



POLICY ISSUE
(Notation Vote)

September 10, 1992

SECY-92-314

For: The Commissioners

From: James M. Taylor
Executive Director for Operations

Subject: CURRENT LICENSING BASIS FOR OPERATING PLANTS

Purpose: To respond to Commission staff requirements memoranda (SRM) regarding compiling the current licensing basis (CLB) and determining the industry's methods for updating the final safety analysis reports (FSARs).

Summary: On November 29, 1991, the Commission requested information and recommendations from the staff concerning compilation of the CLB and current industry practices in updating the FSAR. To ensure that design changes and modifications, safety evaluations, and operability determinations are properly carried out, the licensee must be able to retrieve docketed correspondence on a system or topic that might contain CLB information, find the CLB within the documents, and use the CLB effectively. The staff will use its regulatory oversight programs to ensure licensees are preserving the underlying safety interest of the CLB.

No licensee has volunteered to compile their CLB, although two licensees have volunteered to demonstrate the adequacy of their document search and retrieval systems. As a result, the staff recommends ending the program for volunteers to compile the CLB. The staff also recommends that compilation of the CLB within a single document not be required and that the interpretation of the FSAR update rule should not be revised at this time to include the entire CLB. The staff will evaluate the need for revisions to

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current regulations to ensure that the processes for effective management of the CLB, the FSAR, design basis, docketed correspondence, and plant records are complete and clear.

Background:

Responding to the Commission's direction, the staff issued Generic Letter (GL) 92-03, "Compilation of the Current Licensing Basis: Request for Voluntary Participation in a Pilot Program," March 19, 1992. The staff also conducted audits of the FSAR on specific issues (e.g., anticipated transient without scram (ATWS), Three Mile Island (TMI) requirements) at 14 sites to determine the way in which licensees update their FSARs and the relationship between the updated FSAR and the CLB. Enclosure 1 is a report on these audits, and Enclosure 2 is a summary of a 2-day workshop for representatives of the utilities. Enclosure 3 is the definition of CLB contained in 10 CFR 54.3.

Discussion:

The following information responds to the specific requests and direction in the SRM of November 29, 1991:

Item 1

Solicit industry participants in a pilot program in which a small number of representative volunteer-licensees would compile their CLB and advise the NRC on the advantages and disadvantages of such an effort.

Assess the usefulness of the compiled CLBs for the licensees' operations and the NRC's regulation of those plants.

Make recommendations to the Commission on the usefulness of the CLB compilation for all operating plants.

To bound the pilot program, the staff needed definitions for both "CLB" and "compilation." The definition of CLB in 10 CFR 54.3, which applies only to license renewal, was used to bound the scope of the CLB for the pilot program. CLB is mentioned in 10 CFR 50.54(f); however, there is currently no definition of CLB in 10 CFR Part 50. Defining CLB for 10 CFR Part 50 will be part of a coordinated evaluation of possible rule changes discussed later in this paper. In GL 92-03, the staff defined "compilation" as a single set of documents in one location or a system that references documents that can be retrieved easily from several locations.

Either a single set of documents in one location containing and identifying all the CLB or a system that references such documents for the plant would require a large initial investment of resources and time to research the complete docket and find all the CLB. This single set of documents or system that references such documents will be referred to as the CLB document. For the CLB document to be effective,

it must have a complete system of cross references and the licensee's staff must be able to adequately use it. In the long term, this CLB document might lose its effectiveness unless the staff maintaining it could find the CLB within new correspondence, extract it and appropriately file it within the CLB document so that it could be retrieved when needed. No licensee has volunteered for this type of compilation. However, Southern California Edison and Baltimore Gas and Electric have volunteered to demonstrate the adequacy of their document search and retrieval systems.

From the audit, the staff found that most licensees have recognized the benefits that could be obtained from a well managed CLB. The industry seeks to improve its management of the CLB by improving the various processes for retrieving the documents containing the CLB, finding the CLB within the documents, and using the CLB effectively. The staff refers to these processes collectively as a CLB process.

The difference between the licensees' CLB process and the single CLB document is that the licensees use the CLB process to maintain the documents containing the CLB (i.e., the docket) and extract the CLB when needed. However, to establish the CLB document, the licensee would need to extract the CLB from or identify the CLB within all documents before finding a need.

