

Engineering and Construction Department

E&C 24-10-19
DEPARTMENT
QA PROCEDURE

REV. 0
EFFECTIVE: 02/01/88

DEVELOPMENT, REVIEW, APPROVAL AND RELEASE OF SCE LIMITED CHANGE PACKAGES (LCPs) SONGS 1, 2&3

A. GENERAL INFORMATION

1. This procedure documents the process for the preparation, review, approval, release, implementation, and closeout of Limited Change Packages (LCPs). LCPs provide a method by which design changes of limited scope may be implemented through a review process consistent with the reduced complexity and safety aspects of the design change. Additionally, the LCP is used to document the review of the design change for unreviewed safety questions as required by 10CFR50.59. Therefore, if the Proposed Design Change meets the criteria for preparation of an LCP, a separate Proposed Facility Change (PFC) is not required.
2. Any Proposed Design Changes requiring a long form PFC may not be implemented by an LCP (see E&C QA Procedure E&C 24-10-15, ACTION II).
3. The Quality Class of an LCP shall be the same as the Quality Class of the component, system or structure being modified. The design criteria for the design change shall be in accordance with the Updated Final Safety Analysis Report (UFSAR), Updated Fire Hazards Analysis (UFHA), Security Plan (SP), and Emergency Plan (EP) (reference E&C QA Procedure E&C 24-7-13) for SONGS 2&3 and E&C 24-7-13 for SONGS 1.

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Responsible Division Manager	Date
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Manager, Station Technical	Date
Approved By: <u>R. M. Rowland</u>	<u>12-28-87</u>
QA Organization Manager	Date

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4. FORM 26-179-1, Interim Design Change Notice (IDCN)/Design Change Notice (DCN) SONGS 1, 2&3, and FORM 26-179-2, Interim Design Change Notice (IDCN)/Design Change Notice (DCN) Supplemental Page SONGS 1, 2&3, are used to document design changes and their approval to design disclosure document. The preparation of IDCNs when issued within an LCP will be processed in accordance with E&C QA Procedure E&C 24-10-17. Upon construction completion and Station acceptance of an LCP, all IDCNs within the LCP are converted to DCNs and are distributed to the field against the latest drawing revision to reflect the "As-Built" condition in accordance with E&C QA Procedure E&C 24-8-7. Under no circumstances shall a design change be incorporated into a design disclosure document prior to the actual construction completion and Station acceptance.

5. This procedure shall apply to all design work regardless of safety class within and along the boundary (including the outside isolation zone) of the SONGS 1, 2&3 Plant Protected Area. It shall also apply to facilities outside the Protected Area as follows:

Facilities not excepted by the conditions of E&C QA Procedure E&C 24-10-15, Exhibit 1, Criterion B.5, which include:

- a. Switchyard
- b. Condensate Storage Tank and Transfer Piping System
- c. Meteorological Instrumentation
- d. Emergency Siren and Paging System
- e. Radiation Monitoring Stations
- f. Circulating Water Conduits and Structures
- g. Onsite and Offsite Probable Maximum Flood (PMF) Facilities
- h. Facilities, systems or components outside the Protected Area which interface with and affect the performance or operation of facilities, systems or components inside the Protected Area (e.g., Fire Protection, including components stored for use on dedicated/alternate shutdown systems, Communications, etc.)
- i. Emergency Operating Facility (EOF)

6. This procedure complies with the requirements of the applicable documents referenced in the Matrix of Regulatory Reference Material for E&C QA Procedures.

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B. PROCEDURAL ACTIONS

■ ACTION I - PREPARATION, REVIEW, APPROVAL, RELEASE AND REVISION OF LCP

Project Engineer (E&C) or Manager, Station Technical (NGS)

1. Assign the design change to a Lead Discipline Group Leader (E&C) or Supervising Engineer 1 (NGS) who will assign a Responsible Engineer (RE) and identify affected disciplines.

Responsible Engineer (RE)

2. Review Exhibit 1, Limited Change Package (LCP) Criteria, to determine if an LCP may be prepared. Proceed if LCP criteria is satisfied, otherwise prepare DCP/PFC in accordance with E&C QA Procedure E&C 24-10-16.

3. Identify all affected design documents known at this time, and prepare a brief description of, and the technical basis for changes.

- a. Complete Page 1 of FORM CC(123) 183, San Onofre Nuclear Generating Station Configuration Document Checklist. (Responsible Engineer [E&C] and Station Originator [NGS] shall complete the form as instructed by keypoints on the reverse side.)

NOTE: Page 2 of CC(123) 183 is completed by Configuration Control after LCP approval in accordance with Site Configuration Control Procedure S0123-XIV-4.2, Site Design Change Process.

- b. List affected design documents on FORM CC(123) 184, San Onofre Nuclear Generating Station Configuration Documents Requiring Change, for each major category identified on the CC(123) 183.
4. Prepare IDCNs in accordance with E&C 24-10-17 utilizing Forms 26-179-1 and 26-179-2. Obtain IDCN numbers from SCE Project Administration as required and assign numbers to Form 26-179-1.

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5. Indicate LCP number on FORM 26-360-1, Limited Change Package (LCP) cover sheet (Exhibit 3) and complete FORM 26-360-2, List of Design Change Documents (Exhibit 7).

