



Westinghouse Electric Corporation
Advanced Technology Business Area

AP600

Program Operating Procedure

Subject:

DESIGN CONFIGURATION CHANGE CONTROL
FOR THE AP600 PROGRAM

Approved:

H. J. Bruschi
H. J. Bruschi, General Manager
Advanced Technology Business Area

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AUTHOR/COGNIZANT FUNCTION

Contact Manager, Project Engineering & Integration [CCB
Chairman], on questions concerning this procedure.

PURPOSE

This procedure defines the process and actions required for the
Construction phases to implement a change to the design which
has been previously released in a document for project use and
placed under configuration control, as defined in GW-GOY-02,
Westinghouse AP600 Program Configuration Management Plan.

SCOPE

This procedure applies to the design under configuration control
as reflected on documents, including, but not limited to, the
following documents:

- I&C Equipment List
- System Specification Documents
- Functional Specifications
- Containment Specification Document
- Control & Protection System Functional Requirements
- Core Design Documentation
- Chemistry Specification
- NSSS Structural Design Interface Guidelines
- NSSS Design Transients
- Radiation Analysis Manual
- Fluid Systems Safeguards Data
- General Arrangement Drawings
- Piping & Instrumentation Diagrams
- Logic Drawings
- Equipment Outline Drawings
- General Assembly Drawings
- Concrete Outline Drawings
- Steel Framing Drawings
- Electrical One Line Drawings

DEFINITIONS**ATBA General Manager**

Selects the CCB Chairman and determines the makeup of the CCB. The General Manager is also responsible for the final decision in cases where the CCB does not reach a consensus for a Class 1 DCP, and for issuing post-CCB meeting approval of DCPs approved for post-design certification.

Configuration Control Board (CCB)

A board of individuals drawn from various organizations and disciplines to review and disposition Design Change Proposals. The CCB uses the criteria established in Table 5 to disposition Class 1 DCPs. The organization and responsibilities of the CCB are defined in Appendix A.

Approved Design Material (Tier 2)

Approved Design Material is the same as Tier 2 information. For AP600, Tier 2 information is the Standard Safety Analysis Report (SSAR). This is an NRC definition and does not allow its use as design input.

Certified Design Material (Tier 1)

Certified Design Material is the same as Tier 1 information. For AP600, Tier 1 information includes Inspections, Tests, Analyses, and Acceptance Criteria; and "end materials" as defined by NRC. This is an NRC definition and does not allow its use as design input.

Engineer [DCP Initiator]

Any engineer within Westinghouse or Subcontractors' or Contributed labor organizations who initiates design changes for items within his/her scope of design.

The DCPI is also responsible for determining the classification of a Class 1 or Class 2 DCP based on the criteria established in this procedure.

If the DCPI is not physically located at the Energy Center, then he/she is responsible for nominating an ATBA engineer as a proxy for the DCP.

Responsible Manager

The manager within Westinghouse or subcontractor's or Contributed labor organizations who is responsible for approving, implementing design changes for items within his/her scope of design, or providing impact to design

changes initiated by other design organizations. The Responsible Manager identifies whether the proposed change falls within Class 1, 2 or 3 criteria. DCPs are prepared for Class 1 or 2 changes and are forwarded to the Westinghouse Project Manager. The Responsible Manager approves and implements changes that fall within the Class 3 criteria.

Contributed Labor

Effort applied directly to the design of AP600 provided by employees of organizations other than Westinghouse or its compensated Subcontractors.

Westinghouse Project Manager

The manager within Westinghouse responsible for confirming that Class 1 or Class 2 DCP's have been correctly classified and dispositioning Class 2 DCP's using alternatives established in Table 6.

Design Certification Project Manager

The Westinghouse manager responsible for the Design Certification program. This manager is a member of the CCB.

FOAKE Project Manager

The Westinghouse manager responsible for the First-of-a-Kind-Engineering program. This manager is a member of the CCB.

DCP Administrator

The person assigned the responsibility of updating and maintaining the DCP System database. See Appendix A for a detailed list of responsibilities.

CCB Technical Secretary

The person assigned the responsibility of documenting the CCB's decision for each DCP via the meeting minutes. See Appendix A for a detailed list of responsibilities.

Baseline

A documented and approved design which constitutes an established reference position of the plant design. The Baseline Configuration Identification is as defined in the AP600 Program Configuration Management Plan.

Configuration Control

The process of managing proposed changes to the configuration items and related technical documentation which ensures that proposed changes to the plant design are identified, described, systematically reviewed and evaluated for impact, properly implemented upon approval, documented and completed.

Design Documentation

Those documents (including drawings) that control or specify the design, fabrication, installation, and test of a system or component or structure. Documentation that is placed under configuration control requires that the revision be changed from an alpha to a numeric revision number.

Change Control

The systematic evaluation, coordination, and approval or disapproval of all proposed configuration changes from established baselines.

DCP Number

The standard AP600 document number that is automatically issued by the DCP Tracking System and used by the DCP Administrator for overseeing the DCP process. The AP600 document number is in accordance with GW-GMP-005.

DCP Classification

A design change proposal may be classified as Class 1, 2 or 3. Class 1 requires Westinghouse Project Manager concurrence and CCB approval. Class 2 requires only Westinghouse Project Manager approval. Class 3 requires only the Responsible Manager's approval. See procedure section for further detail.

Design Change Proposal (DCP)

Form that documents the proposed change to the contents of design document(s) under configuration control. This includes any backup information. DCPs may be approved for incorporation into the Design Certification Documentation or may be approved but not incorporated into the Certification Process.

DCP Approved for Design Certification

A DCP that is approved that does not affect the contents of the SSAR or ITAACs or a DCP that is approved and

requires changes to the SSAR or ITAAC that can be made in a manner which can be accommodated within the ongoing design certification process.

DCP Approved for Post-Design Certification

A DCP that is approved by the CCB on the basis that the plant changes are considered worthwhile improvements, however implementation is to be delayed to preclude perturbing the Design Certification process. In addition to having the CCB approval, approval of the ATBA General Manager is also required. The changes will be identified in the design by the Combined Operating License (COL) Applicant.

Design Change Review (DCR)

Form issued to collect impacts of change (scope/budget/effect on design documents) from affected functional groups for Class 1 and 2 DCPs.

DCP Tracking System

The method of tracking a DCP from initiation through closure. The DCP Tracking System provides reports that may be used as part of the DCP Review Package and Meeting Minutes and in identifying outstanding DCPs. Implementation of the DCP is verified via the Technical Document Control System.

DCP Review Package

A package containing a report of the DCP/DCR impacts and a copy of associated documentation if necessary. Class 1 DCP packages are transmitted to the initiator and CCB members prior to a CCB meeting. Class 2 DCP packages are transmitted to the Westinghouse Project Manager for approval.

DCP Meeting Minutes

Formal record of CCB meeting proceedings and includes the CCB decision of each Class 1 or non-concurred Class 2 DCP. The CCB meeting minutes notifies the DCP Initiator and impacted organizations with a status of the DCP(s). (See Appendix C for content.)

DCP Summary Status Report

Report produced from the DCP Tracking System for Class 1 and 2 DCPs. DCP Summary Status Reports are issued to Project Management as requested. (See Appendix D for content.)

Technical Document Control (TDC) System

A system that documents the document number/revision; lists all formally released documents and associated document data such as effective revision number, date released, responsible party; and identifies all the implemented/outstanding DCPs.

A flowchart of the procedure is given in Appendix B.

PROCEDURE General

A. DCP Information within the AP600 Program

The DCP Tracking System should be checked for status, or information of a DCP including all impacts. When updating a document or drawing, each engineer should access the DCP Tracking System to ensure that all related DCPs are incorporated into the document or drawing.

