reviewing the plant design basis and intended function(s), as necessary.

The reviewer should verify that the applicant's scoping methods document the actual information sources used (for example, those identified in Table 2.1-1).

Tables 2.1-2 contain specific staff guidance on certain subjects of scoping.

2.1.3.1.1 Safety-Related

The applicant's methodology is reviewed to ensure the safety-related systems, structures, and components are identified to satisfactorily accomplish any of the intended function identified in 10 CFR 54.4(a)(1). The reviewer needs to ascertain how, and to what extent, the information in the CLB for the facility was incorporated by the applicant in its methodology. Specifically, the reviewer needs to review the application, as well as all other relevant sources of information outlined above, to identify the set of plant-specific conditions of normal operation, design basis accidents, external events, and natural phenomena for which the plant must be designed to ensure the following functions:

(i) The integrity of the reactor coolant pressure boundary;

(ii) The capability to shut down the reactor and maintain it in a safe shutdown condition; and

(iii) The capability to prevent or mitigate the consequences of accidents that could result in potential offsite exposure comparable to the guidelines in §50.34(a)(1), §50.76(b)(2), or §100.11, as applicable.

2.1.3.1.2 Non-Safety-Related

The applicant's methodology is reviewed to ensure that non-safety related systems, structures, and components whose failure could prevent satisfactory accomplishment of any of the functions identified in 10 CFR 54.4(a)(1) are identified as within the scope of license renewal.

The scoping criterion under 10 CFR 54.4(a)(2), in general, is intended to identify those nonsafety-related SSCs that support safety related functions. More specifically, this scoping criterion requires an applicant to identify all nonsafety-related SSCs whose failure could prevent satisfactory accomplishment of the applicable functions of the SSCs identified under 10 CFR 54.4(a)(1). The SOC (60FR22467), Section III.c (iii) contains a clarification of the Commission's intent for this requirement in the following statement:

> The inclusion of nonsafety-related systems, structures, and components whose failure could prevent other systems, structures, and components from accomplishing a safety function is intended to provide protection against safety function failure in cases where the safety-related structure or component is not itself impaired by age-related degradation but is vulnerable to failure from the failure of another structure or component that may be so impaired.

In addition, the SOC, Section III.c(iii) provides the following guidance to assist an applicant in determining the extent to which failures need to be considered when applying this scoping criterion:

> Consideration of hypothetical failures that could result from system interdependencies, that are not part of the current licensing bases and that have not been previously experienced is not required [.] However, for some license renewal applicants, the Commission cannot exclude the possibility that hypothetical failures that <u>are part of the CLB</u> may require consideration of second-, third-, or fourth-level support systems.

Therefore, to satisfy the scoping criterion under 10 CFR 54.4(a)(2), an applicant needs to identify those nonsafety-related SSCs (including certain second-, third-, or fourth-level support systems) whose failure are considered in the CLB and could prevent the satisfactory accomplishment of the safety-related function identified under 10 CFR 54.4(a)(1). In order to identify such systems, an applicant would consider those failures identified in (1) the documentation that makes up its CLB, (2) plant-specific operating experience, and (3) industry-wide operating experience that is specifically applicable to its facility. The applicant need not consider hypothetical failures that are not part of the CLB, have not been previously experienced, or are not applicable to its facility.

For example, the safety classification of a pipe may change throughout its life in the plant, such as at valve locations. In these instances, the applicant should identify the safety related portion of the pipe as within the scope of license renewal under 10 CFR 54.4(a)(1). However, the entire pipe run, up to and including associated piping anchors, may have been analyzed as part of the CLB to establish that it could withstand design basis event loads. If this is the case, a failure in the remainder of the pipe run or in the associated piping anchors, could render the safety-related portion of the piping unable to perform its intended function under CLB design conditions. Therefore, the reviewer must verify that the applicant's methodology would include (1) the remaining non-safety related piping up to its anchors, and (2) the associated piping anchors, as within the scope of license renewal under 10 CFR 54.4(a)(2).

On the basis of the staff's experience to date, it is important to clarify that the scoping criterion under 10 CFR 54.4(a)(2) specifically applies to those functions "identified in paragraphs (a)(1)(i), (ii), and (iii)" of 10 CFR 54.4. An applicant need not extend this requirement to the scoping criteria under 10 CFR 54.4(a)(3), as is discussed below.

2.1.3.1.3 "Regulated Events"

The applicant's methodology is reviewed to ensure that systems, structures, and components relied on in safety analyses or plant evaluations to perform functions that demonstrates compliance with the requirements of the fire protection (FP), environmental qualification (EQ), pressurized thermal shock (PTS), anticipated transients without scram (ATWS), and station blackout (SBO) regulations are identified. The reviewer should review the applicant's docketed correspondence associated with compliance of the facility with these regulations.