NOTES: (1) LCP number determined in accordance with Budget and Cost Control Procedure S0123-XIX-3.0, Site Work Request Process and Station Engineering Procedure S0123-V-5.11, Station Engineering Review of Preliminary Design Change Packages.

(2) LCPs are not necessarily related to established Work Requests. Therefore, not all LCP numbers will be based on established Work Requests.

6. Revise and/or prepare calculations as required in accordance with E&C 24-7-15.

7. Coordination the preparation of affected discipline IDCNs.

NOTE: Each affected discipline shall prepare Interim Design Change Notices (IDCNs) against the drawings in their area of cognizance.

8. Prepare Description and Engineering Evaluation in accordance with Exhibit 6.

9. Prepare the necessary LCP Plant Hazards Summary Checklist as described in Exhibit 4.

NOTES: (1) The existing detailed hazards Checklist (E&C 24-10-15 and 24-10-16) shall be completed and utilized as guidance in preparing the Summary Checklist. The completed existing detailed checklist shall be signed by the RE only, and forwarded and filed with the original revision number comments.

(2) "YES" answers on the Summary Checklist require a brief explanation on the checklist or in the LCP Engineering Evaluation. Additionally, the specific detailed checklist (e.g. for Security, Fire Protection, etc.) must be attached.

(3) If the sole basis for checking "YES" under Item 9, Fire Protection, is the need for FBRRRs during construction, then so state only on Form 26-361. In this case, attachment of the detailed Fire Protection Checklist is not required.

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10. Prepare Test Procedure Guidelines (or indicate and justify in Engineering Evaluation that Test Procedure Guidelines are not required) (Exhibit 8).
11. Prepare the LCP Safety Evaluation in accordance with Exhibit 5.
12. Prepare changes to the UFSAR, UFHA, EP, SP, System Descriptions, etc., as required.
13. CSA shall be obtained from the implementing organization, (prepared during the Rev. A review) and submitted with the review comments per E&C 24-10-16, Exhibit 2.
14. Prepare Bill of Material Worksheet-FORM A (FORM 26-93).
15. Assemble the LCP in accordance with Exhibit 2. Indicate the page count on the LCP cover sheet.
16. Distribute or direct Project Administration (PA) to distribute the LCP for interdisciplinary review in accordance with the Document Review and Approval Distribution Matrix (DRADM) for the LCP and contents (i.e., IDCN requirements).

Reviewers

17. Perform an Engineering Review in accordance with the Design Review Responsibility Matrix (DRRM) to ensure that all design requirements are included. Document the review on FORM EO 165-1, Document Transmittal/FORM EO 165-2, Review/Comment Documentation (E&C)/FORM CC(123) 262, Document Transmittal (NGS).

NOTE: An IRE from the responsible discipline (E&C) or group (NGS) issuing the IDCN as part of the LCP will utilize the criteria on the reverse side of the EO 165-1 as a minimum, and document any comments on the EO 165-1/-2 (E&C) or on the CC(123) 262 (NGS). (Only one EO 165-1 will be required from each discipline.) The IRE shall also review any pertinent calculations.

Nuclear Systems Engineering (NSE) Group Leader

18. Perform a safety review and verify correctness of the determinations made with respect to the following:
 - a. Safety Evaluation
 - b. Quality Class and Seismic Category
 - c. ALARA Considerations

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- d. Verify that the LCP does not involve a change to the License and/or Technical Specifications, or does not change the design basis of the UFSAR, FSA, UFHA, Security Plan or Emergency Plan, and does not involve an unreviewed safety question.

NOTE: For a design change that does involve changes to the items listed in (d) or involves an unreviewed safety question, use of an LCP is not allowed and a long form PFC/DCP (PFCP) shall be prepared in accordance with E&C 24-10-15 and 24-10-16.

19. Sign and return FORM EO 165-1 to the RE or PA (as indicated on the EO 165-1), with comments as required utilizing FORM EO 165-2, as necessary.

Project Administration (PA)

(If EO 165-1 specifies PA to receive comments)

20. Receive comments and forward to the RE.

Responsible Engineer (RE)

21. Incorporate and resolve comments and document resolution on Form EO 165-1/-2 or CC(123) 262. Assemble package in accordance with Exhibit 2. Forward the Rev. 0 LCP for approval in accordance with the DRADM to obtain Lead Discipline approval on IDCNs in accordance with the DRADM.

- NOTES: (1) Resolution of review comments and approval of the LCP through Block II of Form 26-360-1 may be accomplished in a design review meeting. Meeting Minutes shall be prepared by the RE to document comment resolution. Meeting minutes shall be signed by the RE and included in review package when forwarded to CDM for retention with the review comments. Documentation of comment resolution with appropriate reference to these meeting minutes is required on the EO 165-1.
- (2) For modifications requiring revision to the Security Plan, prepare a transmittal memorandum to the Supervisor, Security Compliance forwarding an attachment identifying the recommended/required changes to the Security Plan. Forward copies to the appropriate Supervisor of Nuclear Licensing and Manager, Station Technical. Forward in accordance with the requirements for 10CFR73.21 materials. The transmittal memorandum shall not contain Safeguards Information and shall be annotated to indicate that when separated from the attachment, it is decontrolled. A copy of the memorandum only shall be attached to the LCP.

