1.0 SCOPE

1.1 The purpose of this procedure is to provide a mechanism for determining whether a change to the utilization facility, Independent Spent Fuel Storage Installation (ISFSI), or their procedures can be implemented, or a test or experiment can be conducted without prior Nuclear Regulatory Commission (NRC) review and approval. This procedure also establishes responsibility for these evaluations and specifies documentation and reporting requirements. It is based upon the requirements of 10 CFR 50.59, "Changes, Tests, and Experiments," and its interpretation presented in NSAC 125, (Reference 2.4), and 10 CFR 72.48, "Changes, Tests, and Experiments."

1.2 Title 10 CFR 50.59 Changes, Tests, and Experiments (a)(1) states that:

"The holder of a license authorizing operation of a production or utilization facility may (i) make changes in the facility as described in the safety analysis report, (ii) make changes in the procedures as described in the safety analysis report, and (iii) conduct tests or experiments not described in the safety analysis report, without prior Commission approval, unless the proposed change, test, or experiment involves a change in the technical specifications incorporated in the license or an unreviewed safety question." 10 CFR 72.48 includes the same provisions for ISFSI. (Reference 2.1)

1.3 To accomplish the purpose of the regulations, 10 CFR 50.59 and 72.48 define what constitutes an unreviewed safety question and describe the requirements for documenting and reporting that a change, test, or experiment does not involve an unreviewed safety question. 10 CFR 50.59 directs that utilization facility licensees submit an application for an amendment of the license if the change, test, or experiment does involve an unreviewed safety question or a change to the Technical Specifications.

1.4 10 CFR 72.48 directs that ISFSI licensees submit an application for an amendment of the license if the change, test, or experiment does involve an unreviewed safety question, a significant increase in occupational exposure, a significant environmental impact, or a change to the license conditions.

The term "Safety Evaluation" or "SE" is used to generally refer to 50.59 and 72.48 evaluations.

1.5 Documents other than the FSAR may contain licensing basis information and NRC commitments. Changes involving these also need to be considered for safety evaluation applicability. A list of licensing basis documents containing commitments is given in Attachment A.

1.6 Additionally, as-built conditions which are found to be different than intended by the licensing basis are also considered to be "changes." Accordingly, safety evaluation applicability shall be considered when it is proposed to operate permanently in the as-built condition.

1.7 In general, maintenance activities are not required to be reviewed under this procedure. However, those maintenance activities that place the plant in a condition where it functions differently than described in the licensing basis shall have a safety evaluation. Additional guidance on the applicability of maintenance activities is given in Attachment A.

2.0 REFERENCES

2.1 10 CFR 50.59, "Changes, Tests, and Experiments"

2.2 NRC Inspection and Enforcement Manual, Part 9800, dated January 1, 1984, CFR Discussions "Changes to Facilities, Procedures, and Tests (or Experiments)"

2.3 NPD General Policy 002 (AM 5.1.1), "NRC Commitments"

2.4 NSAC 125, June 1989, "Guidelines for 10 CFR 50.59 Safety Evaluations"

2.5 Point Beach Nuclear Plant Technical Specifications (15.6.5.1.8, 15.6.5.1.9), Manager's Supervisory Staff

2.6 Point Beach Nuclear Plant Final Safety Analysis Report

2.7 Form PBF-1515, "10 CFR 59.59 Report"

2.8 NP 1.6.5, "MSS Presentation Guideline"

2.9 TS 15.6.5.2.7, "Offsite Review Committee"

2.10 TS 15.6.9.B.2, "Annual Results and Data Report"

2.11 10 CFR 72.48, "Changes, Tests, and Experiments"

2.12 ANSI N18.7-1976, "Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants"

2.13 NP 5.2.6, "FSAR Revisions"

2.14 WE to NRC Document Control Desk, VPNPD-96-031, "Reply to a Notice of Violation, Inspection Report 50-266/96002; 50-301/96002, dated May 17, 1996.

2.15 Oral Commitment to NRC at NRC Pre-Enforcement Conference, September 12, 1996, NRC Region III Headquarters, Lisle, IL.

3.0 PROCEDURE

3.1 Screening For 10 CFR 50.59 and 72.48 Applicability

3.1.1 The determination of 10 CFR 50.59 and 72.48 applicability shall be documented in Section 1 of Form PBF-1515. Additional guidance, expectations and clarification of terms can be found in NSAC 125, and Attachments A and B. (Reference 2.4, 2.15)

3.1.2 Some facility structures, systems or components (SSCs) described in the FSAR and licensing basis documents for the ISFSI, clearly do not affect the safe operation of PBNP or the ISFSI. Examples of SSCs not important to safety include the office and service buildings, miscellaneous plant systems, such as front office HVAC, normal lighting, and heating boilers. Proposed changes to these SSCs are not included in the scope of 10 CFR 50.59 or 72.48. These proposed changes may be screened as a safety evaluation not being required, with appropriate justification documented in Section 1 of Form PBF-1515.

3.1.3 Changes to SSCs not important to safety, including those not described in the FSAR, may affect or impact the capability of equipment important to safety to perform its intended function and thus require a safety evaluation. If special design considerations such as seismic qualification, missile protection, environmental qualification, flooding protection, radiation protection, and fire protection are applicable to a modification, a safety evaluation should be considered. When applying screening criteria to Level 1 or Level 2 software additions or changes, the software should be considered a configuration change, which requires a safety evaluation. In addition, guidance on maintenance activities that may require a safety evaluation is included in Attachment A.

3.1.4 Section 1.A of Form PBF-1515 is used to describe a proposed modification, procedure change, test, or experiment, including interim configurations or conditions. Interim conditions are important because changing plant configurations while work is in progress may involve an unreviewed safety question even though the change when complete may not. (Examples include: temporary jumpers, lifted leads, valve alignments, or equipment used on a temporary basis.)

3.1.5 Section 1.B of Form PBF-1515 is used to document the FSAR or VSC-24 SAR sections where the system, structure, component, procedure, test or experiment is described. If the proposed change, test, or experiment affects a description in the FSAR, an FSAR Change Request shall be prepared in accordance with NP 5.2.6 "FSAR Revisions." (Reference 2.14)

3.1.6 Section 1.C of Form PBF-1515 is used to document whether the proposed change, test, or experiment involves a Technical Specification change. If yes, the Technical Specification change must be approved by the NRC prior to implementation.

3.1.7 Section 1.C of Form PBF-1515 contains the following screening criteria for 10 CFR 50.59 and 10 CFR 72.48 used to determine whether a proposed modification, procedure change, test, or experiment is subject to an evaluation in accordance with this procedure:

a. 10 CFR 50.59 Screening:

- An SSC described in the FSAR either by text, drawing or other information, will be temporarily or permanently altered. (Refer to Step 3.1.2 for exception. This question may be answered "no" although the SSC is described in the FSAR.)

- A proposed change presents a reasonable potential for affecting the intended design, operation, function or method of function, of an SSC important to safety which is described in the FSAR. This includes proposed changes to an SSC not specifically addressed in the FSAR. This also includes interim conditions.

- A procedure described in the FSAR will be temporarily or permanently altered. Changes to procedures not explicitly described in the FSAR, but which would affect the intended design, operability, function or method of function of SSCs important to safety would be within the scope of 10 CFR 50.59. This does not include editorial corrections or format changes. Guidance on the applicability of procedures is given in Attachment A.

- A test or experiment not described in the FSAR will be performed. The intent is to require safety evaluations of tests and experiments that might affect safe operation of the plant, but were not anticipated in the FSAR. Previously evaluated periodic tests do not require safety evaluations. However, one-of-a-kind, or new, tests that measure the effectiveness of new techniques or a new system configuration that can affect systems important to safety are within the scope of 10 CFR 50.59. Post-maintenance or post-modification testing should be considered if an abnormal mode of operation is required and may be included in the modification safety analysis. Tests or experiments that do not represent a departure from normal operational modes do not require safety evaluations.

- Implementation will affect a prior documented technical commitment to the NRC. A commitment of this type would be one pertaining to the design, operability, function or method of function of SSCs important to safety. A list of licensing basis documentation containing commitments is provided in Attachment A.

b. 10 CFR 72.48 Screening For The Independent Spent Fuel Storage Installation (ISFSI)

- A system, structure or component (SSC) described in the ISFSI Licensing Basis documents, either by text, drawing, or other information, will be temporarily or permanently altered. (Refer to Step 3.1.2 for exception. This question may be answered "no" although the SSC is described in the ISFSI Licensing Basis documents.)

- A proposed change presents a reasonable potential for affecting the intended design, operation, function or method of function, of an SSC important to safety which is described in the ISFSI Licensing Basis documents. This includes proposed changes to an SSC not specifically addressed in the ISFSI Licensing Basis documents. This also includes interim conditions.

- A procedure described in the ISFSI Licensing Basis documents will be temporarily or permanently altered. Changes to procedures not explicitly described in the ISFSI Licensing Basis documents, but which would affect the intended design, operability, function or method of function of SSCs important to safety would be within the scope of 10 CFR 72.48. This does not include editorial corrections or format changes. Guidance on the applicability of procedures is given in Attachment A.

- A test or experiment is not described in the ISFSI Licensing Basis documents will be performed. The intent is to require safety evaluations of tests and experiments that might affect safe operation of the ISFSI, but were not anticipated in the ISFSI Licensing Basis documents. Previously evaluated periodic tests do not require safety evaluations. However, one-of-a-kind, or new, tests that measure the effectiveness of new techniques or a new system configuration that can affect systems important to safety are within the scope of 10 CFR 72.48. Post-maintenance or post-modification testing should be considered if an abnormal mode of operation is required and may be included in the modification analysis. Tests or experiments that do not represent a departure from normal operational modes do not require safety evaluations.

- Implementation will affect a prior documented technical commitment to the NRC. A commitment of this type would be one pertaining to the design, operation, function or method of function, of SSCs important to safety. A list of the ISFSI Licensing Basis documents is provided in Attachment A.

3.1.8 If any of the 10 CFR 50.59 screening criteria identified in Step 3.1.7 are satisfied, the proposed change to the facility, change to procedure, test, or experiment, shall be evaluated pursuant to 10 CFR 50.59 in accordance with this procedure. Use Sections 2 and 3 of Form PBF-1515 to perform and document the safety evaluation. If any of the 10 CFR 72.48 screening criteria identified in Step 3.1.7 are satisfied, the proposed change to the ISFSI, change to procedure, test, or experiment, shall be evaluated pursuant to 10 CFR 72.48 in accordance with this procedure. Use Sections 4 and 5 of Form PBF-1515 to perform and document the safety evaluation.

3.1.9 If a vendor has performed a safety evaluation for PBNP, a safety evaluation usually is accomplished by WE personnel using the vendor safety evaluation report (SER) as the primary reference. The vendor may be listed as the preparer and the WE person as reviewer on Form PBF-1515.

3.1.10 If determination of safety evaluation applicability is questionable and cannot be resolved with the additional guidance in NSAC 125 and Attachments A and B, the Regulatory Services (RES) manager, Licensing or Safety Evaluation Group (SEG) may be contacted for assistance.

