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18. R. Hernandez 3/10/99 R. Hernandez Signature of EDT Originator Date		19. R. Hernandez 3/10/99 R. Hernandez Authorized Representative for Receiving Organization Date		20. R. Hernandez 3/10/99 R. Hernandez Design Authority/Cognizant Manager Date		21. DOE APPROVAL (if required) Ctrl No. _____ ☐ Approved ☐ Approved w/comments ☐ Disapproved w/comments	
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WASTE ENCAPSULATION AND STORAGE FACILITY DESIGN RECONSTITUTION PLAN

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Abstract:

This supporting document provides the plan for performing Design Reconstitution at WESF

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**WASTE ENCAPSULATION AND STORAGE FACILITY
DESIGN RECONSTITUTION PLAN**

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WASTE ENCAPSULATION AND STORAGE FACILITY DESIGN RECONSTITUTION PLAN

1.0 PURPOSE

The purpose of Design Reconstitution is to establish a Design Baseline appropriate to the current facility mission.

2.0 SCOPE

The scope of this plan is to ensure that Systems, Structures and Components (SSC) identified in the WESF Basis for Interim Operation (HNF-SD-WM-BIO-002) are adequately described and documented, in order to support facility operations. In addition the plan addresses the adequacy of selected Design Topics which are also crucial for support of the facility Basis for Interim Operation (BIO). These systems and topics are as follows:

WESF Systems

C11	-	Cesium & Strontium Capsules
C12	-	Electrical Distribution
C20 & C21-		Raw & Sanitary Water
C22	-	Steam
C23	-	Air
C24		Cold Chemical
C25	-	HVAC & Filters
C26	-	Fire Protection
C31	-	Pool Cells
C31F	-	Pool Cell Ion Exchange System and Emergency Ion Exchange
C32A	-	Low Level Liquid Waste
C34	-	Pool Cell Closed Loop Cooling
C93	-	Process Instrumentation & Control
C96	-	Radiation Monitors
C97	-	Stack Monitors
C99K	-	Structural (Seismic)

Design Topic

Environmental Qualification
Radiological Design

The above systems and topics do not comprise the entire WESF design. Accordingly, the plan also includes an element for planning subsequent phases of design reconstitution following the documentation of the design bases of those SSCs which are safety affecting. Design reconstitution efforts beyond priority safety SSCs, and topics will be performed in a graded approach. Design information for SCCs are described in detail in System Design Descriptions (SDD).

3.0 OBJECTIVES

System Design Descriptions will be developed for facility SSCs using DOE-STD-3024-98, "Control of System Design Descriptions." The facility safety basis will be the starting point from which all existing design information (i.e., design basis and design requirements) will be assessed. This is to assure that existing as well as reconstituted, elements of the design information will be traceable to the safety basis. The safety basis is of highest priority in that it describes aspects of the facility considered to be important to the safe operation of the facility. An overview of the process for identification of design information, establishing its supportive links to the safety basis, and regeneration of missing or inadequate information is shown in Figure 3-1, "Design Reconstitution."

The design reconstitution process includes field verification of essential drawings, support drawings and other design documentation as required to support facility safety and operation. Field verification will include comparison of current field conditions represented by the drawing. The documentation is validated through traceability of facility requirements to the safety basis.

3.1 IDENTIFICATION OF DESIGN BASIS

The Design bases has changed since construction of this facility. It is necessary to review the current mission and design bases in order to accomplish design reconstitution (Figure 3-2). Applicability of Safety bases elements to current systems and design topics will be captured in a matrix, see Figure 3-3, "Safety Bases Matrix". Each SDD will identify any additional design bases required. Design bases documents required to support safety SSCs will be reconstituted. Other design bases documents required will be reconstituted using a graded approach.

