C.2.9 Inspections, Tests, Analyses and Acceptance Criteria (ITAAC)

OVERVIEW:

This section provides guidance regarding the ITAAC information to be submitted in a combined license (COL) application for a nuclear power plant. Therefore, it addresses many, albeit not all, of the application options allowed by 10 CFR Part 52. Although a COL applicant is not required to conform to this guidance, its use will facilitate both the preparation of a COL application by the applicant and the timely review of the application by the NRC staff. Much of this guidance is also applicable to ITAAC for an early site permit (ESP) and standard design certification (DC).

The history of ITAAC is coupled with the history of nuclear power plant standardization, particularly with the standardization of the processes for issuing combined construction permits and combined licenses (COLs). Early in the commercial nuclear power industry, there were many first-time nuclear plant applicants, designers, and consultants, and many novel design concepts. Accordingly, the 10 CFR Part 50 licensing process was structured to allow licensing decisions to be made while design work was still in progress and to focus reviews on individual plant-specific and site-specific considerations. Construction permits were commonly issued with the understanding that open safety issues would be addressed and resolved during construction and that issuance of a construction permit did not constitute Commission approval of any design feature. Consequently, this made the operating license review very broad in scope.

A fundamental premise of 10 CFR Part 52, is that with a mature nuclear industry, it is possible to describe and evaluate nuclear power plant designs on a generic basis, and to have designs that are essentially complete in scope and level of detail prior to construction.

An “essentially complete nuclear power plant design” is defined as a design, which includes all the structures, systems and components, which can affect safe operation of the plant, except for site-specific features such as the service water intake structure and ultimate heat sink. An essentially complete design is a design that has been finalized to the point that procurement specifications and construction and installation specifications can be completed and made available for audit if it is determined that they are required for Commission review in accordance with 10 CFR 52.47(a)[1].

The intent of 10 CFR Part 52, in providing for the review and approval or certification of standard designs, is to affect early resolution of safety issues and to enhance the safety and reliability of nuclear power plants through standardization. With an “essentially complete design” and the early resolution of safety issues, it is possible to combine the attributes of a construction permit with much of those of an operating license issued under 10 CFR Part 50. Operation can then be authorized under the combined license following an opportunity for a hearing on a more limited set of issues related to whether the acceptance criteria in the combined license for the inspections, tests, and analyses are not, or will not be, met.

Applications for a COL under 10 CFR Part 52 Subpart C, may, but need not, incorporate, by reference, an ESP, a DC, or both. The scope of ITAAC development for a COL

[1] See SRM to SECY 90-377 and Statement of Consideration section of 72 FR 49352.

applicant will differ depending on which of these, if any, it references in the application. The scope of ITAAC at the DC stage is limited to, and should be consistent with, the structures, systems, and components (SSCs) that are in the certified design and ITAAC for the site-specific design features should be developed at the COL stage. The ITAAC are limited to those design features and requirements that can be verified prior to fuel loading. Therefore, items like power ascension testing that are also described in the application should be covered by license conditions in the COL.

The COL applicant must propose a complete set of ITAAC that addresses the entire facility, including ITAAC on emergency planning and physical security hardware. The type of information and the level of detail included in the ITAAC should be based on a graded approach that is commensurate with the risk- and safety-significance of the SSCs for the design.

The NRC will incorporate the complete set of facility ITAAC into the COL as a license condition to be satisfied prior to fuel load. After the Commission has made an affirmative finding that the inspections, tests, and analyses have been performed and the acceptance criteria met, in accordance with 10 CFR 52.103(g), the ITAAC do not, by virtue of their inclusion in the combined license, constitute regulatory requirements for the licensees.

Once completion of ITAAC and the supporting design information demonstrate that the facility has been properly constructed, it then becomes the function of existing programs such as the Technical Specifications, the in-service inspection and in-service testing program, the quality assurance program, the maintenance program, and other operational programs to demonstrate that the facility continues to operate in accordance with the certified design and the combined license.

The guidance in this section is focused on the ITAAC requirements for a COL application, including those COL applications that incorporate by reference an ESP, a DC, or both an ESP and DC. Table 1 provides regulatory history relevant to ITAAC.