B. CCB Meeting

A quorum of 100% is required to approve or disapprove a Design Change Proposal. All members are expected to attend each meeting personally; meetings are scheduled in advance to accommodate member availability. All members should either attend or arrange with another member to be represented by proxy and so notify the Chairman before the meeting. Only in unusual circumstances, such as extended absence, may a member designate a subordinate to act in his/her stead on any matter brought before the CCB. The CCB meeting attendees, including those members to whom proxies are given, are identified in the meeting minutes.

If a member is not present or represented at a meeting, he/she must indicate his concurrence with the decisions taken to the CCB chairman within five days of the meeting. This post-meeting concurrence will be recorded in the meeting minutes. In the event that the absent member does not concur with the decisions, the CCB Chairman shall reconvene the meeting at a suitable time.

C. Design Changes due to Incorrect Design

If a design change is being proposed because of a significant error, with potential safety consequences, the DCP Initiator shall issue a QPF (see ESBU Policy &

Procedures Manual, Procedure WP-15.3) to initiate an investigation of the causes of the design error.

D. Determination if a proposed change requires a DCP

The engineer and the responsible manager in any of the organizations determine if the change falls within the Class 3 criteria. Class 3 changes are approved and implemented by the Responsible Manager. Other changes are submitted to the Westinghouse Project Manager using the DCP Form. The DCP Initiator shall determine, using the criteria defined in the procedure section whether the change is a Class 1 or 2. In his review of DCPs, the CCB Chairman shall consider the appropriate classification of the DCP.

E. Submittal of Proposed Design Changes by External Parties

If the initiator of the proposed design change is not located at the Energy Center, he/she shall nominate an ATBA Engineer as a proxy for the DCP.

F. DCP Submittal

The DCP Administrator shall receive any proposed Class 1 DCP at least three weeks before a CCB scheduled meeting. This is to allow time for sending and returning of DCRs. DCPs received *later than the three weeks* may be reviewed at CCB discretion. Class 2 DCPs shall be received and sent to impacttees within a week of receipt. The DCP Administrator shall review each DCP for completeness and has the responsibility to return any DCPs that have information missing to the initiating party. The Administrator will return incomplete DCPs to the Responsible Manager within 48 hours of receipt.

G. Class 1 & 2 DCP Design Certification Impact Review

Each Class 1 or 2 DCP shall be reviewed by the Manager, Advanced Plant Safety and Licensing to confirm that it has been correctly classified in terms of its Design Certification impact; that areas of impact on Design Certification have been correctly identified; and that affected Design Certification documents are correctly identified. Where there are Design Certification impacts,

the Manager, Advanced Plant Safety and Licensing, shall determine whether the proposed change is acceptable to the Design Certification Project and indicate concurrence or disagreement accordingly. This review shall be conducted in parallel with the other impact assessments.

H. CCB Review of Class 1 DCPs Prior to CCB Meeting

A DCP review package that includes a report of the DCRs is prepared and transmitted by the DCP Administrator to the DCP Initiator at least a week before the CCB meeting. Additionally the report will identify any outstanding DCRs. The Administrator may provide a copy of the actual DCRs to the DCP Initiator, if necessary.

The DCP Initiator is responsible to reconcile the DCR data and obtain missing DCRs prior to the CCB meeting, and to provide the original DCRs to the DCP Administrator for filing and updating the database.

A final DCP review package that includes the summary report of the impacts is issued by the DCP Administrator to the DCP Initiator and CCB members in advance of the CCB meeting for review.

I. Westinghouse Project Manager Review of Class 2 DCPs

A DCP review package that includes the Design Change Proposal and a summary of the Design Change Review impacts is provided to the DCP Initiator, Responsible Manager and to the Westinghouse Project Manager by the DCP Administrator in advance of a meeting, if required by the Westinghouse Project Manager, to review the DCP prior to disposition.

NOTE

THE WESTINGHOUSE PROJECT MANAGER MAY HAVE A MEETING WITH THE INITIATOR AND RESPONSIBLE MANAGER WHEN DISPOSITIONING A CLASS 2 DCP

J. DCP Supporting Design Documentation

All AP600 documents that are referenced in the DCP/DCR shall have an AP600 document number (alternate document numbers may be used, but only in addition to the AP600 document number). The DCP

Administrator shall verify that an AP600 document number has been referenced in the DCP/DCR forms. If there is no AP600 number, the DCP Administrator shall contact the DCP Initiator/DCR Impactee and request that they obtain an AP600 document number.

K. Impactee Non-Concurrence with the Proposed Design Change

If one or more of the impactee reviewers do not concur with the proposed design change, the DCPA will forward a copy of these forms to the DCPI. The DCPI will try to resolve the problem(s) with the associated impactee(s). See main procedure for further details.

L. Class 1 DCP Disposition - CCB Meeting

The DCP Initiator will be responsible for preparing and presenting the proposed design change to the CCB; to resolve impacts; and review the DCP Review Package prior to the DCP Administrator issuing the DCP Review Package to the CCB. The CCB reviews the DCP and its impacts and dispositions the DCP using Table 5. All CCB decisions are formally documented by the CCB Technical Secretary via meeting minutes. See Appendix C for typical format.

CCB approval can be given in one of two categories. A change to be included in the Certified Plant Design SSAR, ITAACs, or technical specification must indicate as such as a condition of approval by the CCB. If the change will not be included in the Design Certification process, the DCP can be approved for post-Design Certification incorporation and forwarded to the ATBA General Manager for approval.

DCPs that are for post-Design Certification will have to be approved by NRC during the COL licensing process if the change impacts either the technical specification or the ITAACs (Tier 1 information). Changes that affect information contained in the SSAR (a Tier 2 document) will be permitted following the "50.59-like" review and provided the justification and documentation are appropriate. The documentation must include a certification impact evaluation addressing the items identified in Appendix F.

M. Class 2 DCP Disposition

The Class 2 DCP and its impacts are reviewed and dispositioned using Table 6 by the Westinghouse Project Manager. The disposition is documented along with a signature on the DCP Review Package. The disposition is then entered by the CCB Administrator in the DCP Tracking System. A summary report is issued to the DCP Initiator(s), Responsible Manager(s) and the Westinghouse Project Manager listing the DCP status. See Appendix D for typical report format.

N. Disapproval of Standard Class 1 Design Changes

In the event of the CCB disapproving a Class 1 DCP, the DCP Administrator updates the DCP database by statusing the DCP as R (rejected). The DCP Administrator then transmits the CCB minutes to the Responsible Manager who will inform the DCP Initiator of the CCB decision. The DCP must not be implemented.

O. Disapproval of Standard Class 2 Design Changes

In the event of the Westinghouse Project manager disapproving a Class 2 DCP, the DCP Administrator updates the DCP database by statusing the DCP as R (rejected). The DCP Administrator then transmits a letter to the Responsible Manager who will inform the DCP Initiator of the Westinghouse Project Manager's decision. The DCP must not be implemented.

P. DCP Implementation

The DCP Administrator will update the DCP Tracking System and issue a DCP Summary Status Report, on a monthly basis or as necessary, that identifies the DCP status and a list of all affected documents.

For Class 1 DCPs, the CCB meeting minutes will identify those DCPs that have been approved by the CCB which can proceed to be implemented.

For Class 2 DCPs, a summary report that identifies the status of the DCPs is issued to the DCP Initiator(s), Responsible Manager(s) and the Westinghouse Project Manager(s). All approved Class 2 DCPs can be

implemented when the Westinghouse Project Manager approves the DCP.

The DCP Tracking System is integral with the TDC system. The TDC system provides a list of all documents and the DCPs that have not been incorporated into the documents. The DCP system provides a list of all issued DCPs and the affected documents (documents which need to be revised to incorporate the DCP).