3.1.11 If none of the criteria identified in Step 3.1.7 are applicable for either 50.59 or 72.48 screening, the basis for the determination that a safety evaluation is not required shall be documented by completing Section 1.D of Form PBF-1515. Section 1 shall be signed by the preparer and the reviewer as required by Step 3.4.1.

3.2 Performance of the 10 CFR 50.59 Safety Evaluation

3.2.1 The 10 CFR 50.59 safety evaluations shall be documented on Section 2 of Form PBF-1515 with attachments, as appropriate, to summarize the change, test, or experiment and to evaluate and document why an unreviewed safety question does or does not exist.

3.2.2 The safety evaluation may be prepared by the individual proposing or responsible for a modification, procedure change, test, or experiment or may be assigned to another technically competent individual. The evaluation shall be performed on the final design of a modification, procedure change, test, or experiment. If the design changes for a modification which has an approved safety evaluation, and the change places the design outside the scope of the original safety evaluation, a revision to the safety evaluation shall be performed in accordance with Step 3.5 to document the effect of this change.

3.2.3 Section 2.A of Form PBF-1515 is used to list licensing basis documents and sections where the applicable SSC, procedure, test, or experiment is described. A list of licensing basis documents is included in Attachment A.

3.2.4 An unreviewed safety question as defined in 10 CFR 50.59 applies to temporary or permanent changes to the facility, temporary or permanent changes to procedures, tests, or experiments. For the purpose of performing safety evaluations, the 10 CFR 50.59 criteria can be broken down into seven separate questions to be answered in Section 2.B of Form PBF-1515. The answer to each question shall be explained. A simple yes or no, or rephrasing the question to become a statement, is not an adequate answer. Additional guidance and expectations for performing safety evaluations is provided in Attachments A and B

3.2.5 Additional guidance on the intent of the seven questions listed below, and an explanation of phrases such as "structure, system, or component important to safety" are included in Attachment A and also may be found in NSAC 125:

a. **Will the proposed activity increase the probability of occurrence of an accident previously evaluated in the safety analysis report?**

List the accident(s) or event(s) previously evaluated in the FSAR with which the proposed change to the SSC or procedure, or the proposed test or experiment could have any possible bearing, effect, or association, and describe the bearing, effect, or association. Describe why and/or how the probability of occurrence will or will not be increased. Include any interim conditions.

b. **Will the proposed activity increase the consequences of an accident previously evaluated in the safety analysis report?**

Describe why and/or how the radiological consequences of the accident(s) or event(s) previously evaluated in the FSAR will or will not be increased. Include any interim conditions.

c. **Will the proposed activity increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the safety analysis report?**

List the malfunction(s) of equipment previously evaluated in the FSAR with which the proposed change to the SSC or procedure, or the proposed test or experiment could have any possible bearings, effect, or association, and describe the bearing, effect or association. Describe why and/or how the probability of occurrence will or will not be increased. Include any interim conditions.

d. **Will the proposed activity increase the consequences of a malfunction of equipment important to safety previously evaluated in the safety analysis report?**

Describe why and/or how the radiological consequences of the malfunction(s) previously evaluated in the FSAR will or will not be increased. Include any interim condition.

e. **Will the proposed activity create the possibility of an accident of a different type than any previously evaluated in the safety analysis report?**

List any possible accident or event that may be created as a result of the proposed activity. Describe why and/or how each accident or event is or is not of a different type than any previously evaluated in the FSAR. Include any interim conditions.

f. **Will the proposed activity create the possibility of a different type of malfunction of equipment important to safety than any previously evaluated in the safety analysis report?**

List any possible malfunction of equipment that may be created as a result of the proposed activity. Describe how and/or why each malfunction is or is not of a different type than any previously evaluated in the FSAR. Include any interim conditions.

g. **Does the proposed activity reduce the margin of safety as defined in the basis for any technical specification?**

List any Technical Specification with which the proposed change, test, or experiment has any bearing, association, or effect, and describe the bearing, association, or effect. Identify the acceptance limits which form the licensing basis for the Technical Specifications. Discuss the impact of the proposed change, test, or experiment on the acceptance limits which form the Basis for the Technical Specifications. Include any interim conditions.

3.2.6 Section 3 of Form PBF-1515 is used to document the evaluation summary. The summary should contain a brief description of the change, test, or experiment, a determination of whether an unreviewed safety question exists or TS change is required, and a basis for the determination. The summary is included in an annual report to the NRC. Therefore, the summary shall contain sufficient information as a stand-alone writeup to allow the NRC to review the change, test or experiment.

3.3 Performance of the 10 CFR 72.48 Evaluation

3.3.1 10 CFR 72.48 evaluations shall be documented on Section 4 of Form PBF-1515 with attachments, as appropriate, to summarize the change, test, or experiment and to evaluate and document why it does or does not involve an unreviewed safety question, significantly increase occupational exposure, create a significant unreviewed environmental impact, or change the license conditions as contained in the certificate of compliance.

3.3.2 The safety evaluation may be prepared by the individual proposing or responsible for a modification, procedure change, test, or experiment or may be assigned to another technically competent individual. The evaluation shall be performed on the final design of a modification, procedure change, test, or experiment. If the design changes for a modification which has an approved safety evaluation, and the change places the design outside the scope of the original safety evaluation, a revision to the safety evaluation shall be performed in accordance with Step 3.5 to document the effect of this change.

3.3.3 Section 4.A of Form PBF-1515 is used to list licensing basis documents and sections where the applicable SSC, procedure, test, or experiment is described. A list of licensing basis documents for the ISFSI is included in Attachment A.

3.3.4 An unreviewed safety question as defined in 10 CFR 72.48 applies to temporary or permanent changes to the facility, temporary or permanent changes to procedures, tests, or experiments. For the purpose of performing safety evaluations, the 10 CFR 72.48 criteria can be broken down into nine separate questions to be answered in Section 4.B of Form PBF-1515. The answer to each question shall be explained. A simple yes or no, or rephrasing the question to become a statement, is not an adequate answer. Additional guidance and expectations for performing safety evaluations is provided in Attachments A and B.

3.3.5 Additional guidance on the intent of the nine questions listed below, and an explanation of phrases such as "structure, system, or component important to safety" are included in Attachment A and also may be found in NSAC 125:

a. **Will the proposed activity increase the probability of occurrence of an accident previously evaluated in the safety analysis report?**

List the accident(s) or event(s) previously evaluated in the ISFSI Licensing Basis documents with which the proposed change to the SSC or procedure, or the proposed test or experiment could have any possible bearing, effect, or association, and describe the bearing, effect, or association. Describe why and/or how the probability of occurrence will or will not be increased. Include any interim conditions.

b. **Will the proposed activity increase the consequences of an accident previously evaluated in the safety analysis report?**

Describe why and/or how the radiological consequences of the accident(s) or event(s) previously evaluated in the ISFSI Licensing Basis documents will or will not be increased. Include any interim conditions.

c. **Will the proposed activity increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the safety analysis report?**

List the malfunction(s) of equipment previously evaluated in the ISFSI Licensing Basis documents with which the proposed change to the SSC or procedure, or the proposed test or experiment could have any possible bearings, effect, or association, and describe the bearing, effect or association. Describe why and/or how the probability of occurrence will or will not be increased. Include any interim conditions.

d. **Will the proposed activity increase the consequences of a malfunction of equipment important to safety previously evaluated in the safety analysis report?**

Describe why and/or how the radiological consequences of the malfunction(s) previously evaluated in the ISFSI Licensing Basis documents will or will not be increased. Include any interim condition.

e. **Will the proposed activity create the possibility of an accident of a different type than any previously evaluated in the safety analysis report?**

List any possible accident or event that may be created as a result of the proposed activity. Describe why and/or how each accident or event is or is not of a different type than any previously evaluated in the ISFSI Licensing Basis documents. Include any interim conditions.

f. **Will the proposed activity create the possibility of a different type of malfunction of equipment important to safety than any previously evaluated in the safety analysis report?**

List any possible malfunction of equipment that may be created as a result of the proposed activity. Describe how and/or why each malfunction is or is not of a different type than any previously evaluated in the ISFSI Licensing Basis documents. Include any interim conditions.

g. **Does the proposed activity reduce the margin of safety defined in the ISFSI licensing basis documents or change the license conditions as contained in the certificate of compliance?**

List any ISFSI licensing basis documents or license conditions as contained in the certificate of compliance that may be affected by the proposed activity. Identify the acceptable limits associated with the margin of safety and list the license conditions that would be changed, if any. Evaluate the impact of the proposed activity on the acceptable limits and license conditions that have been identified.

h. **Does the proposed activity create the possibility of a significant increase in occupational exposure than previously evaluated in the ISFSI Licensing Basis documents?**

Review the ISFSI Licensing Basis documents to determine if the proposed change could significantly increase occupational exposure. This determination should be made by verifying that the requirements for radiological protection as stated in 10 CFR 72.126 are not violated. These requirements are stated as follows:

- *Exposure Control.* Radiation protection systems must be provided for all areas and operations where onsite personnel may be exposed to radiation or airborne radioactive materials. Structures, systems, and components for which operation, maintenance, and required inspections may involve occupational exposure must be designed, fabricated, located, shielded, controlled, and tested so as to control external and internal radiation exposures to personnel. The design must include means to:

  (a) Prevent the accumulation of radioactive material in those system requiring access;

  (b) Decontaminate those systems to which access is required;

  (c) Control access to areas of potential contamination or high radiation within the ISFSI or MRS;

  (d) Measure and control contamination in areas requiring access;

  (e) Minimize the time required to perform work in the vicinity of radioactive components; for example, by providing sufficient space for ease of operation and designing equipment for ease of repair and replacement; and

  (f) Shield personnel from radiation exposure.

- *Radiological alarm systems.* Radiological alarm systems must be provided in accessible work areas as appropriate to warn operating personnel of radiation and airborne radioactive material concentrations above a given setpoint and of concentrations of radioactive materials in effluents above control limits. Radiation alarm systems must be designed with provisions for calibration and testing their operability.

i. **Does the proposed activity create the possibility of a significant unreviewed environmental impact than any previously evaluated in the ISFSI Licensing Basis documents?**

Environmental impact for PBNP has been previously evaluated and the results are contained in the Atomic Energy Commission report, "Final Environmental Statement, Point Beach Nuclear Plant, Units 1 and 2," dated May, 1972. An environmental assessment and finding of no significant impact was completed by NRC for the VSC-24 ventilated storage cask system. Review these documents to determine if a new significant environmental impact is created by the proposed activity.

3.3.6 Section 5 of Form PBF-1515 is used to document the evaluation summary. The summary should contain a brief description of the change, test, or experiment, a determination of whether an unreviewed safety question, a significant increase occupational exposure, a significant unreviewed environmental impact, or a change the license conditions as contained in the certificate of compliance exists, and a basis for the determination. The summary is included in an annual report to the NRC. Therefore, the summary shall contain sufficient information in a stand-alone writeup to allow the NRC to review the change, test or experiment.

