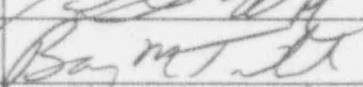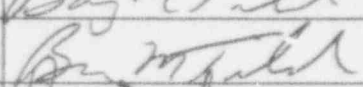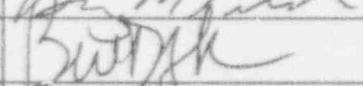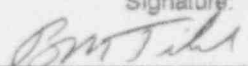Attachment D

Component Level ITLR Screening Procedure for Systems: LCM-11

LCM-11

LIFE CYCLE MANAGEMENT
COMPONENT LEVEL ITLR SCREENING PROCEDURE
FOR SYSTEMS
REVISION 4/CHANGE 0

Action	Signature	Name - Printed	Date
Prepared By		P.D. Manbeck	2-25-93
Technical Reviewer		B.M. Tilden	2-26-93
Functional Reviewer		B.M. Tilden	2-26-93
Supervisory Approval		B.W. Doroshuk	3-1-93
QA Approval (If Applicable)		(N/A)	
POSRC	Mtg No: 93-018 Review	(N/A)	
Plant General Manager Approval	N/A	Delayed Implementation Approved YES NO (N/A)	
Effective Date 3-1-93	Pre-Implementation Requirements Completed: YES (N/A)	Release for Distribution Signature:	3/2/93

EXECUTIVE SUMMARY SHEET

REVISION	CHANGE NO.		SUMMARY OF CHANGES
0	0		None.
1	0	1.	The ITLR System Function Identification process is now iterative and is performed simultaneously with ITLR Component Identification (Lessons Learned).
		2.	Discrete instructions are now provided for each header on Table 1. This will reduce confusion stemming from jumping to attachments while applying multi-conditional steps.
		3.	Rationale for and evidence of function consolidation must now be provided (Lessons Learned). "Show Your Work" is intended to reduce the burden placed on the Verifier as well as to give successors the benefit of the Evaluator's thoughts.
		4.	Table 1 no longer requires "Updating Screening Results" since it is based on the Screening Tools, which are expected to be revised infrequently as compared with drawings and other Source Documents which are used to produce Table 2.
		5.	Traveler preparation is no longer considered a safety-related activity. It is, however, still subject to Independent Technical Review.
		6.	The ITLR Component Identification process is now iterative and is performed simultaneously with ITLR System Function Identification (Lessons Learned).
		7.	Catalog development is now considered optional and is no longer considered a safety-related activity. Table 2 now contains all information necessary to "link" a function with its required components and associated references.
		8.	Analysis of Table 2 results provides a check for completeness and consistency.
		9.	For Independent Technical Review, greater detail has been provided (Lessons Learned). There are 3 pages now as compared to 1 page initially.
		10.	Incorporated TPRs 91-07, 91-26, 91-29, 91-30, 91-40, 91-42, 91-56, 91-115 and 91-125.

EXECUTIVE SUMMARY SHEET (continued)

REVISION	CHANGE NO.		SUMMARY OF CHANGES
2	0	1.	Made procedure a BG&E-controlled procedure, instead of a Grove Engineering-controlled procedure.
		2.	Requires the use of the LCMEVAL application.
		3.	Reinstates Function Catalogs as Safety Related. [B-7]
		4.	Add 1E, 1M and CLS1 Function Catalogs (Lessons Learned)
		5.	Deletes EOP/AOP Function Catalogs. (TPR 91-133, not included in Basis Section because section deleted from Procedure).
		6.	Deletes Travelers and moves data transfer instructions from Section 6 to Section 7. (TPR 91-122, not included in Basis Section because section deleted from Procedure).
		7.	Changes Table 1 format to be consistent with action steps of procedure.
		8.	Changes Table 2 format to be consistent with the use of LCMEVAL and deletes Attachment for Sample Table 2.
		9.	Incorporated TPRs 91-66, 91-71, 91-105, 91-117, 91-119, 91-122, 91-127, 91-132, 91-133, 91-140, 91-149, 91-167 and 91-168.
3	0	1.	Updates References to most current versions.
		2.	Deletes SIC function. [B-12]
		3.	Adds LCO function. [B-13]
		4.	Changes Criteria and Function Catalogs formats to be consistent with the use of LCMEVAL.
		5.	Deletes CCETS Reference. [B-14]
		6.	Changes Q-List Items Report Reference to Nucleis Equipment Technical Database (NETD). [B-15]
		7.	Deletes Q-List Manual as reference except for red line drawings and System Flowsheets.

EXECUTIVE SUMMARY SHEET (continued)

REVISION	CHANGE NO.		SUMMARY OF CHANGES
3	1	1.	Change Reference for Containment Isolation Components from "UFSAR Chapter 5, Figure 10, ShXX" to "UFSAR Ch5 Fg10 ShXX". Reference required shortening to fit into field in LCMEVAL.
		2.	Delete third bullet in Step 6.2.B.n.. This was a redundant Step.
		3.	Add Step 6.2.B.o, new Function Catalog LRAAA-00000. This change was made to eliminate the requirement to Edit Table 2 every time it is generated.
		4.	The Following changes were made to accommodate changes made in LCMEVAL:
			A. Change Section 6.C, add new Steps 6.C.1 and 6.C.4, change old step 6.C.1 to 6.C.2 and old step 6.C.2 to 6.C.3.
			B. Add new note under Step 6.C.1
			C. Move Steps 6.C.2a and 6.C.2b to new Note under Step 6.C.1.
3	2	1.	Clarify the format for references to make them consistent with NUCLEIS format. Specify the format for reference for LCO components.
		2.	Change Steps 6.2.D.1, 6.2.G.1 and 6.2.H.1 to allow the use of a word processor for generation of Cover Sheets
4	0	1.	Add clarification to Step 6.1.a for systems that have vital auxiliary and containment isolation functions.
		2.	Added "VA" to Steps 6.1.B.a.2, 6.2.A.1.a.1 and 6.2.B.1.a.1.
		3.	Modified Step 6.1.A.5.c to allow consolidation of vital auxiliary functions without flowsheet references into 1E or 1M functions.
		4.	Added instructions to Steps 6.2.A.1.f and 6.2.A.1.g to check for 1E or 1M components with flowsheet references.
		5.	Clarification of OI reference format.
		6.	Clarification of flowsheet format.

EXECUTIVE SUMMARY SHEET (continued)

REVISION	CHANGE NO.		SUMMARY OF CHANGES
		7.	Delete section for Update in Progress of screening results (Step 6.2.E)
		8.	Add section for updating of verified screening results for TPR resolution incorporation only (new Step 6.2.I)
		9.	Clarify note in Step 6.2.A.1.f
		10.	Added notes to Steps 6.2.A.1.l and 6.2.A.1.m to clarify which components are supposed to be included in the function catalogs.
		11.	Modified instructions in Steps 6.2.B.1.l and 6.2.1.B.m so that only FP and LCO unique components are included in the respective Function Catalogs.
		12.	Incorporated TPRs 92-089, 92-093, 92-108, 92-116, 92-118 and 92-158
		13.	Removes "Component" types FP, LX, PP, SX, TP from the screening process.
		14.	Deletes "Q" as a criteria for ITLR screening. SR-Q Components are now resolved into an established ITLR criterion.

TABLE OF CONTENTS

LIST OF EFFECTIVE PAGES

Page No.	Change No.	Page No.	Change No.	Page No.	Change No.
1	0	26	0	51	0
2	0	27	0	52	0
3	0	28	0	53	0
4	0	29	0	54	0
5	0	30	0	55	0
6	0	31	0	56	0
7	0	32	0	57	0
8	0	33	0	58	0
9	0	34	0	59	0
10	0	35	0	60	0
11	0	36	0		
12	0	37	0		
13	0	38	0		
14	0	39	0		
15	0	40	0		
16	0	41	0		
17	0	42	0		
18	0	43	0		
19	0	44	0		
20	0	45	0		
21	0	46	0		
22	0	47	0		
23	0	48	0		
24	0	49	0		
25	0	50	0		

1.0   PURPOSE

The purpose of this Life Cycle Management (LCM) Program Procedure is to provide instructions for implementing the component level screening process for important to license renewal (ITLR) systems at the Calvert Cliffs Nuclear Power Plant (CCNPP). The purpose of the component level screening process is to identify those components of a given ITLR system which are, themselves, ITLR.

This LCM Program Procedure also establishes methods for documenting the component level ITLR screening process and provides instructions for verifying LCM information. Specific instructions are also provided for reviewing and referencing Source Documents. This LCM Program Procedure has been prepared in accordance with the Preparation and Control of NED Procedures (Reference 3.1.F).

2.0   APPLICABILITY/SCOPE

This LCM Program Procedure governs component level ITLR screening for all ITLR systems at CCNPP Units 1 and 2. The process is applied on a per-system basis.

An Evaluator is assigned for each given ITLR system. The Evaluator is responsible for screening system components and for coordination and completion of each step of this Procedure. The Evaluator is responsible for generating the Work Product.

Work Products generated by this Program Procedure are reviewed and approved in accordance with established QA Review and Approval processes, which are not covered by this LCM Program Procedure.

The approach used in this LCM Program Procedure is based on the Screening Methodology identified in Reference 3.1.A. This Program Procedure controls the following activities:

> ITLR system function identification
> ITLR component identification
> Independent Technical Review

The determination of those components which are important to power production (ITPP) is not within the scope of this LCM Program Procedure and is addressed in a separate LCM Program Procedure. Component level ITLR screening is safety related; therefore, a 100% independent technical review is required to verify results.

3.0   REFERENCES

3.1.   Developmental References

The following references were consulted in the preparation of this LCM Program Procedure:

A.   CCNPP Methodology for Integrated Plant Assessment, Volume 1: SSC Screening Methodology. Revision 2.

B.   Baltimore Gas and Electric Life Cycle Management Program Management Plan, Baltimore Gas and Electric Co. Revision 2, April 30, 1992.