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Project Administration (PA)

22. Receive the discipline approved LCP and EO 165's with comment resolutions, Rev. 0. Obtain additional approvals as required by the DRADM.

- NOTES:
- (1) For NGS generated LCPs, this step is performed by SONGS Configuration Control.
 - (2) The NSE GROUP LEADER (or his designee or Site Representative) reviews and approves the LCP indicating that the review required by Step 18 was completed and that NSE comments were incorporated or satisfactorily resolved.
 - (3) The PROJECT ENGINEER or MANAGER, STATION TECHNICAL will review and approve the LCP verifying:
 - a) The change involves activities whose nonradiological effects are confined to onsite areas previously disturbed during site preparation and plant construction. The Manager, Station Technical or Project Engineer can provide the Environmental Engineer approval signature.

NOTE: When a proposed change involves activities whose non-radiological effects are not confined to onsite areas previously disturbed or impacts offsite areas, the LCP must be sent to the Environmental Engineering Group for further evaluation.

- b) That an unreviewed safety or environmental question does not exist.
- c) That the design change does not involve a change to the License and/or Technical Specifications or to the design basis of the UFSAR, FSA, UFHA, Security Plan or Emergency Plan.

NOTE: For a design change that does involve an unreviewed safety or environmental question or changes to Item c) listed above, use of an LCP is not allowed, and a long form DCP/PFC (PFCP) will be required in accordance with E&C 24-10-15 and 24-10-16.

- d) Approval that the proposed design change achieves its objective, is complete, constructible, operable and maintainable.

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- e) LCP Plant Hazards Summary Checklist is complete.
 - f) The LCP identifies the Responsible Work Organization (RWO) in Block III of the LCP cover sheet.
- (4) Editorial changes are allowed during or after the approval process by lining out and initialing the change. Design content changes are not allowed except in accordance with E&C 24-10-17 and ACTION I, Step 26, Notes (1) and (2).
23. Log the LCP and forward to SONGS Configuration Control Supervisor.
- Supervisor, Configuration Control (CC)
(Information Only)
24. Receive the approved Rev. 0 LCP and EO 165's and obtain additional NGS approvals.
25. Retain the original of Page 1 of the LCP Cover Sheet (26-360-1, Page 1) and obtain Block IV Nuclear Safety Group (NSG) and QA approvals.
26. Prepare FORM 26-89, Document Issue Request, and forward a copy of Page 1 of the approved LCP Cover Sheet and the remainder of the approved LCP and all comments to CDM - SONGS Drawing Processing for distribution.
- NOTES:
- (1) After an LCP has been released for construction, no additional documents shall be added to the LCP without causing a revision to the LCP, except as allowed by E&C 24-10-17, Exhibit 1. Any additions shall be recorded on the list of Design Change Documents.
 - (2) Changes to the 10CFR50.59 Evaluation (or Description or Engineering Evaluation) can be made on the original LCP by lining out old text and adding new. Approval by NSE Site Representative and Site PE (or Station Technical Manager for NGS generated LCPs) is required. Concurrence will be noted by initialing and dating the original LCP and by stating changes have been assessed and approved on Page 2 of Form 26-360-2. (The Site PE shall contact the Unit PE for concurrence, as deemed necessary.)
27. Identify distribution to CDM-SONGS.

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CDM - SONGS, Drawing Processing (For Information Only)

28. Log the LCP and associated documents as approved and prepare or update the LCP history records in accordance with Site Administration Procedure S0123-VI-28, Corporate Documentation Management Drawing Control Revision Controlled Document Processes.

29. Return a copy of the entire LCP cover sheet and the original LCP to SCE Project Administration (E&C) for file, with FORM 26-22-2, Data Transmittal, for acknowledgement.

30. Forward a copy of Page 1 of the LCP cover sheet, the original Page 2 of the LCP cover sheet, the original List of Design Change Documents (Forms 26-360-1 and 26-360-2), and a copy of the LCP to the Retrofit Supervisor or Station Technical Cognizant Engineer (as appropriate). Forward one copy of the LCP to the Project Retrofit Engineer (PRE)/Responsible Engineer (NGS).

NOTE: The LCP cover sheet identifies the Responsible Work Organization (RWO).

Retrofit Supervisor/Station Technical Cognizant Engineer

31. Coordinate the implementation of the change (including the partial turnover process) with the organization responsible for construction in accordance with Retrofit Program Administrative Procedure AP-10, Design Change Process, or other applicable maintenance procedures.

Implementing Organization

32. Construct LCP in accordance with Retrofit Administrative Procedure AP-10, Design Change Process, and other applicable maintenance procedures. Upon completion, process turnover package in accordance with Retrofit Administrative Procedure AP-32, DCP Turnovers. Sign Block V, Step 1 of the LCP Cover Sheet (original 26-360-1, Page 2). Forward the LCP to the Retrofit Supervisor/Station Technical Cognizant Engineer (as appropriate).

Retrofit Supervisor/Station Technical Cognizant Engineer

33. Ensure that testing is complete and Block V, Step 2 of the LCP Cover Sheet is signed.

34. Ensure Field Generated Interim Design Change Notices (FIDCNs) (and other field generated design change documents) are listed on the original 26-360-2 form, Page 2. Obtain Site Project Engineer or Station Supervising Engineer signature on original 26-360-1, Page 2 (as appropriate) (Block V, Step 3) signifying additional design documentation is listed on the 26-360-2.