RESPONSIBILITY

ACTION

A flowchart of the procedure is given in Appendix B.

Engineer/
Responsible Manager

1. Any engineer desiring to make a change to the design determines with the Responsible Manager if the proposed change falls within the Class 1, 2 or 3 criteria. The Responsible Manager ensures that the proposed change conforms with the overall plan and direction of the AP600 Program, discussing the change with likely affected groups where appropriate.

For DCPs that impact information contained in the SSAR or ITAACs, the marked-up change pages shall be provided and an initial recommendation for the implementation time (pre/post-Design Certification) shall be indicated.

The initiator shall also identify the potential impact on plant safety (see Appendix F) and compliance with URD requirements. A completed safety impact sheet (Appendix F, "50.59 - Like Checklist for Certification Impact Evaluation" Form 58238 shall be completed with each DCP.

Engineer

2. If the Proposed change falls within the Class 3 criteria, the engineer documents the change in detail on the Record of Change form for documents or ensures that it is properly reflected on the revision column for drawings.

NOTE

INTERFACING PARTIES NEED TO BE INFORMED THAT THE DOCUMENT HAS BEEN REVISED TO THE NEXT LEVEL EVEN IF THE CHANGE DOES NOT AFFECT THE INTERFACING PARTIES SCOPE

Responsible Manager 3. Approves those proposed changes that fall within Class 3. Ensures that the changes are clearly defined in the Record of Change form or on the revision column of the drawings. The document/drawing may be revised to the next level.

Engineer 4. Prepares a DCP if the proposed change falls within Class 1 or 2.

Completes the DCP Form, ensures that the documents that are affected have an AP600 Document Number, attaches the required documentation, and submits it to the Responsible Manager for review and approval.

Unless otherwise assigned by the Responsible Manager, overall responsibility is vested in the Engineer to define all impacts accurately within his/her field, and to reconcile all impacts from other groups.

NOTE

THE DCP NEED NOT HAVE ALL SUPPORTING DOCUMENTS ATTACHED - ONE COPY MAY BE PROVIDED FOR THE OFFICIAL DCP FILE. SKETCHES, ILLUSTRATIONS THAT ARE NOT PART OF THE SUPPORTING DOCUMENTS SHOULD BE ATTACHED.

Responsible Manager 5. Reviews the DCP for completeness and accuracy for those proposed changes that fall within the Class 1 or 2 criteria.

Signs, dates and transmits the DCP to the Westinghouse Project Manager.

Engineer 6. Determines whether the proposed design change should be submitted as a Class 1 or 2 DCP using the criteria defined in Tables 1 and 2.

If the DCPI is not located at the Energy Center, he/she must nominate an ATBA Engineer as proxy for the DCP.

Westinghouse Project Manager 7. Evaluates the proposed design change and confirms based on the criteria defined in Table 1 or 2, that the proposed change is correctly classified.

Documents the classification of the DCP on the DCP form via a signature/date.

Transmits the DCP to the DCP Administrator.

DCP Administrator

8. Assigns a DCP number to DCPs [Class 1 and 2].

Receives all DCPs and ensures that an AP600 Document Number has been assigned to the affected AP600 documents. Reviews form for completeness, logs it into the DCP Tracking System, and issues a Design Change Form (DCR) to obtain the schedule/budgetary/affected document impact of the proposed change from affected functional groups.

Impacted
Functional Group

9. Reviews the proposed design change identified in the DCR (and any attachments) for impact to existing documentation that may have been developed previously. The impacted engineer and manager complete the DCR. The manager of the Impacted Functional Group signs and dates the DCR, and sends it back to the DCP Administrator. If there is a need for other groups to review the DCR, the impacted engineer/manager should identify the group in the DCR Form. Additionally, for expediency, the engineer/manager could contact the DCP Administrator directly and identify the additional impacted groups.

If the functional group decides that the proposed DCP has no impact on his/her workscope and concurs with the change, then the appropriate item is selected on the DCR Form. The Functional group's manager approves decision by signing/dating and returning completed form to the DCP Administrator.

DCP Administrator

10. Once the impacts are collected via the DCR Form, the data is entered into the DCP Database, summarized and assembled into a DCP Review package.

For Class 1 DCPs, the DCP Review package is distributed to the DCP Initiator prior to CCB meeting for review.

For Class 2 DCPs, the DCP Review package is distributed to the DCP Initiator prior to the Westinghouse Project Manager for review.

If any non-concurrences are identified, the DCPA shall return a copy of the non-concurring impactee(s) form(s) to the DCPI for resolution.

Engineer
[DCP Initiator]

11. Responsible to ensure that all impactees have responded and that the impactees' inputs have been properly recorded in the DCR form. Also responsible to ensure that any areas of impact (additional to those he identified in the DCP) that are identified in the reviews are assessed and reported.

Responsible for compiling and identifying all issues, and where appropriate reconciles DCR data (e.g. budgets, impacts).

Once the DCP/DCR data has been reviewed and is complete, the DCP Initiator transmits the entire package to the DCPA.

If an impactee raises a non-concurrence, the DCPI shall try to resolve the differences with the originator. There are 5 possible outcomes of these discussions:

- 11.1 The non-concurrences were not resolved.

The DCPI notifies the DCPA who generates an impact summary report which is taken to the next CCB meeting for resolution. (GO TO Step 13).

- 11.2 The non-concurrences were resolved, the DCP was withdrawn and a new DCP is required.

The DCPI documents how the non-concurrences were resolved and notifies the Westinghouse Project Manager, the Responsible Manager and the DCPA that the DCP has been withdrawn. The DCPA updates the DTS to reflect the latest status of the DCP and the DCPI then prepares a new DCP. The new DCP will need a new DCP number to be allocated by the DCPA.

- 11.3 The non-concurrences were resolved, the DCP was withdrawn and a new DCP is not required.

The DCPI documents how the non-concurrences were resolved and notifies the Westinghouse Project Manager, the Responsible Manager and the DCPA that the DCP has been withdrawn. The DCPA updates the DTS to reflect the latest status of the DCP.

- 11.4 The non-concurrences were resolved and changes are required to the DCP.

The DCPI documents how the non-concurrences were resolved and notifies the Westinghouse Project Manager, the Responsible Manager and the DCPA that changes are required to the DCP. The DCPA updates the DTS to reflect the latest status of the DCP. The revised DCP will adopt the same unique number as the original DCP but will be processed with a higher revision number. The DCPI/RM must then confirm that the classification of the revised DCP is correct and the approval process is repeated (GO TO Step 1).

- 11.5 The non-concurrences were resolved and there are no further changes required to the DCP.

The DCPI documents that the associated impactee now concurs with the DCP and identifies how the non-concurrences were resolved.

DCP Administrator

12. The DCP Administrator reviews the DCP/DCR package, ensures that the DCP/DCR data is entered or updated into the DCP Database. Reports are prepared and assembled into a DCP Review package. A report identifying outstanding DCPs may be included. The distribution is as follows:

For Class 1 DCPs or Class 2 DCP's with unresolved non-concurrences, the DCP Review package is distributed to the CCB members and the DCP Initiator prior to CCB meeting for review [Go to Step 13].

For Class 2 DCPs, the DCP Review package is distributed to the Westinghouse Project Manager for final approval [Go to Step 16].

CCB Members/
Engineer

13. Prior to the CCB meeting, CCB members review the Class 1 DCP impact list and verify that the impacts obtained are reasonable and complete.

The CCB meets to review and disposition the DCP. The CCB uses the alternatives in Tables 5 and 6 to disposition the DCP. The CCB members may make a judgement on whether or not sufficient impact statements have been collected at the time of the CCB meeting. During the

meeting, the cognizant engineer presents the proposed change. The technical merits of the change including input from impacted functional groups, are discussed.