Efficient and effective management of the CLB process will benefit the licensee and the NRC by:

- promoting plant safety by enhancing the licensee's ability to resolve operability issues and concerns and to prepare corrective actions and by ensuring maintenance and modifications to the facility and its programs are made within the bounds of the CLB.
- establishing a common framework for interaction between the industry and the NRC on safety issues, thereby optimizing regulatory oversight, responses to events, and routine inspection and reviews, and increasing NRC's confidence in the licensee's capability to preserve the safety basis of the plant; and
- conserving the licensee's and the NRC's resources.

The large volume of documents that contain the CLB, including NRC requirements and the licensee's commitments to the NRC, also contain general information that is not in the CLB. All audited licensees appeared to be able to retrieve documents containing the CLB for specific issues, such as ATWS, because a separate subject file is usually maintained; however, their ability to determine which documents contain the CLB pertinent to a specific modification of a design,

component, or program varies according to the sophistication of their document retrieval methods and their ability to find commitments within those documents. The document retrieval methods can be grouped in two distinct but acceptable ways, each with its advantages and disadvantages.

One method consists of maintaining paper files that are searched manually. This method may include limited text (synopsis) electronic search systems such as NUDOCs, which primarily support the manual search process. The licensee's staff must expend much effort retrieving the CLB for a particular application, since it must store, track, search, and reference large volumes of documents for which it has few or no cross references. This method requires a large staff to be effective.

The second method consists of maintaining electronic or laser disk storage systems containing all docketed correspondence, the FSAR, and, in some cases, the design basis documents (DBDs). The documents are stored electronically, which enables the licensee to maintain central control of data, speed access, and speed searches for the specific CLB. Most licensees in the FSAR audit and the CLB Workshop are using computer information management systems for document retrieval to some degree. Although the licensees using the second method need fewer staff, the staff must be skilled in the proper use of search capabilities to ensure the search is valid and thorough.

Once the documents are retrieved, the licensee must find the licensing basis within the documents. The staff found that various members of the licensees' organizations differ over the interpretation of the definition of "commitment." During the audits and the workshop, various licensees stated that their ability to determine which statements constitute a "commitment" is limited by the lack of a clear definition and that additional guidance would assist in applying that definition.

To complete the CLB process, the licensee must effectively use the portions of the CLB that it has found. In conducting the FSAR audit, the staff found indications of insufficient procedural requirements to ensure the CLB and the CLB process are used when implementing design changes and modifications, conducting safety evaluations, and determining operability.

The staff recommends ending the formal pilot program because the pilot has not attracted any volunteers to compile their CLB. The staff does not recommend a new requirement that would result in CLB compilation for all plants. The licensee's CLB process can be acceptable to the NRC with proper attention to the vulnerabilities of the methods used. The staff will continue to encourage licensees to improve

the processes by which they retrieve, find and use the CLB and will support any licensee's improvements as may be appropriate. NRR expects to gain sufficient knowledge from these efforts to write guidance for our activities to oversee the acceptability of CLB control and use.

Item 2

Determine how licensees are responding to the requirement in 10 CFR 50.71 for annual updates to their FSARs to ensure that the information included in the FSAR contains the latest material developed.

Determine whether and how the annual updates to the FSAR fall short of describing the licensee's CLB.

Explore the option and the advantages and disadvantages of revising the interpretation currently given to 10 CFR 50.71 to include the CLB.

As allowed by the update rule, 10 CFR 50.71(e), most licensees conduct updates annually and take up to 6 months before revising the available paper copies of the FSAR accordingly. The current annual update requirements allow the docketed FSAR to be as much as 18 months out of date. A proposed rule change currently under consideration to extend the update interval to once every refueling outage would result in the docketed FSAR being as much as 30 months out of date. Some of the licensees recognize a need for more timely updates so that the document is more useful to their staff. The licensees who maintain the FSAR in an electronic format for easy access and updates are beginning to make electronic copies available to their staff in lieu of continually printing paper updates to the docketed FSAR.