3.4 Review and Approval

3.4.1 The determination of non-applicability (i.e., screening), Section 1 of Form PBF-1515, or the completed evaluation and any revisions shall be reviewed by a technically competent individual other than the preparer. For a screening only, the preparer, reviewer, OR one additional reviewer, if necessary, shall be a member of the Multi-Disciplinary Review Team, and the Multi-Disciplinary Review Team line of PBF-1515 shall be signed by this individual.

3.4.2 The preparer of a full safety evaluation shall arrange for a review by the Multi-Disciplinary Review Team. Once the Multi-Disciplinary Review Team has approved the safety evaluation the preparer should present the safety evaluation to the MSS in accordance with NP 1.6.5. (Reference 2.8) The preparer shall arrange for Manager's Supervisory Staff (MSS) review of the safety evaluation by contacting RES. RES is responsible for providing administrative controls over safety evaluations for tracking and retention.

3.4.3 The Multi-Disciplinary Review Team review of a full safety evaluation shall consist of:

a. A review by a minimum of two members.

b. Verification of no Unreviewed Safety Question (USQ) or Technical Specification change involved in the change, test, or experiment prior to MSS review. (Reference 2.15)

3.4.4 The MSS shall review the evaluation to ensure the requirements of 10 CFR 50.59 and 72.48 have been met. After making this determination, the MSS recommends the evaluation be approved by the PBNP manager. MSS review shall be documented on Form PBF-1515. (Reference 2.5)

3.4.5 The PBNP manager approves the evaluation based on the MSS recommendation. Approval by the manager is documented on Form PBF-1515. (Reference 2.5)

3.4.6 If it is determined that the proposed modification, procedure change, test, or experiment does not involve an unreviewed safety question, or for the ISFSI; a significant increase occupational exposure, a significant unreviewed environmental impact, or a change the license conditions as contained in the certificate of compliance, no TS changes are required, and the PBNP manager has approved the safety evaluation, then the proposed modification, procedure change, test, or experiment may be implemented.

3.4.7 The original Form PBF-1515, including the approved summary, comprises the official safety evaluation record and is retained in the NPBU files.

3.4.8 If it is determined that the proposed modification, change, test, or experiment involves an unreviewed safety question, or for the ISFSI; a significant increase occupational exposure, a significant unreviewed environmental impact, or a change the license conditions as contained in the certificate of compliance, if a change to the TS is required and the PBNP manager has approved the safety evaluation, then the proposed modification, procedure change, test, or experiment shall be approved by the NRC prior to implementation.

3.4.9 The Offsite Review Committee (OSRC) shall review approved safety evaluations. OSRC review is documented in OSRC meeting minutes. Implementation of the change, modification, test, or experiment may proceed prior to OSRC review unless an unreviewed safety question or a change in the technical specifications is involved. (References 2.9, 2.12)

3.4.10 SEG shall perform periodic reviews (every two years) of selected safety evaluations, and documentation of safety evaluation applicability for thoroughness, accuracy, applicability, and standardization purposes. QA surveillances may be used in place of the SEG review.

3.5 Safety Evaluation Revisions

3.5.1 Revisions to safety evaluations may be required. Examples are: Design changes to a modification, procedure change, test, or experiment; interim plant conditions or configurations during the change which are different than previously considered; or the application of a safety evaluation performed for one unit to the other unit (if not previously considered as part of the original evaluation).

3.5.2 A revision to a safety evaluation is documented as a complete safety evaluation using Form PBF-1515 and attached to the front of the original evaluation. Section 1.A of Form PBF-1515 is used to describe the reason for the revision. Applicable portions of the original evaluation may be used to document the revision. Review and approval of the revision are accomplished in the same manner as described in Section 3.4.

3.6 Reporting and Recordkeeping Requirements

3.6.1 The original copy of Form PBF-1515, including the completed Section 1 (if a determination of non-applicability has been made), and any attachments shall be forwarded to RES for subsequent retention in NPBU files in accordance with applicable records retention requirements. An electronic Form PBF-1515 is acceptable for documenting screenings and safety evaluations providing the content of the form is not changed and it is the correct revision. The computerized form is available on the LANs in Milwaukee and PBNP. RES or the SEG may also be contacted for assistance. A copy of the safety evaluation or screening documentation shall be retained with the modification package, procedure revision review and approval form or other initiating documentation.

3.6.2 A description and summary of the document shall be included in the annual results and data report to the NRC. The report is prepared by RES. (Reference 2.10)

4.0 ATTACHMENTS

4.1 Attachment A, Safety Evaluation Guidance

4.2 Attachment B, Safety Evaluation Expectations

4.3 Attachment C, Safety Evaluation Review Flowchart

ATTACHMENT A
SAFETY EVALUATION GUIDANCE

This attachment defines "Safety Analysis Report" and provides a list of examples of where licensing basis documentation may be found. It also defines "Structure, System, or Component Important to Safety" and "Safety Evaluation." Additionally it provides discussions on the applicability of maintenance activities, the applicability of procedure changes, and the questions used to determine if an unreviewed safety question exists.

A. SAFETY ANALYSIS REPORT

The safety analysis report referred to in 10 CFR 50.59 is the most recently updated Final Safety Analysis Report (FSAR) submitted to the NRC as required by 10 CFR 50.71(e). This regulation requires that, "The updated FSAR shall be revised at least annually to include the effects of: all changes made in the facility or procedures; all safety evaluations performed by the licensee either in support of requested license amendments or in support of conclusions that changes did not involve an unreviewed safety question; and all analyses of new safety issues performed by or on behalf of the licensee at the Commission's request."

For purposes of this procedure, the phrase "as described in the FSAR" is not limited to explicit discussions of SSCs, procedures, tests, or experiments. Thus minor physical or programmatic components referenced by title or name or shown on a drawing are considered to be included in the FSAR for purposes of safety evaluation.

When considering the term "Safety Analysis Report" other documents which may contain licensing basis information or NRC commitments shall be included. These documents consist of the following:

1. **Final Safety Analysis Report (FSAR)**
2. **Facility Operating License and Technical Specifications**
3. **NRC Safety Evaluations (SERs)**

The following are examples of programs or documents which may have NRC SERs associated with them:

Environmental Qualification Program
Seismic Qualification Program
Reload License Submittals
QA Program
Emergency Plan
Fire Protection Evaluation Report (FPER)
Station Blackout Program
Post-Accident Monitoring Instrumentation
Evaluations and Responses to NRC Requests in Bulletins and Generic Letters

4. ISFSI Licensing Basis Documents:

SAR for cask(s) being used
Certificate of Compliance for casks(s) being used
NRC SER for cask(s) being used
10 CFR 72.212 site specific evaluations

5. Responses to NRC Notices of Violation.

Technical commitments outside the FSAR and PBNP operating license and Technical Specifications are contained in the Current Licensing Basis (CLB) Summary. This summary gives a brief description and date of the commitment. The file of the complete CLB is available through Nuclear Information Management at PBNP and Licensing in Milwaukee. More detailed information may also be found in the documents listed above. In addition, ZyFind is a database program on dedicated PCs at PBNP and Milwaukee. This program provides on-line search capabilities of the FSAR, CLB, Technical Specifications, and VSC-24 SAR. Licensing, SEG and RES may be contacted for assistance.

B. STRUCTURE, SYSTEM OR COMPONENT IMPORTANT TO SAFETY

The changes, tests, or experiments to be evaluated in accordance with this procedure are those which alter the design, operation or function of SSCs important to safety. Alterations in the design, operation or function of SSCs explicitly described in the FSAR or ISFSI Licensing Basis documents may result from alterations related to SSCs not described in the FSAR or ISFSI Licensing Basis documents.

An SSC is considered to be "important to safety" if:

1. The SSC design, operation or function is directly or indirectly credited in the accident analyses identified in FSAR Chapter 14 or in ISFSI Licensing Basis documents.

2. The SSC is required to mitigate or respond to other design basis events such as turbine missiles, high energy line break, seismic events, and loss of offsite power.

3. The SSC has a reasonable potential to cause a transient or event (e.g., generator or turbine trip) which could result in a challenge to safeguards systems, function or equipment.

"Important to Safety" is not an equipment classification. The focus of the safety evaluation review process is to evaluate the potential effect(s) of the proposed change on the safe operation of the facility without regard to any overall classifications.

C. SAFETY EVALUATION

Safety evaluations are those records required by 10 CFR 50.59, paragraph (b) and 10 CFR 72.48, paragraph (b) which provide the basis for the determination that a change, test, or experiment does or does not involve an unreviewed safety question or Technical Specification change. For those activities that do not involve an unreviewed safety question, the safety evaluation serves to document and justify why the change is not an unreviewed safety question. The safety evaluation shall record a description of the change, test, or experiment, the scope of the evaluation, and the logic for the unreviewed safety question determination. In the case where a vendor SER has been done, a SER usually is prepared by WE personnel using the vendor SER as reference.

D. MAINTENANCE

Maintenance activities are not considered to be modifications. However, specific SSC conditions are often required to perform maintenance. Therefore, maintenance activities requiring the plant and/or ISFSI to be in a condition where it functions differently than assumed in the FSAR and/or ISFSI Licensing Basis analyses are required to be reviewed in accordance with 10 CFR 50.59 and/or 72.48. In many cases, systems or components removed from service for maintenance are covered by the PBNP Technical Specifications for allowable outage times, permissible mode conditions, and permitted reductions in redundancy. Therefore, a 10 CFR 50.59 evaluation is not required for these activities.

E. PROCEDURES

1. Revisions to procedures which are explicitly described in the FSAR or ISFSI Licensing Basis documents and which can control the operation of the plant or ISFSI require 10 CFR 50.59 or 72.48 safety evaluations unless the change is editorial as mentioned below.

   The following are examples of procedures in this category:

   Emergency Operating Procedures (EOPs)
   Emergency Contingency Actions (ECAs)
   Critical Safety Procedures (CSPs)
   Critical Safety Function Status Trees (STs)

   Screening for 10 CFR 50.59 applicability shall be done for changes to the above procedures with the exception of editorial corrections or format changes (e.g., misspelled words, renumbering or rewording Steps, adding notes for guidance, relabeling valves with no configuration change).

2. Many procedures may not be explicitly described in the PBNP FSAR or ISFSI Licensing Basis documents, but affect or control the intended design, operability, function or method of function of SSCs important to safety. Change to these types of procedures may require a 10 CFR 50.59 or 72.48 safety evaluation. This is a qualitative determination and should be based on sound engineering judgment.