3.2 IDENTIFICATION AND EXTRACTION OF DESIGN OUTPUTS

Design documentation will be identified and retrieved in a phased approach which correlates with increasing design detail, see Figure 3-4. First, a "Formal Review" of existing summary documentation will be made to establish a preliminary set of design outputs. This data will be used to create a status matrix showing source documents and their current status, see Figure 3-5 "Identification of Design Outputs," to identify and retrieve design output documents most likely to contain design requirements. Design requirements identified will be indexed against the safety bases in a spread sheet format for use in evaluating design information, see Figure 3-6, "Baseline Index" as an example.

Figure 3-1
Design Reconstitution

Figure 3-2
Identification of Design Bases

**Figure 3-3
Safety Bases Matrix**

System Basis	C11	C12	C15	C20 C21	C22	C23	C24b	C25	C26	C27	C30	C31	C32a	C32b	C34	C41	C93	C96	C97	C99K	Env. Qual. Topic	Radio- logical Design Topic
BIO 4.3.1								X			X	X	X		X	X						
BIO 4.3.2								X														
BIO 4.3.3									X													
BIO 4.3.4												X						X				
BIO 4.3.5												X					X					
BIO 4.3.6												X			X							
BIO 4.3.7												X					X					
WIXM														X								
IOSRs				X	X			X	X			X			X		X	X				
LCO 3.1.1												X			X							
SR 3.1.1.1												X						X				
AC 5.7				X											X							
AC 5.8				X								X					X					
AC 5.11								X														
AC 5.12									X													
AC 5.13					X							X										
WIXM													X	X								

X - Safety Basis Document is applicable to the system or topic

Figure 3-4
Identification of Design Information

**Figure 3-5
Identification of Design Requirements**

WESF Facility System _____			
Design Requirement Documents	Location	Status	Priority
Master Equipment List (MEL)			
Safety Equipment List (SEL)			
Essential Drawings:			
Process and Instrumentation (P&ID)			
Integrated Flow (IFD)			
Lock and Tag Boundaries (L&TD)			
Supporting Drawings (as applicable)			
Process and Instrumentation (P&ID)			
Integrated Flow (IFD)			
Layout/Routing Drawings			
Lock and Tag Boundaries (L&TD)			
Administrative Manuals			
Procedures			
Operating Procedures			
Maintenance Procedures			
Alarm Response Procedures			
Round Sheet Procedures			
Functional Test Procedures			
Surveillance and Inspection Procedures			
Vendor Information (VI)			
Calculations			

Note: Additional System Specific line items could be added.

Design Baseline Document As-Built Status:

+ - in as-built condition; * - matches field conditions; ~ - has not been field verified

Design Baseline Document Priority:

Priority: ____ % = (Consequence: ____ %)*(Probability of Occurance: ____ %)*(Incomplete Status: ____ %)