The statement of considerations published with the update rule in 1980 clearly defined the updated final safety analysis report (UFSAR) as containing or referencing all the new analyses the Commission required or requested of the licensees. However, the update rule states that the FSAR is to be revised to include "the effects of" all new analyses and modifications made to the plant as described in the FSAR. Most of the licensees audited have interpreted "effects of" to mean that the update need only include those changes that would create error in the existing FSAR. The licensees sometimes did more than merely correct errors, but included considerably less detail than was included in the analyses submitted to the NRC and usually did not include the new licensing basis. When new information is added, it is based on the licensee's judgement of significance and usually includes no greater detail than was included in the original operating license (OL) FSAR, which varies according to the year of issuance. Any references were usually to the NRC's initiating document, such as a generic letter or a new

rule, and not to the licensee's correspondence containing the analyses or commitments.

During the audits, the staff found that the FSARs, at the time of licensing, usually contain most of the plant-specific design basis as defined by 10 CFR 50.2. However, 10 CFR 50.71(e) does not include a specific reference to 10 CFR 50.2 and most of the new design bases and commitments made to the NRC after licensing to address generic letters, bulletins, enforcement actions, and license event reports (LERs) are not included in the FSARs.

Capturing all the analyses and CLB commitments in the FSAR would make the FSAR difficult to manage. Alternatively, referencing in the FSAR the documents containing the CLB may not improve the ability of the licensee to find or retrieve pertinent correspondence. Extracting the CLB from the correspondence and then adding it to the sections of the FSAR where appropriate would be an expensive effort for licensees and would yield little safety benefit over current retrieval systems used by most licensees.

The staff does not believe that the FSAR update rule as written can be interpreted to require that the FSAR include all the elements of the CLB. Moreover, current regulations do not ensure that the FSAR references all of the design bases (10 CFR 50.2) and do not provide a regulatory means to modify all of the elements (e.g., letter commitments) of the CLB. The staff will conduct a coordinated evaluation of possible revisions to the change rule (10 CFR 50.59) and the update rule (10 CFR 50.71(e)) to ensure that the FSAR, design basis documentation, docketed correspondence, and plant records are complete and to verify that the processes for controlling and using the CLB are clear.

FOUR ISSUES RELATED TO THE COMMISSION'S QUESTIONS

1. No clear process is defined for making changes to the CLB (licensee commitments) that are not included in the FSAR

The licensee may make changes to the facility as described in the FSAR in accordance with 10 CFR 50.59. However, the NRC has not issued regulatory guidelines for changes to the CLB not contained in the UFSAR.

The NRC staff is not interested in revising 10 CFR 50.71(e) to include the entire CLB or to subject every change of a licensee's commitments to the requirements of 10 CFR 50.59. However, the staff is concerned that the licensees may not be consistent in controlling changes to those portions of the CLB outside of the FSAR.

If commitments are to be allowed to remain outside the FSAR, a change process must be devised and required of licensees

to ensure the underlying safety interest of the commitment is preserved. Accordingly, the staff plans to emphasize this matter in working with industry on developing guidance for implementing the requirements of 10 CFR 50.59 and on developing recommendations for a requirement (rule or rule change) to establish a change process for those portions of the CLB that may remain outside the FSAR. This change process, including reporting and approvals, must be consistent with the category of information and its safety significance. The staff will include this issue in the rule change evaluation.

2. No clear understanding exists for "design bases" in terms of its scope and its relationship to the CLB

During the CLB workshop, the staff found confusion among the licensees over "design bases" as defined by 10 CFR 50.2. This led to many questions on the scope of the term and its relationship to the CLB. The scope of design basis was discussed extensively in the context of design basis reconstitution. In NUREG-1397, "An Assessment of Design Control Practices and Design Reconstitution Programs in the Nuclear Power Industry," the staff defined a new term, engineering design bases, specifically for NUREG-1397. As stated in NUREG-1397, "engineering design bases are not limited to design features or considerations that are necessary to satisfy regulatory requirements." However, a definition of CLB satisfying regulatory requirements for operating reactors would be limited to plant-specific design basis information defined in 10 CFR 50.2. The industry has issued additional guidance on the scope of the design bases in conjunction with the continuing efforts to reconstitute the design bases; see NUMARC 90-12, "Design Basis Program Guidelines." The staff will continue to work with industry to ensure the design information is adequate and available.