If a consensus is reached on disapproval of the change, no further discussion of the change is required. The CCB Technical Secretary records the CCB decision in the meeting minutes including any resolution of issues identified in the DCP/DCR Forms.

If consensus is not reached during the meeting, further discussion may be conducted at the next CCB Meeting if additional information/expertise is needed to resolve the issue. The DCP is "TABLED" until the next CCB meeting.

Approved changes to be included in the Certified Plant Design, SSAR, ITAACs, or technical specifications, must indicate this inclusion as a condition of approval by the CCB. If the change is approved and will not be included in the Design Certification process, the DCP will be forwarded to the ATBA General Manager for approval.

DCPs that are approved for post-Design Certification will have to be approved by NRC if the change impacts either the technical specification or the ITAACs (Tier 1 information). Changes that affect information contained in the SSAR (a Tier 2 document) will be permitted provided the justification and documentation are appropriate. The documentation must include a safety evaluation addressing the items identified in Appendix F.

If review of all available information still does not result in consensus, the decision will be referred to the Westinghouse ATBA General Manager.

Normally, it is the responsibility of the initiator to resolve comments when they are part of a CCB approval condition. The CCB may assign the responsibility to resolve comments resulting from an approval action to someone other than the initiator as appropriate.

CCB Technical
Secretary

14. Identifies to the DCP Administrator the status of each DCP reviewed in the CCB meeting. Prepares the CCB Meeting Minutes, obtains CCB Chairman approval signature and transmits the minutes to the DCP Initiator, impacted organizations and functional groups, and CCB members within two weeks of the CCB meeting.

DCP Administrator/
CCB Technical Secretary

15. Updates the DCP database based on the DCP disposition as identified by the CCB Technical Secretary.

Ensures that the DCP database is complete for each DCP. Prepares a report for inclusion with the meeting minutes. Transmits the official DCP file [DCP/DCR Forms and attachments, if any] to the AP600 Central Files.

Westinghouse Project
Manager

16. Dispositions Class 2 DCPs using Table 6. Before approval, Class 2 DCPs must obtain the concurrence of the Manager, APSL. The Westinghouse Project Manager documents his decision on the DCP Review Package and dates/signs. The completed DCP Review Package [DCP/DCR Forms and attachments, if any] is returned to the DCP Administrator.

DCP Administrator

17. Updates the DCP status on the DCP Tracking System for Class 2 DCPs based on the DCP Review Package disposition. Prints out a report identifying the status of the DCP and transmits this report via letter to the DCP Initiator, Responsible Manager, impacted parties and the Westinghouse Project Manager. Copies of the signed off DCP Review Package should be transmitted to the DCP Initiator and Responsible Manager. The DCP Administrator transmits the official final completed DCP Package to the AP600 central files.

Impacted Functional
Group Managers

18. The Managers of the Westinghouse Functional Engineering, Subcontractors and contributed labor which have been notified of the approved DCP implement the change. External groups [other Westinghouse divisions, Subcontractors, contributed labor] use their internal procedures to implement the change.

Responsible Manager
for Document/Drawing

19. By signature on implementing document cover sheet or on the or drawing, the Responsible Manager ensures that the design change defined in the approved DCP has been incorporated in the document or drawing.

Ensures that the DCP number and revision is referenced on the document cover sheets or in the revision block of drawings.

Ensures that the updated document/drawing is transmitted to the AP600 central files.

Central
File Administrator

20. Updates the TDC tracking system to reflect the latest document revision and enters the DCP number and revision, as noted on the document cover sheet or drawing revision block, against the specific AP600 document

DCP Administrator

21. Accesses the TDC tracking system and prints out the DCP/TDC comparison report to monitor DCP implementation. Periodically, this report is issued to the Westinghouse Project Manager as information.

REFERENCES

AP-6.1, "Document Numbering"
AP-6.2, "Technical Document Release and Control"
AP-3.9, "Preparation and Control of Drawings"
GW-GMP-005, "AP600 Document Numbering Procedure"
GW-G0Y-002, "AP600 Configuration Control Plan"

FORMS/EXHIBITS

Design Change Proposal, Form 58184, Exhibit 11
Design Change Review, Form 58185, Exhibit 12
Record Of Changes, Form 58204, Exhibit 16
AP600 Standard Internal Review Sheet, Form 58203, Exhibit 17
AP600 Document Cover Sheet, Form 58202, Exhibit 10
AP600 Design Specification Cover Sheet, Form 58205, Exhibit 18

TABLES

1. Class 1 DCP Criteria
2. Class 2 DCP Criteria
3. Class 3 DCP Criteria
4. AP600 Systems Analyzed in PRA
5. CCB decision/DCP disposition and database status codes
6. Westinghouse Project Manager decision/database status codes

APPENDICES

- A. Westinghouse Configuration Control Board (CCB) Organization
- B. Design Configuration Change Control Flowchart
- C. CCB Meeting Minutes (Contents)

- D. Content of DCP Summary Status Report for Class 1 and 2 DCPs
- E. Document Cover Sheet/Record of Change/Internal Review Sheet/and Drawing Block Samples
- F. "50.59-Like" Checklist for Certification Impact Evaluation

TABLE 1 - CLASS 1 DCP CRITERIA

Requires Westinghouse Project Manager Concurrence and CCB Review and Approval Prior to Implementation

• Potential Total Cost Impact on Design Certification, or FOAKE, or Construction Exceeds \$100,000
• Proposed Change causes a URD Non-Conformance
• Design Certification Impact - change to safety principles, basis of safety arguments, safety analysis interface data as defined by the Safeguards Interface List, PRA interface data from systems listed in Table 4, or sections outside scope of DCP initiator.
• Issue has high visibility with customers [DOE, EPRI, ARC, USC, USG]
• There is known dispute with the change from interfacing design organizations
• Degradation of material property, standardization, or other significant reductions in design margins
• Design Certification Impact-change to SSAR, PRA, ITAACS, ERGs, etc.

TABLE 2 - CLASS 2 DCP CRITERIA

Requires ONLY Westinghouse Project Manager Review and Approval Prior to Implementation

• Potential total cost impact on program exceeds \$25,000
• The change impacts interfaces with three or fewer non-mandatory areas of impact beyond initiator
• Does not comply with Class 1 criteria

TABLE 3 - CLASS 3 DCP CRITERIA

Requires ONLY Responsible Manager Review and Approval Prior to Implementation

• The change is limited to the Responsible Manager's work scope and there is no impact on interfaces with other design organizations or design groups
• The potential cost impact is less than \$25,000
• Does not comply with Class 1 or 2 criteria

Note: Class 1, 2 and 3 changes are "major changes" in terms of ASME NQA-1 Supplement 6S-1.