**Figure 3-6
Baseline Index (Example)**

System (JCS)	Subsystem m	Structure Containing Subsystem End Effector (ex. LDE)	WESF SEL Number	WESF Component Number (WESF Component ID Number)	Name of SSC	SC	SS	ENV	GS	Impact of Equip. Failure	Basis(es) Number and Location
C31E	WLD5 1	POOL CELL 1	PC1-DOV-4 PC1-5400-2	(PC1-8504-1)	BALL VALVE						
		POOL CELL 1		(PC1-8008-4)	GATE VALVE						
		POOL CELL 1		(PC1-8008-5)	BALL VALVE						
		POOL CELL 1		(PC1-8000-2)	BALL VALVE						
		POOL CELL 1		PC1 DOV-8 (PC1-8000-1)	SOLENOID VALVE ?		X				(1) (2) (4)
		POOL CELL 1		(PC1-5400-2)	POOL CELL WATER REMOVAL SYSTEM SOLENOID VALVE		X				(1)
		POOL CELL 1		(PC1-8008-1)	BALL VALVE						
		POOL CELL 1		(PC1-8008-2)	GLOBE VALVE						
		POOL CELL 1		(PC1-8004-1)	BALL VALVE						
		POOL CELL 1		(PC1-8508-2)	GATE VALVE						
		POOL CELL 1		(PC1-8508-2)	GLOBE VALVE						
		POOL CELL 1		PCV-DOV-1 (PC1-8000-1)	DIAPHRAGM OPERATED VALVE						
		POOL CELL 1		(PC1-8000-2)	CHECK VALVE						
		POOL CELL 1		(PC1-5400-1)	SOLENOID VALVE ?						
		POOL CELL 1		(PC1-8008-6)	GLOBE VALVE						
		POOL CELL 1		(PC1-8300-1)	GATE VALVE						
		POOL CELL 1		(PC1-8508-3)	GATE VALVE						
		POOL CELL 1		(PC12-PO1-1)	GATE VALVE						
		OPERATING GALLERY		(OG-8400-1)	GATE VALVE						
C31A		TO TRUCK PORT		(TP-5300-1)	GATE VALVE						
		TO TRUCK PORT		(TP-8400-1)	GATE VALVE						
		POOL CELL 1		(PC1-8008-3)	GATE VALVE						
		POOL CELL 1		(PC1-5400-20)	GATE VALVE						
C31A		POOL CELL 1		(PC1-5400-21)	GATE VALVE						
C31A		POOL CELL 1		(PC1-5400-22)	GATE VALVES (3)						
C31A		POOL CELL 1	WFT-S1-1	WFT-S1-1	LEVEL (WEIGHT FACTOR) TRANSMITTER		X				(1) (4)
		POOL CELL 1		(PC1-5400-23)	GATE VALVE						
C31A		POOL CELL 1		WFAS S1-2	WEIGHT FACTOR ALARM SWITCH						(6)
C31A	WLD5 1	POOL CELL 1	WFAS-S1-3	(PC1-5400-24)	GATE VALVE						
C31A		POOL CELL 1		WFAS S1-3	POOL CELL INTERLOCK ALARM		X				(1) (2) (4) (6)
C31A		POOL CELL 1		(FIV-S1-1)	PURGE ROTAMETER						
C31A		POOL CELL 1		(FIV-S1-2)	PURGE ROTAMETER						
		POOL CELL 1		(PC1-5400-4)	GATE VALVE						
		POOL CELL 1		(VD-PC1-K4-1)	BUTTERFLY VALVE						
		POOL CELL 1		PFA S-1	ANNUNCIATOR WINDOW _ CIRC						
		POOL CELL 1			PUMP FAILURE						
	LRMS 1	POOL CELL 1	RE-S1	FS S1-1	FLOW SWITCH ?						
		POOL CELL 1		RE S1-1	RADIATION ELEMENT		X				(1)
	LRMS 1	POOL CELL 1	DC-S1-1	DC S1-1	DECOUPLER		X				(1)
		PUMP PIT									
	LRMS 1	POOL CELL 1	RPAMP-S1-1	RPAMP S1-1	PREAMPLIFIER		X				(1)
		PUMP PIT									
C31C	LDS 1	POOL CELL 1		LDE-S1-1	LEAK DETECTION ELEMENT						
C31C	LDS 1	POOL CELL 1		LDK-S1-1	LEAK DETECTION RELAY						
C31C	LDS 1	POOL CELL 1		LDA-S1-1	LEAK DETECTION ALARM						
C31B	TMS 1	POOL CELL 1	TE-S1-1	TE-S1-1	TEMPERATURE ELEMENT		X				(1)
C31B	TMS 1	POOL CELL 1	TE-S1-2	TE-S1-2	TEMPERATURE ELEMENT		X				(1)
C31B	TMS 1	POOL CELL 1	TR-S-1	TR S-1 (24 POINT)	TEMPERATURE RECORDER ?		X				(1)
	TMS 1	POOL CELL 1	TA-TAM-S1-1	TAM S-1 (24 POINT?)	TEMPERATURE ALARM METER ?						
		POOL CELL 1		TA S1-2	H-ALARM FOR POOL CELL 1						
C31B	TMS 1	POOL CELL 1		TA-TAM-S1-1	H-HI ALARM FOR POOL CELLS 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, & 12		X				(1)
C31J		POOL CELL 1		H-225B-PC1-1	HEAT EXCHANGER						
C31E		POOL CELL 1		MS PC1-VALVE	MANUAL SWITCH ?						
		POOL CELL 1		PI S1-1	PRESSURE INDICATOR						
		POOL CELL 1		MS S1-1	MANUAL SWITCH ?						
		POOL CELL 1		MCC-2	MOTOR CONTROL CENTER						
C31J		POOL CELL 1		P-225B-PC1-1	PUMP						
		POOL CELL 1		PS PC1-VALVE 8	PRESSURE SWITCH ?						
		POOL CELL 2		(PC2-8504-1)	BALL VALVE						
		POOL CELL 2		(PC2-8000-2)	GLOBE VALVE						
		POOL CELL 2		(PC2-TK201-1)	BALL VALVE						
		POOL CELL 2		(PC2-8000-1)	BALL VALVE						
		POOL CELL 2		(PC2-TK202-1)	BALL VALVE						
		POOL CELL 2		(PC2-5300-1)	GATE VALVE						
		POOL CELL 2		(PC2-5400-20)	GLOBE VALVE						