3. No industry-wide agreement exists on a definition of CLB (i.e. licensee commitments) for operating reactors

There is no agreement throughout the industry on the interpretation of the definition of "commitment" in 10 CFR 54.3. During the CLB workshop, the industry discussed continuing initiatives to define "commitment". Some licensees see the separation of the information into licensing basis commitments and the details describing the implementation of the commitment as confusing at best. The staff will continue its efforts with industry to better define "commitment" for the CLB and consider this issue in evaluating any rule changes.

4. Accuracy of the docket with respect to the CLB

As a result of the differing interpretations and the lack of a clearly defined process for making changes to commitments

As a result of the differing interpretations and the lack of a clearly defined process for making changes to commitments outside the scope of 10 CFR 50.59, some licensees have not docketed changes made to some licensing basis commitments. This was a common conclusion by the NRC and the industry at the CLB workshop. The staff will address this issue in its continuing efforts with industry to develop guidance for implementing the requirements of 10 CFR 50.59 and will consider this issue in evaluating any rule changes.

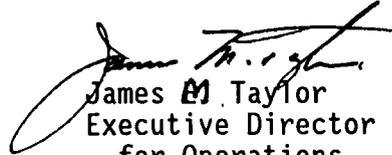
Followup Actions: In responding to the SRM, the staff has found that there is no definition of the CLB for operating reactors and no clear understanding of design bases and commitments in the CLB. Additionally, the change rule (10 CFR 50.59) applies only to the facility and procedures as described in the FSAR and to tests or experiments not described in the FSAR. Therefore, there is no requirement to ensure adequate process control of changes to commitments and design bases (10 CFR 50.2) that are not contained in the FSAR. Although the Design Basis Reconstitution Program contains engineering design bases that includes design bases (10 CFR 50.2), it is also not subject to the change rule. As a result of these findings, the staff will

1. work to define CLB for operating reactors
2. work to clarify the process for changing the FSAR and the CLB
3. work to clarify the definition of commitment and design bases in the CLB
4. increase emphasis on ensuring that licensee commitments on the docket are appropriately changed and that the changes are reflected on the docket
5. evaluate proposed changes to the following rules to ensure that the FSAR, design basis documentation, docketed correspondence, and plant records are complete and that the processes for controlling and using the CLB are clear.
 - a. The rule for FSAR updates (10 CFR 50.71(e))
 - b. The change rule (10 CFR 50.59)
 - c. "Definitions," 10 CFR 50.2

The evaluation will include a regulatory and cost benefit analysis to justify the impact to both the NRC and the industry.

Recommendations: That the Commission

1. end the formal pilot program for compiling of the CLB
2. not require compilation of the CLB
3. not revise the interpretation of 10 CFR 50.71 to include the entire CLB at this time


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Enclosure 1: FSAR Audit
Enclosure 2: Workshop
Enclosure 3: Definition of CLB

Commissioners' comments or consent should be provided directly to SECY by c.o.b. Friday, September 25, 1992.

Commission Staff Office comments, if any, should be submitted to the Commissioners NLT September 18, 1992, with an information copy to SECY. If the paper is of such a nature that it requires additional review and comment, the Commissioners and the Secretariat should be apprised of when comments may be expected.

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Audit of Fourteen PlantsBACKGROUND

In November 1991, the Commission directed the staff (1) to determine how licensees are responding to the requirement in 10 CFR 50.71 for annual updates to the final safety analysis report (FSAR), (2) to ensure that the FSAR contains the latest material, and (3) to determine whether and how the annual updates to the FSAR fall short of describing the licensees' current licensing basis (CLB). The staff used the definition of CLB in Section 54.3 (see Enclosure 3) in its evaluation.

The staff obtained this information by visiting 14 licensees that represented a cross section of the industry. The plants visited were licensed between 1970 and 1987 and included plants of all reactor vendor types and from all regions, plants having computer systems for tracking commitments, and plants lacking such systems. The Attachment lists the plants audited and their profiles.