The scoping criteria under 10 CFR 54.4(a)(3) states that an applicant must consider *"[a]ll systems, structures, and components relied on in safety analyses or plant evaluations to perform a function that demonstrates compliance with the [specified] Commission regulations[.]"* In addition, the SOC, Section III.c(iii) states that the Commission intended to limit the potential for unnecessary expansion of the review for SSCs that meet the scoping criteria under 10 CFR 54.4(a)(3), and provides additional guidance that qualifies what is meant by *"those SSCs relied on in safety analyses or plant evaluations to perform a function that demonstrates compliance with the Commission regulations"* in the following statement:

> [T]he Commission intends that this [referring to 10 CFR 54.4(a)(3)] scoping category include all systems, structures, and components whose function is relied upon to demonstrate compliance with these Commission[ ] regulations. An applicant for license renewal should rely on the plant's current licensing bases, actual plant-specific experience, industry-wide operating experience, as appropriate, and existing engineering evaluations to determine those systems, structures, and components that are the initial focus of license renewal.

Therefore, all SSCs that are relied upon in the plant's CLB (as defined in 10 CFR 54.3), plant specific experience, industry-wide experience (as appropriate) and safety analyses or plant evaluations to perform a function that demonstrates compliance with the Commission's regulations identified under 10 CFR 54.4(a)(3), are required to be included within the scope of the rule. For example, if a nonsafety-related diesel generator is required for safe shutdown under the fire protection plan, the diesel generator and all SSCs specifically required for that diesel to comply with and operate within the Commission's regulations, based on the applicant's design specifications for that diesel, shall be included within the scope of license renewal under 10 CFR 54.4(a)(3). Such SSCs may include, but should not be limited to, the cooling water system or systems required for operability, the diesel support pedestal, and any applicable power supply cable specifically required for safe shutdown in the event of a fire.

In addition, the last sentence of the second paragraph in the SOC, Section III.c(iii) provides the following guidance for limiting the application of the scoping criteria under 10 CFR 54.4(a)(3) as it applies to the use of hypothetical failures:

> Consideration of hypothetical failures that could result from system interdependencies, that are not part of the current licensing bases and that have not been previously experienced is not required.

The SOC does not provide any additional guidance relating to the use of hypothetical failures or the need to consider second-, third-, or fourth-level support systems for scoping under 10 CFR 54.4(a)(3). Therefore, in the absence of any guidance, an applicant need not consider hypothetical failures or second-, third-, or fourth-level support systems in determining the SSCs within the scope of the rule under 10 CFR 54.4(a)(3). For example, if a nonsafety-related diesel generator is only relied upon to remain functional to demonstrate compliance with the

Commission SBO regulations, an applicant may not need consider the following SSCs: (1) an alternate/backup cooling water system, (2) the diesel generator non-seismically qualified building walls, or (3) an overhead segment of non-seismically qualified piping (in a Seismic II/I configuration). This guidance is not intended to exclude any support system (whether identified by an applicant's CLB, or as indicated from actual plant-specific experience, industry-wide experience, as applicable, or safety analyses or plant evaluations) that is specifically required for compliance with or operation within the applicable Commission regulation. For example, if a nonsafety-related diesel generator (required to demonstrate compliance with an applicable Commission regulation) specifically requires a second cooling system to cool the diesel generator Jacket Water Cooling System for the diesel to be operable, then both cooling systems must be included within the scope of the rule under 10 CFR 54.4(a)(3).

The applicant is required to identify the systems, structures, and components whose functions are relied on to demonstrate compliance with the regulations identified in §54.4(a)(3) (that is, whose functions were credited in the analysis or evaluation). Mere mention of a system, structure, or component in the analysis or evaluation does not necessarily constitute support of an intended function as required by the regulation.

For EQ, the reviewer verifies that the applicant has indicated that the EQ equipment is that equipment already identified by the licensee under 10 CFR 50.49(b). That is, equipment relied upon in safety analyses or plant evaluations to demonstrate compliance with the Commission's regulations for environmental qualification (10 CFR 50.49).

The PTS regulation is only applicable to pressurized water reactors (PWRs). If the renewal application is for a PWR and the applicant relies on a Regulatory Guide 1.154(Ref.5) analysis to satisfy 10 CFR 50.61, as described in the plant's CLB, the reviewer verifies that the applicant's methodology would include systems, structures, and components relied on in that analysis as within the scope of license renewal.

For SBO, the reviewer verifies that the applicant's methodology would include those systems, structures, and components relied upon during the "coping duration" phase of an SBO event (Ref. 6).

2.1.3.2 Screening

Once the systems, structures, and components within the scope of license renewal have been identified, the next step in the process is the determination of which structures and components are subject to an aging management review, i.e., "screening" (Ref. 1).

2.1.3.2.1 "Passive"

The reviewer reviews the applicant's methodology to ensure that "passive" structures and components are identified as those that perform their intended functions without moving parts or a change in configuration or properties in accordance with 10 CFR 54.21(a)(1)(i). The description of "passive" may also be interpreted to include structures and components that do not display "a change in state." 10 CFR 54.21(a)(1)(i) provides specific examples of structures and components that meet and not meet the criterion in 10 CFR 54.21(a)(1)(i). The reviewer verifies that the applicant's screening methodology includes consideration of the intended functions of structures and components consistent with plant CLB, as typified in Table 2.1-4 of this review plan section.