Hazard Consequence of Equipment Failure has Following Impacts:

S0 - Within Confinement; S1 - Facility Worker; S2 - Onsite Worker; S3 - Offsite Exposure

3.3 EVALUATION OF DESIGN INFORMATION

System Engineer and Chief Engineer

The evaluation process is complicated and will require the greatest rigor to control changes during iterations of verification, validation, analysis and recording, see Figure 3-7. Indexed design information will be verified for completeness and accuracy. The data will undergo a technical validation to determine if each requirement supports the current mission, represents the facility configuration and is technically feasible. The source document index will be correlated between design requirements and the design basis. Variances will be reviewed to determine if additional validation activities are required, or if design information is missing.

Missing design requirements and basis will be regenerated using the same processes shown in Figure 3-8 and Figure 3-9 respectively.

3.3.1 Essential and Support Drawings

Those drawings identified by WESF management review as required for facility safety and safe operation, will be field verified and as-built. Essential drawings will be reviewed to verify applicability, appropriateness, and that an acceptable level of configuration control exists. Those drawings that are determined to be supporting drawings or otherwise nonessential will be reclassified through appropriate configuration control. See WESF Essential and Support Drawing List, HNF-3643.

Supporting drawings will be addressed using a graded approach (see SD for essential drawing list - identify # of DWGs). These drawings will be screened to determine if they support the current facility mission as described in the BIO, and to categorize them for as-built prioritization. Supporting drawings will be addressed based on a risk based cost analysis which will determine funding. See WESF Essential and Support Drawing List, HNF-3643.

System Engineers will support the drawing/ECN review effort with Design Drafter(s) during the walkdown sub-task, see WESF Essential and Support Drawing List, HNF-3643. Incorporation of ECNs and Engineer approval of the as-built drawings will complete this sub-task.

3.3.2 Other Design Information Documentation

Essential design baseline documents will be addressed using a graded approach. These documents will be screened to determine if they support the current facility mission as described in the facility safety bases and to determine priority for as-built work in conjunction with system drawings.

Figure 3-7
Evaluation of Design Information

Figure 3-8
Regenerate Critical Design Requirements

Figure 3-9
Regenerate Critical Design Basis

3.4 SYSTEM DESIGN DESCRIPTIONS

A System Design Description (SDD) will be prepared for each system. The DOE standard, DOE-STD-3024-98, "Content of System Design Descriptions," will be used as a guide for the format and content of SDDs. For each designated system or topic, the SDD will provide a description including applicable drawings, operability requirements, system functions and interfaces, component information, system and component design basis, regulatory requirements and DOE commitments. Calculations and analyses, codes and standards, design practices, procurement specifications and other relevant design information will be referenced as appropriate. Original information will be referenced whenever possible in order to avoid interpolation errors. Field validation of the SDD will be performed to ensure that design requirements properly reflect physical configuration and the associated documentation.