C.   Quality Assurance Manual for Nuclear Power Plants, Baltimore Gas and Electric Co. Revision 10.

D.   Code of Federal Regulations, Title 10 Part 50, Revised as of May 31, 1991.

E.   Code of Federal Regulations, Title 10 Part 54, Effective Date of January 13, 1992.

3.1   Developmental References (continued)

F.   <u>Preparation and Control of Nuclear Engineering Department Procedures</u>, DAP-1 Rev.0/Change 0.

G.   QAP-20, <u>Training</u>, Quality Assurance Procedure. Revision 22

3.2   Performance References

The following references are available for use during the screening process:

A.   Calvert Cliffs Nuclear Power Plant, <u>Quality List Manual</u>, Baltimore Gas and Electric Co.

B.   NUCLEIS Database, and Master Equipment List (MEL).

C.   Calvert Cliffs Nuclear Power Plant, Units 1 and 2, <u>Updated Final Safety Analysis Report</u>.

D.   Calvert Cliffs Nuclear Power Plant Units 1 & 2, Reg. Guide 1.97 Response (BG&E letter to NRC dated August 9, 1988).

E.   Calvert Cliffs Nuclear Power Plant, <u>Environmental Qualification (EQ) Design Manual</u>.

F.   5049 List (EQ Manual).

G.   NUREG/CR-4022, "Pressurized Thermal Shock Evaluation of the Calvert Cliffs Unit 1 Nuclear Power Plant."

H.   Station Blackout Analysis (SBO).

I.   Calvert Cliffs Nuclear Power Plant Drawings.

J.   Calvert Cliffs Nuclear Power Plant Operating Instructions (OIs).

K.   Calvert Cliffs Nuclear Power Plant Life Cycle Management Program, <u>System/Structure Level ITLR Screening Results</u>.

L.   Calvert Cliffs Nuclear Power Plant System Descriptions.

M.   Design Basis Event (DBE) Flow Chart Screening Tool.

N.   Limiting Conditions for Operation (LCO) Screening Tool.

O.   Post Accident Monitoring (PAM) Screening Tool.

P.   Environmental Qualification (EQ) Screening Tool.

Q.   Q Screening Tool.

R.   Pressurized Thermal Shock (PTS) Screening Tool.

S.   Anticipated Transients Without Scram (ATWS) Screening Tool.

T.   Station Blackout (SBO) Screening Tool.

U.   Fire Protection (FP) Screening Tool.

3.2 Performance References (continued)

    V.   Life Cycle Management Unit Evaluations Computer Application and Databases (LCMEVAL).

    W.   LCMEVAL User's Manual.

    X.   LCM Policy Instruction 90-02 Technical Problem Reporting.

    Y.   LCM-2, Records Retention and Document Control, Rev.0/Change 0, dated October 4, 1991.

4.0   PREREQUISITES

System/Structure (S/S) Level Screening is required to be complete for the assigned system.

This LCM Program Procedure shall be conducted by personnel who have been trained and qualified to conduct LCM safety-related activities. Personnel using LCM Program Procedures shall be familiar with the CCNPP Methodology for Integrated Plant Assessment, Volume 1: SSC Screening Methodology (Reference 3.1.A) and the Baltimore Gas and Electric Life Cycle Management Program Management Plan (Reference 3.1.B) reports.

Use of the LCMEVAL application is required to complete this Program Procedure. As such, personnel performing this Procedure shall have received training in the utilization of the LCMEVAL software application as part of their Component Screening training.

Identification of ITLR system functions requires that the most current revision of the following S/S Level Screening Tools be available to the Evaluator at initiation of Section 6.1:

-    DBE Screening Tool (Reference 3.2.M)
-    LCO Screening Tool (Reference 3.2.N)
-    PAM Screening Tool (Reference 3.2.O)
-    EQ Screening Tool (Reference 3.2.P)
-    Q Screening Tool (Reference 3.2.Q)
-    PTS Screening Tool (Reference 3.2.R)
-    ATWS Screening Tool (Reference 3.2.S)
-    SBO Screening Tool (Reference 3.2.T)
-    FP Screening Tool (Reference 3.2.U)

Identification of components required for performance of ITLR system functions requires an LCMEVAL software application configured for the assigned system.

5.0   PRECAUTIONS

Source Documents and reference documents used in conjunction with this LCM Program Procedure are controlled documents obtained through the BG&E LCM Program staff or directly from BG&E Document Control. These controlled documents will be transmitted to outside contractors in accordance with LCM-2 (Reference 3.2.Y) or BG&E Document Control. The Work Products generated in Section 6.2 shall be referenced to the most recent version of the source material available at the time that screening is begun in. The revision/change status of all reference materials shall be recorded whenever the Procedure calls for the recording of a revision, unless the Procedure specifies otherwise. Work Products, which include the ITLR System Functions Table (Table 1), the ITLR Function Catalogs and the ITLR Component Level Screening Results (Table 2), will become LCM Program Controlled Documents.

6.0   PERFORMANCE

This LCM Program Procedure shall be applied on a per-system basis.

NOTES:

If the application of this Program Procedure is to update an Approved Work Product, then the Evaluator or Verifier should begin with the update step in Section 6.2.I of this Procedure.

The screening process described in this LCM Program Procedure provides the detail necessary to assure consistent results. A Technical Problem Report (TPR) shall be submitted in accordance with Reference 3.2.X for any technical issue or procedure step that requires clarification in order to complete the screening process.

Sections 6.1 and 6.2 are iterative and Work Products generated by these sections are intended to be completed simultaneously. For example, components identified in Section 6.2 which are required to support ITLR system functions listed in Section 6.1 may provide input to the consolidating function descriptions, step Section 6.1.5.

6.1   ITLR System Function Identification

The purpose of this section is to compile a list of ITLR system functions based on a review of the Criteria Listings from LCMEVAL (Reference 3.2.V), the S/S Level Screening Tools (References 3.2.M through 3.2.U) identified in Section 4.0 and the 'Q'-List Manual (Reference 3.2.A). All steps in Section 6.1 are to be performed by the Evaluator, unless noted otherwise.

NOTE:

The results from the performance of Section 6.1.A are recorded by hand on a facsimile of Table 1, Attachment 2. Table 1 information is entered into the LCMEVAL application in Section 6.1.B.

A.   Table 1 Preparation

NOTES:

References 3.2.A, 3.2.K and 3.2.M through 3.2.U should be used as the basis for identifying system functions; the Source Documents referenced by the Screening Tools and any other "Performance References" listed in Section 3.2 should be used as necessary to aid in the function identification process.

The 1E and 1M criteria will only appear on the LCMEVAL Criteria Listing if the system contains components that are 1E only or 1M only.

---

1.   PRINT the Criteria Listing using LCMEVAL application (Reference 3.2.V).

6.1.A ITLR System Function Identification (continued)

2. OBTAIN a facsimile of the sample Table 1, "ITLR System Functions," provided by Attachment 2.

a. RECORD the System name in the space provided.

> **NOTE:**
>
> Rev. # is the number corresponding to the successive screening of the system. Rev. 0 is the initial screening, Rev. 1 is the first updating of the screening results, etc.

b. RECORD the revision in the "Rev." space as "Initial Draft Rev #," where '#' is the appropriate revision being developed.

> **NOTE:**
>
> If there is a discrepancy between the S/S Level ITLR Screening Results and the Criteria Listing, the evaluator should investigate and resolve the discrepancy. A TPR may be required to resolve the discrepancy.

3. USE the S/S ITLR Screening Results (Reference 3.2.K) and the Criteria Listing **AND** PERFORM Steps 6.1.A.3.a through 6.1.A.3.i, below, for References 3.2.M through 3.2.U in any order, **AND COMPLETE** Table 1 for the Assigned System as follows:

a. IF Table 2 of the S/S ITLR Screening Results (Reference 3.2.K) lists DBE numbers OR the Criteria Listing has a flowsheet(s) listed, **THEN REFER** to the appropriate DBE Screening Tool(s) (Reference 3.2.M) **AND DO** the following:

- DETERMINE the ITLR function **AND ADD** a function description in the "Description of Function" column for each unique occurrence of the assigned system on each appropriate DBE Flow Chart.

- IF the assigned system has "Containment Isolation" as an identified function THEN PLACE a check (√) in only "DBE" columns 13 and 17. [B-19]

- IF the assigned system appears on the vital auxiliaries Flow Chart as a "vital auxiliary," THEN PLACE a check (√) in only "VA" column of Table 1. GO to Step 6.1.A.3.b. [B-18]

- IF the assigned system does not appear on the vital auxiliaries Flow Chart as a "vital auxiliary," THEN PLACE a check (√) in the appropriate "DBE" column(s) of Table 1 to identify the DBE(s) required for each function identified.

b. IF "Yes" is recorded in the "PAM" column of Table 2 of the S/S ITLR Screening Results (Reference 3.2.K) OR the Criteria Listing has "PAM" listed, **THEN** REFER to the PAM Screening Tool (Reference 3.2.O) **AND DO** the following:

6.1.A.3.b ITLR System Function Identification (continued)

> **NOTES:**
>
> In this procedure PAM refers to components that are either PAM 1 or PAM 2. PAM 3 is not screened in this procedure.

- ADD the following function description in the "Description of Function" column:

- "To provide information used to assess the environs and plant condition during and following an accident."

- PLACE one check (√) in the "PAM" column of Table 1 to indicate the source of the function.

- IDENTIFY individual PAM parameters AND ADD the respective descriptions to the Table 1 "Description of Function" column beneath the PAM function.

c.   IF "Yes" is recorded in the "EQ" column of Table 2 of the S/S ITLR Screening Results (Reference 3.2.K) OR the Criteria Listing has "5049" listed, THEN REFER to the EQ Screening Tool (Reference 3.2.P) AND DO the following:

- ADD the following function description in the "Description of Function" column:

- "To Maintain functionality of electrical components as addressed by the EQ Program." [B-16]

- PLACE one check (√) in the EQ column of Table 1 to indicate the source of the function. [B-3]

d.   IF "Yes" is recorded in the "Q" column of Table 2 of the S/S ITLR Screening Results (Reference 3.2.K) OR the Criteria Listing has "Q" listed, THEN PRINT the Q Criteria Catalog AND DO the following:

> **NOTE:**
>
> A review of the 'Q'-List classification associated with this component in the NUCLEIS Database (Reference 3.2.B) may provide guidance to the functions for these component(s).
>
> All Q components with ITLR functions will be included within the other ITLR functional categories, i.e. DBE, VA, PB, PAM, etc.

- FOR all components listed on the Q Criteria Catalog DETERMINE which other ITLR function(s), if any, the components should be associated with.

6.1.A.3.d ITLR System Function Identification (continued)

> **NOTE:**
>
> Some or all of these components may be determined to not be associated with an ITLR function(s).