   Changes to the following procedures may require 10 CFR 50.59 safety evaluations:

   Abnormal Operating Procedures (AOPs)
   Operating Procedures (OPs)
   Refueling Procedures (RPs)
   Special Maintenance Procedures (SMPs)
   Operations Refueling Tests (ORTs)
   Technical Specification Tests (TSs)
   Setpoint Changes (STPTs)
   Shutdown Emergency Procedures (SEPs)
   Point Beach Test Procedures (PBTPs)
   Reactor Engineering Procedures
   Routine Maintenance Procedures (RMPs)
   Health Physics Procedures (HPs)
   Operating Instructions (OIs)
   Check Lists (CLs) associated with safety-related systems and components
   Inservice Tests (ITs)
   Reactor Engineering Instructions (REIs)
   Installation Work Plans (IWPs)
   Reactor Operating Data (RODs)
   Radioactive Materials Handling Procedures (RDWs)

Screening changes to the above procedures for 10 CFR 50.59 and 72.48 applicability shall normally be done except for editorial corrections or format changes as mentioned above in (1).

3. Changes to a number of procedures do not normally require a safety evaluation. Screening changes to these types of procedures for 10 CFR 50.59 and 72.48 applicability is not normally required. Screening should be done if the applicability is in question. Examples of such procedures include the following:

   Master Data Books (MDBs)
   Annunciator Response Books (ARBs)
   Maintenance Instructions (MIs)
   Security Procedures
   Emergency Plan Implementing Procedures (EPIPs)
   Emergency Plan Maintenance Procedures
   Refueling Call-ups (RFs)

I&C Instructions
NPD Procedures Manual
NPD Administrative Manual
NPD Organization Manual
Periodic Callups (PCs)
Operations Standing Orders, Special Orders, and Memos
CHAMPS Task Sheets

The above lists are not all-inclusive and represent a hierarchy of 10 CFR 50.59 and 72.48 applicability. If the screening remains in question, contact the manager - RES, or Safety Evaluation Group (SEG) for assistance.

NOTE: ***The PBNP probabilistic safety assessment (PSA) model may by able to be used to support the position that a modification, procedure, experiment, or test is not an unreviewed safety question. The PSA model, however, has limitations and can be misused, if not used with caution. The PSA Group should be consulted prior to using PSA results for this purpose.***

F. DISCUSSION ON THE SEVEN QUESTIONS USED TO DETERMINE IF AN UNREVIEWED SAFETY QUESTION EXISTS FOR 10 CFR 50.59

ACCIDENTS AND MALFUNCTIONS PREVIOUSLY EVALUATED IN THE SAFETY ANALYSIS REPORT (Ref. Questions 1,3)

The term "accidents" refers to the anticipated operational transients and postulated design basis accidents that are analyzed to demonstrate that the plant can be operated without undue risk to the health and safety of the public. The accidents considered for the PBNP are identified in FSAR Chapter 14 and other events with which the plant was designed to cope and are incorporated into the FSAR.

The term "malfunctions" of equipment refers to the failure of SSCs to perform the safety functions described in the FSAR.

INCREASE IN THE PROBABILITY OF OCCURRENCE OF ACCIDENTS (Ref. Question 1)

Accidents have been divided into categories based upon a qualitative assessment of frequency. These categories shall be used to assess if an increase in the probability of occurrence may result.

Normal Operations - Expected frequently or regularly in the course of power operation, refueling, maintenance, or maneuvering.

Incidents of Moderate Frequency - Any one incident expected per plant during a calendar year.

Infrequent Incidents - Any one incident expected per plant during plant lifetime.

Limiting Faults - Not expected to occur but could release significant amount of radioactive material thus requiring protection by design.

Changes that result in a change from one frequency class to a more frequent class or changes within a category that result in a clear increase or trend are examples of changes that increase the probability of occurrence. When there is no clear trend toward increasing the probability, the change is not considered to cause an increase in probability.

INCREASE IN THE PROBABILITY OF OCCURRENCE OF A MALFUNCTION OF EQUIPMENT IMPORTANT TO SAFETY (Ref. Question 3)

The accident analyses assume the proper functioning of some portion of safety systems in demonstrating the adequacy of design. The proper functioning of other systems, while not specifically identified in the accident analyses, may be credited in a indirect sense. Therefore, the bounds of the accident analyses are extended to include these systems as important to safety. For example, the probability of occurrence of a malfunction of equipment important to safety is increased if:

- The performance of a safety system assumed to function in the accident analyses is degraded below the design basis; or

- Challenges to safety systems assumed to function in the accident analyses are increased such that safety system performance is degraded below the design basis without compensating effects.

INCREASE IN CONSEQUENCES OF ACCIDENTS OR MALFUNCTIONS OF EQUIPMENT IMPORTANT TO SAFETY (Ref. Questions 2,4)

An increase in consequences must involve an increase in radiological doses to the public above the regulatory acceptance limit. Onsite dose consequences may also involve an unreviewed safety question if they restrict access to vital areas or otherwise impede actions to mitigate the consequences of accidents. Occupational exposures resulting from routine operations, maintenance, and testing are not within the scope of the consequences referred to in 10 CFR 50.59.

If a proposed change, test, or experiment would result in an increase in radiological dose from any accident or equipment malfunction above that which was previously reviewed and approved by the NRC and used as part of the licensing basis for the plant, i.e., the regulatory acceptance limit (10 CFR 100), then the proposed change, test, or experiment involves an unreviewed safety question and requires prior NRC approval. An increase in absolute terms of a plant specific analysis dose value which is still bounded by the regulatory acceptance limit does not constitute an unreviewed question. If a change in consequences is so small or the uncertainties in determining whether a change in consequences has occurred are such that it cannot be reasonably concluded that the consequences have actually changed, the change is not considered to cause an increase in consequences. It should be noted that regulatory acceptance limits are plant specific and may be different than generic limits specified in regulations or for other plants.

POSSIBLE ACCIDENT OR MALFUNCTION OF A DIFFERENT TYPE
(Ref. Questions 5 & 6)

An accident or malfunction that involves an initiation or failure not considered in the safety analysis report is potentially an accident or malfunction of a different type. The possible accidents or malfunctions of a different type are limited to those that are as likely to happen as those considered in the FSAR. A change that increases the probability of an analyzed accident or results in a newly discovered accident scenario previously thought to be incredible to become as likely as the accidents in the FSAR, creates a possible accident of a different type.

MARGIN OF SAFETY AS DEFINED IN THE BASIS OF ANY TECHNICAL
SPECIFICATION (Ref. Question 7)

For purposes of performing the 10 CFR 50.59 evaluation, a margin of safety is the range above a regulatory acceptance limit (to the design failure point or system limitation) which has been reviewed and approved by the NRC as part of the licensing basis.

In general, the Technical Specifications are provided to ensure that the plant is operated in a manner that ensures acceptable levels of protection for the health and safety of the public. The Technical Specifications prescribe the necessary available equipment and initial conditions to meet the assumptions in the accident analyses. However, the Technical Specifications are not meant to be all inclusive. They are reserved for those matters where the imposition of rigid conditions or limitations upon reactor operation is deemed necessary to avoid an abnormal situation or event or give rise to an immediate threat to the public health and safety.

In some cases, the Bases for a Technical Specification will explicitly define or address the margin of safety. If the Bases do not specifically address a margin of safety, then the PBNP FSAR, the NCRs safety evaluation reports, and confirmatory orders shall be reviewed to determine if the proposed change, test, or experiment will result in a reduction in a margin of safety.

In making the judgment on whether the margin is reduced, the decision should be based on physical parameters or conditions which can be observed or calculated. If a change in margin is so small or the uncertainties in determining whether a change in margin has occurred are such that there is no clear trend toward reducing the margin, the change, test, or experiment should not be considered to cause a reduction in a margin of safety. Changes in transient or accident core thermal hydraulic conditions or peak reactor coolant pressure which do not violate the fuel design limits or reactor coolant system design pressure in the safety limits specified in the Technical Specifications do not constitute a reduction in the margin of safety. This assumes the changes are made consistent with previously accepted methods and specific acceptance conditions, criteria, and limits.

A change in initial conditions, system response time, or other parameter affecting the accident analysis must be evaluated to determine if the change causes the acceptance limit for that analysis to be exceeded. If the limit is exceeded, the change would involve a reduction in the margin of safety.

The determination of whether or not a reduction in margin of safety is involved is based on the results of the analysis and not on the change itself. If the analysis results continue to be bounded by the acceptance limit, a reduction in a margin of safety is not involved.

G. DISCUSSION ON THE NINE QUESTIONS USED TO DETERMINE IF AN UNREVIEWED SAFETY QUESTION EXISTS FOR 10 CFR 72.48

The first seven questions for determination of an unreviewed safety question for 72.48 are identical to the seven questions for 50.59 listed in Part F, except "ISFSI Licensing Basis Documents" is substituted for FSAR, and license conditions for the ISFSI are contained in the certificate of compliance.

CREATE THE POSSIBILITY OF A SIGNIFICANT INCREASE IN OCCUPATIONAL EXPOSURE (REF. QUESTION 8)

A significant increase in occupational exposure is based on a review of the change, test, or equipment using §72.126, which is the GDC used by the NRC for their review of the ISFSI systems.

CREATE THE POSSIBILITY OF A SIGNIFICANT UNREVIEWED ENVIRONMENTAL IMPACT (REF. QUESTION 9)

Environmental impacts are considered to be such situations as; ground water contamination, liquid effluent, radiation exposure at the protected area boundary, and other situations that pertain to radiation or radioactive materials released to the environment. The answer to this question does not need to repeat the answer to questions 2 and 4, which deal with the possibility of increasing the consequences of an accident and increasing the consequences of a malfunction.

ATTACHMENT B
SAFETY EVALUATION EXPECTATIONS

This attachment defines enhanced guidance and expectations for preparers, reviewers, and approvers of 10 CFR 50.59/72.48 safety evaluations. The guidance is intended to help ensure that unreviewed safety questions (USQs) and conflicts with Technical Specifications related to proposed changes, tests, or experiments are not missed. Proposed activities which involve either a USQ or Tech Spec conflict require NRC approval of a license amendment requested in accordance with 10 CFR 50.90 prior to implementation of the activity. The enhanced guidance and expectations are provided as a result of recent regulatory issues and potential violations related to compliance with the provisions of 10 CFR 50.59 and 72.48 regulations. Examples of these issues are discussed below:

1. A 50.59 safety evaluation regarding a revision to the DCS Handbook administrative restrictions for operation of the nonconforming service water system missed a USQ. The USQ resulted from the nonconforming condition (not the DCS Handbook change) on the service water system, where the Tech Spec basis stated that 2/6 pumps was sufficient to perform the safety function of containment fan cooler heat removal and new analysis showed that 3/6 pumps were required. The safety evaluation question regarding reducing the margin of safety defined in the basis of any Tech Spec should have been answered "YES," resulting in a determination of a USQ. The safety evaluation question regarding the increase in consequences of previously evaluated accident should also have been answered "YES," since a single failure of DC control power under the nonconforming condition could have resulted in insufficient SW flow to the containment fan coolers in the event of a LOCA.

2. A 72.48 safety evaluation regarding the testing of the weight of the shield lid for a VSC-24 MSB missed a USQ. The USQ resulted from relying on radio communications to the crane operator to ensure that the shield lid was not inadvertently removed from the MSB, thus exposing workers to the spent fuel loaded into the MSB. The safety evaluation questions regarding the probability of a malfunction of equipment previously evaluated or the possibility for an accident of a different type should have been answered "YES," since a breakdown in the communications path could have resulted in inadvertent removal of the shield lid from the loaded MSB.