3.5 DESIGN TOPICS

SDDs will also be prepared for the design topics during the phase of work based on funding and will contain information as described in Section 3.4.

3.6 CONFIGURATION MANAGEMENT

The as-built drawings and SDD's which result from this plan for design reconstitution will be managed under rigorous CM controls in accordance with the WESF CM Program requirements (FSP-WESF-001, CM-1).

3.7 PROGRAM PLANNING

Remaining WESF documentation will be assessed to determine their relative importance to facility operations, safety and programmatic goals. This plan for performing design reconstitution in a graded approach will be developed to include more detailed schedule and cost data prior to initiating each phase of work.

There are four integrated phases of Design Reconstitution as shown in Figures 3-1 through 3-10. Furthermore, fiscal year funding issues may divide Design Reconstitution by SCCs in a graded approach for implementation.

Figure 3-10
Prepare System Design Descriptions

Figure 3-11
Evaluate Changes Required

4.0 DESCRIPTION OF PROGRAM ELEMENTS

This section provides a brief description and technical basis for each principle element of the project. These elements describe the work breakdown for the entire effort. Portions of these will not occur in the initial phase of work (see Sections 2.0 and 3.0).

4.1 PROJECT MANAGEMENT

Description: This program element provides for the overall management of the project, including planning, scheduling, tracking of discrepancy resolution and interface with the WESF CM Program requirements (FSP-WESF-001, CM-1).

In addition, the Project Management element controls preparation of a systematic approach for identifying, sorting and cataloguing design information, and preparation of guidelines and procedures for implementing the processes described in the other program elements.

The Project Management element provides overall direction and coordination for the activities described in the other program elements and ensures that the resulting products are integrated into the facility CM Program.

Basis: This activity is required in order to ensure that design reconstitution activities are in conformance with the WESF CM Program requirements (FSP-WESF-001, CM-1).

4.2 AS-BUILDING

Description: This program element will consist of retrieving those essential and support documents containing design information pertinent to the scope of the DR Program and are, therefore, critical for proper conduct of operations. Conduct facility walk downs, redline the drawings and documents for revision as required and finally to process ECNs in accordance with established PHMC requirements in order to document current facility as-found condition. In addition, ongoing plant work processes will be reviewed to ensure that ECNs to affected drawings are being prepared as required to reflect changes in the plant configuration, as required by WESF CM Program requirements (FSP-WESF-001, CM-1).

Basis: As-building is a key element of the WESF CM Program requirements (FSP-WESF-001, CM-1). The purpose for including this effort in the DR Program is to establish a current baseline for identifying design discrepancies to be addressed, and to guide evaluation of supporting design information.

4.3 IDENTIFICATION OF DESIGN BASIS

Description: This WBS element encompasses the identification and retrieval of design source documents relevant to the safety basis and extraction of the appropriate design information.

As the first phase of the identification, retrieval and design information extraction process, a Formal Review of on-hand summary level design documents (e.g., BIO/SAR, supporting design documents and other information that serves as reference material in support of facility activities) will be conducted to establish the preliminary set of facility design requirements.

Basis: The purpose of this effort is to confirm that the scope of the Design Reconstitution process, as defined in this Plan, is indeed correct. If facility design requirements are not adequately established, then this review is critical to establishing a baseline set of requirements, including the CM equipment database, initial system categorization and initial system grading.

4.4 IDENTIFICATION AND RETRIEVAL OF DESIGN OUTPUT DOCUMENTS

Description: This program element encompasses the identification and retrieval of design output documents and their embedded design information.