GUIDANCE:

ITAAC Requirements

Early Site Permit:

For an ESP applicant who does not seek a Limited Work Authorization (LWA), the ITAAC requirements are limited to emergency planning (EP). Under 10 CFR 52.17(b)(3), the ESP applicant has three alternatives:

1. EP ITAAC shall be included if the application contains proposed complete and integrated emergency plans per 10 CFR 52.17(b)(2)(ii);

2. EP ITAAC may be included if the application contains the proposed major features of the emergency plans per 10 CFR 52.17(b)(2)(i); or

3. EP ITAAC are not applicable if the application is limited to addressing physical site characteristics that could pose significant impediments to the development of emergency plans per 10 CFR 52.17(b)(1).

ITAAC other than those related to EP or to an LWA (if requested) are not applicable to an ESP application. However, ITAAC may be required for work performed under an LWA on safety-related structures (e.g. engineered backfill, soil compaction, foundation base mat, and other site-related conditions).

Design Certification:

As required by 10 CFR 52.47(b)(1), an application for a standard design certification shall include the proposed ITAAC that are necessary and sufficient to provide reasonable assurance that, if the inspections, tests, and analyses are performed and the acceptance criteria met, a facility that incorporates the design certification has been constructed and will be operated in conformity with the design certification, the provisions of the Act, and the Commission's rules and regulations.

Design certification is a process whereby standard designs are approved by rulemaking. The resulting design certification rule (DCR) is included in 10 CFR Part 52 as an appendix. Each appendix incorporates by reference a generic design control document (DCD)[2] that contains the Tier 1 and Tier 2 information and generic technical specifications. Tier 1 means the portion of the design-related information contained in the generic DCD that is approved and certified. Tier 1 includes: the definitions and general provisions, design descriptions, ITAAC, significant interface requirements, and the significant site parameters. Tier 2 is the portion of the design-related information contained in the generic DCD that is approved but not certified by the DCR and is similar to the Final Safety Analyses Report (FSAR). Should an inconsistency exist between information contained in Tier 1 and Tier 2, the Tier 1 certified information takes precedent.

[2] The Commission approved the graded or two-tiered approach for a design certification application in the SRM to SECY 90-377. To date, all DCRs have incorporated by reference a DCD. An applicant however, could choose to not submit a DCD and instead submit *an FSAR with all of the information required under 10 CFR 52.47(a)*.

The design descriptions contained in the Tier 1 document are derived exclusively from the Tier 2 document. In addition, the Tier 1 design descriptions include tables and figures that are referenced in the acceptance criteria of the ITAAC. The tables and figures identify the components, equipment, system piping, building walls, and so forth that must be verified by ITAAC and provide a convenient method for managing the size of the ITAAC tables. For example, an ITAAC that requires verification of the design functions of motor operated valves (MOVs) may refer to a specific table listing those MOVs.

Design descriptions and ITAAC for a DC are provided for the structures, systems, and components that are (a) fully within scope of the standard design certification and (b) the in-scope portions of those systems that are only partially within scope of the standard design certification. Additionally per 10 CFR 52.47(a)(26), the method to be used for verification of the significant interface requirements (10 CFR 52.47(a)(25)) must be included as part of the proposed ITAAC required by 10 CFR 52.47(b)(1).

For a COL that incorporates by reference a design certification, the Tier 1 Design Descriptions serve as binding requirements for the lifetime of a facility

Combined License:

The COL application, as required by 10 CFR 52.80(a), must include the proposed inspections, tests, and analyses, including those applicable to emergency planning, that the licensee shall perform, and the acceptance criteria that are necessary and sufficient to provide reasonable assurance that, if the inspections, tests, and analyses are performed and the acceptance criteria met, the facility has been constructed and will be operated in conformity with the combined license, the provisions of the Act, and the Commission's rules and regulations.

- If the COL application references an ESP with ITAAC, as required by 10 CFR 52.80(a)(1), the ESP ITAAC must apply to those aspects of the combined license which are approved in the early site permit.

- If a COL application references a DC, as required by 10 CFR 52.80(a)(2), the ITAAC contained in the certified design must apply to those portions of the facility design, which are approved in the design certification.

A COL applicant who references a DC must comply with both the rule certifying the design and the DCD. A COL applicant or licensee that wishes to make a change to the DCD Tier 1 or Tier 2 information must do so in accordance with Section VIII of the applicable DCR.