- FOR all components listed on the Q Criteria Catalog which were determined to not be ITLR NOTE on the Criteria Catalog that these components will be added to function LRAAA-00 in Step 6.2.B.1.n.

- FOR all components listed on the Q Criteria Catalog which were determined to be ITLR NOTE which ITLR function(s) the component will be added to in Step 6.2.A.1.e

- DOCUMENT on a TPR (Reference 3.2.X) each component which appears on the Q Criteria Catalog AND what the present Q-List category should be changed to.

e. IF "Yes" is recorded in the "PTS" column of Table 2 of the S/S ITLR Screening Results (Reference 3.2.K), THEN REFER to the PTS Screening Tool (Reference 3.2.R) AND DO the following:

- DETERMINE the ITLR function(s) AND ADD the indicated function description(s) in the "Description of Function" column.

- PLACE one check (√) in the PTS column of Table 1 for each function to indicate the source of the function.

f. IF "Yes" is recorded in the "ATWS" column of Table 2 of the S/S ITLR Screening Results (Reference 3.2.K), THEN REFER to the ATWS Screening Tool (Reference 3.2.S) AND DO the following:

- DETERMINE the ITLR function(s) AND ADD the indicated function description(s) in the "Description of Function" column.

- PLACE one check (√) in the "ATWS" column of Table 1 for each function to indicate the source of the function.

g. IF "Yes" is recorded in the "SBO" column of Table 2 of the S/S ITLR Screening Results (Reference 3.2.K) OR the Criteria Listing has "SBO" listed, THEN REFER to the SBO Screening Tool (Reference 3.2.T) AND DO the following:

- DETERMINE the ITLR function(s) AND ADD the indicated function description(s) in the "Description of Function" column.

- PLACE one check (√) in the SBO column of Table 1 for each function to indicate the source of the function.

h. IF "Yes" is recorded in the "FP" column of Table 2 of the S/S ITLR Screening Results (Reference 3.2.K), THEN REFER to the FP Screening Tool (Reference 3.2.U) AND DO the following:

6.1.A.3.h ITLR System Function Identification (continued)

- DETERMINE the ITLR function(s) AND ADD the indicated function description(s) in the "Description of Function" column.

- PLACE one check (√) in the FP column of Table 1 for each function to indicate the source of the function.

i. IF "Yes" is recorded in the "LCO" column of Table 2 of the S/S ITLR Screening Results (Reference 3.2.K) THEN REFER to the LCO Screening Tool (Reference 3.2.N) AND DO the following:

- DETERMINE the ITLR function(s) and ADD the appropriate function description and the associated LCO number in the "Description of Function" column.

- PLACE one check (√) in the "LCO" column of Table 1 to indicate the source of the function. [B-13]

4. USING the Criteria Listing COMPLETE Table 1 for the assigned system, as follows:

a. IF the Criteria Listing lists "CLS1," THEN ADD the following function description in the "Description of Function" column:

"To provide seismic integrity and/or protection of SR components."

- PLACE one check (√) in the "CLS1" column of Table 1 to indicate the source of the function.

b. IF the Criteria Listing lists "1E," THEN ADD the following description in the "Description of Function" column:

"To maintain electrical continuity and/or provide protection of the electrical system."

- PLACE one check (√) in the "1E" column of Table 1 to indicate the source of the function. [B-10, B-11]

c. IF the Criteria Listing lists "1M," THEN ADD the following description in the "Description of Function" column:

"To maintain mechanical operability and/or provide protection of the mechanical system."

- PLACE one check (√) in the "1M" column of Table 1 to indicate the source of the function. [B-11]

d. IF the Criteria Listing lists "PB," THEN ADD the following function description in the "Description of Function" column:

"To maintain the pressure boundary of the system (liquid and/or gas)."

- PLACE one check (√) in the "PB" column of Table 1 to indicate the source of the function.

6.1.A. ITLR System Function Identification (continued)

5. CONSOLIDATE function descriptions on Table 1 into a set of unique system functions.

> **NOTES:**
>
> Functions may be consolidated if they are clearly the same. Rationale for consolidation may be documented; for example, as a note on an Evaluator-supplied Table 1 note sheet.
>
> Consolidation of functions relies on engineering judgement. It may be necessary to refer to the Source Documents upon which the Screening Tools are based as input toward making the engineering judgement.
>
> Functions which have been consolidated under another function (parent) are child functions.

a. IF a function on Table 1 is identical to, OR enveloped within another function, THEN PLACE this child function below the one which matches/envelopes it on Table 1 AND RETAIN the relative locations of check marks indicating the source(s) of the child function.

b. For parent functions, ADD a check ($\checkmark$) mark in each column of Table 1 that corresponds to the function sources of the child(ren) functions.

c. IF the function(s) checked is 1E or 1M, THEN DO NOT CONSOLIDATE the function into another function. IF no flowsheet references exist for components that support vital auxiliary functions , these vital auxiliary functions MAY BE consolidated into 1E or 1M functions. [B-20]

d. IF the function(s) checked is PAM, THEN DO NOT CONSOLIDATE the function into another function. IF PAM parameters are clearly the same, THEN THEY MAY BE CONSOLIDATED into another PAM parameter.

6. ASSIGN function identification (ID) numbers to the functions and parameters listed in Table 1. USE the following format AND LIST the function ID numbers in the "Function ID Number" column of Table 1:

Parent Functions: LRAAA-BB

Child Functions: LRAAA-BB-CC

Parameters: LRAAA-BB-XX

Where: LR   is constant (from ITLR)

AAA   is the BG&E system no. [for nos. less than 100 add a zero(s) to the left (11 shall be 011)].

BB   is the sequential no. assigned by the Evaluator for each parent function of a given system [for nos. less than 10 add a zero to the left (1 shall be 01)].

6.1.A.6 ITLR System Function Identification (continued)

CC   is the sequential no. assigned by the Evaluator for each child function of a given parent function [for nos. less than 10 add a zero to the left (1 shall be 01)].

XX   is the sequential capital letter(s) for each parameter of the PAM parent function.

7.   RECORD the completion date in the "Date" space on Table 1.

B.   Enter Table 1 information into LCMEVAL

1.   After Steps 6.1.A.1 through 6.1.A.7 have been completed, ENTER the Table 1 information into the LCMEVAL application.

> **NOTE:**
>
> The LCMEVAL User's Manual (Reference 3.2.W) gives specific instructions for information entry.

2.   ENTER the function number, system number, function indicator (P, M, or C), parent function number and function description.

> **NOTE:**
>
> P = Parent   M = Parameter   C = Child

3.   After all function information is entered, PRINT a draft Table 1.

4.   REVIEW the printout AND VERIFY that the information was entered correctly. IF any of the information is incorrect, THEN EDIT the information AND REPRINT Table 1.

5.   ENTER the criteria references into the LCMEVAL application as follows:

> **NOTE:**
>
> For all functions, entry of the DBE number or criterion (e.g., PAM) is necessary to produce an "X" in the applicable column of Table 1. Entry of an associated flowsheet number or source reference is necessary for automatic ascription of components to functions by LCMEVAL (Reference 3.2.V).

a.1.   For DBE function "Containment Isolation," ENTER the DBE number(s) as the criterion AND ENTER "UFSAR Chapter 5" as the reference.

a.2.   For DBE or VA functions (other than "Containment Isolation"), ENTER the functions as follows: [B-18]

6.1.B.5.a.2 ITLR System Function Identification (continued)

- ENTER the function once using the DBE number as the criterion AND ENTER all of the flowsheets associated with that function as the references. IF more than one DBE number is associated with the function, THEN REPEAT this step for each additional DBE number.

- ENTER the function again using a single flowsheet number as the criterion AND ENTER "FLWSHT-XXXY" as the reference, WHERE XXXY is the flowsheet number, Y will be an alphabetic character. IF more than one flowsheet is associated with the function, THEN REPEAT this step for each additional flowsheet.

b. For the CLS1 function, ENTER "CLS1" as the criterion AND ENTER "NETD" as the reference.

c. For the PAM function, ENTER "PAM" as the criterion AND ENTER "NETD" as the reference.

d. For the EQ function, ENTER "5049" as the criterion AND ENTER "NETD" as the reference.

e. For Q components NO ENTRY for Table 1 is made.

f. For the 1E function, ENTER "1E" as the criterion AND ENTER "NETD" as the reference.

g. For the 1M function, ENTER "1M" as the criterion AND ENTER "NETD" as the reference.

h. For the PB function, ENTER "PB" as the criterion AND ENTER "NETD" as the reference.

i. For PTS functions, ENTER "PTS" as the criterion AND ENTER "PTS Screening Tool" as the reference.

j. For ATWS functions, ENTER "ATWS" as the criterion AND ENTER "ATWS Screening Tool" as the reference.

k. For SBO functions, ENTER "SBO" as the criterion AND ENTER "SBO Screening Tool" as the reference.

l. For FP functions, ENTER "FP" as the criterion AND ENTER "FP Screening Tool" as the reference.

m. For LCO functions, ENTER "LCO" as the criterion AND ENTER "LCO Screening Tool" as the reference.

6.1.B.5 ITLR System Function Identification (continued)

NOTES:

The Criteria Correlation is a listing of the criteria and references associated with the Table 1 functions.

When steps above direct the Evaluator to enter a specific reference, this indicates the normal reference for such information. Other references may be entered instead of those indicated, if the other reference is clearly required to determine a function description.

---

6. After all criteria and reference information is entered, **PRINT** Table 1 **AND PRINT** a copy of the Criteria Correlation.

7. **REVIEW** these printouts **AND VERIFY** that the information was entered correctly. **IF** any of the information is incorrect, **THEN EDIT** the information **AND REPRINT** Table 1 and the Criteria Correlation.

6.2 ITLR Component Identification

NOTES:

The following steps require engineering judgement. It will be necessary to refer to plant drawings and other documents as input toward making the engineering judgement.

All components are to have unique NUCLEIS equipment identifiers.

Components with Device Type "STR" and "SYS" are administrative component designations and should be specifically excluded from the screening process. [B-5]

Components with Device Type "AP", "FP", "LX", "PP", "RP", and "SX" are location indicators only and shall be specifically excluded from the screening results.

Hangers and Snubbers may be included in a system MEL, but will be screened in a separate screening process, (See Reference 3.1.A). These components should be specifically excluded from the screening process. [B-6]

A. Review of Criteria Catalogs and Development of Function Catalogs

The purpose of this section is to provide specific instructions for the compilation of one Function Catalog of required components for each specific ITLR parent function listed in Table 1 for the assigned system. All steps in Section 6.2 are to be performed by the Evaluator.