As the second phase of the identification, retrieval and design information extraction process, a search will be conducted using the graded approach. This is an expansion of the Formal Review, and consists of identification and retrieval of design output documents and subsequent extraction of relevant design information. The design information extracted during this phase reflects a greater level of detail than design information extracted as part of the Formal Review. Examples of design output documents include drawings, specification, electrical load lists, valve lists, operational set points, maintenance and test requirements and construction and installation instructions. The product of this search in combination with WBS 1.3.1 (Identification of Design Basis) culminates with the completion of the identification of facility design requirements as well as the design basis information contained in the associated source documents. All documents retrieved must be properly identified and must be included in the facility Document Control Program in order to ensure future availability and retrievability.

A technical review identifies embedded design information used to determine if the document is acceptable for use. Missing or inadequate design information is classified for later evaluation in this way.

Basis: The purpose of this effort is to ensure that the facility design basis is directly related to a well defined set of facility design requirements and that all documents relevant to these requirements have been identified, retrieved, catalogued and sorted. This also ensures that subsequent evaluation, verification and validation activities can proceed cost-effectively.

4.5 EVALUATE DESIGN INFORMATION

Description: This program element provides for evaluation of design information that has been

accumulated.

Evaluate the design information that has been accumulated. This information should be verified for completeness, accuracy, and applicability.

4.6 REGENERATION OF DESIGN INFORMATION

Description: This program element includes regeneration of both design requirements and design basis information as determined necessary by the risk assessment process described in Section 4.2.3.1, "Risk Assessment" of this plan.

Several methods may be employed to accomplish the task: reanalysis, engineering judgement, re-enactment (of the original design process) or testing. The method of regeneration is determined by the availability of information, the importance of the SSCs, feasibility of regenerating the information, and time and resources available to accomplish the task.

Design basis regeneration may begin after the evaluation of design requirements and proceed in parallel with completion of search activities. Design basis regeneration may not be needed for initial SDD issuance, but may occur in parallel with preparation of the initial SDDs. The same methods applicable to regeneration of design requirements also apply to regeneration of the design basis.

Basis: This effort is required to develop missing information essential for support of the facility design basis.

4.7 PREPARE SYSTEM DESIGN DESCRIPTIONS (SDD)

DOE Standard, DOE-STD-3024-98, *Content of System Design Descriptions* will be used to prepare SDDs

4.8 DOCUMENT CONTROL (WBS 1.3)

Description: This WBS element provides control of all documents prepared in conjunction with the DR effort. It represents an expanded scope of work for the existing WESF Document Control activity, which is established as part of the WESF CM Program requirements (FSP-WESF-001, Section CM-1), and which is currently conducted under established PHMC procedures and requirements.

Basis: The DR effort will result in the generation of many design documents and ECNs which will document accurately the Authorization Basis for the facility. It is critical to the overall success of the effort that these documents be rigorously controlled.

4.9 IDENTIFICATION AND RETRIEVAL OF SOURCE DOCUMENTS (WBS 1.4)

Description: This WBS element encompasses the identification and retrieval of design source documents and extraction of relevant design information.

Identification and retrieval of source documents proceeds in phases. Initially, a formal review of on-hand, summary level design documents (e.g., BIO/SAR, supporting design documents, and other information that serves as reference material in support of facility activities). The purpose of this review is to establish the preliminary set of facility design requirements. If facility design requirements are not adequately established, then this review is critical to establishing a baseline set of requirements, including the CM equipment database, initial system categorization and initial system grading. The Formal Review will confirm that the scope of the Design Reconstitution Program as defined in this Plan is indeed correct.

The Smart Search is an expansion of the Formal Review, and consists of identification and retrieval of design output documents, including drawings, specifications, electrical load lists, valve lists, operational set points, maintenance and test requirements and construction and installation instructions. The product of this search is completion of the identification of facility design requirements as well as the design basis information contained in the associated source documents. All documents retrieved must be properly identified and must be included in the facility Document Control Program in order to ensure future availability and retrievability.