3. A 72.48 safety evaluation was not performed for the use of rigging to lift the MSB within the MSB transfer cask (MTC), when the rigging was sized to only handle the weight of the MSB alone, not the combined weight of the MSB and MTC. Due to a top plate on the MTC preventing lifting the MSB out of the MTC, an inadvertent crane lift would have resulted in lifting the MSB and MTC together. This combined weight was not considered when sizing the lifting slings and therefore the rigging safety factor for the MSB/MTC combination did not meet the required 11-to-1 requirement. A safety evaluation should have been performed to determine if this rigging size involved an unreviewed safety question.

4. A 50.59 safety evaluation regarding adjustment of the throttle valves controlling service water flow to the containment fan cooler (CFC) units failed to properly identify a conflict with the Technical Specifications. Tech Spec 15.5.2.C.2 specifies a design capability of the four CFC units to remove 55,600 BTU/sec under conditions following a LOCA. The revised throttle valve setting range did not ensure that this heat removal capability was maintained. A license amendment should have been requested and approved by the NRC prior to adjusting the throttle valve settings or the setting range adjusted to ensure compliance with this specification.

   In order to help avoid similar safety evaluation issues in the future (specifically missed safety evaluations, missed USQs or missed conflicts with Technical Specifications), the following enhanced guidance and expectations are provided to preparers and reviewers of 10 CFR 50.59 and 72.48 safety evaluations:

A. **DESCRIPTION OF PROPOSED ACTIVITY** Provide a clear and sufficiently detailed description of the proposed change, test, or experiment to allow an independent reviewer or NRC auditor to answer the screening or safety evaluation questions. Include interim configurations, since these could also involve USQs or Tech Spec conflicts.

B. **FSAR AND CLB** For 50.59 safety evaluations determine if the proposed change, test, or experiment is consistent with the updated PBNP Final Safety Analysis Report (FSAR) and other current licensing basis (CLB) requirements by searching these documents. The VSC-24 Safety Analysis Report (SAR), NRC Certificate of Conformance (COC), and NRC Safety Evaluation Report (SER) must be searched for 72.48 safety evaluations. The affected sections of these licensing basis documents must be listed on the PBF-1515 form. Electronic searches of these documents (only a summary for the CLB) may be performed using ZYFIND on dedicated computers located near SEG in Milwaukee or in RES, WCC, or Site Engineering at PBNP. Make sure the effects of the proposed activity on the licensing document requirements are addressed in answering the screening or safety evaluation questions and that interim configurations are considered in these searches. Contact Licensing, SEG, or RES for assistance, if desired.

C. **TECHNICAL SPECIFICATION CONFLICT** Technical Specification requirements (i.e., potential conflicts and required changes) must be determined for the proposed activity by searching the Tech Specs including the basis sections. Electronic searches of the Tech Specs can be performed using ZYFIND similarly to those for the FSAR and CLB described above. Make sure that interim configurations are considered in this search. If a Tech Spec conflict is involved in the proposed activity, then a license amendment must be requested in accordance with 10 CFR 50.90 and approved by the NRC prior to implementation. Contact Licensing, SEG, or RES for assistance, if desired.

D. **SCREENINGS** If there is any doubt whether any of the screening questions (for either 50.59 or 72.48) should be answered "YES" or the written justification for screening the proposed activity becomes lengthy (e.g., > 1 page), then a full safety evaluation should be performed. The regulatory consequences of missing a required safety evaluation are just too great to not make a conservative screening call (i.e., requiring preparation of a full safety evaluation).

E. **SAFETY EVALUATION QUESTIONS** Provide a comprehensive response to each of the safety evaluation questions, which justifies the answer to that specific question. Each of the questions is different and requires a different justification (i.e., do not copy the justification for the first question into the other questions). Make sure that the answers to the questions (i.e., "YES" or "NO") are reasonable based on the justification documented on the PBF-1515 form (not just the judgment or personal knowledge of the preparer or reviewers). The results of the Tech Spec, FSAR, and CLB searches must be incorporated into the responses to the questions. See Appendix A for guidance on answering each of the 50.59 questions.

F. **SUMMARY** Provide an evaluation summary, which is a stand-alone document suitable for submittal to the NRC in an annual report (In fact, this is exactly what the summary is used for and the only reason to have one, since reviewers and approvers are expected to review the entire document). The summary section should contain three brief paragraphs(no more than one page total), including 1) description of the proposed change including interim configurations, 2) justification for the answers to the safety evaluation questions, and 3) conclusion (i.e., Is a USQ or Tech Spec conflict involved and what are the assumptions or conditions for the conclusion like NRC approval of a certain TSCR?). New material should never be included in the summary that did not appear previously in the activity description or responses to the questions. The summary section should be able to be compiled directly into the annual NRC report with no changes required.

G. **NONCONFORMING CONDITIONS** Whenever a safety evaluation is prepared which is even remotely connected to a nonconforming condition, extreme caution must be used. The description must clearly describe whether the nonconforming condition is being evaluated for permanent acceptance as-is **OR** a related/compensatory procedure change, administrative control, temporary modification, or other change is being evaluated. If a nonconforming condition being intentionally evaluated for permanent acceptance as-is involves a USQ or Tech Spec conflict, then a license amendment must be submitted to the NRC in accordance with 10 CFR 50.90 and approved prior to final acceptance. The associated system, structure, or component must be determined to be operable in the interim period prior to final acceptance. Contact Licensing, SEG, or RES for assistance, if desired.

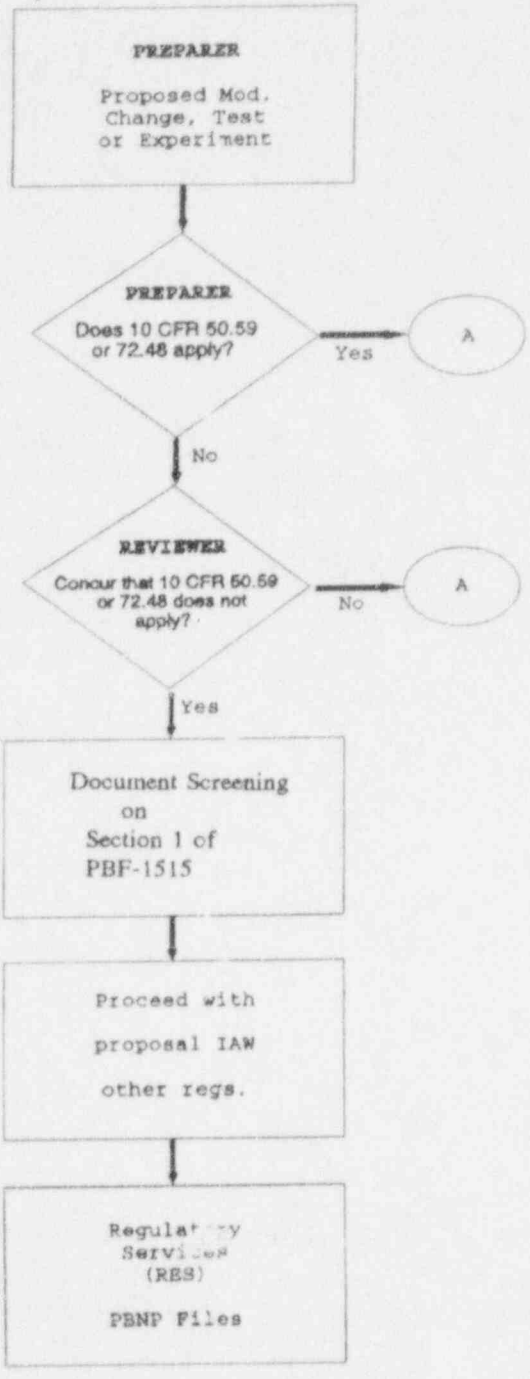
H. **SAFETY EVALUATION PARADIGMS** The following commonly accepted PBNP safety evaluation paradigms must be broken to help improve our safety evaluation performance:

1. **"If a proposed activity is safe, it cannot involve a USQ or Tech Spec conflict." NO!** The only purpose of the 50.59/72.48 safety evaluation is to determine if the NRC needs to review and approve the proposed activity prior to implementation. Many proposed activities significantly improve plant safety (e.g., the EDG project), but they still involve USQs and/or Tech Spec changes and, therefore, require prior NRC review and approval through the license amendment process.

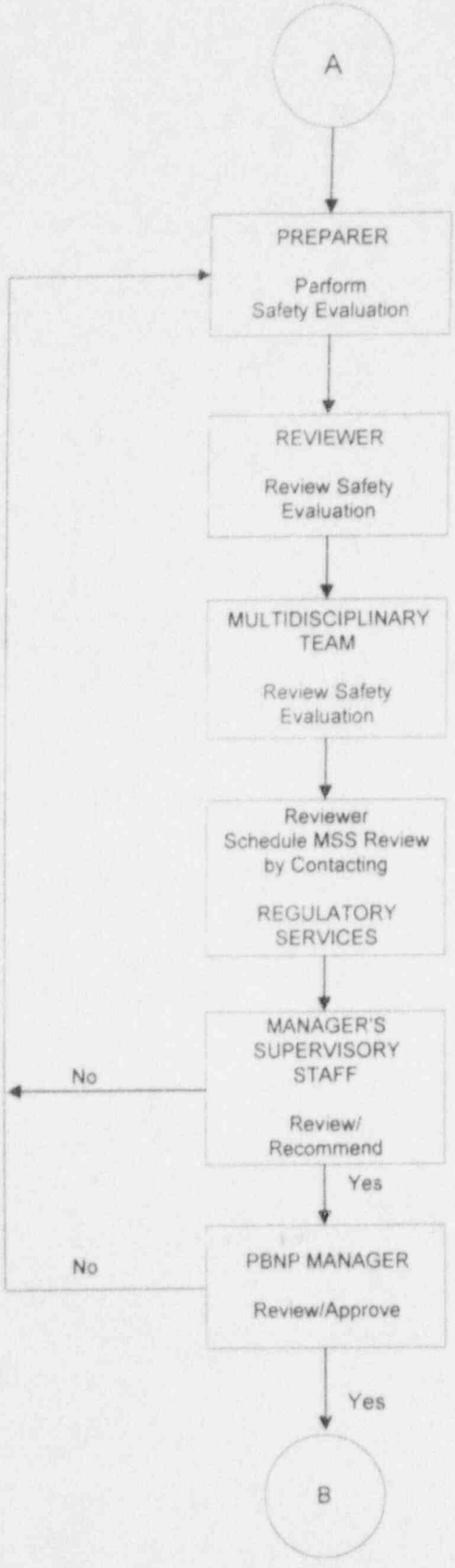
2. **"A completed safety evaluation cannot involve a USQ or Tech Spec conflict." NO!** Safety evaluations can be completed and approved and still document that a USQ or Tech Spec conflict is involved in some aspect of the proposed activity. In that case, the safety evaluation confirms and documents that the associated license amendment is complete and addresses all aspects of the proposed activity including interim configurations that require prior NRC review and approval. The NRC approval of the license amendment would simply be listed as a required condition prior to implementation of the proposed activity.