1. **COMPLETE** a Function Catalog for each parent function listed in Table 1 as follows:

a.1 **IF** the parent function has DBEs **OR** VA checked in Table 1 **AND IS NOT** the "Containment Isolation" function, **THEN DO** the following: [B-18]

• **USE** the Criteria Listing **AND DETERMINE** the corresponding 'Q'-List System Flowsheet numbers associated with the parent function. [B-4]

6.2.A.1.a.1 ITLR Component Identification (continued)

- USE LCMEVAL AND PRINT the Criteria Catalogs for the flowsheets.

- REVIEW the Criteria Catalog AND DETERMINE if all required active components in the system being screened are listed.

- IF components that are required to perform the function ARE NOT found in the Criteria Catalog, THEN RECORD in the appropriate column of the Function Catalog form (Attachment 4) the Equipment ID(s) and Reference(s).

a.2   IF the parent function has DBEs checked in Table 1 AND IS the "Containment Isolation" function, THEN DO the following:

NOTES:

The 100-series 'Q'-List System Flowsheets (i.e., 100A, 100G, etc.) may be used as a starting point for development of the Containment Isolation Function Catalog. However, the UFSAR Figure 5-10 and/or plant drawings must be used as the final references for this catalog.

- REVIEW the UFSAR Chapter 5, Figure 10 AND DETERMINE which components are required for Containment Isolation.

- REVIEW the plant drawings showing those components required for Containment Isolation AND DETERMINE any additional components that are required.

- RECORD, in the "Equipment ID" column on a facsimile of Attachment 4, all components required for Containment Isolation.

- RECORD, in the "Reference" column, the associated reference(s). USE as the reference for all components shown in the UFSAR "UFSAR Ch5 Fg10 ShXX," where XX is the sheet number. USE as the reference for those components not shown in the UFSAR the plant drawing on which they are located.

b.   IF the parent function is checked "CLS1" in Table 1, THEN DO the following:

- USE LCMEVAL AND PRINT the Criteria Catalog for the CLS1 criteria.

- REVIEW the Criteria Catalog AND DETERMINE if all required active components in the system being screened are listed.

- IF components that are required to perform the function ARE NOT found in the Criteria Catalog, THEN RECORD in the appropriate column of the Function Catalog form (Attachment 4) the Equipment ID(s) and Reference(s).

6.2.A.1.c ITLR Component Identification (continued)

c. IF the parent function is checked "PAM" in Table 1, THEN DO the following:

- USE LCMEVAL AND PRINT the Criteria Catalog for the PAM criteria.

> **NOTE:**
>
> Only those components specifically listed in the Reg. Guide 1.97 response as PAM 1 or PAM 2 will be credited as PAM. Any components listed on the criteria catalog that are not in the Reg. Guide 1.97 response will be noted on a TPR for removal of the PAM designation in the NUCLEIS Database. PAM 2 components do not require SR power, only a highly reliable power source (Reference 3.2.D). PAM 3 components are not screened.

- COMPARE the Criteria Catalog with the components listed in the Reg. Guide 1.97 response and DETERMINE those components to be listed in the Function Catalog.

- DETERMINE which parameter(s) each component is required to support AND IDENTIFY each component to the parameter(s) using the capital letter(s) assigned to that parameter on Table 1.

- IF components that are required to perform the function ARE NOT found in the Criteria Catalog, THEN RECORD in the appropriate column of the Function Catalog form (Attachment 4) the Equipment ID(s), Reference(s) and capital letter(s) to indicate the corresponding parameter(s).

d. IF the parent function is checked "EQ" in Table 1, THEN DO the following:

- USE LCMEVAL AND PRINT the Criteria Catalog for the 5049 (EQ) criteria.

- REVIEW the Criteria Catalog AND DETERMINE if all required active components in the system being screened are listed.

- IF MOVs, CVs, or similar components are listed on the Criteria Catalog, THEN RECORD the Equipment IDs of their operators on a facsimile of Attachment 4.

- RECORD "NETD" as their reference.

> **NOTE:**
>
> The valves will need to be deleted from the Function Catalog after it is created in LCMEVAL.

6.2.A.1.d ITLR Component Identification (continued)

- IF components that are required to perform the function **ARE NOT** found in the Criteria Catalog, **THEN RECORD** in the appropriate column of the Function Catalog form (Attachment 4) the Equipment ID(s) and Reference(s).

e. IF "Q" Appears on the Criteria Listing, **THEN DO** the following:

- **FOR** all ITLR components, **REVIEW** the notes made on the Q Criteria Catalog in Step 6.1.A.3.d **AND RECORD** for the appropriate function the Equipment ID(s) and Reference(s) in the appropriate column of the Function Catalog form (Attachment 4).

NOTE:

All components will have a TPR (Reference 3.2.X) requesting that the SR-Q category be changed to that identified in this screening.

---

f. IF the parent function is checked "1E" in Table 1, **THEN DO** the following:

- USE LCMEVAL **AND PRINT** the Criteria Catalog for the 1E criteria.

NOTE:

This catalog will list components that are 1E only and may include components that provide vital auxiliary electrical functions. Because of the data storage characteristics of LCMEVAL, the Criteria Catalog may also contain components referenced to flowsheets. To make this a 1E ONLY Function Catalog, components associated with flowsheets should not be included. **[B-10, B-11, B-17, B-20, B-22]**

- **REVIEW** the Criteria Catalog **AND DETERMINE** if all required active components in the system being screened are listed.

- **COMPARE** the 1E Criteria Catalog **WITH ALL** Flowsheet Criteria Catalogs **AND LINE THROUGH** all components on the 1E Criteria Catalog which **ALSO** appear on a Flowsheet Criteria Catalog. **[B-22]**

- IF components that are required to perform the function **ARE NOT** found in the Criteria Catalog, **THEN RECORD** in the appropriate column of the Function Catalog form (Attachment 4) the Equipment ID(s) and Reference(s).

6.2.A.1.f ITLR Component Identification (continued)

> **NOTE:**
>
> If components are believed to be 1E but are not shown in the NUCLEIS Database as 1E, a TPR (Reference 3.2.X) will be required to request a Q-List category change. Technical justification for the change will be required with the TPR.

g. IF the parent function is checked "1M" in Table 1, **THEN DO** the following:

• USE LCMEVAL **AND PRINT** the Criteria Catalog for the 1M criteria.

> **NOTE:**
>
> This catalog will list components that are 1E only and may include components that provide vital auxiliary mechanical functions. Because of the data storage characteristics of LCMEVAL, the Criteria Catalog may also contain components referenced to flowsheets. To make this a 1M ONLY Function Catalog, components associated with flowsheets should not be included. **[B-10, B-11, B-20, B-22]**

• REVIEW the Criteria Catalog **AND DETERMINE** if all required active components in the system being screened are listed.

• COMPARE the 1M Criteria Catalog **WITH ALL** Flowsheet Criteria Catalogs **AND LINE THROUGH** all components from the 1M Criteria Catalog which **ALSO** appear on a Flowsheet Criteria Catalog. **[B-22]**

• IF components that are required to perform the function **ARE NOT** found in the Criteria Catalog, **THEN RECORD** in the appropriate column of the Function Catalog form (Attachment 4) the Equipment ID(s) and Reference(s).

> **NOTE:**
> If components are believed to be 1M but are not shown in the NUCLEIS Database as 1M, a TPR (Reference 3.2.X) will be required to request a Q-List category change. Technical justification for the change will be required with the TPR.

6.2.A.1.h ITLR Component Identification (continued)

h.   IF the parent function is checked "PB" in Table 1, THEN DO the following:

> **NOTE:**
>
> Components that appear on the 'Q'-List Redline Drawings but are   nly PB
> for Containment Isolation purposes (i.e., they are not connected to the
> pressure boundary portion of the rest of the system), will be listed in the
> DBE Containment Isolation Function only. They will not be listed in the PB
> Function Catalog. **[B-1, B-7]**

- USE LCMEVAL AND PRINT the Criteria Catalog for the PB criterion.
  [B-7]

- USE the latest revisions of plant drawings, P&IDs for pipe segments
  and Operations Drawings (OMs) for hand valves, check valves, etc.,
  AND TRANSFER the pressure boundary to these plants drawings
  USING the Q-List Redline drawings as the source of pressure
  boundary information.

- **FOR EACH** component determined to be within the pressure
  boundary which **WAS NOT** included in the PB Criteria Catalog, **USE** a
  facsimile of Attachment 4 **AND RECORD**, in the "Equipment ID"
  column, the Equipment ID number.

- RECORD, in the "Reference" column, the plant drawing on which the
  component is located as "DDDDDSHXXXXA", where D refers to the
  drawing number, and X and A refer to the sheet number.

> **NOTES:**
>
> The drawing size, i.e., D or E, are not to be included in the
> reference.
>
> The Sheet Number will be 4 digits, i.e., Sheet 1 = SH0001, unless
> there is an alpha character. Then the Sheet Number will be 5
> digits, i.e., Sheet 1A = SH0001A. **[B-16]**

- RECORD the 'Q'-List Redline drawing number as "MXXXSHXX," where
  X refers to the drawing and sheet numbers, for future use in preparing
  notes for this component. **[B-9]**

- FOR those hand valves in the system MEL but **NOT** shown on the
  drawings, **CHECK** the system operating instructions to determine if
  the valve(s) are listed. IF the valve(s) ARE listed AND ARE determined
  to be within the red line pressure boundary by their description (either
  MEL or OI description), THEN RECORD, in the "Equipment ID"
  column, the Equipment ID number(s).

6.2.A.1.h ITLR Component Identification (continued)

- USE as the reference for these hand valves "OIXXATTYSZZ-U," where X refers to the OI numbers, Y refers to the Attachment No. (1 or 2), Z refers to the page numbers and U refers to the unit number (1 or 2). [B-19]

> **NOTE:**
>
> Pressure Boundary Components such as pipe segments and hand valves which only perform a passive function should be listed in the PB Function Catalog only.

i.   IF the parent function is checked "PTS" in Table 1, **THEN DO** the following:

- **REVIEW** the Source Documents listed in the PTS Screening Tool (Reference 3.2.R) **AND IDENTIFY** the component(s) required to perform the given function.

- **RECORD**, on a facsimile of Attachment 4 in the "Equipment ID" column, all Equipment ID numbers for the assigned system that are required to perform the given function.