The license renewal rule focuses on "passive" structures and components because structures and components that have passive functions generally do not have performance and condition characteristics that are as readily observable as those that perform active functions. “Passive” structures and components, for the purpose of the license renewal rule, are those that perform an intended function, as described in 10 CFR 54.4, without moving parts or without a change in configuration or properties (Ref.2). The description of “passive” may also be interpreted to include structures and components that do not display “a change of state.”

Table 2.1-5 provides a list of typical structures and components identifying whether they meet 10 CFR 54.21(a)(1)(i).

10 CFR 54.21(a)(1)(i) explicitly excludes instrumentation, such as pressure transmitters, pressure indicators, and water level indicators, from an aging management review. If an applicant determines that certain structures and components listed in Table 2.1-5 as meeting 10 CFR 54.21(a)(1)(i) do not meet that requirement for its plant, the reviewer reviews the applicant's basis for that determination.

2.1.3.2.2 “Long-Lived”

The applicant's methodology is reviewed to ensure that "long-lived" structures and components are identified as those that are not subject to periodic replacement based on a qualified life or specified time period. Passive structures and components that are not replaced based on a qualified life or specified time period required an aging management review.

Replacement programs may be based on vendor recommendations, plant experience, or any means, that establishes a specific replacement frequency under a controlled program. Section f(b) of the SOC for the Rule, provides the following guidance for identifying “long-lived” structures and components:

> In sum, a structure or components that is not replaced either (i) on a specified interval based upon the qualified life of the structure and component or (ii) periodically in accordance with a specified time period. Is deemed by §54.21(a)(1)(ii) of this rule to be “long-lived,” and therefore subject to the §54.21(a)(3) aging management review.

A qualified life does not necessarily have to based on calendar time. A qualified life based on run time or cycles are examples of qualified life references that are not based on calendar time (Ref. 3).

Structures and components that are replaced based on performance or condition are not generically excluded from an aging management review. Rather, performance or condition monitoring may be evaluated later in the IPA as programs to ensure functionality during the period of extended operation. On this topic, Section f(b), the SOC provides the following guidance:

> It is important to note, however, that the Commission has decided **not** to generically exclude passive structures and components that are replaced based on performance or condition from an aging management review. Absent the specific nature of the performance or condition replacement criteria and the fact that the Commission has determined that the components with “passive” functions are not as readily monitorable as components with active functions, such generic exclusion is not appropriate. However, the Commission does not intend to preclude a license renewal applicant from

providing site-specific justification in a license renewal application that a replacement program on the basis of performance or condition for a passive structure or component provides reasonable assurance that the intended function of the passive structure or component will be maintained in the period of extended operation. [60 FR 22478]

2.1.4 Evaluation Findings

When the review of the information in the license renewal application is complete, and the reviewer has determined that it is satisfactory and in accordance with the acceptance criteria in Subsection 2.1.2 above, a statement of the following type should be included in the staff's safety evaluation report:

> The staff concludes that there is reasonable assurance that the applicant's methodology for identifying the systems, structures, and components within the scope of license renewal and the structures and components requiring an aging management review is consistent with the requirements of 10 CFR 54.4 and 10 CFR 54.21(a)(1).

2.1.5 Implementation

Except in those cases in which the applicant proposes an acceptable alternative method for complying with specified portions of the Commission's regulations, the method described herein will be used by the staff in its evaluation of conformance with Commission regulations.

2.1.6 References

1. NEI 95-10, Rev. 2, "Industry Guideline for Implementing the Requirements of 10 CFR Part 54 - The License Renewal Rule," Nuclear Energy Institute, January 2000.

2. Regulatory Guide 1.29, Rev. 2, "Seismic Design Classification," September 1978.

3. NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants," July 1981.

4. Generic Letter (GL) 88-20, "Individual Plant Examination for Severe Accident Vulnerabilities-10 CFR 50.54(f)," dated November 23, 1988.

5. Regulatory Guide 1.154, "Format and Content of Plant-Specific Pressurized Thermal Shock Safety Analysis Reports for Pressurized Water Reactors," January 1987.

6. Letter from Dennis M. Crutchfield of NRC to Charles H. Cruse of Baltimore Gas and Electric Company, dated April 4, 1996.

7. NUREG-1723, "Safety Evaluation Report Related to the License Renewal of Oconee Nuclear Stations, Units 1, 2, and 3," March 2000.

8. Letter to Douglas J. Walters, Nuclear Energy Institute, from Christopher I. Grimes, NRC, dated August 5, 1999.

9. Summary of December 8, 1999, Meeting with the Nuclear Energy Institute (NEI) on License Renewal Issue (LR) 98-12, "Consumables," Project No. 690, January 21, 2000.