TABLE 4 - AP600 SYSTEMS ANALYZED IN PRA

- Main and startup feedwater
- Passive residual heat removal
- Depressurization system/overpressure protection
- Core makeup tank
- Accumulator
- Gravity injection and recirculation
- Normal residual heat removal
- Containment isolation
- Passive containment cooling
- Chemical and volume control
- Reactor coolant pump trip
- Component cooling water
- Service water
- Chilled water
- Integrated protection and control
- Reactor trip
- Onsite ac power
- Onsite dc power
- Containment hydrogen control
- Compressed air/instrument air
- Diverse actuation

TABLE 5 - CCB DECISION/DCP DISPOSITION AND DATABASE STATUS CODES

CCB DECISION	DCP DATABASE STATUS	EXPLANATION
APPROVED	A = Approved for Design Certification	DCP can be implemented
	C = Approved for Design Certification with comments	Required actions, as recorded in the meeting minutes, are mandatory before DCP implementation. Resolution is to be recorded in the meeting minutes.
	P = Approved for Post-Design Certification Incorporation	
	N = Approved for Post-Design Certification Incorporation following NRC approval	
TABLED	T = Tabled, Pending Further Receipt of Data	A DCP is "Tabled" or put on hold by the CCB pending further information. The DCP may be reviewed at a future CCB Meeting.
		Once data and resolution is obtained the DCP status is changed to a different category.
REJECTED	R = Rejected	A DCP is rejected by the CCB and is not to be implemented.
WITHDRAWN	W = DCP Withdrawn from CCB consideration	In the event that the DCP was initiated but withdrawn from consideration prior to a CCB meeting, this category is selected.
SUPERSEDED	S = Superseded	The DCP has been replaced by a new DCP with a different DCP unique number.
VOID	V = Void	The DCP has been prepared or assessed incorrectly and has been withdrawn.
ON-HOLD	H = On Hold by DCP Administrator	The DCP Administrator is awaiting some additional information from the DCP Initiator, the Impact Reviewers or the DCP assessors.

**TABLE 6 - WESTINGHOUSE PROJECT MANAGER
DECISION/DCP DATABASE STATUS CODES**

DECISION	DCP DATABASE STATUS	EXPLANATION
APPROVED	A = Approved	DCP can be implemented
TABLED	T = Tabled, Pending Further Receipt of Data	A DCP is "Tabled" or put on hold by the Westinghouse Project Manager pending further information. Once data and resolution is obtained the DCP status is changed to a different category.
REJECTED	R = Rejected	A DCP is rejected and is not to be implemented.
WITHDRAW	W = DCP is Withdrawn	In the event that the Responsible Manager withdraws the DCP.
SUPERSEDED	S = Superseded	The DCP has been replaced by a new DCP with a different DCP unique number.
VOID	V = Void	The DCP has been prepared or assessed incorrectly and has been withdrawn.
ON-HOLD	H = On Hold by DCP Administrator	The DCP Administrator is awaiting some additional information from the DCP Initiator, the Impact Reviewers or the DCP assessors.

APPENDIX A**WESTINGHOUSE AP600 CONFIGURATION CONTROL ORGANIZATION****CHAIRMAN, CCB Responsibilities:**

- Administers Westinghouse Configuration Control Process in accordance with this procedure
- Calls CCB meetings as necessary
- Chairs CCB meetings
- Appoints CCB Technical Secretary and DCP Administrator
- Reviews and approves the CCB Meeting Minutes
- Serves as focal point with customer on Design Change Proposals
- Reviews Class 2 DCPs and completes the DCR Form

CCB MEMBERS Responsibilities:

- Review Design Change Proposals and associated Design Change Review impacts prior to meetings
- If necessary, invite to CCB meetings additional personnel with specific expertise to assist in resolution of DCPs
- Review the DCP Impacted List to ensure that all affected groups have been identified and contacted to obtain all impacts

WESTINGHOUSE PROJECT MANAGER Responsibilities:

- Review Design Change Proposals and confirm that the DCP is correctly classified
- Transmits DCPs to the DCP Administrator for processing
- Dispositions the Class 2 DCPs and documents decision on the DCP Review Package
- Manages implementation of approved DCPs

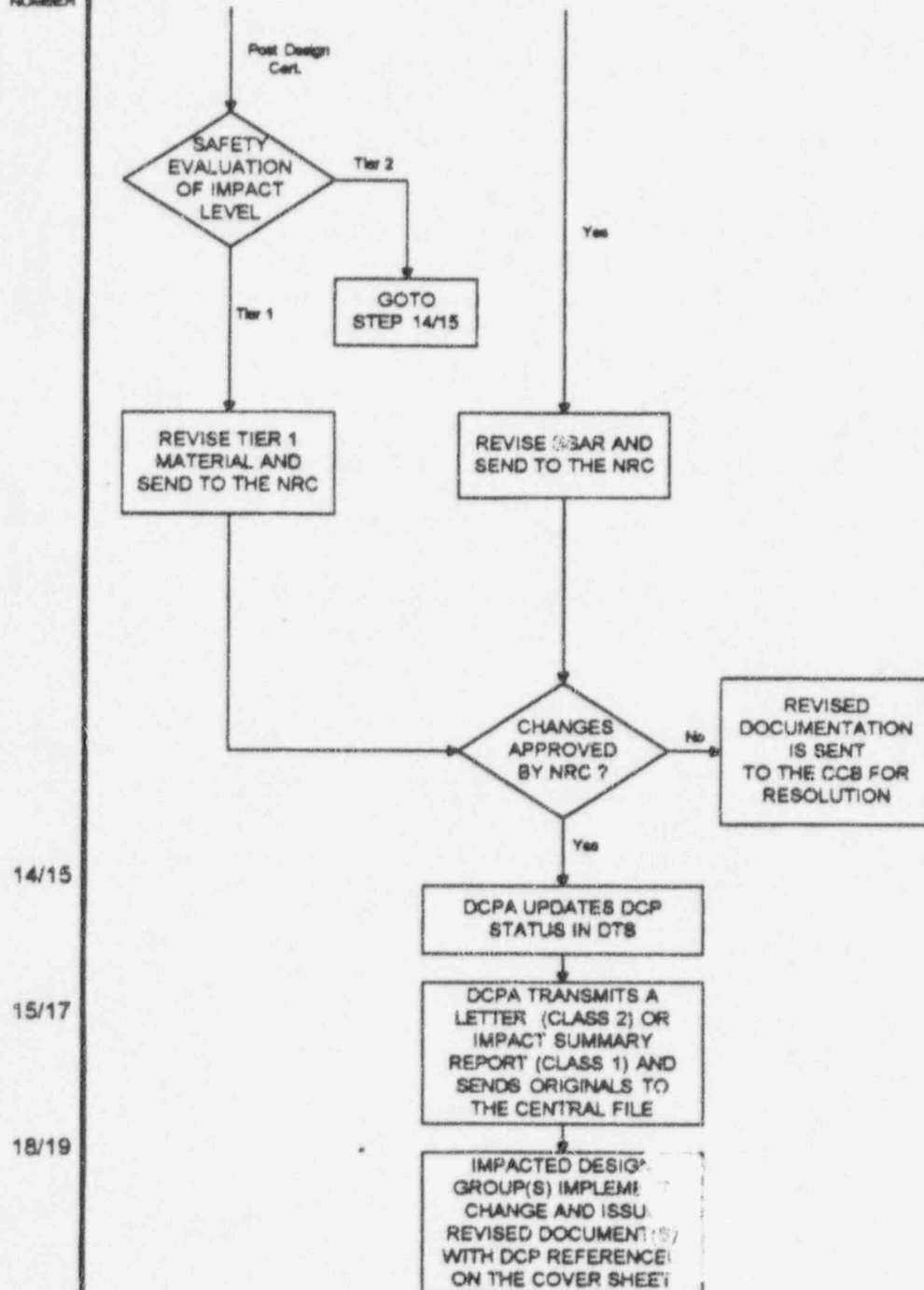
CCB TECHNICAL SECRETARY Responsibilities:

- Attends CCB meetings
- Documents in the meeting minutes the CCB decision and/or action items for each DCP
- Prepares and issues the CCB meeting minutes
- Transmits the CCB meeting minutes to CCB members, DCP Initiator(s), DCP impactees, and others as necessary