- **RECORD**, in the "Reference" column, the appropriate reference(s).

> **NOTE:**
>
> For those components specifically named in the Source Documents, use the Source Document as the reference. For those components required to perform the function but not specifically listed in the Source Documents, use the plant drawing on which they are located as the reference.

j.   IF the parent function is checked "ATWS" in Table 1, **THEN DO** the following:

- **REVIEW** the Source Documents listed in the ATWS Screening Tool (Reference 3.2.S) **AND IDENTIFY** the component(s) required to perform the given function.

- **RECORD**, on a facsimile of Attachment 4 in the "Equipment ID" column, all Equipment ID numbers for the assigned system that are required to perform the given function.

- **RECORD**, in the "Reference" column, the appropriate reference(s).

6.2.A.1.j ITLR Component Identification (continued)

> **NOTE:**
>
> For those components specifically named in the Source Documents, use the Source Document as the reference. For those components required to perform the function but not specifically listed in the Source Documents, use the plant drawing on which they are located as the reference.

k. IF the parent function is checked "SBO" in Table 1, THEN DO the following:

- USE LCMEVAL AND PRINT the Criteria Catalog for SBO.

- REVIEW the Source Documents listed in the SBO Tool (Reference 3.2.T) AND IDENTIFY the component(s) required to perform the given function.

> **NOTE:**
>
> If components listed in the Source Documents are to be turned off during SBO, then these components will not be screened as ITLR. However, components required to turn off other components will be screened as ITLR.

- RECORD, on a facsimile of Attachment 4 in the "Equipment ID" column, all Equipment ID numbers for the assigned system that are required to perform the given function.

- RECORD, in the "Reference" column, the appropriate reference(s).

> **NOTE:**
>
> For those components specifically named in the Source Documents, use the Source Document as the reference. For those components required to perform the function but not specifically listed in the Source Documents, use the plant drawing on which they are located as the reference.

l. IF the parent function is checked "FP" in Table 1, THEN DO the following:

- REVIEW the Source Documents listed in the FP Tool (Reference 3.2.U) AND IDENTIFY the component(s) required to perform the given function.

6.2.A.1.I ITLR Component Identification (continued)

> **NOTE:**
>
> Only those components that provide a unique FP function are to be listed in the FP Function Catalog. All components listed in other Function Catalogs that perform identical functions for fire protection are NOT to be included in the FP Function Catalog. **[B-17]**

- RECORD, on a facsimile of Attachment 4 in the "Equipment ID" column, all Equipment ID numbers for the assigned system that are required to perform the given function.

- RECORD, in the "Reference" column, the appropriate reference(s).

> **NOTE:**
>
> For those components specifically named in the Source Documents, use the Source Document as the reference. For those components required to perform the function but not specifically listed in the Source Documents, use the plant drawing on which they are located as the reference.

m. IF the parent function is checked "LCO" in Table 1, **THEN DO** the following:

- REVIEW the Source Documents listed in the LCO Screening Tool (Reference 3.2.N) **AND IDENTIFY** the component(s) required to perform the given function.

> **NOTE:**
>
> Only those components that provide a unique LCO function are to be listed in the LCO Function Catalog. All components listed in other Function Catalogs that perform identical functions for limiting conditions of operation are **NOT** to be included in the LCO Function Catalog. **[B-17]**

- RECORD, on a facsimile of Attachment 4 in the "Equipment ID" column, all equipment ID numbers for the assigned system that are required to perform the function.

- RECORD, in the "Reference" column, the appropriate reference(s). **[B-13]**

6.2.A.1.m ITLR Component Identification (continued)

NOTE:

For those components specifically named in the Source Documents, use the Source Document as the reference. For those components required to perform the function but not specifically listed in the Source Documents, use the plant drawing on which they are located as the reference.

B.   Entry of Function Catalogs into LCMEVAL and Table 2 Preparation

The purpose of this section is to provide specific instructions for the generation of Table 2. Table 2 is generated using the LCMEVAL Application (Reference 3.2.V).

NOTES:

Administrative assistants and other support-type personnel may be used to assist the Evaluator during the entry of Function Catalogs into LCMEVAL and the preparation of Table 2. The Verifier may also use AA's and other support-type personnel during the Independent Technical Review of the Function Catalogs and/or Table 2, provided the same person did not assist the Evaluator. The Evaluator and Verifier are Ultimately responsible for performing the screening process and verifying the accuracy and completeness of the Work Products.

The Function Catalogs are entered into the LCMEVAL application. The Function Catalogs are stored as files which contain the individual components and their appropriate functions, references and notes. After the Function Catalogs are entered in the application, Table 2 is generated using the application.

All components may be entered using Method 1.   For those components that have been identified as SR or SBO in the NUCLEIS Database or are shown on Flowsheets, Method 2 will be faster.

---

1.   ENTER the Function Catalogs in the LCMEVAL application as follows:

NOTES:

Function Catalogs for each parent function are built in the LCMEVAL application (Reference 3.2.V) by entering component numbers, functions, references and note numbers using one of two different methods.

These methods are:

1.   Manually Ascribe Components--Components are added to the catalog one by one.

2.   Automatically Ascribe NETD Components--All components associated with a given Criteria Catalog are loaded to the Function Catalog.

6.2.B.1 ITLR Component Identification (continued)

NOTES (continued):

A detailed explanation of these two methods is given in the LCMEVAL User's Manual (Reference 3.2.W).

All components are to have NUCLEIS component designations. [B-2]

When drawings are used as references for individual components being included in a catalog, the revision and size are not entered. The revisions for the drawings are required when they are listed on the References and Notes Sheet.

The "Notes" column in the Function Catalog is to be used to indicate all notes for a single component and function. Acceptable entries are TPR XX-XXX, where Xs are numbers, to indicate this component has a TPR written against it; numbers to indicate general notes located on the References and Notes Sheet; capital letters to indicate parameters the component is associated with for the PAM function.

Notes should be used to explain when a single Equipment ID refers to a number of distinct items on a drawing (e.g., skid-mounted components with a single ID).

Components associated with DBE functions should normally have 'Q'-List System Flowsheet(s) for references. Some exceptions to this rule are: Valve Operators and Containment Isolation Components.

---

a.1   FOR components identified with DBE OR VA parent functions which are not the Containment Isolation Function: [B-18]

- USE Method 2 **AND AUTOMATICALLY ASCRIBE** those components referenced to flowsheets; their reference(s), which is "FLWSHT-XXXY," where XXXY is the flowsheet number, is automatically entered.

- USE Method 1 **AND ENTER** the valve operators associated with valves listed on flowsheets **AND ENTER** the plant appropriate drawing as their reference.

- USE Method 1 **AND ENTER** those components listed on a facsimile of Attachment 4 which are not valve operators **AND ENTER** the appropriate plant drawing as their reference.

- ENTER in the "Notes" column the TPR number (Reference 3.2.X), if needed, **AND/OR** number(s) referring to a particular note on the References and Notes Sheet of Table 2, if applicable.

a.2   FOR components identified with the Containment Isolation Function:

- USE Method 1 **AND ENTER** those components identified as required for containment isolation.

- ENTER as their reference the "UFSAR Ch5 Fg10 ShXX," where XX is the sheet number for those components shown in the UFSAR.

6.2.B.1.a.2 ITLR Component Identification (continued)

- ENTER as their reference the appropriate plant drawing for those components not shown in the UFSAR.

- ENTER in the "Notes" column the TPR number (Reference 3.2.X), if needed, AND/OR number(s) referring to a particular note on the References and Notes Sheet of Table 2, if applicable.

b. FOR components identified with the CLS1 parent function:

- USE Method 2 AND AUTOMATICALLY ASCRIBE those components listed in the NUCLEIS Database with SR Category CLS1; their reference, which is "NETD," is automatically entered.

- USE Method 1 AND ENTER those components not listed in the NUCLEIS Database.

- ENTER as their reference the plant drawing on which they are located.

- ENTER in the "Notes" column the TPR number (Reference 3.2.X), if needed, AND/OR number(s) referring to a particular note on the References and Notes Sheet of Table 2, if applicable.

c. FOR components identified with the PAM parent function:

- USE Method 2 AND AUTOMATICALLY ASCRIBE those components listed in the NUCLEIS Database with SR Category PAM; their reference, which is "NETD," is automatically entered.

- EDIT the Function Catalog AND CHANGE the Function Catalog Number to LRAAA-00 for those PAM components that were automatically ascribed BUT which were determined to NOT be PAM.

- ENTER in the "Notes" column the TPR number (Reference 3.2.X), which requests that the component(s) be downgraded to remove the PAM category.

- ENTER in the "Notes" column the capital letter(s) identifying the PAM parameter(s), for the remaining component(s), with which the component is associated.

- USE Method 1 AND ENTER those PAM components not listed in the NUCLEIS Database.

- ENTER as their reference the plant drawing on which they are located.

- ENTER in the "Notes" column the TPR number (Reference 3.2.X), if needed, AND/OR number(s) referring to a particular note on the References and Notes Sheet of Table 2, if applicable AND ENTER in the "Notes" Column the capital letter(s) identifying the PAM parameter(s) with which the component is associated.

6.2.B.1. ITLR Component Identification (continued)

    d.   FOR components identified with the EQ parent function:

- USE Method 2 **AND AUTOMATICALLY ASCRIBE** those components listed in the NUCLEIS Database with SR Category 5049; their reference, which is "NETD," is automatically entered.

- IF an MOV, CV, etc., is shown as 5049, **THEN USE** Method 1 **AND ENTER** the operator.

- USE the "NETD" as the operator reference.

- EDIT the Function Catalog **AND DELETE** the MOV, CV, etc., from the Function Catalog.

- USE Method 1 **AND ENTER** those other EQ components not listed in the NUCLEIS Database.

- ENTER as their reference the plant drawing on which they are located.

- ENTER in the "Notes" column the TPR number (Reference 3.2.X), if needed, **AND/OR** number(s) referring to a particular note on the References and Notes Sheet of Table 2, if applicable.

    e.   FOR ITLR components which appeared on the Q Criteria Catalog, **DO** the following:

- USE Method 1 **AND ENTER** these components in the appropriate function catalog as determined in step 6.1.A.3.e.

- ENTER as their reference the plant drawing on which they are located.