10. Letter to William R. McCollum,Jr., Duke energy Corporation, from Christopher I. Grimes, NRC, dated October 8.1999.

11. Letter to Douglas J. Walters, Nuclear Energy Institute, from Christopher I. Grimes, NRC, dated August 5, 1999.

Table 2.1-1. Sample Listing of Potential Information Sources

- Verified databases (A database that is subject to administrative controls to assure and maintain the integrity of the stored data or information)
- Master equipment lists (including NSSS vendor listings)
- Q-lists
- Updated Final Safety Analysis Reports
- Piping and instrument diagrams (P&IDs)
- NRC Orders, Exemptions, or License Conditions for the facility
- Design basis documents
- General Arrangement or Structural Outline Drawings
- Probabilistic Risk Assessment summary report
- Maintenance Rule compliance documentation
- Design Basis Event evaluations (including plant-specific 10 CFR 50.59 evaluation procedures)
- Emergency operating procedures
- Docketed correspondence
- System interaction commitments
- Technical Specifications
- Environmental Qualification program documents
- Regulatory compliance reports (Including Safety Evaluation Reports)

Table 2.1-2. Specific Staff Guidance on Scoping

Issue	Guidance
Commodity groups	The applicant may also group like structures and components into commodity groups. Examples of commodity groups are pipe supports and cable trays. The basis for grouping structures and components can be determined by such characteristics as similar design, similar materials of construction, similar aging management practices, and similar environments. If the applicant uses commodity groups, the reviewer verifies that the applicant has described the basis for the groups.
Complex assemblies	There are some structures and components that, when combined, are considered a complex assembly (for example, diesel generator starting air skids or heating, ventilating, and air conditioning refrigerant units). For purposes of performing an aging management review, it is important to clearly establish the boundaries of review. An applicant should establish the boundaries for such assemblies by identifying each structure and component that makes up the complex assembly and determining whether or not each structure and component is subject to an aging management review (Ref. 1). Section 2.2.3.4.8.2.1 of NUREG-1723,"Safety Evaluation Report Related to the License Renewal of Oconee Nuclear Station, Units 1, 2, and 3," (Ref. 7) provides an example of how a diesel generator complex assembly was evaluated.
Hypothetical failures	For 10 CFR 54.4(a)(2), an applicant should consider those failures identified in (1) the documentation that makes up its CLB, (2) plant-specific operating experience, and (3) industry-wide operating experience that is specifically applicable to its facility. The applicant need not consider hypothetical failure that are not part of CLB and that have not been previously experienced. For example, an applicant should consider including: (1) the portion of a fire-protection system identified in the UFSAR that supplies water to the refueling floor that is relied upon in a design basis accident analysis as an alternate source of cooling water that can be used to mitigate the consequences from the loss of spent fuel pool cooling, (2) a non-safety-related, non-seismically qualified building whose intended function as described in the plant's CLB is to protect a tank that is relied upon as an alternate source of cooling water needed to mitigate the consequences of a DBE, and (3) a segment of non-safety-related piping identified as a Seismic II/I component in the applicant's CLB (Ref.8).
Cascading	For 10 CFR 54.4(a)(3), an applicant need not consider hypothetical failures or second-, third, or fourth-level support systems. For example, if a non-safety related diesel generator is only relied upon to remain functional to demonstrate compliance with the Commission's SBO regulations, an applicant may not need to consider: (1) an alternate/backup cooling water system, (2) the diesel generator non-seismically qualified building walls, or (3) an overhead segment of non-seismically qualified piping (in a Seismic II/I configuration). An applicant may not exclude any support system (identified by its CLB, actual plant-specific experience, industry-wide experience, as applicable, or existing engineering evaluations) that is specifically required

	for compliance with or operation within applicable Commission regulation. For example, if the analysis of a non safety-related diesel generator (required to demonstrate compliance with an applicable Commission regulation) specifically requires a second cooling system to cool the diesel generator Jacket Water Cooling System for the diesel to be operable, then both cooling systems must be included within the scope of the rule (Ref. 8).

Table 2.1-3. Specific Staff Guidance on Screening

Subject	Guidance
Consumables	Consumables may be divided into the following four categories for the purpose of license renewal: (a) packing, gaskets, component seals, and O-rings; (b) structural sealants; (c) oil, grease, and component filters; and (d) system filters, fire extinguishers, fire hoses, and air packs. The consumables in both categories (a) and (b) are considered as subcomponents and are not explicitly called out in the scoping and screening procedures. Rather, they are implicitly included at the component level (i.e., if a valve is identified as being in scope, a seal in that valve would also be in scope as a subcomponent of that valve). For category (a), the applicant would be able to exclude these subcomponents utilizing a clear basis such as the example of the ASME section III not being relied on for pressure boundary. For category (b), these subcomponents may perform functions without moving parts or change in configuration, and they are not typically replaced. It is expected that the applicant's structural aging management program will address these items with respect to an aging management review program on a plant specific basis. The consumables in categories (c) are short-lived and periodically replaced and can be excluded from an aging management review on that basis. Likewise, the consumables that fall within category (d) are typically replaced based on condition and may be excluded, on a plant-specific basis, from aging management review under 10 CFR 54.21 (a)(1)(ii). The applicant should identify the standards that are relied on for the replacement as part of the methodology description, for example, NFPA standards for fire protection equipment (Ref. 9).
Heat exchanger intended functions	Both the pressure boundary and heat transfer functions for heat exchangers should be considered, because heat transfer may be a primary safety function of these components. There may be a unique aging effect associated with different materials in the heat exchanger parts that are associated with the heat transfer function and not the pressure boundary function. The staff would expect that the programs that effectively manage aging effects of the pressure boundary function can, in conjunction with the procedures for monitoring heat exchanger performance, effectively manage aging effects applicable to the heat transfer function (Ref. 10).
Multiple functions	Structures and components may have multiple functions. The intended function(s) as delineated in 10 CFR 54.4(b) are to be reviewed for license renewal. For example, a flow orifice that is credited in a plant's accident analysis to limit flow would have two intended functions. One intended function is pressure boundary. The other intended function is to limit flow. The reviewer verifies that the applicant has considered multiple functions in identifying structure and component intended function(s).