In accordance with 10 CFR 52.47(a), the COL applicant must submit a plant specific FSAR. The FSAR is similar to the design specific DCD required by a COL applicant that incorporates by reference a DC, which includes the Tier 2 design information as modified by the addition of the site-specific information, approved Tier 2 changes, and the approved departures and or exemptions from Tier 1.

Although not a requirement, COL applicants who do not incorporate by reference a DC may also develop detailed design descriptions that include design bases, tables, and figures specifically for use and reference by the COL ITAAC. In this case, and to distinguish these design descriptions from those included in the Tier 1 document for a

certified design, the COL applicant should call its descriptions "ITAAC Design Descriptions." These ITAAC design descriptions should be separate but derived from the detailed design information contained in the FSAR portion of the COL application. The proposed COL ITAAC may reference the specific sections, tables, and figures in the ITAAC design descriptions for the design requirements and commitments to be verified. However, the Tier 1 and Tier 2 designations do not apply to a COL application that does not reference a DC because certified design information is subject to a different change process than a COL (i.e., Section VIII of the applicable appendix to 10 CFR Part 52).

The COL applicant should include the proposed ITAAC in Part 8 of the COL application. If the COL application references a DC, the COL applicant may (1) include the entirety of Tier 1 information in Part 8 of the COL application or, alternatively, (2) include the Tier 1 design descriptions, significant interface requirements, and significant site parameters in Part 2 of the COL application and provide the ITAAC in Part 8. In recognition of the finite nature of the ITAAC, 10 CFR 52.80 identifies ITAAC as additional technical information required in the application. Therefore, Part 8 of the COL application containing the ITAAC will not become part of the facility's FSAR.

Basis, Format and Content, and ITAAC Design Descriptions

ITAAC Basis:

In Section 14.3 of the FSAR, the COL applicant should provide its proposed methodology for developing ITAAC for the facility, as well as its proposed criteria for establishing the necessary and sufficient acceptance criteria in accordance with 10 CFR 52.80(a).

In a table provided in FSAR Section 14.3, applicants should provide cross-references to the important design information and parameters from key safety analyses, including the key insights and assumptions from facility-specific PRAs and severe accident analyses, to show their treatment (i.e., inclusion or exclusion) in the ITAAC. These cross-references should be sufficiently detailed to enable the COL applicant or licensee to consider whether a proposed design change impacts the treatment of these parameters in the ITAAC.

ITAAC should be constructed with simple language and avoid unnecessary detail to minimize ambiguity and assure a focus on the top-level design feature or performance characteristic to be verified. Therefore to assure a clear understanding of the intent of the ITAAC, additional information about each ITAAC may be include in FSAR Section 14.3. To aid individuals that implement ITAAC, the additional information related to ITAAC that is provided in Tier 2 Section 14.3, should be presented along with the ITAAC itself.

The additional information provided may include, but is not limited to:

- Reference to the FSAR discussion of the top-level design feature or performance characteristic to be verified by the ITAAC
- A discussion of the verification method
- Clarifying discussion of the ITAAC acceptance criteria

- Reference to or discussion of associated NRC regulatory guidance, industry codes, or industry standards
- Reference to FSAR Section 14.2 test abstract describing the preoperational test that will satisfy the ITAAC (if the ITAAC is a Preoperational Test)

ITAAC Format and Content:

The applicant should format the ITAAC in a three-column table, as shown:

ITAAC TABLE X.X.X-X

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
Xxxxxxxxxx	Yyyyyyyyyy	Zzzzzzzzzzz

The first column of the ITAAC table should identify the proposed design commitment (i.e. requirement) to be verified. This column should contain the specific text of the design information extracted from the detailed design descriptions contained in the COL FSAR. Applicants should minimize any differences in text unless intended, for example, to better conform the commitments in the design description to the ITAAC format. Any differences in text, however, should retain the principal performance characteristics and safety functions of the design feature that must be verified.

The second column of the ITAAC table should identify the proposed method (inspection, testing, analysis, or some combination of the three) by which the licensee will verify the design commitment described in column 1. In-situ testing of the as-built SSCs is the preferred method of ITAAC verification. The detailed design information in the COL FSAR should include supporting information for each ITAAC, which describes at least one method that can and should be used to satisfy the ITAAC acceptance criteria. This information describes an acceptable means (albeit not the only means) of satisfying an ITAAC.