- ENTER in the "Notes" column the TPR number (Reference 3.2.X), which requests the "Q" category be changed, **AND** number(s) referring to a particular note on the References and Notes Sheet of Table 2, if applicable.

    f.   FOR components identified with the 1E parent function: [B-10, B-11]

- USE Method 2 **AND AUTOMATICALLY ASCRIBE** those components listed in the NUCLEIS Database with SR Category 1E only; their reference, which is "NETD," is automatically entered.

- EDIT the Function Catalog **AND DELETE** those components which were "lined out" of the 1E Criteria Catalog in Step 6.2.A.1.f.

- USE Method 1 **AND ENTER** those 1E only components not listed in the NUCLEIS Database.

- ENTER as their reference the plant drawing on which they are located.

6.2.B.1.f ITLR Component Identification (continued)

- ENTER in the "Notes" column the TPR number (Reference 3.2.X), if needed, AND/OR number(s) referring to a particular note on the References and Notes Sheet of Table 2, if applicable.

g. FOR components identified with the 1M parent function: **[B-11]**

- USE Method 2 **AND AUTOMATICALLY ASCRIBE** those components listed in the NUCLEIS Database with SR Category 1M only; their reference, which is "NETD," is automatically entered.

- EDIT the Function Catalog **AND DELETE** those components which were "lined out" of the 1M Criteria Catalog in Step 6.2.A.1.g.

- USE Method 1 **AND ENTER** those 1M only components not listed in the NUCLEIS Database.

- ENTER as their reference the plant drawing on which they are located.

- ENTER in the "Notes" column the TPR number (Reference 3.2.X), if needed, AND/OR number(s) referring to a particular note on the References and Notes Sheet of Table 2, if applicable.

h. FOR components identified with the PB parent function: **[B-9]**

- USE Method 2 **AND AUTOMATICALLY ASCRIBE** those components listed in the NUCLEIS Database with SR Category PB; their reference, which is "NETD," is automatically entered.

- USE Method 1 **AND ENTER** those PB components not listed in the NUCLEIS Database.

- ENTER as their reference the plant drawing on which they are located.

  ENTER in the "Notes" column the TPR number (Reference 3.2.X), if needed, AND/OR number(s) referring to a particular note on the References and Notes Sheet of Table 2, if applicable.

- ENTER a Generic Note on the References and Notes Sheet which identifies the 'Q'-List Redline drawings that were used to transfer the pressure boundaries to the plant drawings.

i. FOR components identified with PTS parent functions:

- USE Method 1 **AND ENTER** those components identified as required for PTS.

- ENTER as the reference "NUREG/CR-4022" for the components specifically mentioned in NUREG/CR-4022.

- ENTER as the reference for those components not specifically identified in NUREG/CR-4022, the plant drawings on which they are located.

6.2.B.1.i ITLR Component Identification (continued)

- ENTER in the "Notes" column the TPR number (Reference 3.2.X), if needed, AND/OR number(s) referring to a particular note on the References and Notes Sheet of Table 2, if applicable.

j. FOR components identified with the ATWS parent function:

- USE Method 1 AND AUTOMATICALLY ASCRIBE those components identified in the ATWS Screening Tool References as required for ATWS.

- ENTER as their reference the appropriate ATWS Screening Tool reference.

- USE Method 1 AND ENTER those components not specifically identified in the ATWS Screening Tool References.

- ENTER as their reference the plant drawings on which they are located.

- ENTER in the "Notes" column the TPR number (Reference 3.2.X), if needed, AND/OR number(s) referring to a particular note on the References and Notes Sheet of Table 2, if applicable.

k. FOR components identified with SBO parent functions:

- USE Method 2 AND AUTOMATICALLY ASCRIBE those components identified in the Criteria Catalog as required for SBO; their reference, which is "SBO Screening Tool," is automatically entered.

- EDIT the Function Catalog AND DELETE those components that were automatically ascribed which are secured components or power restoration components.

- USE Method 1 AND ENTER those components that are not identified in the Criteria Catalog.

- ENTER as their reference the plant drawing on which they are located.

- ENTER in the "Notes" column the TPR number (Reference 3.2.X), if needed, AND/OR number(s) referring to a particular note on the References and Notes Sheet of Table 2, if applicable.

l. FOR components identified with FP parent functions:

- USE Method 1 AND ENTER only those components which have unique FP functions. [B-21]

- ENTER as their reference the appropriate FP Screening Tool reference.

6.2.B.1.I ITLR Component Identification (continued)

- ENTER as the reference for those components not specifically
  identified in the FP Screening Tool References, the plant drawings on
  which they are located. [B-16]

- ENTER in the "Notes" column the TPR number (Reference 3.2.X), if
  needed, AND/OR number(s) referring to a particular note on the
  References and Notes Sheet of Table 2, if applicable.

m. FOR components identified with LCO parent functions:

- USE Method 1 AND ENTER only those components which have
  unique LCO functions. [B-21]

- ENTER the Technical Specifications section, "Tech Spec A.B.C d" as
  the reference for those components specifically mentioned in the
  Technical Specifications.

- ENTER the plant drawing on which they are located as the reference
  for those components which are not specifically mentioned in the
  Technical Specifications.

- ENTER in the "Notes" column the TPR number (Reference 3.2.X), if
  needed, AND/OR number(s) referring to a particular note on the
  References and Notes Sheet of Table 2, if applicable.

n. FOR components which REQUIRE a down-grade of category AND/OR are not
    in the MEL:

- USE Method 1 AND ENTER these components in Function Catalog
  LRAAA-00.

- ENTER in the "Notes" column the TPR number (Reference 3.2.X),
  requesting a change to NUCLEIS.

+--+
| NOTE: |
| |
| These components will not have a reference and will be ITLR "N" on |
| Table 2. |
+--+

o. FOR components which ARE listed in the MEL AND ARE to be moved to
    another system MEL :

- USE Method 1 AND ENTER these components in Function Catalog
  LRAAA-00000.

- ENTER in the "Notes" column the TPR number (Reference 3.2.X),
  requesting a change to NUCLEIS.

6.2.B.1.o ITLR Component Identification (continued)

> **NOTE:**
>
> These components will not have a reference and will not be designated as either ITLR "Y" or "N".

C.   Generation of Table 2

The purpose of this section is to provide direction for the generation of Table 2.

1.   USE LCMEVAL AND IDENTIFY all components that are NOT to be printed in Table 2.

> **NOTE:**
>
> "Components" STR, SYS, FP, LX, PP, SX, TP and SNUB are not to be screened or printed in Table 2. [B-5, B-6].

2.   USE LCMEVAL AND GENERATE Table 2.

3.   EDIT Table 2 as necessary.

> **NOTES:**
>
> Any editing required for Table 2 except entering of components, is accomplished using the edit menu of LCMEVAL before the Table is printed. If any ITLR components are required to be added to Table 2, they are entered into the appropriate Function Catalog(s) and Table 2 is recompiled.
>
> Any editing of ITLR components in Table 2 which changes the component status requires the changes also be incorporated in the Function Catalog(s).
>
> Any components that were entered in Function Catalogs LRAAA-00 or LRAAA-00000 do not require editing in Table 2.

4.   PRINT Table 2.

D.   References and Notes Sheet

The purpose of this section is to provide instructions for generation of the References and Notes Sheet.

1.   USE LCMEVAL or a word processor AND DO the following:

a.   LIST all references and notes cited in Table 2.

b.   INCLUDE a general note explaining the capital letters used to identify PAM parameters.

6.2.D.1 ITLR Component Identification

      c.   INCLUDE a general note which identifies the Q-List red line drawings that were used to transfer the pressure boundary to the plant drawings.

      d.   LIST AND DEFINE any shorthand abbreviations and/or acronyms used in Table 2.

      e.   PRINT the References and Notes Sheet.

E.   Table 2 Analysis

The purpose of this section is to check the results of the component screening for completeness and consistency.

1.   USE the completed Table 2 AND PERFORM the following:

      a.   IDENTIFY inconsistencies between units.

      b.   IDENTIFY inconsistencies within the same unit (i.e., patterns of components relied upon; nomenclature used for equipment type).

      c.   REVIEW components identified by an 'N' in the "ITLR" column.

      d.   QUESTION why 'N' components are not captured in an existing function.

      e.   REVIEW components with a TPR reference AND ENSURE all components are listed on the correct TPR(s).

2.   INCORPORATE any necessary revisions to Table 1 and/or Table 2.

3.   REVISE Function Catalogs, if necessary, to be consistent with changes to Table 2.

4.   RECOMPILE and PRINT Table 2 and the Function Catalogs, if necessary, AND VERIFY that all changes have been incorporated.

F.   Table 1 Cover Sheet Preparation

1.   USE LCMEVAL or a word processor AND DO the following:

      a.   RECORD the system name in the two blanks provided.
      b.   RECORD the references and revision numbers (i.e., those identified by References 3.2.B, 3.2.K and 3.2.M through 3.2.U), used to identify each of the functions listed in Table 1, in the space provided on the Cover Sheet.

      c.   TYPE your name.

      d.   PRINT Table 1 Cover Sheet.

2.   PLACE the Table 1 Cover Sheet, Table 1, and the Criteria Correlation in a three-ring binder.

6.2 ITLR Component Identification

G.   Table 2 Cover Sheet Preparation

1.   USE LCMEVAL or a word processor AND DO the following:

a.   RECORD the system name in the three blanks provided.
b.   TYPE your name.
c.   PRINT Table 2 Cover Sheet.

2.   PLACE the Table 2 Cover Sheet on top of Table 2.

3.   PLACE the References and Notes Sheet behind Table 2.

4.   PLACE the Table 2 Cover Sheet, Table 2, all Function Catalogs and the References and Notes Sheet in a three-ring binder.

5.   PLACE all handwritten Function Catalogs in a separate binder.

6.   IF this is the initial screening, THEN PROCEED to Step 6.3.

H.   Periodic Update of Screening Results [B-8]

NOTE:

Step 6.2.H is to be performed to update an Approved Work Product (Component Level Screening Results) after the initial screening has been completed, verified and approved; i.e., periodic updates.

---

1.   IF updating is being provided on an Approved Work Product, THEN the Evaluator will ASSIGN an appropriate revision designator. The revision designator should take the form Initial Draft Rev. #, where # is the appropriate revision being developed.

NOTE:

The Evaluator should assign a revision designator to distinguish the Work Product from previous or future working revisions, and previous or future approved revisions.