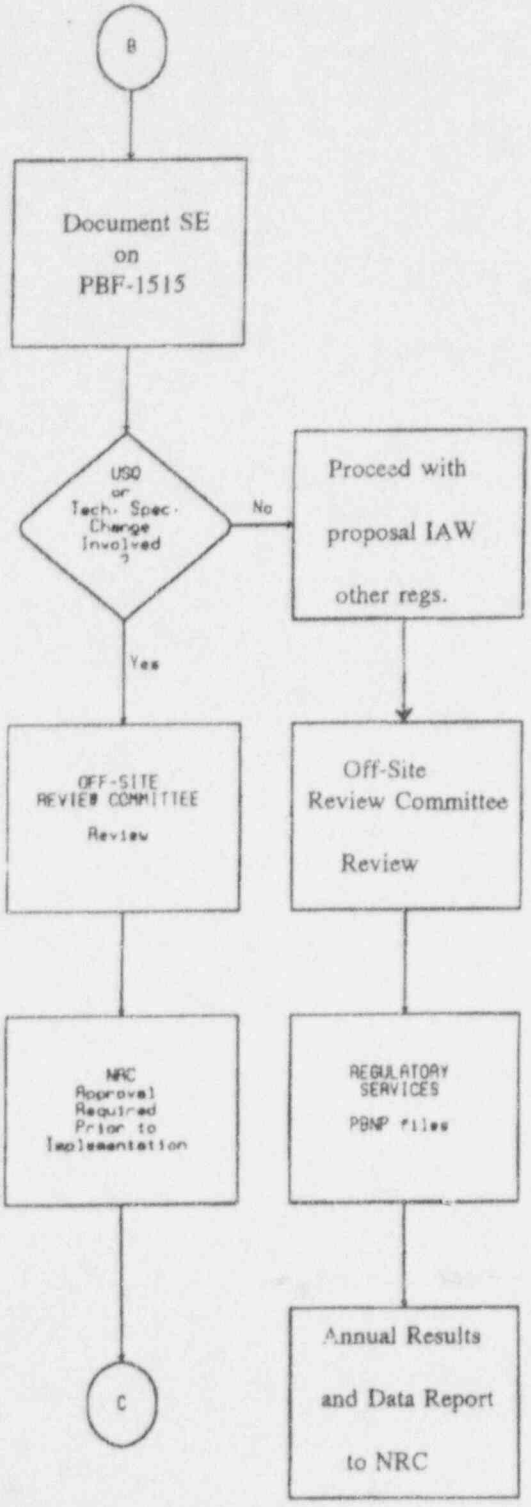
3. **"The purpose of safety evaluations is to determine whether a proposed activity is safe." NO!** The safety of a proposed activity should be reviewed under other programmatic requirements (e.g., design review checklists for modifications or verification and validation for EOP changes). Although a safety evaluation may help determine if an activity is safe, that is not its purpose. Perhaps the name "safety" evaluation is misleading and should be changed to "licensing" or "regulatory" evaluation.

ATTACHMENT C
SAFETY EVALUATION REVIEW FLOWCHART

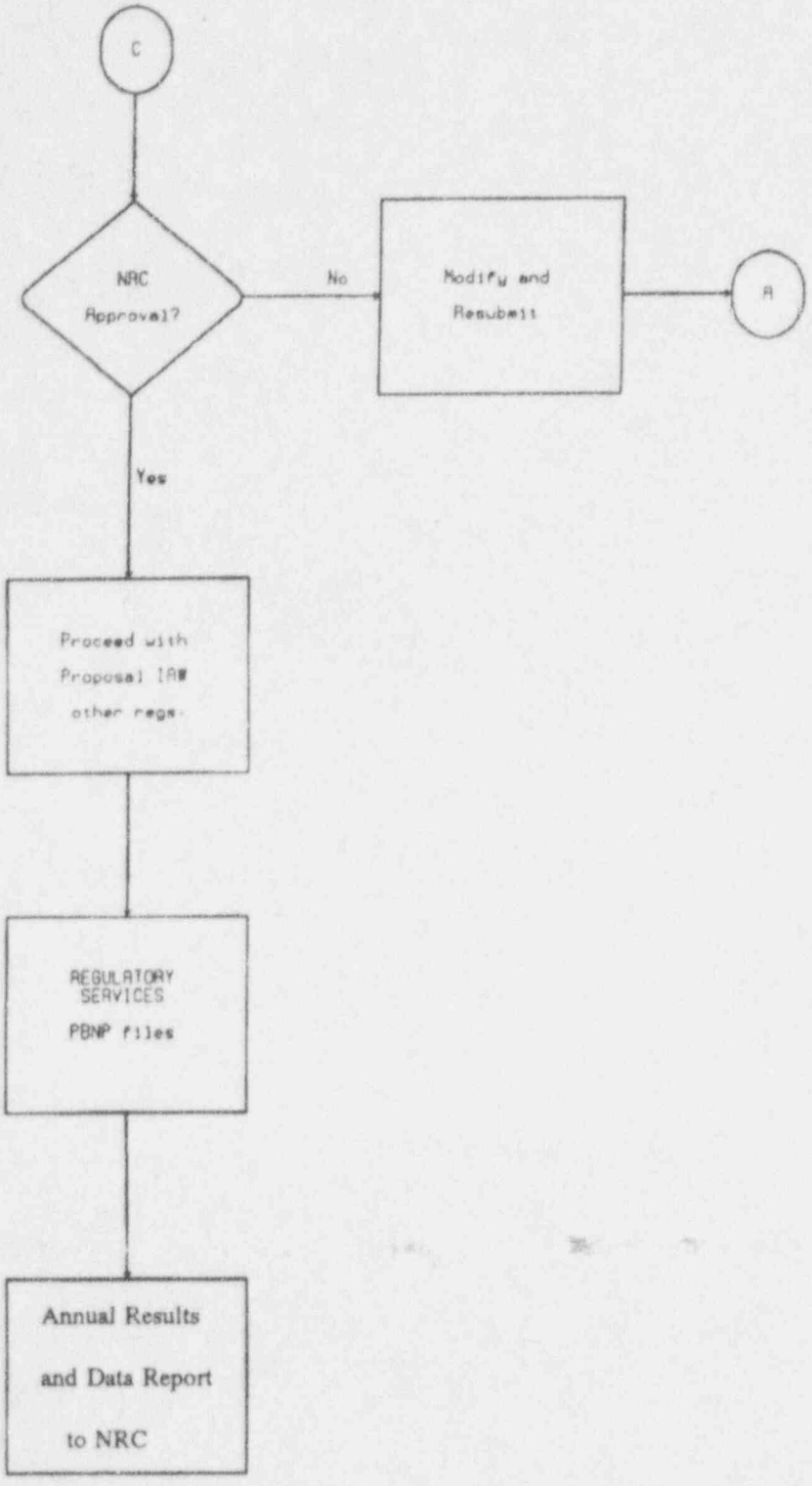


Attachment C




B
Document SE on PBF-1515
USQ or Tech. Spec. Change Involved ?
No
Proceed with proposal IAW other regs.
Yes
OFF-SITE REVIEW COMMITTEE Review
Off-Site Review Committee Review
NRC Approval Required Prior to Implementation
REGULATORY SERVICES PBNP files
C
Annual Results and Data Report to NRC

Attachment C



Title of Proposed Modification,
Procedure Change, Test or Experiment: _____

Reference Document(s) #: _____

_____

Prepared By: _____ Date: _____

Reviewed By: _____ Date: _____

Reviewed by Multidisciplinary Review Team: 1. _____ Date: _____

2. _____ Date: _____

_____ Date: _____

MSS Review/Date: _____ MSS #: _____

Manager - PBNP Approval: _____ Date: _____

In lieu of MSS and Manager signature, attach PBF-0026d if serial review has been conducted. (MSS and manager approvals are not necessary for a determination of non-applicability.)

Section 1
Screening - Determination if Safety Evaluation is Required

A. Describe the modification, procedure change, test, or experiment and its expected effects. Include interim configurations or conditions.

B. List the FSAR sections or VSC-24-SAR sections where the system, structure, component, procedure, test or experiment is described.

C. Does the change, test or experiment involve a change in the Technical Specification? ☐ Yes ☐ No
If a change is required, briefly describe what the change should be and why it is required.
NOTE: NRC approval is required prior to implementation.

D. Screening for 10 CFR 50.59 and 10 CFR 72.48 Applicability:

1. 10 CFR 50.59 Screening:

a. Will any system, structure or component (SSC) described in the PBNP FSAR, including its figures, be altered? (Refer to NP 10.3.1, step 3.1.2 for exception. This question may be answered "no" although the SSC is described in the PBNP FSAR.) ☐ Yes ☐ No

Section 1 - Continuation

b. Could, within reasonable possibility, the proposed change affect the intended design, operation, function, or method of function, of an SSC important to safety which is described in the PBNP FSAR? (This includes interim conditions.) ☐ Yes ☐ No

c. Will any procedure described in the PBNP FSAR be altered? (Refer to NP 10.3.1, Attachment A, Part E. for guidance.) ☐ Yes ☐ No

d. Will a test or experiment be performed which is not described in the PBNP FSAR and affects the design, operation, function, or method of function, of an SSC important to safety which is described in the PBNP FSAR? ☐ Yes ☐ No

e. Will implementation affect a prior documented regulatory commitment to the NRC pertaining to the design, operation, function, or method of function, of an SSC important to safety which is described in the PBNP FSAR? ☐ Yes ☐ No

f. Is a 10 CFR 50.59 evaluation required (are any of the above questions answered yes)? ☐ Yes ☐ No

NOTE: If no, then provide basis for decision in Part D.
If yes, complete Sections 2 and 3.

2. 10 CFR 72.48 Screening for the Independent Spent Fuel Storage Installation (ISFSI):

a. Will any system, structure, or component (SSC) described in the ISFSI Licensing Basis document, including its figures, be altered? (Refer to Step 3.1.2 for exception. This question may be answered "no" although the SSC is described in the ISFSI Licensing Basis documents.) ☐ Yes ☐ No

b. Could, within reasonable possibility, the proposed change affect the intended design, operation, function, or method of function, of an SSC important to safety which is described in the ISFSI Licensing Basis documents? (This includes interim conditions.) ☐ Yes ☐ No

c. Will any procedures described in the ISFSI Licensing Basis documents be altered? ☐ Yes ☐ No

d. Will a test or experiment be performed which is not described in the ISFSI Licensing Basis documents and affects the design, operation, function, or method of function, of an SSC important to safety which is described in the ISFSI Licensing Basis documents? ☐ Yes ☐ No

e. Will implementation affect a prior documented regulatory commitment to the NRC pertaining to the design, operation, function, or method of function, of an SSC important to safety which is described in the ISFSI Licensing Basis documents? ☐ Yes ☐ No

f. Is a 10 CFR 72.48 evaluation required (are any of the above questions answered yes)? ☐ Yes ☐ No

NOTE: If no, then provide basis for decision in Part D.
If yes, complete Sections 4 and 5.