1. Inspect or Inspections include visual observations, physical examinations or reviews of records based on visual observation or physical examination that compare the structure, system, or component condition to one or more Design Commitments. Examples include walkdowns, configuration checks, measurements of dimensions, or non-destructive examinations.

2. Test means the actuation, operation, or establishment of specified conditions to evaluate the performance or integrity of the as-built structures, systems, or components, unless explicitly stated otherwise. In-situ testing where possible, of the as-built facility, is the preferred means of ITAAC verification. Conversion or extrapolation of test results from the test conditions to the design conditions may be necessary to satisfy the ITAAC. The licensee or applicant should provide suitable justification for, and applicability of, any necessary conversions or extrapolations of test results necessary to satisfy the ITAAC.

3. Type test means a test on one or more sample components of the same type and manufacturer to qualify other components of that same type and manufacturer. A type test is not necessarily a test of the as-built components.

4. Analysis means a calculation, mathematical computation, or engineering or technical evaluation. Engineering or technical evaluations could include, but are not limited to, comparisons with operating experience or design of similar structures, systems, or components. The details of the required analysis should be specified in either the ITAAC or preferably the FSAR. The ITAAC should not reference the applicable section in the FSAR, however; the FSAR sections may reference the ITAAC. For example, Chapter 3 of the FSAR contains detailed analysis methods of seismic and environmental qualification supporting detailed design descriptions for SSCs, as well as detailed piping design information supporting additional design material applicable to multiple sections of the design.

The third column of the ITAAC table should identify the proposed specific acceptance criteria for the inspections, tests, or analyses described in column 2 that, if met, demonstrate that the licensee has met the design commitments/requirements in column 1. In general, to prevent misinterpretation, the acceptance criteria should be unambiguous, objective, and inspectable. When possible, measureable numeric performance values should be specified in the ITAAC acceptance criteria when failure to meet the stated acceptance criterion would clearly indicate a failure to properly implement the design. The numeric values selected should be those assumed in the safety analyses, rather than the design values.

Each numbered Design Commitment is entered into the Design Commitment column of the ITAAC table. Each Design Commitment occupies a single row of the ITAAC table. In the Design Commitment column the first ITAAC is numbered “1” followed by a period. Subsequent ITAAC are numbered consecutively and occupy their own row in the ITAAC table. In the “Inspections, Tests, Analyses” and “Acceptance Criteria” columns, information is entered without numbering if a single entry in these columns is sufficient to address the Design Commitment. If multiple entries are required in these columns, then each entry is numbered using the lower case Roman numeral numbering format “i., ii., iii.” Entries in the Acceptance Criteria column should align with the entries in the Inspections, Tests, and Analyses column and have corresponding numbering. For a specific DC, ITA, or AC entry, which has multiple parts, the individual parts should be listed using bullets.

The number of ITAAC Tables provided will depend on the individual applicant, whether a DC is incorporated by reference, or if the COL applicant has chosen to provide its own “ITAAC Design Descriptions.” In either case, the ITAAC incorporated into Appendix C of the combined license will be listed with a sequential ITAAC Index Number starting from 1 and going to ###.

Design Acceptance Criteria (DAC**)** are a set of prescribed limits, parameters, procedures, and attributes upon which the NRC relies, in a limited number of technical areas, in making a final safety determination to support a design certification. DAC are designated as “{{DAC}}” in the inspections, tests, and analyses column and acceptance criteria column of the ITAAC tables where appropriate. Section C.2.8, “Design Acceptance Criteria,” of this regulatory guide contains explanatory information and guidance on this topic.

The use of codes and standards in the ITAAC should be minimized, with exceptions granted on a case-by-case basis. Instead, the applicable requirements from the regulations, codes, or standards should be stated, rather than reference to the regulation, code, or standard. It is more important to provide substantive ITAAC verification criteria (even if by reference) than to leave the ITAAC acceptance criteria open for interpretation. In general, the specific code edition, volume, version, date, etc., should be specified in the FSAR rather than the ITAAC or Tier 1 of the DCD.