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35. Upon completion of Step 32 and construction and testing, sign the LCP cover sheet (Block V, Step 4) and process in accordance with AP-10 (for the Retrofit Supervisor) or Site Engineering Procedure S0123-V-4.15, Structure, Equipment, and System Turnover (for the Station Technical Cognizant Engineer).

36. Forward a copy of the entire LCP Cover Sheet, (stamped "COMPLETE") and a copy of the List of Design Change Documents to Project Administration. Forward the original Page 2 of the LCP Cover Sheet, the original List of Design Change Documents and pertinent attachments to Configuration Control (CC).

Configuration Control (CC) (For Information Only)

37. Receive the package from Retrofit and insert the original Page 1 of the LCP Cover Sheet (with Block IV Quality Assurance and Nuclear Safety Group signatures).

38. In accordance with Site Configuration Control Procedure S0123-XIV-4.2, Configuration Document Change Control for Proposed Facility Changes, notify affected groups utilizing FORM CC(123) 183, San Onofre Nuclear Generating Station Configuration Document Checklist/FORM CC(123) 184, San Onofre Nuclear Generating Station Configuration Documents Requiring Change (hereafter referred to as CC(123) 183/CC(123) 184) that a change has been implemented and that revision of design documents and procedures shall be prepared to reflect as-built condition.

39. Sign Block VI after acceptance of a turnover package by Station (Block VI) for LCPs, forward a Memorandum Directing DCN Conversion to Project Administration, a copy to CDM-SONGS and the IDCN/DCN Conversion ESC (as applicable). Per the "TURNOVER ACCEPTED" distribution listed on Form 26-360-1, forward a copy of the approved LCP to NSE and Site Project Engineering (both without IDCNs). Forward a copy of the approved LCP Cover Sheet and the List of Design Change Documents (Forms 26-360-1/2), to the Retrofit Supervisor.

Project Administration (PA)/IDCN/DCN Conversion ESC

40. Receive Memorandum Directing DCN Conversion and Acknowledgement Receipt. Convert IDCNs to DCNs. Initiate incorporation of DCNs in accordance with E&C 24-8-7 and issue all As-Built drawings.

NOTE: Upon completion of conversion, return the signed Part II of the Memorandum Directing DCN Conversion to Configuration Control.

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Project Group Leader (NSE)

41. Receive copy of the LCP from Configuration Control.
42. Prepare memorandum, as appropriate, to the Unit Supervising Licensing Engineer, forwarding marked up UFSAR, UFHA, Emergency Plan (EP), or Design Criteria document changes.

Configuration Control (CC) (For Information Only)

43. Receive signed Part II of the Memorandum Directing DCN Conversion from Project Administration and close LCP. Forward original LCP Cover Sheet and copy of LCP to CDM, SONGS for file, and final distribution. Update history record.

CDM SONGS, Drawing Control (For Information Only)

44. Receive, encode and sign the original LCP cover sheet (Block VII) and distribute the LCP in accordance with the "CLOSE OUT COMPLETE" distribution list on Form 26-360-1. File the original LCP cover sheet and balance of package.

■ ACTION II - REVISION AND CANCELLATION OF LCPs

SCE Responsible Engineer/Project Engineering Site Representative

1. Evaluate the condition requiring a change with the Project Retrofit Engineer (E&C) or Maintenance (NGS). Review the criteria in accordance with E&C 24-10-17, Exhibit 1, to determine if an FIDCN may be written or if a revision to the LCP is required.

- NOTES:
- (1) If a field generated change does not meet the criteria stated in E&C 24-10-17, Exhibit 1, Section 1, initiate a revision to the LCP and repeat ACTION I.
 - (2) If a field generated change meets the criteria in E&C 24-10-17, Exhibit 1, Section 1, initiate an FIDCN and process in accordance with E&C 24-10-17, ACTION II.
 - (3) List FIDCNs on Form 26-360-2, Page 2.

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2. When it becomes necessary to void an LCP, the term "VOID" shall be used and the action taken shall be as follows:

For voided LCPs, the Responsible Engineer shall prepare a new LCP cover sheet, Form 26-360-1, and document the action by noting "VOID--To be Revised" in the description area of the form.

3. When it becomes necessary to cancel an LCP, the term "CANCEL" shall be used and the action taken shall be as follows:

For cancelled LCPs, the Responsible Engineer shall prepare a new LCP cover sheet, Form 26-360-1, and document the action by noting "CANCEL." Once an LCP is cancelled, as indicated by the "CANCEL" LCP cover sheet, a new revision of FIDCNs shall not be initiated against that LCP number. If any modifications and/or revisions related to the LCP are found to be necessary, a new LCP shall be prepared having a new LCP number assignment.

The Responsible Engineer shall also revise any calculation which may be affected by the voided or cancelled LCP (refer to E&C 24-7-15) and confirm that no construction physically altering the plant configuration has taken place as a result of the voided/cancelled LCP.