The staff visited each site and discussed plant-specific programs for updating the FSAR by examining, with the licensee, the resolution of selected issues through the update process. The licensee discussed its update process with the staff, and the staff audited each of the selected issues to confirm the overall discussions. The staff also observed computer systems used to track commitments, to search data for CLB information, or to store the FSAR for easy update, search, and retrieval.

The staff selected up to five of the following issues for each licensee:

automatic actuation of shunt trip attachment (W, B&W), GL 83-28

ATWS rule, 10 CFR 50.62

reliability of air systems, GL 88-14

safety parameter display systems, GL 89-06

instrumentation for inadequate core cooling, NUREG-0737

improved accident monitoring, Regulatory Guide 1.97

The issues expanded or further defined the licensing basis of the plants and required facility modifications or new systems. The staff did not focus on the technical adequacy of the issues but sought to understand the licensee's methodology and process for updating the FSAR and the extent to which the licensee incorporated or referenced the analyses from the issues in its updated FSARs (UFSARs).

AUDIT FINDINGS

The staff found that FSAR updates for the issues audited contain or reference only a small portion of the licensing basis added after 1980. The staff found that this resulted from the licensee's interpretations of 10 CFR 50.71e,

which states that the FSAR is to be revised to include "the effects of" all new analyses and modifications made to the plant as described by the FSAR. Most of the audited licensees interpreted "effects of" to mean that the update need include only changes that would create error in the existing FSAR. In the Statement of Considerations supporting 10 CFR 50.71(e), the Commission stated that "New analyses...may be incorporated...within the FSAR." These licensees interpreted this section to mean that if new analyses may be incorporated, they may also not be incorporated. The staff found that licensees seldom add entirely new information to the FSAR. The licensee adds new information upon determining its significance and usually includes no greater detail than was included for the original license. None of the audited licensees' updates included the full text of analyses or reference to all licensee correspondence containing the analyses. Any references included were usually to the NRC's initiating document such as a generic letter or new rule. Some partial updates of the FSAR included more than corrections for errors, but less than the analyses submitted to the NRC, and usually did not include the new licensing basis.

The staff found that the design basis as defined by 10 CFR 50.2 is not included in the UFSAR from analyses performed after 1980. This omission appears inconsistent with the definition of CLB in 10 CFR 54.3, where plant-specific design basis is that which is located in the most recent UFSAR.

The UFSAR is used primarily by the engineering staff for conducting design modifications and the related safety evaluations required by 10 CFR 50.59 to determine if it must obtain the NRC's approval before conducting tests or experiments; making plant design modifications; issuing licensing correspondence to support licensing amendments; and updating the FSAR as required in 10 CFR 50.71(e). Some licensees report using the FSAR for operability determinations, although the audit did not focus on this use. None of the licensees reported using the FSAR as a single document for any process, but each reported using the FSAR in conjunction with docketed correspondence, design basis documents, plant commitment tracking systems, and plant records. The licensees manage this information manually and, in varying degrees, by computer.

Some of the audited licensees reported that the procedures for the design change process include specific requirements to search the FSAR and docketed correspondence files for the applicable CLB. However, one of the audited licensees with a limited search capability did not have such requirements and relies entirely on the training and experience of its staff. This and other licensees with limited search capabilities and procedures may unknowingly modify the licensing basis, thereby compromising the CLB's underlying role in the safe operation of the plant.

Most licensees recognized that retrieval of the current licensing basis must include searches of both the FSAR and docketed correspondence. This creates additional questions about the validity of the search method, the thoroughness of the search, the recognition of the differences between the CLB and the design implementation details, and the access of licensee staff to the search method (especially computer systems), training, and the adequacy of procedures to ensure a proper search on the complete files (FSAR and docketed

correspondence). In its audit, the staff also continued to identify questions about the appropriate process by which the licensees change the various elements of the CLB: design basis as defined in 10 CFR 50.2 and commitments not contained in the FSAR.

The staff made the following general observations during the audit:

The detail included in an FSAR corresponds approximately to its size and age. The thickness of an FSAR produced by one architectural engineering firm ranged from 16 inches in 1974 to 99 inches in 1982, although the staff found no correlation between the architect-engineer and the amount of detail in an FSAR. The detail in the FSARs more than doubled from the 1970s to the 1980s.