D. Basis for determination that a safety evaluation is not required:

Section 2
Determination if a 10 CFR 50.59 Unreviewed Safety Question is Involved

A. List the licensing basis documents (FSAR, SER, etc.) and sections where the system, structure, component, procedure, test, or experiment is described.

B. 1. Does the proposed activity increase the probability of occurrence of an accident previously evaluated in the PBNP FSAR? ☐ Yes ☐ No

2. Does the proposed activity increase the consequences of an accident previously evaluated in the PBNP FSAR? ☐ Yes ☐ No

3. Does the proposed activity increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the PBNP FSAR? ☐ Yes ☐ No

4. Does the proposed activity increase the consequences of a malfunction of equipment important to safety previously evaluated in the PBNP FSAR? ☐ Yes ☐ No

5. Does the proposed activity create the possibility of an accident of a different type than any previously evaluated in the PBNP FSAR? ☐ Yes ☐ No

6. Does the proposed activity create the possibility of a malfunction of equipment important to safety of a different type than any previously evaluated in the PBNP FSAR? ☐ Yes ☐ No

7. Does the proposed activity ~~reduce the margin of safety~~ defined in the Basis for any ~~Technical~~ Specification? ☐ Yes ☐ No

DOES THE CHANGE, TEST, OR EXPERIMENT INVOLVE A 10 CFR 50.59 UNREVIEWED SAFETY QUESTION? (IS THE ANSWER TO ANY OF THE ABOVE QUESTIONS YES?) ☐ Yes ☐ No

Section 3
10 CFR 50.59 Evaluation Summary

(This summary must be sufficiently complete [summary of description in Section 1, summary of the answers to the questions in Section 2, and a concise conclusion] to submit to the NRC for review.)

Section 4
Determination if a 10 CFR 72.48 Unreviewed Safety Question is Involved

A. List the licensing basis documents (Cask SAR, SER, Certificate of Compliance, etc.) and sections where the system, structure, component, procedure, test, or experiment is described.

B. 1. Does the proposed activity increase the probability of occurrence of an accident previously evaluated in the ISFSI Licensing Basis documents? ☐ Yes ☐ No

2. Does the proposed activity increase the consequences of an accident previously evaluated in the ISFSI Licensing Basis documents? ☐ Yes ☐ No

3. Does the proposed activity increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the ISFSI Licensing Basis documents? ☐ Yes ☐ No

4. Does the proposed activity increase the consequences of a malfunction of equipment important to safety previously evaluated in the ISFSI Licensing Basis documents? ☐ Yes ☐ No

5. Does the proposed activity create the possibility of an accident of a different type than any previously evaluated in the ISFSI Licensing Basis documents? ☐ Yes ☐ No

6. Does the proposed activity create the possibility of a malfunction of equipment important to safety of a different type than any previously evaluated in the ISFSI Licensing Basis documents? ☐ Yes ☐ No

7. Does the proposed activity ~~reduce the~~ ~~margin of safety~~ ~~defined~~ in the ~~ISFSI~~ licensing basis documents or change the license conditions as contained in the certificate of compliance? ☐ Yes ☐ No

Section 4 - Continuation

8. Does the proposed activity create the possibility of a significant increase in occupational exposure than previously evaluated in the ISFSI Licensing Basis documents? ☐ Yes ☐ No

9. Does the proposed activity create the possibility of a significant unreviewed environmental impact other than any previously evaluated in the ISFSI Licensing Basis documents? ☐ Yes ☐ No

DOES THE CHANGE, TEST, OR EXPERIMENT INVOLVE A 10 CFR 72.48 UNREVIEWED SAFETY QUESTION, SIGNIFICANTLY INCREASE OCCUPATIONAL EXPOSURE, CREATE A SIGNIFICANT UNREVIEWED ENVIRONMENTAL IMPACT, OR CHANGE THE LICENSE CONDITIONS AS CONTAINED IN THE CERTIFICATE OF COMPLIANCE? (IS THE ANSWER TO ANY OF THE ABOVE QUESTIONS YES?) ☐ Yes ☐ No

Section 5
10 CFR 72.48 Evaluation Summary

(This summary must be sufficiently complete [summary of description in Section 1, summary of the answers to the questions in Section 4, and a concise conclusion] to submit to the NRC for review.)

Date: Thursday, 13 March 1997 5:12pm CT
To:
From:
Subject: restart #33

The training has all been completed. has the records.

TRAINING RECORD

REPORT DOESN'T USE F3 HAS 'AND' LOGIC. (REPORT INCLUDES ACTIVITY NAME

activity code:IP960043
activity name:5059 & 7248 IN-LINE REVIEW

NAME	DATE	ACTIVITY NAME
[illegible]	09-30-96	5059 & 7248 IN-LINE REVIEW
[illegible]	09-30-96	5059 & 7248 IN-LINE REVIEW
[illegible]	09-30-96	5059 & 7248 IN-LINE REVIEW
[illegible]	09-30-96	5059 & 7248 IN-LINE REVIEW
[illegible]	09-30-96	5059 & 7248 IN-LINE REVIEW
[illegible]	09-30-96	5059 & 7248 IN-LINE REVIEW
[illegible]	09-30-96	5059 & 7248 IN-LINE REVIEW
[illegible]	09-30-96	5059 & 7248 IN-LINE REVIEW
[illegible]	09-30-96	5059 & 7248 IN-LINE REVIEW
[illegible]	09-30-96	5059 & 7248 IN-LINE REVIEW
[illegible]	09-30-96	5059 & 7248 IN-LINE REVIEW
[illegible]	09-30-96	5059 & 7248 IN-LINE REVIEW
[illegible]	09-30-96	5059 & 7248 IN-LINE REVIEW
[illegible]	09-30-96	5059 & 7248 IN-LINE REVIEW
[illegible]	09-30-96	5059 & 7248 IN-LINE REVIEW
[illegible]	09-30-96	5059 & 7248 IN-LINE REVIEW
[illegible]	09-30-96	5059 & 7248 IN-LINE REVIEW
[illegible]	09-30-96	5059 & 7248 IN-LINE REVIEW
[illegible]	09-30-96	5059 & 7248 IN-LINE REVIEW
[illegible]	09-30-96	5059 & 7248 IN-LINE REVIEW
[illegible]	09-30-96	5059 & 7248 IN-LINE REVIEW
[illegible]	09-30-96	5059 & 7248 IN-LINE REVIEW
[illegible]	09-30-96	5059 & 7248 IN-LINE REVIEW
[illegible]	09-30-96	5059 & 7248 IN-LINE REVIEW
[illegible]	09-30-96	5059 & 7248 IN-LINE REVIEW
[illegible]	09-30-96	5059 & 7248 IN-LINE REVIEW

TRAINING RECORD

REPORT DOESN'T USE F3 HAS 'AND' LOGIC. (REPORT INCLUDES ACTIVITY NAME

activity code:IP970003
activity name:SAFETY EVALUATION SCREENING REFRESHER

NAME	DATE	ACTIVITY NAME
[redacted]	02-21-97	SAFETY EVALUATION SCREENING REFRESHER
[redacted]	02-03-97	SAFETY EVALUATION SCREENING REFRESHER
[redacted]	02-06-97	SAFETY EVALUATION SCREENING REFRESHER
[redacted]	02-06-97	SAFETY EVALUATION SCREENING REFRESHER
[redacted]	02-06-97	SAFETY EVALUATION SCREENING REFRESHER
[redacted]	02-06-97	SAFETY EVALUATION SCREENING REFRESHER
[redacted]	02-03-97	SAFETY EVALUATION SCREENING REFRESHER
[redacted]	02-03-97	SAFETY EVALUATION SCREENING REFRESHER
[redacted]	02-03-97	SAFETY EVALUATION SCREENING REFRESHER
[redacted]	02-03-97	SAFETY EVALUATION SCREENING REFRESHER
[redacted]	02-12-97	SAFETY EVALUATION SCREENING REFRESHER
[redacted]	02-06-97	SAFETY EVALUATION SCREENING REFRESHER
[redacted]	02-03-97	SAFETY EVALUATION SCREENING REFRESHER
[redacted]	02-06-97	SAFETY EVALUATION SCREENING REFRESHER
[redacted]	02-06-97	SAFETY EVALUATION SCREENING REFRESHER
[redacted]	02-03-97	SAFETY EVALUATION SCREENING REFRESHER
[redacted]	02-12-97	SAFETY EVALUATION SCREENING REFRESHER
[redacted]	02-03-97	SAFETY EVALUATION SCREENING REFRESHER
[redacted]	02-21-97	SAFETY EVALUATION SCREENING REFRESHER
[redacted]	02-03-97	SAFETY EVALUATION SCREENING REFRESHER
[redacted]	02-03-97	SAFETY EVALUATION SCREENING REFRESHER
[redacted]	02-03-97	SAFETY EVALUATION SCREENING REFRESHER
[redacted]	02-03-97	SAFETY EVALUATION SCREENING REFRESHER
[redacted]	02-03-97	SAFETY EVALUATION SCREENING REFRESHER
[redacted]	02-03-97	SAFETY EVALUATION SCREENING REFRESHER
[redacted]	02-19-97	SAFETY EVALUATION SCREENING REFRESHER

10 CFR 50.59/72.48 In-Line Review Team Members

10 CFR 50.59 Reviewers

	Work No.	Home No.	Pager	Cell Phone
[illegible]	221-2009	414-375-1439	0500	
[illegible]	221-3950	414-259-9823	3288	
	221-3531	414-781-0297	3289	
	221-3372	414-521-2796		
	221-2019	414-284-6488	0109	
	221-3951	414-238-1694		
	221-3964	414-228-7611		
	221-4554	414-255-3827		531-4122
	221-3367	414-789-7154		
	221-3967	414-784-0765		581-5837
	221-4683	414-784-9537		588-6116
	221-3545	414-284-8079		
	221-4550	414-544-1845		791-6810
	221-4913	414-476-7445		
	755-6680	414-983-0225	3127	
[illegible]	755-6500	414-684-3689	0718	
	755-6377	414-793-4718	0735	
[illegible]	755-6573	414-683-3427		
	755-6320	414-794-7249	0794	
	755-6684	414-755-2133		
	755-6595	414-682-0069		
[illegible]	755-6448	414-755-4131	3287	
[illegible]	755-6571	414-468-[illegible]	32[illegible]	
[illegible]	755-6251	414-[illegible]-0999	3768	

Date: Thursday, 9 January 1997 12:41pm CT
To:
Cc:

From:
Subject: Multi-disciplinary Review Team for 50.59 screenings

To support the U2 Startup Commitment List item #33 which states, "Implement interim improvements for the 50.59 process to require that all screenings be either authored or reviewed by a member of the multi-disciplinary review team", engineering and Maintenance have been requested to provide personnel to augment the multi-disciplinary team for the initiation or review of no-eval screenings.