C. REFERENCES

1. E&C QA Procedure E&C 24-7-13, Design Criteria Documents for Engineering Construction Project (ECP) Activities for SONGS Units 1, 2&3
2. E&C QA Procedure E&C 24-7-15, Performing Design Analysis and Verification for SONGS 1, 2&3
3. E&C QA Procedure E&C 24-8-7, Development, Review, Approval and Release of New and As-Built SCE Drawings and Obsolescence of Existing SCE Drawings for SONGS 1, 2&3
4. E&C QA Procedure E&C 24-10-15, Preparation, Review, and Approval of Proposed Facility Changes (PFCs) and Proposed Facility Change Packages (PFCPs) for SONGS 1, 2&3
5. E&C QA Procedure E&C 24-10-16, Development, Review, Approval and Release of SCE Design Change Packages (DCPs) and Assembly With Proposed Facility Changes (PFCs) SONGS 1, 2&3
6. E&C QA Procedure E&C 24-10-17, Development, Review, Approval and Release of SCE Interim Design Change Notices (IDCN)/Design Change Notice (DCN) SONGS 1, 2&3

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26. FORM CC(123) 184, San Onofre Nuclear Generating Station Configuration Documents Requiring Change
27. FORM CC(123) 262, Document Transmittal (NGS)
28. Design Review Responsibility Matrix (DRRM)
29. Document Review and Approval Distribution Matrix (DRADM)
30. Engineering Specification, S0123-701-01
31. Updated Final Safety Analysis Report (UFSAR) for Units 2&3, Section III
32. Updated Fire Hazards Analysis (UFHA)

D. DEFINITIONS

Refer to the E&C QA Reference Procedures Manual Glossary.

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EXHIBIT 1

LIMITED CHANGE PACKAGE CRITERIA

Criteria

A limited Change Package (LCP) may be issued if the following criteria are satisfied:

1. Modifications to a single system, component, group of identical components performing similar functions, or single structure (RCP motor, valve, pump) that will not change the design basis.
2. Limited to 25 IDCNs per package or as approved by the Project Engineer or Manager, Station Technical.

NOTE: This waiver applies to the number of IDCNs in the package only, not to other criteria listed herein.

3. Design changes to correct clearly identified nonconformances in the original design identified by SPR, NCR, etc.
4. Allow replacement of proven/documented unreliable components with engineering evaluated substitutes (as evaluated by SPEERS).
5. Documentation for implementing acceptable/proven temporary modifications as permanent changes within the existing plant design basis and specifications.
6. Allow addition of instrumentation which will not change process or control other system functions (i.e., provide additional monitoring function only).
7. Rerouting/addition of plant piping, cable, conduit, tubing (no changes to plant system parameters, or functions that affect overall system performance or design bases).
8. Relocate plant equipment which will not change plant design basis.
9. Addition/deletion of pipe supports within single system.
10. Addition of piping to facilitate system performance without changing overall system function.
11. Addition/deletion of equipment access structures (platforms, ladders, etc).
12. Removal of abandoned equipment (functionally terminated by other changes or otherwise operationally isolated).

General Notes and Guidance

- NOTES:
- (1) If a the Field Change Notice (FCN) or LCP criteria cannot be met, modifications shall be implemented by DCP in accordance with E&C QA Procedure E&C 24-10-16.
 - (2) Any Proposed Design Changes normally requiring a long form PFC cannot be implemented by an LCP (see E&C QA Procedure E&C 24-10-15, ACTION II).
 - (3) Criteria that are consistent with the intent of the criteria listed above (but may not be specifically identified above or possibly may not meet the literal interpretation of the criteria) may be added by PCM and approved in accordance with E&C QA Procedure E&C 41-1-7.

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EXHIBIT 2

CONTENTS OF LCP

SECTION	TITLE
1.	FORM 26-360-1, Limited Change Package (LCP) Cover Sheet (Exhibit 3)
2.	FORM 26-360-2, List of Design Change Documents (Exhibit 7)
3.	Description of Change (Exhibit 6)
4.	Engineering Evaluation (Exhibit 6)
5.	LCP Safety Evaluation (10CFR50.59 Evaluation) (Exhibit 5)
6.	FORM 26-361, LCP Plant Hazards Summary Checklist (and as required, any detailed specific hazards checklist)
7.	Construction Safety Assessment
8.	Test Procedure Guidelines, as necessary (Exhibit 8)
9.	Changes to UFHA, UFSAR, Emergency Plan (EP), Security Plan change memorandum, Systems Descriptions, as required/appropriate
10.	FORMS CC(123) 183 and 184
11.	FORM 26-93, Bill of Material Worksheet FORM A
12.	FORM 26-179-1 and 26-179-2
NOTES:	LCP Plant Hazards Summary Checklist shall be sufficiently complete such that other checklists shall not be necessary (see Exhibit 4 for additional guidance).