Of the licensees audited, 85 percent have the UFSAR on searchable word processing systems, and almost all plan to upgrade to a searchable system and make it available to all site organizations.

Of the licensees audited, 80 percent update the FSAR only as needed to document the design modification and license amendment processes.

Of the licensee audited, 20 percent specifically review new rules, orders, generic letters, information notices, licensee event reports, enforcement actions, and confirmatory action letters to determine if they warrant FSAR updates. The licensees update their FSARs to incorporate information on reviews, plant modifications, and licensee amendment processes.

The audited licensee with the least dependable automated information system spent more than 2.5 times longer than the average licensee to search and retrieve the CLB for the issues audited.

CONCLUSIONS

The FSAR is not a single reference document and may be overly relied upon by some to support significant activities. Portions of the CLB are located in various documents and places, requiring the licensees to assemble this information to support the audit. The staff's concern is that the processes used to retrieve, find and use the CLB may not be adequately defined for and understood by the licensee's staff. Inadequately managing the CLB may result in a failure to preserve the underlying safety interest of the CLB.

Attachment:
UFSAR Audit

UPDATED FINAL SAFETY ANALYSIS REPORT
AUDIT
APRIL/MAY 1992

SITES AUDITED

SALEM
BEAVER VALLEY
CALVERT CLIFFS
TMI AT GPU NUCLEAR
ZION
FORT CALHOUN AT OPPD
WATERFORD
GRAND GULF
ARKANSAS AT GRAND GULF
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S&W, GIBBS, EBASCO, UE&C, AND THE LICENSEE.

WORKSHOP

The NRC held a current licensing basis (CLB) workshop on June 23 and 24, 1992, at the Holiday Inn, Crown Plaza, in Rockville, Maryland. Licensees participating in the FSAR audit and others requested the workshop to discuss the many questions about the licensing basis, updated final safety analysis reports (UFSARs), design bases, and the process for making changes to commitments. Views expressed by individuals on the topics were not taken as the licensees' or the NRC's positions unless expressly stated to be. The participants exchanged information and opinions to help the NRC form the recommendations to the Commission on the CLB and the FSAR update process.

Over 200 people attended the workshop, representing almost all utilities, NUMARC, the NRC, and numerous vendors. Along with the NRC staff, licensee representatives chaired and participated in seven panel discussions. The participants discussed the following topics.

1. Components of the Current Licensing Basis

Most of the workshop participants recognized that CLB is not a new concept; however, they did not all agree on the interpretation of the definition from 10 CFR 54.3. Most agreed that the documents containing the CLB (i.e., requirements and commitments to the NRC) can be ordered in a hierarchical fashion and that they include a large volume of information that is not in the CLB. They did not agree on a clear definition of "commitment." Some of the attendees saw the separation of the information into licensing basis commitments and details describing the implementation of the commitments as confusing at best.

The CLB definition in 10 CFR 54.3 includes only that information which is docketed and is in effect. Therefore, licensees must ensure that the docket accurately reflects the CLB. Licensees consider docketed correspondence to include portions of the CLB but questioned whether other information should be docketed that is considered a basis for licensing, such as operability decisions and justifications for continued operation. The NRC relies on much of this information, only some of which is docketed. The CLB also includes the plant-specific design basis, as defined in 10 CFR 50.2, as contained in the most recent UFSAR. In the FSAR audit (Enclosure 1), the staff established that the UFSARs do not include most of the post-licensing plant-specific changes to the design basis.

Licensees also questioned the definition of design basis in 10 CFR 50.2 for its practical application to design basis reconstitution, FSAR updates, and the processes by which a licensee may change the design basis.

2. The Significance and Use of the CLB

Participants made strong statements of opinion that compiling the CLB involves significant costs without commensurate benefit. However, they generally agreed that they benefit from retrieving and using the CLB when needed. The

form of the CLB and the process for maintaining it are not as important as the accuracy and availability of the CLB. Among other benefits noted, an efficient and effective CLB process will

- promote plant safety by
 - enhancing the licensee's ability (1) to resolve operability issues and concerns and (2) to prepare corrective actions, including interim actions that may be needed to avoid unwarranted plant shutdowns; and
 - ensuring that modifications to the facility and its programs are made with an awareness of their effect on the underlying safety interests;
- establish a common framework for interaction between the industry and the NRC on safety issues, thereby
 - optimizing regulatory oversight, responses to events, and routine inspection and reviews; and
 - increasing NRC's confidence in the licensee's capability to preserve the safety basis of the plant; and
- conserve the licensee's and the NRC's resources.