ITAAC Design Descriptions:

The ITAAC Design Descriptions, if provided, are derived solely from the detailed design information contained in the COL FSAR and should address the essential top level design information and performance characteristics that the staff relied upon as the bases for its safety review of the design.

The type of information and the level of detail included in the ITAAC and ITAAC design descriptions for each SSC are based on a graded approach (SECY 90-377) that is commensurate with the risk- and safety-significance of the facility's SSCs. Top-level design information selected for verification in the ITAAC should contain the principal performance characteristics and safety functions of the structures, systems, and components, their important features in various safety analyses, and their functions for defense-in-depth considerations. The COL applicant's development of proposed ITAAC, and ITAAC design descriptions, should consider the following factors:

- Carefully consider design-specific and unique features of the facility for inclusion in ITAAC.
- Ensure that the ITAAC reflect the important insights and assumptions from the Probabilistic Risk Assessment (PRA) with respect to the risk- and safety-significance of SSCs.
- Ensure that the ITAAC reflect the resolutions of technically relevant USIs and GSIs, NRC generic correspondence (such as bulletins and generic letters), and relevant industry operating experience.
- Ensure that the ITAAC are consistent with the Technical Specifications, including their bases and limited condition for operation (LCOs).
- Ensure that the ITAAC are consistent with the preoperational test program described in Section 14.2 of the FSAR since many of the preoperational tests for SSCs may be used to satisfy ITAAC. However, pre-operational tests are not to be relied on for testing in lieu of ITAAC.
- Ensure that the ITAAC emphasize testing of the as-built facility and use the definitions for testing provided in this guide.
- Ensure that the ITAAC include SSCs for which the features or functions are necessary to satisfy the NRC's regulations in 10 CFR Part 20, "Standards for Protection Against Radiation," 10 CFR Part 50, 10 CFR Part 73, "Physical Protection of Plants and Materials," or 10 CFR Part 100.
- Ensure that ITAAC include severe accident design features and plant features designed for protection against hazards.
- Ensure that ITAAC include SSCs determined to be risk-significant under the Regulatory Treatment of Nonsafety Systems (RTNSS) for Passive Advanced Light Water Reactors.

The NRC staff is particularly interested in ensuring that the ITAAC adequately consider the assumptions and insights from key safety and integrated plant safety analyses in the FSAR, where plant performance is dependent on contributions from multiple systems of the facility design. Addressing these assumptions and insights in ITAAC ensures that the as-built facility preserves the integrity of the fundamental analyses for the facility design. These analyses include flooding, overpressure protection, containment, core cooling, fire protection, transients, ATWS, steam generator tube rupture (PWRs only), radiological concerns, USIs/GSIs, TMI Action Plan items, or other key analyses specified by the staff.

The applicant should consult Regulatory Issue Summary (RIS) 2008-05 Revision 1 for lessons learned with regard to improving the ITAAC. Additionally, more specific and detailed ITAAC guidance may be found in the Standard Review Plan, NUREG 0800. SRP Section 14.3, which provides introductory and general ITAAC guidance and should be used in conjunction with the following associated SRP sections that have been organized in accordance with the primary review responsibilities of the NRC's technical staff branches:

SRP Section 14.3.1	Site Parameters Inspections, Tests, Analyses and Acceptance Criteria
SRP Section 14.3.2	Structural and Systems Engineering Inspections, Tests, Analyses and Acceptance Criteria
SRP Section 14.3.3	Piping Systems and Components Inspections, Tests, Analyses and Acceptance Criteria
SRP Section 14.3.4	Reactor Systems Inspections, Tests, Analyses and Acceptance Criteria
SRP Section 14.3.5	Instrumentation and Controls Inspections, Tests, Analyses and Acceptance Criteria
SRP Section 14.3.6	Electrical Systems Inspections, Tests, Analyses and Acceptance Criteria
SRP Section 14.3.7	Plant Systems Inspections, Tests, Analyses and Acceptance Criteria
SRP Section 14.3.8	Radiation Protection Inspections, Tests, Analyses and Acceptance Criteria
SRP Section 14.3.9	Human Factors Engineering Inspections, Tests, Analyses and Acceptance Criteria
SRP Section 14.3.10	Emergency Planning Inspections, Tests, Analyses and Acceptance Criteria
SRP Section 14.3.11	Containment Systems Inspections, Tests, Analyses and Acceptance Criteria
SRP Section 14.3.12	Physical Security Hardware Inspections, Tests, Analyses and Acceptance Criteria
SRP Section 19.3	Regulatory Treatment of Nonsafety Systems for Passive Advanced Light Water Reactors