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EXHIBIT 3

LIMITED CHANGE PACKAGE

 UNIT _____ LCP NO. _____
 LCP Q-CLASS _____ SEISMIC CAT. _____
 HIGHEST Q-CLASS OF DRAWING WITHIN LCP _____

TITLE _____

UFSAR Change Required?	<input type="checkbox"/> YES <input type="checkbox"/> NO	Physical Security Plan?	<input type="checkbox"/> YES <input type="checkbox"/> NO
UFMA Change Required?	<input type="checkbox"/> YES <input type="checkbox"/> NO	/Barrier Change Required?	<input type="checkbox"/> YES <input type="checkbox"/> NO
EQ Package Revision Required?	<input type="checkbox"/> YES <input type="checkbox"/> NO	Emergency Plan Change Required?	<input type="checkbox"/> YES <input type="checkbox"/> NO
EQ Master List Change Required?	<input type="checkbox"/> YES <input type="checkbox"/> NO	Startup Systems Affected	<input type="checkbox"/> YES <input type="checkbox"/> NO
Q-List Change Required?	<input type="checkbox"/> YES <input type="checkbox"/> NO		

I. INTERFACE APPROVALS (AFFECTED DISCIPLINES PGL's)

1. Civil Engrg. _____	Date _____	4. Mech. Engrg. _____	Date _____
2. I&C Engrg. _____	Date _____	5. Arch. _____	Date _____
3. Elect. Eng-g. _____	Date _____	6. Other _____	Date _____
4. Mech. Engrg. _____	Date _____		

II. DESIGN APPROVAL: This change is consistent with the criteria for LCP and is satisfactory for implementation and operation.

Waiver of IDCM limit _____ (PE/Manager, Station Technical)

RE/Station Cog. Engr. _____ Date _____

Independent Review Engr. _____ Date _____

Group Leader/Station Supvr. _____ Date _____

Environmental Engineering _____ Date _____

Nuclear System Engr. _____ Date _____

Project Engr./Manager, Sta. Tech. _____ Date _____

Quality Assurance _____ Date _____

III. STATION APPROVAL:

Station Cog. Engr. _____ Date _____

Supv. Engr. I _____ Date _____

Manager, Sta. Tech. _____ Date _____

Operations/Equipment Control: Work is authorized during Mode _____

SUPV. PLANT COORD. _____ Date _____

RESTRICTIONS _____

IV. REVIEW: Review of LCP is performed after Station approval for implementation.

1. Quality Assurance _____ Date _____

2. Nuclear Safety Group _____ Date _____

GROUP SUPV. _____

DISTRIBUTION:

STATION APPROVAL

Retrofit (3)

Maintenance

Site Engineering

Station Engineering

Station Equipment Control

Configuration Control

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EXHIBIT 3

LIMITED CHANGE PACKAGE

UNIT _____ LCP NO. _____
 LCP Q-CLASS _____ SEISMIC CAT. _____
 HIGHEST Q-CLASS OF DRAWING WITHIN LCP _____

V. IMPLEMENTATION AND TURNOVER:

RWO: _____

1. Installation

- a. LCP was accomplished by RWO using CWOs, MOs _____
- b. The following additional documents (attached) were issued after LCP approval for construction: (26-360-2 updated) _____
- c. Work is complete, satisfactory, and ready for test with the following exceptions: _____

_____ Date _____
 RWO MGR. OR MAINT. SUPT.

2. Test

- a. The following tests were performed: _____
 by CWOs, MOs _____
- b. The following additional documents (attached) were issued after LCP approval for test _____
- c. Tests were satisfactorily accomplished and LCP is ready for turnover with the following exceptions _____

_____ Date _____
 TEST OPS. SUPV. STA. COG. ENGR.

3. Engineering Changes

- a. The additional documentation listed in 26-360-2 was issued for construction and test of this LCP. The listing is complete.

_____ Date _____
 SITE PROJECT ENGR./NSG SUPV. ENGR.

4. Released for Turnover

- a. The LCP is satisfactory and ready for Station Acceptance.
- b. Exception _____

_____ Date _____
 RETROFIT SUPV./STATION COG. ENGR.

VI. TURNOVER ACCEPTANCE:

The work is accepted for operation and maintenance with the following exception _____

_____ Date _____
 STA. COG. ENGR. SUPV. ENGR. I

_____ Date _____
 CONFIGURATION CONTROL

VII. CLOSE OUT

1. Affected design disclosure documents and procedures reflect this modification.
2. All IDCNs are converted to DCNs

_____ Date _____
 CONFIGURATION CONTROL

3. Document is on File

_____ Date _____
 CDM, SUPERVISOR

DISTRIBUTION:

TURNOVER ACCEPTED
 Retrofit Supv. (Cover Sheet)
 Site Project Engineer
 (w/o IDCNs)
 NSE Group Leader (w/o IDCNs)
 Configuration Control

CLOSE OUT COMPLETE (W/O)
 Responsible Engineer
 Project Administration G.O
 Manager, Station Technical
 Retrofit Supv.

Site Project Engineer/PE
 Configuration Control
 CDM-SONGS
 CDM-GO

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EXHIBIT 4

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LIMITED CHANGE PACKAGE PLANT HAZARDS SUMMARY CHECKLIST

Are there any special requirements for the following effect? Explain any "YES" answers below or in the LCP Engineering Evaluation. Additionally "YES" answers require attachment of the detailed hazards checklist.