Participants asked about the NRC's needs regarding the CLB. One participant stated that the NRC inspector views the CLB as an essential starting point for inspection. The CLB is included within a large volume of documents with few cross references. Therefore, NRC inspectors and reviewers use the licensee's systems or seek the licensee's assistance in gathering desired information.

Another participant stated that, although the NRC is concerned that the CLB is maintained adequately, the licensee is responsible to meet the "contract" established by the CLB. Several participants believed the process for meeting this "contract" could be improved to simplify the license renewal process. Others saw the more immediate benefits of using the CLB in daily activities such as in evaluating changes to the plant, procedures, and programs and evaluating degraded and nonconforming conditions.

3. The Significance and Use of the USAR

Most of the participants agreed that the NRC staff relied extensively on the FSAR during the licensing process. Some stated that the licensee's staff also uses the FSAR to support daily activities such as plant design modifications and 10 CFR 50.59 reviews. Some participants stated that the level of detail in the FSAR was dictated by its use. These participants indicated that, while both the headquarters and the regional NRC staff use the FSAR, they also rely on docketed correspondence to verify the accuracy of the information.

In discussing the frequency of NRC-required FSAR updates, a few licensees recognized a need for their staff to use an FSAR that is updated frequently. These licensees typically maintain the FSAR in an electronic format for easy access and updating.

The staff learned that the scope and content of the FSARs varies widely within the industry. Thus, the licensees differ in the manner in which they apply 10 CFR 50.59 and in the level of detail included therein. To some degree, NSAC-125 serves as a standard for 10 CFR 50.59 evaluations by extending the applicability of this section to structures, systems, or components not described in the FSAR if the change to the structure, system, or component affects a larger structure, system, or component described in the FSAR. This standard directs the licensees to safety evaluation reports (SERs) and safety analysis reports (SARs) that contain the acceptability criteria for the probabilities, consequences, and margins of safety. This information is in the docketed correspondence for a facility if not located in the FSAR.

4. The Significance and Use of the Design Basis Reconstitution Efforts

The design basis document (DBD) programs defined by 10 CFR 50.2 encompass approximately 80 percent of the CLB. Most of the licensee participants recognized that the key to maximizing the benefits from the DBD programs is to make them available to their staff in a user-friendly format with managers establishing expectations and policy to ensure that they be used. Participants agreed that DBDs must be both used and useful to justify the large investment of time and money needed to produce them. Clearly written DBDs that contain an easily retrievable design basis will ensure that the licensee's staff understands the capabilities, performance parameters, and interactions of systems. This improves the modification processes, the ability to handle routine and abnormal plant conditions, the maintenance and training programs, and the regulatory oversight. The DBD effort is vital to the overall effort on the CLB.

5. Managing Changes to the CLB

Almost everyone believed that, although the CLB varies among plants, each licensee must know what it is, and manage changes to it. The CLB helps assure the NRC that operating plants will not compromise the public health and safety. The industry and the NRC need regulatory processes for making changes to the CLB that ensure the CLB continues to support the safe operation of the plant.

Some of the participants stated that the means for changing the CLB are primarily distinguished by the amount of NRC involvement: none, notification after the fact, prior notification, and prior approval. Although the licensee can not always be certain which mechanism applies, it usually determines this by categorizing the information in the CLB according to the significance of the information and its final location. The information assigned to each category differs between plants. Correctly categorizing a commitment ensures that the licensee will use an appropriate means to make each change. However, various licensees did not have clear criteria for determining the category in which to place a commitment. Some licensees found it difficult to decide whether or not to add a commitment to the FSAR if that commitment would enable control as required by 10 CFR 50.59.