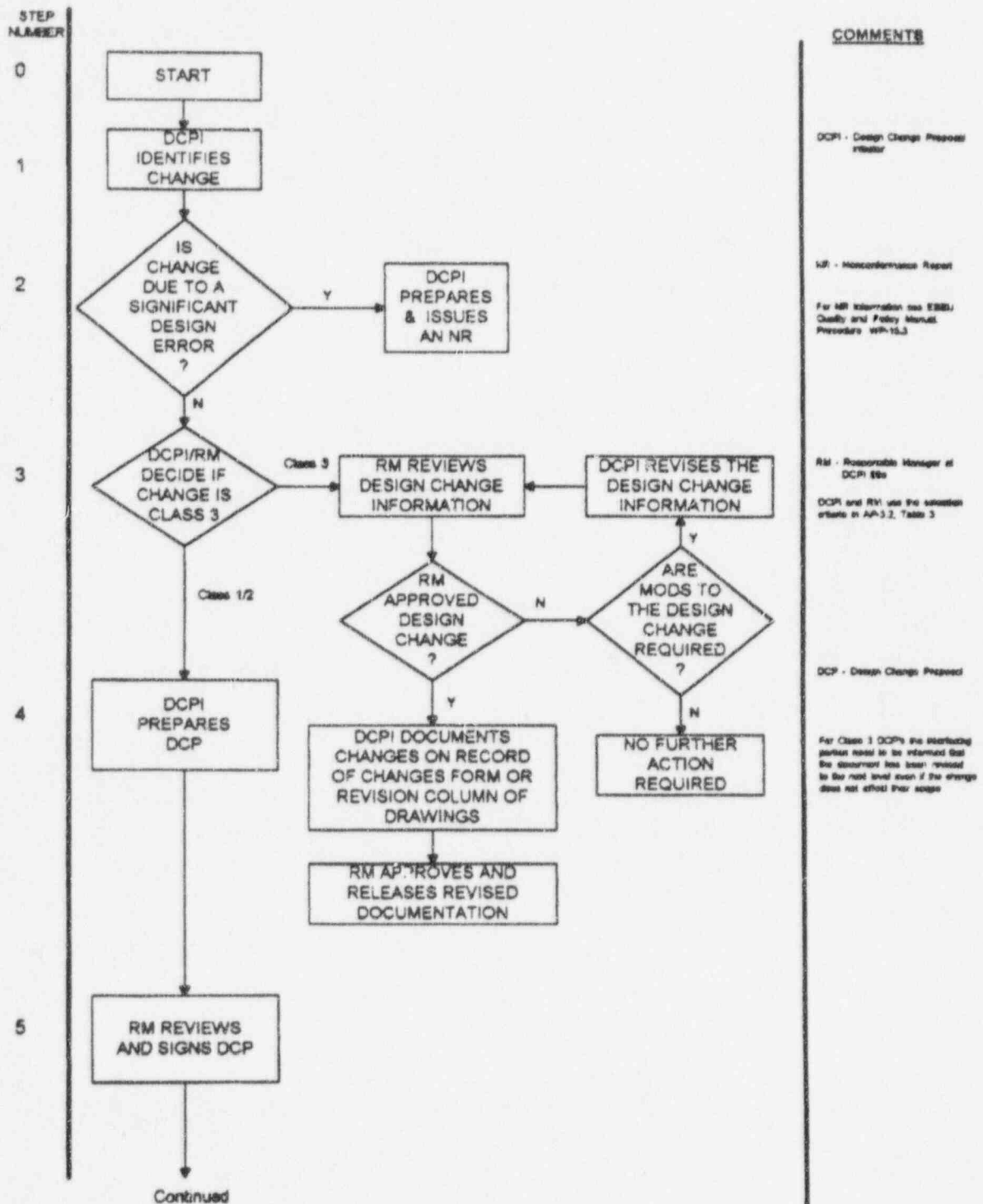
DCP ADMINISTRATOR Responsibilities:

- Attends CCB meetings, as required
- Maintains Westinghouse DCP tracking system for Class 1 and 2 DCPs
- Logs into DCP database and assigns a DCP Number
- Issues DCRs to functional groups for Class 1 and 2
- Verifies that an AP600 document number has been referenced in the DCP/DCR forms for any affected document, calculation or analysis
- Reviews [administrative not technical review] the DCP/DCR forms for completeness including signatures and dates
- Returns to DCP Initiator or impactee incomplete DCPs/DCRs
- Enters the data from the DCP/DCR into the DCP database
- Maintains the official DCP file [DCPs, DCRs, and associated documentation]
- Prepares a list of all DCRs received and provides the DCP Initiator with the DCRs and a list of missing DCRs
- Obtains from the DCP Initiator the completed DCRs and ensures that all the DCR data is entered into the DCP database
- Prepares the DCP Review Package and transmits it to the DCP Initiator and CCB for their review and preparation prior to the CCB meeting
- Ensures that the DCP tracking system is updated with the CCB decision for each DCP
- Transmits the official DCP package for Class 1 and 2 to central files
- Prepares and issues a Class 1 DCP status report to Project Management as requested
- Prepares and issues a Class 2 DCP status report and transmits it to the Westinghouse Project Managers [with copy to CCB members] on a monthly basis or as needed
- Prepares and issues periodic reports of outstanding DCPs [DCP/TDC comparison report]. Outstanding Class 1 DCPs are identified to the CCB and outstanding Class 2 DCPs are identified to the Westinghouse Project Manager

APPENDIX B

STEP
NUMBERCOMMENTS

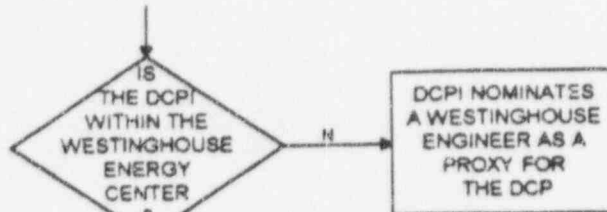
APPENDIX B (Continued)



APPENDIX B (Continued)