Table 2.1-4. Typical "Passive" Structure and Component Intended Functions

Components
Provide pressure-retaining boundary so that sufficient flow at adequate pressure is delivered
Provide filtration
Provide flow restriction (throttle)
Provide structural support to safety-related components
Provide electrical connections to specified sections of an electrical circuit to deliver system voltage and current
Provide heat transfer
Structures
Provide rated fire barrier to confine or retard a fire from spreading to or from adjacent areas of the plant
Provide shelter/protection to safety-related components
Provide structural and / or functional support to safety-related equipment
Provide flood protection barrier (internal and external flooding event)
Provide pressure boundary or essentially leak tight barrier to protect public health and safety in the event of any postulated design basis events.
Provide spray shield or curbs for directing flow (e.g. safety injection flow to containment sump)
Provide shielding against radiation
Provide missile barrier (internally or externally generated)
Provide shielding against high energy line breaks
Provide structural support to nonsafety-related components whose failure could prevent satisfactory accomplishment of any of the required safety-related functions
Provide pipe whip restraint
Provide path for release of filtered and unfiltered gaseous discharge
Provide source of cooling water for plant shutdown
Provide heat sink during SBO or design basis accidents

Table 2.1-5. Typical Structures, Components, and Commodity Groups, and 10 CFR 54.21(a)(1)(I) Determinations for Integrated Plant Assessment

ITEM	CATEGORY	STRUCTURE, COMPONENT, OR COMMODITY GROUPING	STRUCTURE, COMPONENT, OR COMMODITY GROUP MEETS 10CFR 54.21(a)(1)(i) (YES/NO)
1	Structures	Category I Structures	Yes
2	Structures	Primary Containment Structure	Yes
3	Structures	Intake Structures	Yes
4	Structures	Intake Canal	Yes
5	Structures	Other Non-Category I Structures Within the Scope of License Renewal	Yes
6	Structures	Equipment Supports and Foundations	Yes
7	Structures	Structural Bellows	Yes
8	Structures	Controlled Leakage Doors	Yes
9	Structures	Penetration Seals	Yes

Table 2.1-5. Typical Structures, Components, and Commodity Groups, and 10 CFR 54.21(a)(1)(I) Determinations for Integrated Plant Assessment

ITEM	CATEGORY	STRUCTURE, COMPONENT, OR COMMODITY GROUPING	STRUCTURE, COMPONENT, OR COMMODITY GROUP MEETS 10CFR 54.21(a)(1)(i) (YES/NO)
10	Structures	Compressible Joints and Seals	Yes
11	Structures	Fuel Pool and Sump Liners	Yes
12	Structures	Concrete Curbs	Yes
13	Structures	Offgas Stack and Flue	Yes
14	Structures	Fire Barriers	Yes
15	Structures	Pipe Whip Restraints and Jet Impingement Shields	Yes
16	Structures	Electrical and Instrumentation and Control Penetration Assemblies	Yes
17	Structures	Instrumentation Racks, Frames, Panels, and Enclosures	Yes
18	Structures	Electrical Panels, Racks, Cabinets, and Other Enclosures	Yes
19	Structures	Cable Trays and Supports	Yes

Table 2.1-5. Typical Structures, Components, and Commodity Groups, and 10 CFR 54.21(a)(1)(I) Determinations for Integrated Plant Assessment

ITEM	CATEGORY	STRUCTURE, COMPONENT, OR COMMODITY GROUPING	STRUCTURE, COMPONENT, OR COMMODITY GROUP MEETS 10CFR 54.21(a)(1)(i) (YES/NO)
20	Structures	Conduit	Yes
21	Structures	Tube Track	Yes
22	Structures	Reactor Vessel Internals	Yes
23	Structures	ASME Class 1 Hangers and Supports	Yes
24	Structures	Non-ASME Class 1 Hangers and Supports	Yes
25	Structures	Snubbers	No
26	Reactor Coolant Pressure Boundary Components (Note: the components of the RCPB are defined by each plant's CLB and site specific documentation	ASME Class 1 Piping	Yes
27	Reactor Coolant Pressure Boundary Components	Reactor Vessel	Yes