Some of the participants stated that the level of detail in the UFSAR and its quality appear to determine how broadly the licensee applies 10 CFR 50.59. Some licensees appear to have gone beyond NSAC-125 guidance in applying 10 CFR 50.59 to avoid any question of compliance. They are managing changes to the

many commitments not included in the FSAR, but included in docketed correspondence with the NRC. Some were concerned that this could reduce the effectiveness of the 10 CFR 50.59 process for reviewing significant safety issues. However, the licensee could not easily use 10 CFR 50.59 to determine which issues must first be approved by the NRC if the licensee does not incorporate certain types of commitments in the FSAR. For example, commitments that define the critical functions and performance parameters of new equipment and commitments stated in NRC SERs (previously agreed to by the licensee) may require previous NRC approval if the level of safety has decreased in any fashion, but these commitments may not be incorporated in the FSAR.

6. Managing Licensee Commitments

During the discussion, one of the industry participants submitted the following definition of a commitment as adopted by the Regulatory Commitments Tracking Group:

A documented obligation, expressed or implied, made either by the licensee or through an uncontested imposition by a regulatory agency, that either establishes requirements or promises actions to be performed.

The definition covers a range of licensee actions including continuing obligations to resolve significant safety issues, simple statements to complete minor actions by specific dates, and commitments to comply with the previously established licensing basis, as is the case for most licensee event reports (LERs) and enforcement actions, or to implement by some date a new level of licensing basis to cover a deficiency. The obligation to comply or to restore compliance is a commitment lasting until compliance is reached. Thereafter, the level of compliance is part of the licensing basis and the implementation of the commitment need no longer be tracked.

Licensees are also attempting to manage the implementation of this type of commitment by combining, deleting, adding, or using other reasonable means to limit the total outstanding commitments. The staff learned that licensees have not docketed changes to some licensing basis commitments as a result of differing interpretations and a lack of a clearly defined process for changes to commitments outside the scope of 10 CFR 50.59.

The NRC initiatives in the area of commitments include the proposed final policy to establish the Integrated Scheduling Program with the voluntary Integrated Licensing Schedules. This program gives the licensees a process to make changes to commitment schedules based on safety priorities and NRC acceptance by negative consent.

7. Storing and Retrieving (Compiling) The CLB

Most licensees are integrating computer information management systems into their CLB and DBD processes. These licensees recognize accurate and timely retrievability as the key to CLB management.

The licensees appeared interested in sharing more electronic information with the NRC. The licensees generally have information configuration management

systems that are the state of the art. The NRC will begin with a limited pilot program to share electronic versions of licensing correspondence with all licensees. IRM will develop a longer term incremental program for transmissions between machines. IRM and NRR will work with licensees to establish and implement standards for electronic interface.

8. Observations

The staff observed the following during the workshop presentations and discussions:

- The industry should take additional measures to ensure that the underlying role of the CLB in safe operation of a plant is maintained.
- The definition of CLB should be clarified, specifically for the terms "commitment" and "design basis."
- The industry should take additional measures to ensure the docket accurately reflects the CLB.
- The NRC should clarify the FSAR update rule (10 CFR 50.71(e)) to address the design basis (Section 50.2) and its implications for the change process (Section 50.59).
- The NRC should issue guidance for controlling changes to commitments and other portion of the CLB not covered by 10 CFR 50.59.

Definition of CLB from 10 CFR 54.3

Current licensing basis (CLB) is the set of NRC requirements applicable to a specific plant and a licensee's written commitments for ensuring compliance with and operation within applicable NRC requirements and the plant-specific design basis (including all modifications and additions to such commitments over the life of the license) that are docketed and in effect. The CLB includes the NRC regulations contained in 10 CFR parts 2, 19, 20, 21, 30, 40, 50, 51, 54, 55, 70, 72, 73, and 100 and appendices thereto; orders; license conditions; exemptions; and technical specifications. It also includes the plant-specific design basis information defined in 10 CFR 50.2 as documented in the most recent final safety analysis report (FSAR) as required by 10 CFR 50.71 and the licensee's commitments remaining in effect that were made in docketed licensing correspondence such as licensee responses to NRC bulletins, generic letters, and enforcement actions, as well as licensee commitments documented in NRC safety evaluations or licensee event reports.