TABLE 1: REGULATORY HISTORY[3]

SECY or SRM Number	SECY Title / SECY Content
SECY-90-016 & SRM-90-016	Title: Evolutionary Light Water Reactor (LWR) Certification Issues and Their Relationship to Current Regulatory Requirements Content: SECY-90-016 does not directly address ITAAC. However, it does provide policy decisions on 15 issues considered fundamental to agency decisions on the acceptability of evolutionary ALWR designs. The issues and policy contained in SECY-90-016 were summarized in Part I of the attachment to SECY-93-087.
SECY-90-241 & SRM-90-241	Title: Level of Detail Required for Design Certification Under Part 52 Content: SECY-90-241 presents options for Commission consideration regarding the implementation of the provisions of 10 CFR Part 52 that address the level of design detail.
SECY-90-377 & SRM-90-377	Title: Requirements for Design Certification Under 10 CFR Part 52 Content: SECY-90-377 provides recommendations to the Commission regarding (1) the level of detail required for an essentially complete nuclear power plant design for design certification, and for a combined license under 10 CFR Part 52, and (2) the use of the industry's proposed two-tier approach to design certification.
SECY-91-178 & SRM-91-178	Title: Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) for Design Certifications and Combined Licenses Content: SECY-91-178 describes how the ITAAC for design certification, the ITAAC associated with site-specific design information, and certain Tier 2 information could constitute a verification program to be implemented by the combined license holder. The form and content of the ITAAC document is proposed with an example. The SECY also describes how the successful completion of the ITAAC requirements and any other acceptance criteria in the combined license will constitute the basis for the NRC's determination to allow operation of the facility.
SECY-91-210 & SRM-91-210	Title: Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Requirements for Design Review and Issuance of a Final Design Approval (FDA) Content: SECY-91-210 requests Commission guidance on a policy matter related to an industry proposal that would allow the NRC staff to issue standardized plant final design approvals (FDAs) prior to final staff approval of the proposed ITAAC.
SECY-92-053	Title: Use of Design Acceptance Criteria During 10 CFR Part 52 Design Certification Reviews Content: SECY-92-053 addresses design acceptance criteria (DAC) for pipe stress analyses, radiation shielding and airborne concentrations, instrumentation and control systems, and control room design details.

[3] Excerpt from NEI 15-02 Draft A of Revision 0, *Industry Guideline for The Development of Tier 1 and ITAAC Under 10 CFR Part 52* (*ML15147A672*) submitted to NRC for review and discussion on 5/27/15 (ML15147A671).

SECY or SRM Number	SECY Title / SECY Content
SECY-92-196	Title: Development of Design Acceptance Criteria (DAC) for the Advanced Boiling Water Reactor (ABWR) Content: SECY-92-196 addresses the proposed use of DAC as an approach to the design review and resulting design certification for the GE ABWR to resolve the difficulties being experienced in obtaining detailed design information for selected areas of the plant. Enclosure 1 is a draft of the staff's final Safety Evaluation Report on the radiation protection and airborne concentration DAC area. Enclosure 2 is a draft of the staff's final Safety Evaluation Report on ~~of~~ the piping design DAC area.
SECY-92-214	Title: Development of Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) for Design Certifications Content: SECY-92-214 addresses issues identified in SECY-91-178, "Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) for Design Certifications and Combined Licenses," and SECY-91-210, "Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Requirements for Design Review and Issuance of a Final Design Approval (FDA)."
SECY-92-287, SECY-92-287A & SRM-92-287 / 287A	Title: Form and Content for a Design Certification Rule Content: SECY-92-287 proposed a format for a design certification rule for standardized plant designs. The SECY proposed that Tier 1 is the portion of the design-related information contained in the DCD that constitutes the certified standard design. SECY-92-287A addresses apparent inconsistencies between the staff's proposed change process for Tier 2 design information in SECY-92-287, and the Commission's SRM on SECY-90-377, "Requirements for Design Certification under 10 CFR Part 52."
SECY-92-294	Title: Acceptance Review of the Westinghouse Electric Corporation's Application for Final Design Approval and Design Certification for the AP600 Design Content: SECY-92-294 addresses that in order for the NRC staff to complete its review of an application for an FDA/DC, a complete set of ITAAC must be submitted with the application.
SECY-92-299	Title: Development of Design Acceptance Criteria (DAC) for the Advanced Boiling Water Reactor (ABWR) in the Areas of Instrumentation and Controls (I&C) and Control Room Design Content: SECY-92-299 addresses Development of DAC for the ABWR in the areas of I&C and control room design.
SECY-92-327	Title: Reviews of Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) for the General Electric (GE) Advanced Boiling Water Reactor (ABWR) Content: SECY-92-327 presents the results of the "Greybeard" Committee Review of the 10 CFR 52 licensing process for the GE ABWR. This review also provided comments relating to sufficient and appropriate scope and level of detail for the Tier 1 design certification process (Design Description and ITAAC).