1. Satisfies LCP Criteria (Exhibit 1) ☐ NO ☐ YES _____
2. HELBA ☐ NO ☐ YES _____
3. Hydrogen Producing Materials ☐ NO ☐ YES _____
4. ALARA (26-247) ☐ NO ☐ YES _____
5. Electrical Equipment Environmental ☐ NO ☐ YES _____
6. Tornado Missiles ☐ NO ☐ YES _____
7. Flooding ☐ NO ☐ YES _____
8. Internal Missiles ☐ NO ☐ YES _____
9. Fire Protection - FMA (26-292) ☐ NO ☐ YES _____
10. Plant External Environment (Radiological Impact) ☐ NO ☐ YES _____
11. Seismic ☐ NO ☐ YES _____
12. Security (24-10-15 Exhibit 7) ☐ NO ☐ YES _____
13. Emergency Plan (24-10-15, Exhibit 6) ☐ NO ☐ YES _____
14. Environmental (Nonradiological) ☐ NO ☐ YES _____

Additional Comments:

RE	_____	DATE	_____
	Signature		
IRE	_____	DATE	_____
	Signature		
GL	_____	DATE	_____
	Signature		
RSE GL	_____	DATE	_____
	Signature		

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EXHIBIT 5

LCP SAFETY EVALUATION (10CFR 50.59)

SAFETY EVALUATION - This portion of the LCP shall set forth the basis and criteria used to determine that the proposed change does or does not involve an "unreviewed safety question." In making this determination, the following questions shall be answered:

- I. Will the probability of occurrence of an accident or malfunction of any equipment important to safety previously evaluated in the UFSAR/FSA be increased?

Response: (Yes/No) - The response to this question shall include a discussion of the overall effect of the change on the probability of occurrence of accidents analyzed in the references in Exhibit 2-A of E&C QA Procedure E&C 24-10-15. This discussion shall be sufficiently detailed such that it is clear that those accidents analyzed, which are in any way affected by the change are or are not increasingly probable due to change or its installation.

Simple statements, without discussion of the accidents and development of a logical argument for or against this item, shall require rejection of the proposed facility change.

Exhibit 2-A of E&C 24-10-15 provides guidance to references to complete this section.

- II. Will the consequences of an accident or malfunction of equipment important to safety previously evaluated in the UFSAR/FSA be increased?

Response: (Yes/No) - The response to this question shall include a discussion of those accidents analyzed in the references in Exhibit 2-A of E&C 24-10-15 which may in any way be affected by the change. These discussions shall be sufficiently detailed as to demonstrate clearly whether accident analyses bound any and all conditions created by the change or its installation. Exhibit 2-A of E&C 24-10-15 provides guidance to references for accident analyses to be considered.

Simple statements, without discussion of the accidents and development of a logical argument for or against this item, shall require rejection of the proposed facility change.

- III. Will the possibility of an accident or malfunction of a different type than any previously evaluated in the UFSAR/FSA be created?

Response: (Yes/No) - The response to this question shall contain a discussion of any non-analyzed accidents impacted by the change or its installation. References in Exhibit 2-A of E&C 24-10-15 shall form the basis (but not be the sole means) of responding to this question. A simple statement of conclusion is not sufficient and shall be grounds for rejection of the proposed facility change.

- IV. Will the margin of safety as defined in the basis for any technical specification be reduced?

Response: (Yes/No) - The response to this question shall contain a reference to those Technical Specifications (if any) which in any way relate to the change and a sufficiently detailed discussion of the basis for each specification such that it is clear whether that basis is compromised. Key results which effect Technical Specifications/Surveillance Procedures (E.G., battery calculations) shall be described in the LCP, even if the Technical Specification basis remains unchanged.

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EXHIBIT 6

**LCP DESCRIPTION AND ENGINEERING EVALUATION
FORMAT AND CONTENT REQUIREMENTS**

- I. DESCRIPTION - Sufficiently detailed as to the reason, purpose, method, assumptions and design input such that a person technically qualified in the subject can review and understand the change without recourse to the Originator.

Include a brief description of the physical plant changes. Address location of modification piping/conduit routing, walls penetrated, major equipment addition/deletions. Use sketches or marked up P&IDs, general arrangement, etc. as necessary.

- II. ENGINEERING EVALUATION - Review the effects on design parameters and operations, including as required design analysis. Describe the impact of construction on the plant (this may be accomplished through the use of an attachment). The engineering evaluation shall include a definitive statement that the plant modification has been reviewed, is complete, achieves its objective, is constructible, is operable and maintainable. Refer to E&C QA Procedure E&C 37-30-63, Development, Issuance, Revision and Cancellation of the Document Package to Establish the Environmental Qualification (EQ) of Electrical Equipment Listed on the EQ Master List for SONGS 1, 2 and 3 for required environmental qualification information.

Include a discussion of the original plant design basis and the impact of this modification on the original design basis. Also include a discussion of the functional changes imposed by the proposed modification.

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QA PROCEDURE

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EXHIBIT 7

LIST OF DESIGN CHANGE DOCUMENTS

LCP _____

UNIT _____

IDCM DOCUMENTATION

The following documents are contained in this LCP:

ID NO.	TITLE	DWG. NUMBER	IDCM NO.
--------	-------	-------------	----------

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EXHIBIT 7

ADDITIONAL DOCUMENTATION (FIDCM, etc.)