Supervisors and Managers have provided names of personnel who are to be considered as available for this initiation/review team. These personnel will be scheduled for some short training in the next two weeks to ensure consistency across the board to ensure that no-eval screenings are in fact no-evals. The existing full in-line review team will still exist.

Personnel, with system areas, are as follows:

NSSS: * Present member of 50.59 In-Line Review Team
@ Present member of 72.48 In-Line Review Team

*

BOP:

Elect:
Inst
Syst *

RE: @*

@

ISFSI:
*

I&C:

Please add these personnel to the multi-disciplinary team as required when you implement the required initiations/reviews of ALL screenings. I understand that this is to be implemented within the next two weeks.

IP960043

PBNP IN-PLANT TRAINING RECORD

TITLE: 5059 & 7248 Inline Review

GROUP: NPBU DATE(s): 9/30/96 DURATION(hr.): 2

Topic/Objective Covered

- Understanding potential of safety evaluation violations
- Commitment to the NRC and purpose of In-line review
- Mechanics of implementing the in line review, including revised PBF 1515
- Expectations for inline review (looking for unreviewed safety questions and Tech Spec Change Requests)
- Changing interpretations of 5059: NSAC 125, NRC Inspection Manual 9900, Draft NEI 96-07, use of 50.59's vs. JCO's for Degraded and Non-conforming Conditions
- Paradigm shifts using conservative questioning attitude

Approvals

Line Management (Required before presentation)		Date	9/30/96
Training Coordinator (Required following presentation)		Date	11/11/96

Attendance

Name	WE ID or SSN
	NP8310
✓	PB3114
✓	NP2154
✓	WE0573
✓	PB4616
✓	PB2436
✓	PB3489
	PB1906
	WE0076
✓	PB3283
	NP5687
✓	PB1589
	PB1846
✓	NP3190

Name	WE ID or SSN
✓	NP4012
	WE2052
✓	NP4767
	NP2129
✓	NP3942
✓	WE3392
✓	NP9740
✓	NP6160
✓	NP6384
✓	NP6930
	NP4145

NOV 5 1996

TRAIL

POINT BEACH UNIT 2 RESTART COMMITMENT
INDEPENDENT REVIEW RESULTS

Commitment ID Number 33

Commitment Description

Implement interim improvements for the 50.59 process to require that all screenings be either authored or reviewed by a member of the multi-disciplinary review team.

Review Methodology

Perform an Independent Review of NPBU Procedure NP 10.3.1, "Authorization of Changes, Tests, and Experiments (10 CFR 50.59 and 72.48 Reviews)" and the 10 CFR 50.59/10 CFR 72.48 Preparation Form (Form PBF-1515) to verify implementation of interim improvements for the 50.59 process to require that all screenings be either authored or reviewed by a member of the multi-disciplinary review team.

Review Results

The review described above was accomplished 2/4/97 based on documents in-process. Revision 4 of NP 10.3.1 was issued on 2/14/97 and incorporates the information from the in-process document reviewed previously. Based on discussions with WE licensing personnel, training to be conducted for Restart Commitment #33 will be for the multi-disciplinary team in order to develop the required consistency among team members who will be responsible for making determinations of the validity of screenings versus 10 CFR 50.59/10 CFR 72.48 safety evaluations. These actions fulfill the requirements of Startup Commitment #33. Form PBF-1515 was not revised, which is considered appropriate since the procedure revision adequately covers the requirements.

Training for this commitment was provided to the multidisciplinary team 9/30/96 and is documented in activity code IP960043.

Recommendations

Monitor procedure NP 10.3.1 / Form PBF-1515 user feedback. Periodic review of 10 CFR 50.59/10 CFR 72.48 screenings should be performed to verify that the changes to NP 10.3.1 and PBF-1515 are establishing programmatic consistency of the screening documents.

Based on the Independent Review, there are no items involved with Commitment #33 which would impede Unit 2 startup.

Reviewed By: V
3/19/97

****
* Trkid: U2R22 RESTART *
* Action Number: 37 *
****

Responsible Person:
Urgency: DONE
Work Priority: 99

Activity Pending is: DONE ASSOCIATED WITH A COMMITMENT

----------TITLE AND TASK DESCRIPTION----------

Unit 2 Refueling 22 Startup Commitments

Prior to core load, include return-to-service testing in the plant schedule, both outage and non-outage.

----------DATES----------

Source Record: 01/10/97	******* Evaluation *********	****** Correction ******
Commitment:	Eval Due:	Corr Act Due: 01/31/97
Action Create: 01/13/97	Orig Eval Due:	Orig CA Due: 01/31/97
Action Closed: 03/31/97	Eval Done:	Corr Act Done: 01/31/97

----------PEOPLE----------

Responsible for Overall Action: OPS
Responsible for Current Pending Activity:
Issue Manager:
Initiator:
Punchlist Administrator:

----------UPDATE----------

(01/29/97 FC) RTS testing is included in the plant major item worklist schedule (MIWL) for outage and non-outage activities for safety related equipment (testing examples are ITs, TSs) These are identified as separate line items on the MIWL. Lower level RTS requirements are identified in the body of the work order which is line item identified, as well as proceduralized by the PMT/ RTS screening process specified in NP 8.1.1., where specific RTS requirements are captured.

This item is ready for closure.

(01/29/97) Passed to .. for acceptance of work.

(01/31/97 G) Passed to for Verification.
Corrective actions completed. Any further expansion of scope would depend on the results of the work control process improvement effort which is to be facilitated by FPI and co-lead by commencing the week of 2/10.

This item as specified in the restart commitment is ready for closure.

(03/28/97 Passed to for Final Close Out.
Assembled the documentation package - all is complete. This item is ready for closeout.

(03/31/97 PLA Closure of Item.

----------REFERENCES----------

----------MISCELLANEOUS----------

Originating Agency:
NRC Open Item Number:
Related Outages: U2R22
Engineering Work Type: None Specified
Person Hours: Original Estimate =
Current Estimate =
Actual Hours =
System: XX
NRC Status:

RESP. LEVEL GROUP	DESCRIPTION **ACTIVITY NO. / NOTES/WORK ITEMS	Crane?	CALENDAR	DURATION F. FLOAT T. FLOAT	START SCH'D	START REP'D	FINISH SCH'D	FINISH REP'D	
OPPOSITE or COMMON UNIT	*OPPOSITE or COMMON UNIT*	*OPPOSITE or COMMON UNIT*	*OPPOSITE or COMMON UNIT*	*OPPOSITE or COMMON UNIT*					
TGS	IT-07, P-32F SW PUMP & VALVES TESTING			6 H	02/27/97		02/27/97		
	**1935F		7D3S08H	0 H	15:00		21:00		N
OPS	*MTN*MPE			1,130 H	THU		THU		
					SNET	02/27/97 15:00			
	1. PMT FOR P-32F PUMP ONLY DUE TO INCREASED FREQUENCY								
	IT-07 (F ONLY)								
	< < PREDECESSOR: NONE								
	> > SUCCESSOR: NONE								
OPPOSITE or COMMON UNIT	*OPPOSITE or COMMON UNIT*	*OPPOSITE or COMMON UNIT*	*OPPOSITE or COMMON UNIT*	*OPPOSITE or COMMON UNIT*					
JJM	U1 RP SYSTEM LOGIC TEST	(ICP-02.017)		2 H	02/27/97		02/27/97		
	**3735S		7D3S08H	-155 H	~~15:00~~ 0700		17:00		N
IC	*IPE			298 H	THU		THU		
					SNET	02/27/97 15:00			
	1. AST & ET CIRCUITS DEENERGIZED.								
	3. BOTH RCP'S RUNNING.								
	4. SF/FF MISMATCH SIGNALS CLEAR.								
	5. PZR LEVEL & PRESSURE NORMAL.								
	6. STEAM GEN LEVEL ABOVE ALARM SETPOINT.								
	8. RX TRIP BREAKERS OPEN.								
	9. 'DROP DEAD' DATE IS 3/1/97 (21:00)								
	10. RT BYPASS BREAKER LCO								
	< < PREDECESSOR: NONE								
	> > SUCCESSORS:								
	2675S 1161 2680S 2690S								
OPPOSITE or COMMON UNIT	*OPPOSITE or COMMON UNIT*	*OPPOSITE or COMMON UNIT*	*OPPOSITE or COMMON UNIT*	*OPPOSITE or COMMON UNIT*					
SDB	W-032 PAB EXHAUST FAN			8 H	02/27/97		02/28/97		
	**1178		5N1S10H	0 H	17:00		01:00		N
MTN	*OPS*CH *HP			342 H	THU		FRI		
	TAGOUT REQUIRED								
	OPS NOTIFICATION REQUIRED								

PMT EXAMPLE

RESP. LEVEL GROUP	DESCRIPTION **ACTIVITY NO. NOTES/WORK ITEMS	Crane?	CALENDAR	DURATION F. FLOAT T. FLOAT	START SCH'D	START REP'D	FINISH SCH'D	FINISH REP'D	
	SAFE SHUTDOWN AREA 1. FAB VENTILATION WILL BE OFF THIS WILL AFFECT HP LAUNDRY & CHEM . SAMPLING. 9702563 WO, W-032, FAN IS NOISY/ BELTS JUMPING AROUND < < PREDECESSOR: NONE > > SUCCESSOR: NONE								
	OPPOSITE or COMMON UNIT *OPPOSITE or COMMON UNIT* *OPPOSITE or COMMON UNIT* *OPPOSITE or COMMON UNIT* *OPPOSITE or COMMON								
TGS DSS	TEST SI-867B PER TEMP CHANGE TO OP-7A		7D2S12H	6 H	02/27/97	_____	02/28/97	_____	N
	**1184			0 H	20:00	_____	02:00	_____	
OPS	*OPS			246 H	THU	_____	FRI	_____	
	< < PREDECESSORS: 1183 > > SUCCESSORS: 1185								
	DAY # 1								
	OPPOSITE or COMMON UNIT *OPPOSITE or COMMON UNIT* *OPPOSITE or COMMON UNIT* *OPPOSITE or COMMON UNIT* *OPPOSITE or COMMON								
TGS DSS	OP-7B RECOVER FROM 1SI-867B TEST		(OP-7B) 7D2S12H	6 H	02/28/97	_____	02/28/97	_____	N
	**1185			3 H	02:00	_____	08:00	_____	
OPS	*OPS			246 H	FRI	_____	FRI	_____	
	ESTABLISH CONDITIONS FOR PBTP-58 1. TEMP 375 deg F - 385 deg F 2. BUBBLE IN PZR 3. ACCUMULATORS AVAILABLE 4. SAFEGUARDS ENABLED 5. PZR PRESSURE 1100# < < PREDECESSORS: 1184 > > SUCCESSORS: 1176								
	OPPOSITE or COMMON UNIT *OPPOSITE or COMMON UNIT* *OPPOSITE or COMMON UNIT* *OPPOSITE or COMMON UNIT* *OPPOSITE or COMMON								

PMT EXAMPLES