SECY or SRM Number	SECY Title / SECY Content
SECY-93-087 & SRM-93-087	Title: Policy, Technical, and Licensing Issues Pertaining to Evolutionary and Advanced Light-Water Reactor (ALWR) Designs Content: SECY-93-087 contains the NRC staff position on 42 technical and policy issues pertaining to either evolutionary LWRs, passive LWRs, or both. The Commission's SRM response enabled the NRC staff to proceed with the final design approval and the design certification review of the GE Advanced Boiling Water Reactor (ABWR) and ABB-CE System 80+ LWR designs. A cross-reference between the 42 issues and associated commission papers is provided. Section II.L of the SECY-93-087 directly addresses ITAAC by identifying seven SECYs issued in 1991 and 1992 related to ITAAC for the GE ABWR. SECY-93-087 also directly addresses ITAAC for leak-before-break analysis (LBB), control room habitability and the design reliability assurance program (D-RAP).
SECY-94-084 & SRM-94-084	Title: Policy and Technical Issues Associated with the Regulatory Treatment of Non-Safety Systems in Passive Plant Designs Content: SECY-94-084 provided the NRC staff recommendations for eight issues pertaining to the regulatory treatment of nonsafety systems in passive advanced light water designs. The SECY also addressed ITAAC for control room habitability and the design reliability assurance program (D-RAP).
SECY-95-132 & SRM-95-132	Title: Policy and Technical Issues Associated with the Regulatory Treatment of Non-Safety Systems (RTNSS) in Passive Plant Designs (SECY-94-084) Content: SECY-95-132 is a response to the Commission's SRM on SECY-94-084. SECY-95-132 provides certain guidance and positions for ensuring consistent and complete treatment of those systems that might be classified as nonsafety-related by the designer or applicant but are important to safety or otherwise provide defense-in-depth functions. The SECY also addressed ITAAC for control room habitability and the design reliability assurance program (D-RAP).
N/A	Title: Consolidation of SECY-94-084 and SECY-95-132, Memo from Crutchfield to NRC Docket File, dated July 24, 1995 Content: This memorandum completes the action directed by SRM-95-132 and consolidates the approved RTNSS policy and technical positions into one, versus three, documents for convenience of reference.
SECY-02-0059	Title: Use of Design Acceptance Criteria for the AP1000 Standard Plant Design Content: SECY-02-0059 addressees design acceptance criteria (DAC) used in the AP1000 standard plant design.
SECY-02-0067 & SRM-02-0067	Title: Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) for Operational Programs (Programmatic ITAAC) Content: SECY-02-0067 recommended ITAAC for operational programs required by regulations such as training. In its SRM, the Commission directed that (with the exception of ITAAC required on emergency planning), ITAAC for a program should not be necessary if the program and its implementation are fully described in the application and found to be acceptable by the NRC at the COL stage.

SECY or SRM Number	SECY Title / SECY Content
SECY-05-0197 & SRM-05-0197	Title: Review of Operational Programs in a Combined License Application and Generic Emergency Planning Inspections, Tests, Analyses, and Acceptance Criteria Content: SECY-05-0197 allows the use of the generic emergency planning ITAAC as described in Attachment 2 of SECY-05-0197.