The following documents were issued and added to LCP after issue:

NO.	FIDCM, etc.	DWG. NUMBER	CONST/TEST	ENTERED BY	PAGE NO.
-----	-------------	-------------	------------	------------	----------

10CFR50.59 Revision Approved:

_____	Date _____
NSE	
_____	Date _____
Site PE	

Engineering and Construction Department

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DEPARTMENT

QA PROCEDURE

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EXHIBIT 8

TEST PROCEDURE GUIDELINES PREPARATION

The following outlines the format, content, and requirements for preparation of Test Procedure Guidelines. Test Procedure Guidelines must be prepared when specific engineering parameters are to be verified. If the proposed change involves no critical engineering parameters or cannot impact the existing system critical engineering parameters, so state in the LCP Engineering Evaluation and identify any standard startup tests or processes deemed necessary, (i.e., continuity check, system flush, etc.). In such case, Test Procedure Guidelines are not necessary.

When necessary, Test Procedure Guidelines shall address the following:

SECTION 1.0 - SCOPE

Briefly identify the scope and description of the proposed design change including addition/deletion of significant equipment (e.g., pumps, valves, instrumentation, etc.)

SECTION 2.0 - OBJECTIVES

Identify test objectives and critical engineering parameters to be tested and confirmed.

SECTION 3.0 - PREREQUISITES

Identify pre-test requirements including mode of operation, system conditions, system requirements, special valve/equipment status, special test equipment required, system flushes required, etc.

SECTION 4.0 - GENERAL METHODS

Briefly identify the test methods to be utilized (e.g., meggar, special continuity checks, hydrostatic tests, flow tests, pressure tests, etc.)

SECTION 5.0 - ACCEPTANCE CRITERIA

Specify detailed acceptance criteria necessary to meet the test objectives identified in Section 2.0. Acceptance criteria should identify specific quantitative parameters, equipment status (i.e., valve position expected, pump status expected, flow requirements, instrument indication, system pressures) and/or other measurable parameters necessary to confirm expected engineering parameters.

SECTION 6.0 - REFERENCES

Reference pertinent documentation sections of FSAR-Section 14.0, existing test procedures that will facilitate test procedure preparation, pertinent ANSI Standards or ASME Codes, P&IDs, Elementaries, etc.

1 E&C 24-10-19 Rev. 0
2 PCN No 1
10 04/04/88
EFFECTIVE DATE

Procedure Change Notice (PCN) For E&C QA Procedures

- 2 Procedure Title Development, Review, Approval and Release of SCE Limited Change Packages (LCPs)
SONGS 1, 2&3
- 3 Originator D. Hall/A. Ngan PAX No 28456/28378
- 4 Date Originated 03/10/88
- 5 Reason For Change To provide provision to ensure that vendor documents which provide design disclosure information are converted to SCE drawings; and include provisions for Software Modification if a design change impacts any plant computer systems.
- 6 Description Of Change:

In A. GENERAL INFORMATION, Step 4, revise as follows:

4. FORM 26-179-1, Interim Design Change Notice (IDCN)/Design Change Notice (DCN) SONGS 1, 2&3, and FORM 26-179-2, Interim Design Change Notice (IDCN)/Design Change Notice (DCN) Supplemental Page SONGS 1, 2&3, are used to document design changes and their approval to design disclosure document. The preparation of IDCNs when issued within an LCP will be processed in accordance with E&C QA Procedure E&C 24-10-17. New (not previously issued) SCE design and/or Vendor drawings (which provide substantive design information needed for construction) are also implemented through the LCP process. New drawings are included in the LCP in a standard SCE drawing format (issued for Construction) rather than on the 26-179-1. Upon construction completion and Station acceptance of an LCP, all IDCNs within the LCP are converted to DCNs and are distributed to the field against the latest drawing revision to reflect the "AS-Built" condition in accordance with E&C QA Procedure E&C 24-8-7. Under no circumstances shall a design change be incorporated into a design disclosure document prior to the actual construction completion and Station acceptance.

In B. PROCEDURAL ACTIONS, ACTION I, add new Step 4 to read:

4. If the design change impacts any plant computer systems, contact the Station Computer Group and submit a Software Modification Request in accordance with Station Engineering Procedure S023-V-4.70, Software Modification and Verification.

Re-number Items 4 through 44 to 5 through 45

In C. REFERENCES, add new Step 13 to read:

13. Station Engineering Procedure S023-V-4.70, Software Modification and Verification

Re-number Items 13 through 32 to 14 through 33

In EXHIBIT 2 of E&C 24-10-19, add new Section Item 13 to read:

13. Software Modification Request in accordance with Station Engineering Procedure S023-V-4.70, Software Modification and Verification, as applicable

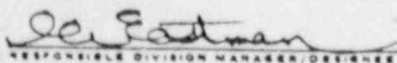
7. Approvals


PROCEDURE AUTHOR

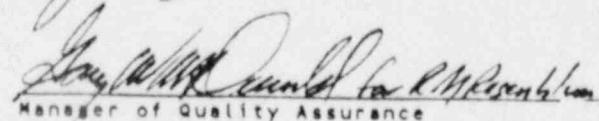
3/11/88
DATE


MANAGER, STATION TECHNICAL/DESIGNER

3/29/88
DATE


RESPONSIBLE DIVISION MANAGER/DESIGNER

3/15/88
DATE


Manager of Quality Assurance

4/4/88
DATE