Table 2.1-5. Typical Structures, Components, and Commodity Groups, and 10 CFR 54.21(a)(1)(I) Determinations for Integrated Plant Assessment

ITEM	CATEGORY	STRUCTURE, COMPONENT, OR COMMODITY GROUPING	STRUCTURE, COMPONENT, OR COMMODITY GROUP MEETS 10CFR 54.21(a)(1)(i) (YES/NO)
28	Reactor Coolant Pressure Boundary Components	Reactor Coolant Pumps	Yes (Casing)
29	Reactor Coolant Pressure Boundary Components	Control Rod Drives	No
30	Reactor Coolant Pressure Boundary Components	Control Rod Drive Housing	Yes
31	Reactor Coolant Pressure Boundary Components	Steam Generators	Yes
32	Reactor Coolant Pressure Boundary Components	Pressurizers	Yes
33	Non-Class I Piping Components	Underground Piping	Yes
34	Non-Class I Piping Components	Piping in Low Temperature Demineralized Water Service	Yes
35	Non-Class I Piping Components	Piping in High Temperature Single Phase Service	Yes
36	Non-Class I Piping Components	Piping in Multiple Phase Service	Yes

Table 2.1-5. Typical Structures, Components, and Commodity Groups, and 10 CFR 54.21(a)(1)(I) Determinations for Integrated Plant Assessment

ITEM	CATEGORY	STRUCTURE, COMPONENT, OR COMMODITY GROUPING	STRUCTURE, COMPONENT, OR COMMODITY GROUP MEETS 10CFR 54.21(a)(1)(i) (YES/NO)
37	Non-Class I Piping Components	Service Water Piping	Yes
38	Non-Class I Piping Components	Low Temperature Gas Transport Piping	Yes
39	Non-Class I Piping Components	Stainless Steel Tubing	Yes
40	Non-Class I Piping Components	Instrument Tubing	Yes
41	Non-Class I Piping Components	Expansion Joints	Yes
42	Non-Class I Piping Components	Ductwork	Yes
43	Non-Class I Piping Components	Sprinklers Heads	Yes
44	Non-Class I Piping Components	Miscellaneous Appurtenances (Includes fittings, couplings, reducers, elbows, thermowells, flanges, fasteners, welded attachments, etc.)	Yes
45	Pumps	ECCS Pumps	Yes (Casing)
46	Pumps	Service Water and Fire Pumps	Yes (Casing)

Table 2.1-5. Typical Structures, Components, and Commodity Groups, and 10 CFR 54.21(a)(1)(I) Determinations for Integrated Plant Assessment

ITEM	CATEGORY	STRUCTURE, COMPONENT, OR COMMODITY GROUPING	STRUCTURE, COMPONENT, OR COMMODITY GROUP MEETS 10CFR 54.21(a)(1)(i) (YES/NO)
47	Pumps	Lube Oil and Closed Cooling Water Pumps	Yes (Casing)
48	Pumps	Condensate Pumps	Yes (Casing)
49	Pumps	Borated Water Pumps	Yes (Casing)
50	Pumps	Emergency Service Water Pumps	Yes (Casing)
51	Pumps	Submersible Pumps	Yes (Casing)
52	Turbines	Turbine Pump Drives (excluding pumps)	Yes (Casing)
53	Turbines	Gas Turbines	Yes (Casing)
54	Turbines	Controls (Actuator and Overspeed Trip)	No
55	Engines	Fire Pump Diesel Engines	No

Table 2.1-5. Typical Structures, Components, and Commodity Groups, and 10 CFR 54.21(a)(1)(I) Determinations for Integrated Plant Assessment

ITEM	CATEGORY	STRUCTURE, COMPONENT, OR COMMODITY GROUPING	STRUCTURE, COMPONENT, OR COMMODITY GROUP MEETS 10CFR 54.21(a)(1)(i) (YES/NO)
56	Emergency Diesel Generators	Emergency Diesel Generators	No
57	Heat Exchangers	Condensers	Yes
58	Heat Exchangers	HVAC Coolers	Yes
59	Heat Exchangers	Primary Water System Heat Exchangers	Yes
60	Heat Exchangers	Treated Water System Heat Exchangers	Yes
61	Heat Exchangers	Closed Cooling Water System Heat Exchangers	Yes
62	Heat Exchangers	Lubricating Oil System Heat Exchangers	Yes
63	Heat Exchangers	Raw Water System Heat Exchangers	Yes
64	Heat Exchangers	Containment Atmospheric System Heat Exchangers	Yes
65	Motors	ECCS and Emergency Service Water Pump Motors	No

Table 2.1-5. Typical Structures, Components, and Commodity Groups, and 10 CFR 54.21(a)(1)(I) Determinations for Integrated Plant Assessment