---

2.   DETERMINE if the Approved Work Product(s) was developed using an earlier version of the Screening Procedure.

3.   IF steps of the procedure have been revised, THEN DETERMINE if the changes impact the content or conclusions documented in the Work Product.

a.   IF the changes have no impact on the Work Product, THEN PROCEED to Step 6.2.I.4.

b.   IF the changes invalidate portions of the Work Product, THEN REPEAT the appropriate steps of the Program Procedure to recreate only those sections of the Work Product affected by the Procedure revisions.

6.2.H ITLR Component Identification (continued)

4. DETERMINE for each reference if changes and/or revisions have been issued since the reference revisions listed on the Table 1 Cover Sheet and Table 2 References and Notes Sheet.

    a. IF changes have been issued to any references, THEN DETERMINE if the changes impact the content or conclusions documented in the Work Product.

        (1) IF the changes have no impact on the Work Product, THEN UPDATE the revision status of the reference(s) listed on the Table 1 Cover Sheet or Table 2 References and Notes Sheet.

        (2) IF the changes invalidate portions of the Work Product, THEN REPEAT the appropriate steps of this Procedure to recreate only those sections of the Work Product affected by reference changes and/or revisions.

5. OBTAIN, from the LCM Lead Evaluations Engineer, a copy of the Delta for the System MEL.

NOTE:

The Delta is the listing of components that have been added to or deleted from the MEL or their SR categories or classifications have changed since the last LCM extraction of components from NUCLEIS.

---

6. REVIEW the "new" components listed on the Delta AND DETERMINE if any are ITLR by performing Step 6.2 of this Procedure.

7. REVIEW the "deleted" components listed on the Delta AND DETERMINE if they should be deleted from the screening results.

8. REVIEW the applicable LCM TPRs addressing the Work Product AND INCORPORATE the resolved LCM TPRs as necessary.

9. AFTER updating is complete, print Table 1, Table 2, and the Function Catalogs. They will be "Rev #." where # is the next sequential number. PREPARE new Cover Sheets in accordance with steps 6.2.G and 6.2.H.

10. PROCEED to Step 6.3.

I. Update of Screening Results to Incorporate TPR Resolutions Only [B-23]

NOTE:

Step 6.2.I is to be performed to update an Approved Work Product (Component Level Screening Results), for incorporation of TPR resolutions only, after the initial screening has been completed, verified and approved.

6.2.I ITLR Component Identification (continued)

1. IF updating is being provided on an Approved Work Product to incorporate TPR resolutions, THEN the Evaluator will ASSIGN an appropriate revision designator. The revision designator should take the form Rev. #, where # is the appropriate revision being developed.

> **NOTE:**
>
> The Evaluator should assign a revision designator to distinguish the Work Product from previous or future working revisions, and previous or future approved revisions.

2. REVIEW the TPR resolutions AND DETERMINE where the resolution are to be incorporated.

3. FOR resolutions that change Table 1 results USE LCMEVAL AND ENTER the resolutions in TABLE 1.

4. FOR resolutions that change Table 2 results DETERMINE which Function Catalogs require changes.

5. USE LCMEVAL AND ENTER these resolutions into the appropriate Function Catalog(s).

6. AFTER updating is complete, print Table 1, Table 2, and the Function Catalogs, they will be "Rev #" where # is the next sequential number. PREPARE new Cover Sheets in accordance with steps 6.2.F and 6.2.G AND PROCEED to Step 6.3.

6.3 **Independent Technical Review**

The purpose of this section is to provide the instructions necessary for Independent Technical Review of Work Products generated by the Evaluator. The steps in Section 6.3 are to be performed by the Evaluator and Verifier, as noted.

A. Independent Technical Review Record Preparation

The purpose of this section is to provide the instructions necessary for preparing an Independent Technical Review Record, which documents the Independent Technical Review of Work Products.

> **NOTE:**
>
> Administrative assistants and other support-type personnel may be used to assist the Evaluator during the entry of Function Catalogs into LCMEVAL and the preparation of Table 2. The Verifier may also use AA's and other support-type personnel during the Independent Technical Review of the Function Catalogs and/or Table 2, provided the same person did not assist the Evaluator. The Evaluator and Verifier are Ultimately responsible for performing the screening process and verifying the accuracy and completeness of the Work Products.

6.3.A Independent Technical Review (continued)

1.   OBTAIN a facsimile of the Independent Technical Review Record, provided by Attachment 6, AND DO the following:

     a.   RECORD today's date in the "Issue Date" block.

     b.   RECORD the Evaluator's name in the "Evaluator" block.

     c.   RECORD the Verifier's name in the "Verifier" block.

     d.   RECORD the document title in the "Document Title" block.

     e.   RECORD the revision in the "Revision" block as " Rev #," where '#' is the appropriate revision being developed.

     f.   RECORD the document date in the "Date" block.

2.   PLACE the Independent Technical Review Record on top of either Table 1 or Table 2 accordingly.

NOTE:

This package is the Original Work Product.

B.   Work Product Review

NOTE:

The verification of the Function Catalogs and comparison of Table 2 with the Function Catalogs is acceptable for verification of Table 2.

The Verifier shall:

1.   REVIEW the Work Products (e.g., Table 1, Function Catalogs and Table 2) generated by the Evaluator.

2.   VERIFY the following is true in a manner consistent with the application of the Procedure:

     a.   Information contained in the Work Product has been derived from Source Documents and Tools, and has been accurately transcribed;

     b.   Results or conclusions reported in the Work Product can be supported by the input information;

     c.   An update has been conducted when applicable, and revision numbers and dates have been revised. The Work Product has been revised to reflect corresponding changes, as appropriate.

6.3.B. Independent Technical Review (continued)

3. RECORD all comments in the "Comments" column of the Independent Technical Review Record.

4. NUMBER all comments sequentially in the "Item No." column, beginning at (1).

5. LOCATE the applicable area of the document in the "Page/Para(graph)" column.

6. IF a response is not required to a comment, THEN PLACE an 'X' in the "Resp. Not Reqd." column. OTHERWISE, LEAVE the "Resp. Not Reqd." column blank.

7. PRINT your name on the Work Product Cover Sheet.

8. SIGN the ITLR Cover Sheet AND NUMBER all pages in the "Page __ of __" block.

9. RETURN the package, with the Independent Technical Review Record, to the Evaluator.

C. Comment Incorporation

The Evaluator shall:

1. INDICATE, for each comment, whether or not it was accepted by placing 'YES' or 'NO' in the "Comment Accepted" column.

> ### NOTE:
>
> A 'Yes' means that the Evaluator agrees with the comment, regardless of whether the Work Product requires change. A 'No' means that the Evaluator disagrees with the comment.

2. ELABORATE how each comment was incorporated or not in the "Proposed Comment Resolution" column.

3. REVISE the Work Product as appropriate.

4. PLACE the Revised Work Product and Independent Technical Review Record on top of the Original Work Product.

5. RETURN the entire package to the Verifier for concurrence.

D. Resolution and Concurrence

1. IF the Verifier concurs with the proposed resolution and proposed incorporation of comments, THEN GO to step 6.3.D.4.

2. IF a resolution cannot be reached by the Evaluator and Verifier, the Project Manager shall ATTEMPT to resolve the unresolved issues AND INDICATE the resolution on the Independent Technical Review Record or Work Product, as appropriate. The Project Manager shall have the ultimate decision in this regard.

6.3.D Independent Technical Review (continued)

    3.   IF any issue remains unresolved, THEN REQUEST resolution by submitting a Technical Problem Report per Reference 3.2.X.

    4.   The Evaluator and Verifier shall:

    INDICATE concurrence by signing and dating the Independent Technical Review Record in the appropriate places.

7.0 POST-PERFORMANCE ACTIVITIES

7.1 Transmittal of Work Product to QA Reviewer and Approver

The purpose of this section is to assemble the Work Product into a package for transmittal to the QA Reviewer (if QA review of individual Work Products is required) and Approver.

A.   QA Review and Approval Preparation

    1.   ASSEMBLE the following into three or more packages (the original and two or more copies):

        •   Work Products (i.e., Table 1, Function Catalogs and Table 2)

        •   Respective Work Product Cover Sheets

        •   Completed Independent Technical Review Records

    2.   FORWARD the package of originals to the project files.

    3.   FORWARD the other packages to the QA Reviewer (if QA review of individual work products is required) and Approver in accordance with LCM Program policy.

    4.   Upon completion of the review and approval process, the Evaluator, Verifier, Approver and QA Reviewer and additional Technical Reviewers, if required, shall SIGN the Cover Sheets of each of the Work Products.

7.2 Transmittal of Approved Work Product to Lead Evaluations Engineer

A.   Transmittal of Approved Work Product to Lead Evaluations Engineer from members of the LCM Unit.

    1.   FORWARD all signed copies of the Work Product from Step 7.1.A to the Lead Evaluations Engineer.

    2.   USE LCMEVAL AND SELECT "Complete ITLR Screening", this will update the system MEL and flag all ITLR components with the appropriate screening results.

    3.   INFORM the Lead Evaluations Engineer that the files stored in LCMEVAL are ready for transfer to LCMDATA.

B.   Transmittal of Approved Work Product to Lead Evaluations Engineer from contractors outside the LCM Unit.

7.2   Transmittal of Approved Work Product to Lead Evaluations Engineer

      1.   FORWARD all signed copies of the Work Product from Step 7.1.A to the Lead Evaluations Engineer.

      2.   USE LCMEVAL AND SELECT 'Complete ITLR Screening', this will update the system MEL and flag all ITLR components with the appropriate screening results.

      3.   FORWARD a floppy disk containing a copy of all software data to the Lead Evaluations Engineer in the LCM Unit.

8.0   BASES

B-1:	TPR 91-66
B-2:	TPR 91-71
B-3:	TPR 91-105
B-4:	TPR 91-117
B-5:	TPR 91-119
B-6:	TPR 91-127
B-7:	TPR 91-132
B-8:	TPR 91-140
B-9:	TPR 91-149
B-10:	TPR 91-167
B-11:	TPR 91-168
B-12:	SIC is equivalent to PAM 3, which is specifically excluded from 10 CFR 54.
B-13:	Added by final LR Rule 10 CFR 54.
B-14:	Change of controlled database from CCETS to NUCLEIS
B-15:	Q-List safety related information now controlled in NUCLEIS
B-16	TPR 92-089
B-17	TPR 92-093
B-18	TPR 92-108
B-19	TPR 92-116
B-20	TPR 92-118
B-21	TPR 92-158
B-22	Q-List data is located in the NUCLEIS Database while Flowsheet data is located in the NORMS Database, resulting in the inability to verify the exclusion of a flowsheet document type for a given component.
B-23	Updating of Verified Screening Results for the incorporation of TPR results without performing an entire periodic update.