STEP
NUMBER

6



7

DCPI SENDS THE DCP TO THE WPM TO CONFIRM THE CLASSIFICATION

8

WPM SENDS DCP TO DCPA TO ASSIGN A DCP NUMBER AND ENTER INTO DTS

DCPA RETURNS DCP TO DCPI FOR COMPLETION



DCPA INITIATES DCR FORM

DCR FORM SENT TO IMPACTEES FOR IMPACT REVIEW

9

IMPACTEES IDENTIFY IMPACTS (IF ANY) IN THEIR AREA AND WHETHER THEY CONCUR WITH THE DCP OR NOT

IMPACTEES RETURN THE DCR FORM TO THE DCPA

10

DCPA ENTERS DATA FROM IMPACTEES INTO THE DTS

Continued

COMMENTS

The DCPI uses the selection criteria provided in AP-3.2, Tables 14.2

WPM - Westinghouse Project Manager

DTS - DCP Tracking System

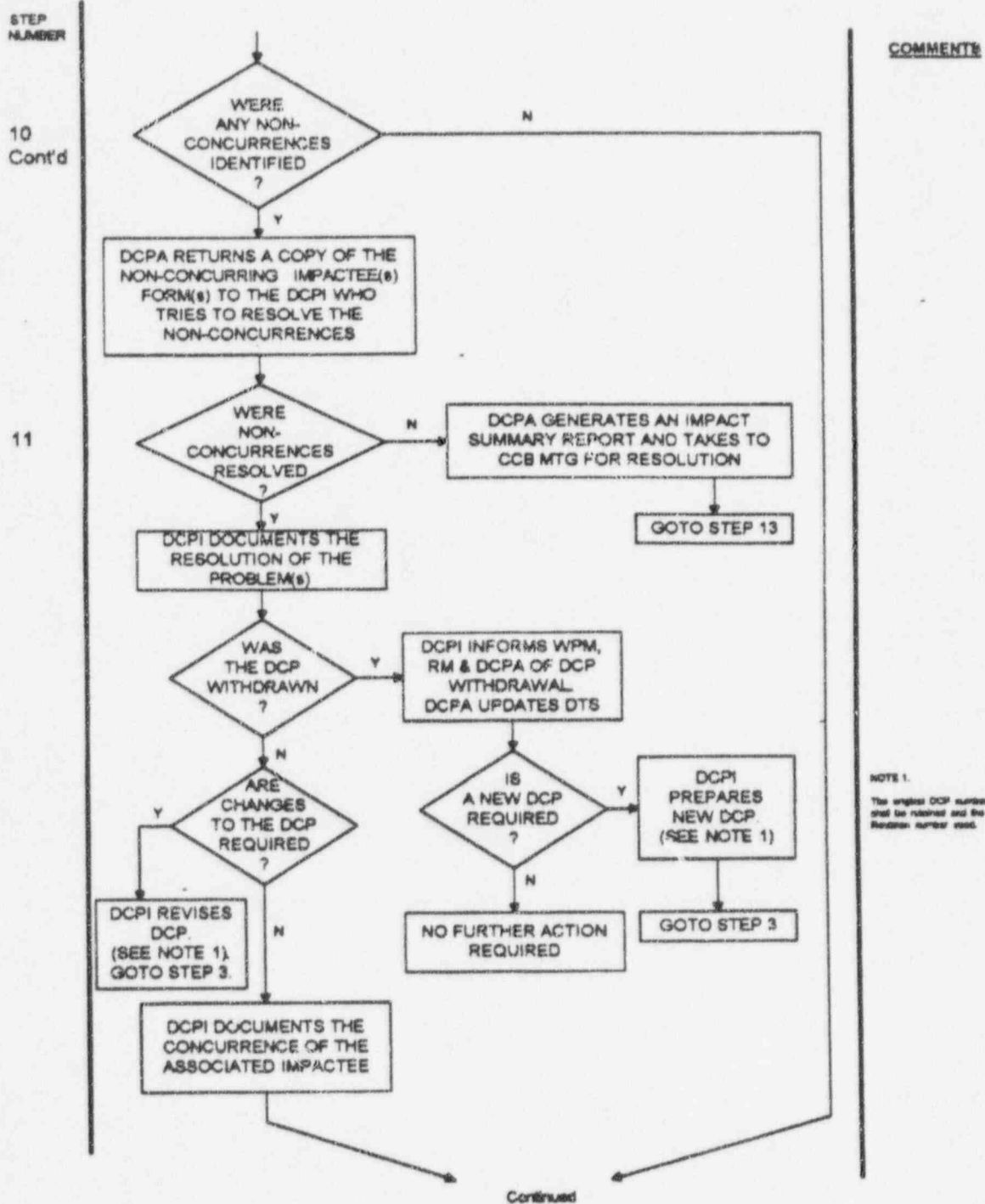
DCPA - Design Change Proposal Administrator

DCPA is responsible for ensuring the DCP for completion

DCR - Design Change Review

If there are Design Certification Impacts, the Manager, Advanced Plant Safety & Licensing, determines whether the proposed change is acceptable to the Design Certification Project & advises consequences or disagreement accordingly

APPENDIX B (Continued)

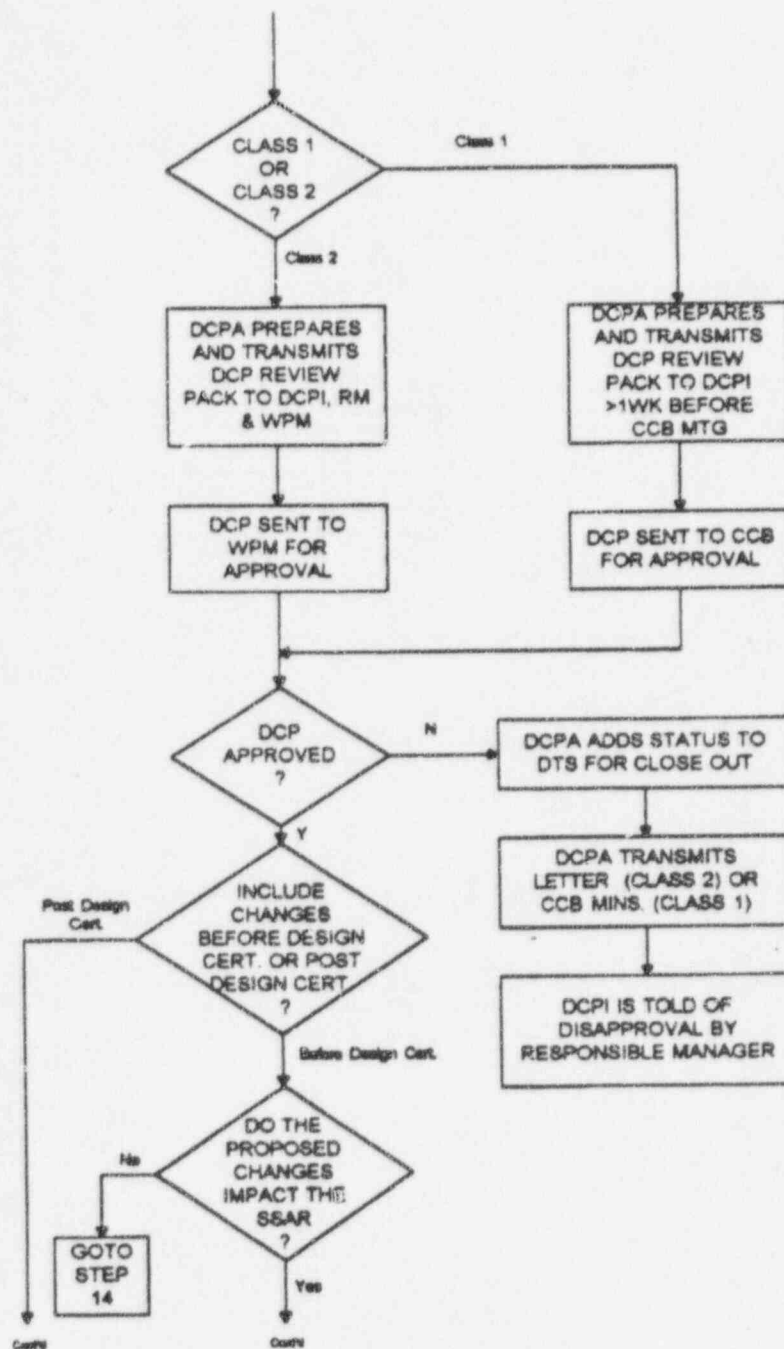


APPENDIX B (Continued)

STEP
NUMBER

12

13/16



COMMENTS

Review path includes the DCP and the review Summary report

WPM uses Table 8.8 procedure AP-3.2

The CCB also considers whether the DCP has been appropriately classified

Insert summary report for Class 1 DCP's incorporated in the CCB minutes
Distribution list for notification of approval of Class 1 and Class 2 DCP's is maintained by the DCPA to suggest the project

APPENDIX C**CONFIGURATION CONTROL BOARD MEETING MINUTES (CONTENTS)**

Key Elements Contained in CCB Meeting Minutes For Each Class 1 or non-concurred Class 2, DCP acted upon in the CCB Meeting:

- Attendance List including proxies
- DCP Number and Revision, Title, and Initiator
- Description of CCB meeting proceedings
- CCB Disposition
- Actions for DCP Initiator or others, if any, resulting from the meeting
- Resolutions of previously identified actions, if any

Appendices (Optional)

- DCP Summary Status Report
- A copy of the DCPs, if necessary

APPENDIX D**CONTENT OF DCP SUMMARY STATUS REPORT FOR CLASS 1 DCPs**

- DCP Number and Revision
- DCP Title
- CCB Disposition and Date [See Table 5]
- DCP Cost Summary
- List of Impacted Organizations/Statements
- List of Affected Documents
- Final DCP Status [Approved, Rejected, Withdrawn]

CONTENT OF DCP SUMMARY STATUS REPORT FOR CLASS 2 DCPs

- DCP Number and Revision
- DCP Title
- Westinghouse Project Manager Disposition and Date [See Table 6]
- DCP Cost Summary
- List of Impacted Organizations/Statements
- List of Affected Documents
- Final DCP Status [Approved, Rejected, Withdrawn]

CONTENT OF TDC/DCP COMPARISON STATUS REPORT

The TDC reports per AP-6.2 will also identify the following:

- Outstanding DCP Numbers and Revision and the affected Documents

APPENDIX E**AP600 DOCUMENT COVER SHEET/RECORD OF CHANGE/
AND DRAWING REVISION BLOCK SAMPLES****AP600 COVER SHEET**

- The DCP Number and revision shall be shown on the cover sheet in the appropriate block.