Extraction of design information should be performed by qualified technical reviewers who have expertise in the systems and disciplines reviewed. System engineers must be directly involved in this activity.

Basis: The purpose of this effort is, first, to ensure that the facility design basis is directly related to a well-defined set of facility design requirements, and second, to ensure that all documents relevant to these requirements have been identified, retrieved, catalogued and sorted, in order to ensure that subsequent evaluation, verification and validation can proceed cost-effectively.

4.10 EVALUATION/ VERIFICATION AND VALIDATION (WBS 1.5)

Description: This WBS element addresses whether retrieved design information is accurate and complete. It consists, first, of a verification that extracted design information is accurate and that nothing has been overlooked. This will normally be accomplished by an independent review, and will be a technical review rather than an independent extraction and comparison. This verification is followed by a technical validation to ensure that retrieved information is appropriate and correct, that critical calculations and analyses are accurate and that the information correlates accurately with the facility design requirements. Finally, the validated information is captured in the CM equipment database for use in supporting ongoing operations.

Following technical validation and correlation a technical management review is conducted to evaluate completeness and accuracy of the extracted design information. If information is found to be missing or inadequate, it is documented as a discrepancy and becomes a candidate for design regeneration. If it is found to be complete and accurate it is ready for incorporation into a System Design Description (SDD).

Basis: This effort is key to identifying and resolving discrepancies in the design basis.

4.11 REGENERATION (WBS 1.6)

Description: This WBS element includes regeneration of design requirements as well as design information.

Identification of missing requirements is determined through technical management review performed during the identification and retrieval phase. Regeneration of design requirements is a high priority, because the physical configuration is established by, and should be consistent with, the requirements. Several methods may be employed to accomplish the task: reanalysis, engineering judgement, re-enactment (of the original design process) or testing.

Design basis regeneration may begin after the evaluation of design requirements and proceed in parallel with completion of search activities. Design basis regeneration may not be needed for initial SDD issuance, but may occur in parallel with preparation of the initial DISs. The same methods applicable to regeneration of design requirements also apply to regeneration of the design basis.

Basis: This effort is required to develop missing information essential for support of the facility design basis.

5.0 ORGANIZATION AND STAFFING

Staffing for this project shall utilize contractor existing staff where practicable. Activities that require additional support in order to meet scope and schedule will be well defined and integrable with project planning.

5.1 CHIEF ENGINEER

The Chief Engineer is responsible for the overall direction and management of the DR Program as an adjunct to the facility CM Program.

5.2 DESIGN AUTHORITY

The Design Authority is responsible to the Chief Engineer for conducting technical management review as required to implement the DR program, for identifying missing or inadequate design requirements for resolution by the DR team, and for prioritizing missing design information for regeneration.

5.3 DESIGN RECONSTITUTION TEAM

The DR team is comprised of key System Engineers, the Plant Safety Authorization Basis Administrator and technical support staff as required. The DR team is responsible to the Chief Engineer for identification, retrieval and extraction of design requirement and design basis information from the facility design documents. The DR team is also responsible for regenerating missing requirements and basis information as identified by technical management review.

5.4 FIELD ASSESSMENT TEAM

The Field Assessment Team is responsible to the Chief Engineer for walking down and redlining designated drawings for updating to reflect facility as-found conditions. This team should be headed by a knowledgeable senior plant engineer and should include qualified operators and crafts.

6.0 INTERFACES

System interfaces will be identified by the design reconstitution and field assessment teams during the design reconstitution project. The information will be recorded in the system design descriptions.

7.0 PRIORITIES

Prioritization of design output reviews and prioritization of the reconstitution of bases and requirements will be recommendations to the Design Authority as requested through the Chief Engineer. In general the prioritization will follow the calculations in the notes of Figure 3-5