9.0   RECORDS

Records generated by this Procedure shall be captured and controlled. Prior to transferring records to Plant History for retention, legibility and completeness of the record shall be verified by the transmitting organization.

    9.1   Tables 1 and 2 and the Function Catalogs for the assigned ITLR system.

    9.2   All Independent Technical Review Records.

10.0   ATTACHMENTS

- Attachment 1
- Definitions

- Attachment 2
- Sample Table 1

- Attachment 3
- Sample Table 1 Cover Sheet

- Attachment 4
- Sample Function Catalog

- Attachment 5
- Sample Table 2 Cover Sheet

- Attachment 6
- Sample Independent Technical Review Record

ATTACHMENT 1
DEFINITIONS

DEFINITIONS

These definitions are used throughout this LCM Program Procedure. An asterisk (*) denotes that the source for that definition is the License Renewal Rule (Reference 3.1.E).

1. Approver

   Individual responsible for assuring that the work performed under this Program Procedure meets the requirements of the LCM Program.

2. Criteria Catalog

   A listing of components for an ITLR criterion obtained from LCMEVAL. The source for the components is the NUCLEIS equipment technical database. Valid ITLR criteria are: Flowsheet numbers, CLS1, LCO, PAM, 5049, Q, 1E, 1M, PB, and SBO.

3. Function Catalog

   A Function Catalog consists of the Criteria Catalog and any additional components required to support each function listed on each system's Table 1. A Function Catalog is developed by reviewing the Criteria Catalog (if there is one), adding other required components and entering the components into LCMEVAL.

4. Critical Safety Functions (CSF)

   A condition or action that prevents core damage or minimizes radiation release to the public. A CSF may be fulfilled through automatic or manual actuation of a system or systems, from passive system performance, from inherent plant design, or from operator action while following recovery guidelines set down in procedures. The seven CSFs include:

   - Reactivity Control
   - RCS Pressure and Inventory Control
   - RCS Heat Removal
   - Containment Isolation
   - Containment Environment Control
   - Radiation Control
   - Vital Auxiliaries

5. Design Basis Events (DBEs)

   10 CFR 5049 defines DBEs as conditions of normal operation, including anticipated operational occurrences, design basis accidents, external events, and natural phenomena for which the plant must be designed to ensure the following three safety functions:

   1. The integrity of the reactor coolant pressure boundary,

   2. The capability to shut down the reactor and maintain it in a safe shutdown condition,

   3. The capability to prevent or mitigate the consequences of accidents that could result in potential offsite consequences comparable to the 10 CFR Part 100 guidelines.

DEFINITIONS (continued):

There are three categories of transients and accidents that have been considered in the Calvert Cliffs Unit 1 and Unit 2 Safety Analysis (UFSAR) Chapter 14.0), Anticipated Operational Occurrences, Postulated Accidents, and Postulated Occurrences.

6. Evaluator

Engineer(s) responsible for performing the screening process as described in this LCM Program Procedure.

7. Functional Requirements

The primary functions of S/Ss including those which provide specific safety and/or power production functions. Other auxiliary functions, such as providing indication to the Emergency Response facility, are not considered primary functions. The functional requirements will serve to establish conceptual S/S boundaries.

8. LCM Information

The information which adequately supports the technical findings of the screenings and evaluations conducted in accordance with the LCM Screening Methodology Report, and may be input to the LCMDATA system for each SSC.

9. Life Cycle Management (LCM)

An integrated program to maintain the material condition of important systems, structures, and components (SSCs) through the current and renewed license terms.

10. License Renewal (LR)

The process whereby a licensee performs Integrated Plant Assessments which define the measures in place or planned to address age-related degradation of SSCs. The NRC will evaluate and verify these measures and grant a renewal license. The term includes the licensee's collection and presentation of that information necessary to allow the NRC to renew the plant's operating license.

11. MEL

The MEL is the Master Equipment List which is a compilation of the technical data on equipment at CCNPP.

12. NETD

NETD (NUCLEIS Equipment Technical Database) is the acronym to be used when referencing components to the NUCLEIS database.

13. NUCLEIS Database

A mainframe computer based Equipment Maintenance information system used to initiate, plan, schedule, track and provide a history of maintenance.

DEFINITIONS (continued):

14. Plant Event Evaluations

The evaluations submitted by BG&E to the NRC to show compliance with the Commission's regulations such as Anticipated Transients Without Scram (ATWS), Station Blackout, (SBO), Pressurized Thermal Shock (PTS), Fire Protection, (FP), and Environmental Qualification (EQ). These evaluations provide additional bases for ITLR determinations under ITLR Criterion 3.

15. Screening Tool

A summary of a Source Document(s) compiled through the research of an event/topic which contains lists of responding systems and their required functions.

16. Source Documents

Related document types to be used as sources of LCM information. There is a Source Document hierarchy that is based on the status of the Source Document and its intended use. The three hierarchy categories, in decreasing order, include:

1. High Priority
   (1)   Source Documents that are controlled as design documents and have been reviewed and approved by the NRC can be directly referenced for ITLR purposes without further review and verification.
   (2)   Controlled programs that are approved by the NRC and satisfy the effective program evaluation criteria in the Component Aging Evaluation Task can be credited directly as effective aging management programs for a particular ARDM unique to license renewal.

2. Medium Priority
   (1)   Source Documents that are controlled as design documents, but have not been approved by the NRC can be used for ITLR evaluations.
   (2)   Controlled programs that have not undergone NRC review are not credited as effective programs for managing aging for an ITLR component without a follow on assessment being performed. This assessment ensures that such a program is the optimum method of aging management and that the program will be controlled consistent with its status as a regulatory commitment under the License Renewal Rule.

3. Low Priority
   (1)   Source Documents not controlled as design documents may only be used for background information in ITLR evaluations.
   (2)   Programs that are not closely controlled (i.e. not governed by a controlled site procedure) and not reviewed by the NRC can be credited as effective programs for managing aging for ITLR components only after proper controls are established for such programs.

17. System Functions

All functions of S/Ss including those which provide specific safety and/or power production functions. Auxiliary functions, such as providing indication to the Technical Support Center facility, are considered system functions. The functional requirements will serve to establish conceptual S/S boundaries.

DEFINITIONS (continued):

18.   (*)<u>Systems, Structures, and Components (SSCs) Important to License Renewal (ITLR)</u>

        1.   Safety-related SSCs, which are those relied upon to remain functional during and following design basis events to ensure:

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

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

            (iii)   The capability to prevent or mitigate the consequences of accidents that could result in potential offsite exposure comparable to the 10 CFR Part 100 guidelines.

        2.   All non-safety related SSCs whose failure could directly prevent satisfactory accomplishment of any of the required functions identified in paragraphs (1) (i), (ii), or (iii) of this definition.

        3.   All SSCs relied on in safety analyses or plant evaluations to demonstrate compliance with the Commission's regulations for fire protection (10 CFR 50.48), environmental qualification (10 CFR 50.49), pressurized thermal shock (10 CFR 50.61), anticipated transient without scram (10 CFR 50.62), and station blackout (10 CFR 50.63).

        4.   All SSCs subject to operability requirements contained in the facility technical specification limiting conditions for operation.

        [Note: The four criteria described above shall be referred to as "ITLR Criteria 1, 2, 3, and 4." Satisfying any of these criteria will suffice to show that a SSC is important to License Renewal.]

19.   <u>Verifier</u>

        Engineer(s) responsible for verifying the accuracy and completeness of the LCM Information. The Verifier(s) provides engineering assurance by performing a 100% independent technical verification of the Work Products of this Program Procedure.

ATTACHMENT 2
SAMPLE TABLE 1

BG&E LCM Program

SYSTEM:

PAGE:

DATE:

REV.

TABLE 1: ITLR SYSTEM FUNCTIONS

| FUNCTION ID NUMBER | DESCRIPTION OF FUNCTION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

ATTACHMENT 3
SAMPLE TABLE 1 COVER SHEET

Table 1: Cover Sheet

_____ System ITLR Functions

This table presents the important to license renewal (ITLR) functions for the _____ System. These functions were identified through a review of Source Documents in accordance with LCM Program Procedure No. LCM-11, Component Level ITLR Screening. The Source Documents were used to identify the system functions that are relied upon in response to specific plant events. The plant events associated with each system function are also identified.

	Name Printed	Signature	Date
Evaluator			
Verifier			
QA Reviewer			
Approver			

ATTACHMENT 4
SAMPLE FUNCTION CATALOG

BG&E LCM PROGRAM		LCM-11, Rev. 4
SYSTEM: FUNCTION ID:		FUNCTION CATALOG
EQUIPMENT ID:	CK	REFERENCE

ATTACHMENT 5
SAMPLE TABLE 2 COVER SHEET

Table 2: Cover Sheet

Component Level ITLR Screening Results
For
_____ System

This table identifies the components that are considered important to license renewal (ITLR) for the _____ System. These components were identified through a review of Source Documents in accordance with LCM Program Procedure No. LCM-11, Component Level ITLR Screening. The Source Documents were used to identify those components relied upon to perform a function used in response to specific plant events. The system functions for which the component is required are also identified. These functions were derived from Table 1, _____ System ITLR Functions. A separate catalog exists which identifies those components associated with each system Function.

	Name Printed	Signature	Date
Evaluator			
Verifier			
QA Reviewer			
Approver			

ATTACHMENT 6

INDEPENDENT TECHNICAL REVIEW
RECORD

Attachment 6

PAGE ___ of ___			INDEPENDENT TECHNICAL REVIEW RECORD		
Issue Date:		Evaluator:		Verifier:	
Document Title:				Revision:	Date:
Item No.	Page/Para	Resp Not Reqd	Comments (Provide rewording, if possible)	Comment Accepted	Proposed Comment Resolution
Verifier:				Date:	
Evaluator Concurrence:			Date:	Verifier Concurrence:	Date:

Attachment 6

PAGE ___ of ___				INDEPENDENT TECHNICAL REVIEW RECORD CONTINUATION SHEET			
Item No.	Page/Para	Resp Not Reqd		Comments (Provide rewording, if possible)	Comment Accepted		Proposed Comment Resolution