RECORD OF CHANGE FORM

- The DCP Number and revision shall be shown on the change description and reason area.

DRAWING REVISION BLOCK

- The DCP Number and revision shall be shown on the Revision block area of the drawing.

APPENDIX E (Continued)

AP600 DOCUMENT COVER SHEET/RECORD OF CHANGE/
AND DRAWING REVISION BLOCK SAMPLES

AP600 DOCUMENT COVER SHEET

Form 84000G(5/94) (rev. 10/94)
0000.FRM

AP600 CENTRAL FILE USE ONLY:

TDC: _____ ID: 1 _____ 8 _____

RFSR:

RFS ITEM #:

AP600 DOCUMENT NO. QW-GOY-000	REVISION NO. 1	Page 1 of _____	ASSIGNED TO NOT APPLICABLE
----------------------------------	-------------------	-----------------	-------------------------------

ALTERNATE DOCUMENT NUMBER: N/A

WORK BREAKDOWN #: QWQZ

DESIGN AGENT ORGANIZATION: WESTINGHOUSE

TITLE: SAMPLE DOCUMENT

ATTACHMENTS: NONE

DCP & REV. INCORPORATED IN THIS DOCUMENT
 REVISION: TYPICAL DCP'S
 94-00000 PRE 3/94
 QW-GEE-0001

CALCULATION/ANALYSIS REFERENCE: N/A

ELECTRONIC FILENAME	ELECTRONIC FILE FORMAT	ELECTRONIC FILE DESCRIPTION
QWQZ1.WPF QWQZ2.WPF		

(C) WESTINGHOUSE ELECTRIC CORPORATION IS _____

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EPR/ CONFIDENTIAL: NOTICE: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ CATEGORY: A ☐ B ☐ C ☐ D ☐ E ☐ F ☐2 ☒ ARC FOIAKE PROGRAM - ARC LIMITED RIGHTS STATEMENT (See page 2)

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ORIGINATOR JANE DOE	SIGNATURE <i>Jane Doe</i> 6/1/95	APPROVAL DATE 6/1/95
AP600 RESPONSIBLE MANAGER P. SMITH	SIGNATURE <i>P. Smith</i>	


*Approval of the responsible manager signifies that document is complete. All required reviews are complete. electronic file is attached and document is released for use.

APPENDIX E (Continued)

AP600 DOCUMENT COVER SHEET/RECORD OF CHANGE/
AND DRAWING REVISION BLOCK SAMPLES**AP600 RECORD OF CHANGES**

Form 8025a (1-90)

AP600 DOCUMENT NO. GW - GOY - 999 REVISION 1ALTERNATE DOC. NO. N/ADESIGN AGENT ORGANIZATION WESTINGHOUSETITLE SAMPLE DOCUMENTCHANGE PARAGRAPH CHANGE DESCRIPTION AND REASON
NUMBER NUMBERENGINEER
APPROVAL DATE

CHANGE NUMBER	PARAGRAPH NUMBER	CHANGE DESCRIPTION AND REASON	ENGINEER APPROVAL	DATE
1	1.2	DCP GW - GEE - 999M WAS INCORPORATED		2/23/94

APPENDIX E (Continued)

AP600 DOCUMENT COVER SHEET/RECORD OF CHANGE/
AND DRAWING REVISION BLOCK SAMPLES

WBS. FOAPGWGZ SO. 2PST-280 D. 727A77		1	
IT.	REVISION		
	ECH-87156 GW-GEE-999/1 GENERAL REARRANGEMENT OF PROCESS AREAS AT ZONE (D-7) DELETED 2 SUMPS AT ZONE (F-4) CORRECTED MSF COLUMN LOCATIONS AND SPACING	2	STANDARD DCP NUMBER 3/94
	T. WILLISLAGE V/V94 <i>20 Jan 94 1/2/94</i> <i>12/94</i> <i>UCLN 1/2/94</i>	3	

APPENDIX F

"50.59-Like" Checklist for Certification Impact Evaluation

DCP GW-GEE- _____

"50.59-Like" Checklist for Certification Impact Evaluation

DCP GW-GEE- _____

	Yes	No
1. Will the change reduce the safety of AP600?	<input type="checkbox"/>	<input type="checkbox"/>
<i>If YES, complete all questions below and provide explanation of safety reduction and justification for change. If NO, continue with questions 2 and 3 and follow subsequent instructions.</i>		
2. Will the change require modification to a design certification basis document (identified with a "D" in "Design Basis" field of TDC)?	<input type="checkbox"/>	<input type="checkbox"/>
3. Will the change require modification to input data for PRA?	<input type="checkbox"/>	<input type="checkbox"/>
<i>If NO to both 2 and 3, STOP here and sign at bottom. If YES to either 2 or 3, describe impact and answer questions 4, 5, 6, and 7.</i>		
4. Will the change require modification to ERGs or other AP600 related WCAP?	<input type="checkbox"/>	<input type="checkbox"/>
5. Will the change require modification of the SSAR, including technical specifications?	<input type="checkbox"/>	<input type="checkbox"/>
6. Will the change require modification of PRA insights (when issued)?	<input type="checkbox"/>	<input type="checkbox"/>
7. Will the change require modification of an issued TIER 1 (ITAAC) section?	<input type="checkbox"/>	<input type="checkbox"/>
<i>If NO to ALL of 4, 5, 6, & 7 STOP here and sign at bottom. If YES to ANY of 4, 5, 6, or 7 provide markups of affected pages and answer the following questions.</i>		
8. Will the probability of occurrence of an accident previously evaluated in the SSAR be increased?	<input type="checkbox"/>	<input type="checkbox"/>
9. Will the radiological consequence of an accident previously evaluated in the SSAR be increased?	<input type="checkbox"/>	<input type="checkbox"/>
10. Will the probability of a malfunction of a safety-related or defense-in-depth structure, system or component previously evaluated in the SSAR be increased?	<input type="checkbox"/>	<input type="checkbox"/>
11. Will the radiological consequence of a malfunction previously evaluated in the SSAR be increased?	<input type="checkbox"/>	<input type="checkbox"/>
12. Will the possibility of an accident of a different type than previously evaluated in the SSAR be increased?	<input type="checkbox"/>	<input type="checkbox"/>
13. Will the possibility of a malfunction of a different type than previously evaluated in the SSAR be created?	<input type="checkbox"/>	<input type="checkbox"/>
14. Will the margin of safety as defined as the basis for any technical specification be reduced?	<input type="checkbox"/>	<input type="checkbox"/>

For any YES answers, provide explanation.

Responsible Engineer Printed_____
Responsible Engineer Signature

NOTE: This form is required to meet the requirements of WCAP-12601 AP-3.2

Form 58238 (6/96)