ITEM	CATEGORY	STRUCTURE, COMPONENT, OR COMMODITY GROUPING	STRUCTURE, COMPONENT, OR COMMODITY GROUP MEETS 10CFR 54.21(a)(1)(i) (YES/NO)
66	Motors	Small Motors	No
67	Miscellaneous Process Components	Gland Seal Blower	No
68	Miscellaneous Process Components	Recombiners	The applicant shall identify the intended function and apply the IPA process to determine if the grouping is active or passive.
69	Miscellaneous Process Components	Flexible Connectors	Yes
70	Miscellaneous Process Components	Strainers	Yes
71	Miscellaneous Process Components	Rupture Disks	Yes
72	Miscellaneous Process Components	Steam Traps	Yes
73	Miscellaneous Process Components	Restricting Orifices	Yes
74	Miscellaneous Process Components	Air Compressor	No

Table 2.1-5. Typical Structures, Components, and Commodity Groups, and 10 CFR 54.21(a)(1)(I) Determinations for Integrated Plant Assessment

ITEM	CATEGORY	STRUCTURE, COMPONENT, OR COMMODITY GROUPING	STRUCTURE, COMPONENT, OR COMMODITY GROUP MEETS 10CFR 54.21(a)(1)(i) (YES/NO)
75	Electrical and I&C	Alarm Unit (e.g., fire detection devices)	No
76	Electrical and I&C	Analyzers (e.g., gas analyzers, conductivity analyzers)	No
77	Electrical and I&C	(e.g., lights, buzzers, alarms)	No
78	Electrical and I&C	Batteries	No
79	Electrical and I&C	Cables and Connections, Bus, electrical portions of Electrical and I&C Penetration Assemblies (e.g., electrical penetration assembly cables and connections, connectors, electrical splices, terminal blocks, power cables, control cables, instrument cables, insulated cables, communication cables, uninsulated ground conductors, transmission conductors, isolated-phase bus, nonsegregated-phase bus, segregated-phase bus, switchyard bus)	Yes
80	Electrical and I&C	Chargers, Converters, Inverters (e.g., converters-voltage/current, converters-voltage/pneumatic, battery chargers/inverters, motor-generator sets)	No
81	Electrical and I&C	Circuit Breakers (e.g., air circuit breakers, molded case circuit breakers, oil-filled circuit breakers)	No

Table 2.1-5. Typical Structures, Components, and Commodity Groups, and 10 CFR 54.21(a)(1)(I) Determinations for Integrated Plant Assessment

ITEM	CATEGORY	STRUCTURE, COMPONENT, OR COMMODITY GROUPING	STRUCTURE, COMPONENT, OR COMMODITY GROUP MEETS 10CFR 54.21(a)(1)(i) (YES/NO)
82	Electrical and I&C	Communication Equipment (e.g., telephones, video or audio recording or playback equipment, intercoms, computer terminals, electronic messaging, radios, transmission line traps and other power-line carrier equipment)	No
83	Electrical and I&C	Electric Heaters, Heat Tracing	No See Appendix C Reference 2
84	Electrical and I&C	Electrical Controls and Panel Internal Component Assemblies (may include internal devices such as, but not limited to, switches, breakers, indicating lights, etc.) (e.g., main control board, HVAC control board)	No
85	Electrical and I&C	Elements, RTDs, Sensors, Thermocouples, Transducers (e.g., conductivity elements, flow elements, temperature sensors, watt transducers, thermocouples, RTDs, vibration probes, amp transducers, frequency transducers, power factor transducers, speed transducers, var. transducers, vibration transducers, voltage transducers)	No Yes for a Pressure Boundary if applicable
86	Electrical and I&C	Fuses	No See Appendix C Reference 1
87	Electrical and I&C	Generators, Motors (e.g., emergency diesel generators, ECCS and emergency service water pump motors, small motors, motor-generator sets, steam turbine generators, combustion turbine generators, fan motors, pump motors, valve motors, air compressor motors)	No
88	Electrical and I&C	High-voltage Insulators (e.g., porcelain switchyard insulators, transmission line insulators)	Yes

Table 2.1-5. Typical Structures, Components, and Commodity Groups, and 10 CFR 54.21(a)(1)(I) Determinations for Integrated Plant Assessment

ITEM	CATEGORY	STRUCTURE, COMPONENT, OR COMMODITY GROUPING	STRUCTURE, COMPONENT, OR COMMODITY GROUP MEETS 10CFR 54.21(a)(1)(i) (YES/NO)
89	Electrical and I&C	High-voltage Surge Arresters (e.g., switchyard surge arresters, lightning arresters, surge suppressers, surge capacitors, protective capacitors)	No
90	Electrical and I&C	Indicators (e.g., differential pressure indicators, pressure indicators, flow indicators, level indicators, speed indicators, temperature indicators, analog indicators, digital indicators, LED bar graph indicators, LCD indicators)	No
91	Electrical and I&C	Isolators (e.g., transformer isolators, optical isolators, isolation relays, isolating transfer diodes)	No
92	Electrical and I&C	Light Bulbs (e.g., indicating lights, emergency lighting, incandescent light bulbs, fluorescent light bulbs)	No See Appendix C Reference 2
93	Electrical and I&C	Loop Controllers (e.g., differential pressure indicating controllers, flow indicating controllers, temperature controllers, controllers, speed controllers, programmable logic controller, single loop digital controller, process controllers, manual loader, selector station, hand/auto station, auto/manual station)	No
94	Electrical and I&C	Meters (e.g., ammeters, volt meters, frequency meters, var meters, watt meters, power factor meters, watt-hour meters)	No
95	Electrical and I&C	Power Supplies	No
96	Electrical and I&C	Radiation Monitors (includes radiation sensors and radiators transmitters) (e.g., area radiation monitors, process radiation monitors)	No Yes for a Pressure Boundary if applicable

Table 2.1-5. Typical Structures, Components, and Commodity Groups, and 10 CFR 54.21(a)(1)(I) Determinations for Integrated Plant Assessment

ITEM	CATEGORY	STRUCTURE, COMPONENT, OR COMMODITY GROUPING	STRUCTURE, COMPONENT, OR COMMODITY GROUP MEETS 10CFR 54.21(a)(1)(i) (YES/NO)
97	Electrical and I&C	Recorders (e.g., chart recorders, digital recorders, events recorders)	No
98	Electrical and I&C	(e.g., voltage regulators)	No
99	Electrical and I&C	Relays (e.g., protective relays, control/logic relays, auxiliary relays)	No
100	Electrical and I&C	Signal Conditioners	No
101	Electrical and I&C	Solenoid Operators	No
102	Electrical and I&C	Solid-State Devices (e.g., transistors, circuit boards, computers)	No
103	Electrical and I&C	Switches (e.g., differential pressure indicating switches, differential pressure switches, pressure indicator switches, pressure switches, flow switches, conductivity switches, level indicating switches, temperature indicating switches, temperature switches, moisture switches, position switches, vibration switches, level switches, control switches, automatic transfer switches, manual transfer switches, manual disconnect switches, current switches, limit switches, knife switches)	No

Table 2.1-5. Typical Structures, Components, and Commodity Groups, and 10 CFR 54.21(a)(1)(I) Determinations for Integrated Plant Assessment

ITEM	CATEGORY	STRUCTURE, COMPONENT, OR COMMODITY GROUPING	STRUCTURE, COMPONENT, OR COMMODITY GROUP MEETS 10CFR 54.21(a)(1)(i) (YES/NO)
104	Electrical and I&C	Switchgear, Load Centers, Motor Control Centers, Distribution Panel Internal Component Assemblies (may include internal devices such as, but not limited to, switches, breakers, indicating lights, etc.) (e.g., 4.16 kV switchgear, 480V load centers, 480V motor control centers, 250 VDC motor control centers, 6.9 kV switchgear units, 240/125V power distribution panels)	No
105	Electrical and I&C	Transformers (e.g., instrument transformers, load center transformers, small distribution transformers, large power transformers, isolation transformers, coupling capacitor voltage transformers)	No See Appendix C Reference 2
106	Electrical and I&C	Transmitters (e.g., differential pressure transmitters, pressure transmitters, flow transmitters, level transmitters, static pressure transmitters)	No
107	Electrical and I&C	Terminal Blocks	Yes
108	Valves	Hydraulic Operated Valves	Yes (Bodies)
109	Valves	Explosive Valves	Yes (Bodies)
110	Valves	Manual Valves	Yes (Bodies)
111	Valves	Small Valves	Yes (Bodies)

Table 2.1-5. Typical Structures, Components, and Commodity Groups, and 10 CFR 54.21(a)(1)(I) Determinations for Integrated Plant Assessment

ITEM	CATEGORY	STRUCTURE, COMPONENT, OR COMMODITY GROUPING	STRUCTURE, COMPONENT, OR COMMODITY GROUP MEETS 10CFR 54.21(a)(1)(i) (YES/NO)
112	Valves	Motor-Operated Valves	Yes (Bodies)
113	Valves	Air-Operated Valves	Yes (Bodies)
114	Valves	Main Steam Isolation Valves	Yes (Bodies)
115	Valves	Small Relief Valves	Yes (Bodies)
116	Valves	Check Valves	Yes (Bodies)
117	Valves	Safety Relief Valves	Yes (Bodies)
118	Valves	Dampers	No
119	Tanks	Air Accumulators	Yes
120	Tanks	Discharge Accumulators (Dampers)	Yes

Table 2.1-5. Typical Structures, Components, and Commodity Groups, and 10 CFR 54.21(a)(1)(I) Determinations for Integrated Plant Assessment

ITEM	CATEGORY	STRUCTURE, COMPONENT, OR COMMODITY GROUPING	STRUCTURE, COMPONENT, OR COMMODITY GROUP MEETS 10CFR 54.21(a)(1)(i) (YES/NO)
121	Tanks	Boron Acid Storage Tanks	Yes
122	Tanks	Above Ground Oil Tanks	Yes
123	Tanks	Underground Oil Tanks	Yes
124	Tanks	Demineralized Water Tanks	Yes
125	Tanks	Neutron Shield Tank	Yes
126	Fans	Ventilation Fans	No
127	Fans	Other Fans	No
128	Miscellaneous	Emergency Lighting	No
129	Miscellaneous	Hose Stations	Yes