GENERAL INSTRUCTION MANUAL

ISSUING ORG. PROGRAMS, FORECAST & ANALYSIS DEPARTMENT.

SUBJECT PROJECT CHANGE REQUEST (SAUDI ARAMCO FORM 3000-C)

20.520	
ISSUE DATE	REPLACES
01/01/2001	03/21/1987
APPROVAL	PAGE NO.
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CONTENT: This General Instruction defines the purpose and use of a Project Change Request (PCR, Saudi Aramco Form 3000-C) and describes the PCR approval process. GI 20.520-1 contains specific instructions for preparing the PCR form.

The text includes:

- 1. Definitions
- 2. Purpose and Use
- 3. Processing Steps
- 4. Distribution
- 5. Related Documents

1.0 **DEFINITIONS**

1.1 <u>Scope</u> - the requirements for an engineered project or equipment purchase.

Engineered project scope includes: (1) facility purpose, (2) facility description, including the physical characteristics or attributes, and location, (3) design basis, and (4) schedule. The approved Project Proposal serves as the final source against which all scope changes are measured. A summary is contained in the Expenditure Request (ER) Brief and the Budget Item Supporting Information (BISI).

Equipment purchase scope includes: (1) equipment purpose, (2) equipment type, (3) installation or use location, and (4) quantity or number of items for purchase. The equipment list in the Budget Item Supporting Information serves as the benchmark against which scope changes are measured.

1.2 <u>Mechanical Completion (MC) Date</u> - Signature of the final Mechanical Completion Certificate (MCC, Saudi Aramco Form 7213) by the Proponent Representative indicates the facility has achieved MCC and that it is ready for start-up and commissioning.

Following final MCC approval, no scope changes or additions may be made to the project or equipment purchases. The MCC may contain exception items that need to be completed; these are the only items that the Project Management Team (PMT) may implement.

For equipment purchase Budget Items, the MCC most often is used to signify the Budget Item is complete and a PAC is not required.

Onstream (OS) Date – the facility is considered Onstream when it has achieved MCC, the system has been energized or product has been introduced into the facility, and it has been successfully operated during the initial start-up period, although design capacity or specification targets have not yet been attained. The facility specification performance acceptance is defined in the Performance Acceptance Certificate (PAC) definition below. Minor exception items may be outstanding at the Onstream Date, which will be handled as exception items. PCRs are not required for start-up modifications or to correct commissioning deficiencies because this work is required to attain the original, approved scope. A PCR is also not required if an Onstream date extension is identified after the project has achieved MCC.

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1.4 Performance Acceptance Certificate (PAC) – date when the proponent has completed the commissioning and start-up of the facility, and the Performance Acceptance Certificate (PAC, Saudi Aramco Form 7214) has been signed by the Proponent Representative. The facility has been operated during the start-up period at the established design conditions. This signifies that the facility meets performance standards specified in the project proposal, Expenditure Request, Master Appropriation Release or approved PCR. Minor exception items may be outstanding at PAC approval, which will be handled as exception items. PCRs are not required for start-up modifications or to correct commissioning deficiencies because this work is required to attain original, approved scope.

Reference GI 2.710, Mechanical Completion and Performance Acceptance of a Facility, for further information concerning MCC and Onstream Date clarification.

- 1.5 <u>Scope Change Threshold</u> maximum cumulative scope change that may be approved by PCRs without Executive Management (or higher) review and approval according to Paragraph 3.4. This threshold is defined by the following guidelines:
 - Cumulative cost change of scope additions or deletions is limited to the lesser of \$10 million or 10% of the ER Amount;
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 - Scope costs include the current and all previous PCRs;
 - Costs of scope additions and deletions are considered as absolute values and neither netted nor offset; and
 - Scope additions and deletions each include capital and expense costs (i.e., the sum of all capital and expense scope additions or the sum of all capital and expense scope deletions).

Scope additions and deletions are not netted because this could mask the effect of significant offsetting changes, which may trigger an ER Redefinition. Equipment substitutions may be allowed to offset each other, but the Capital Programs, Forecast and Analysis Division (CPFAD) decides on these situations on a case-by-case basis.

If the Scope Change Threshold is exceeded within approved project funding, an ER Redefinition is required. If the Scope Change Threshold is exceeded and additional funding is necessary, an ER Redefinition and Supplement is required. If the Scope Change Threshold is exceeded and costs are reduced, an ER Redefinition and Partial Cancellation is required.

1.6 <u>Cost Overrun Threshold</u> - maximum cost overrun within the original scope of an ER that may be approved before an ER Supplement is required. The Threshold is reached at the lesser of 10% of the ER Amount or \$10 million. Refer to GI 20.500, Expenditure Control – Expenditure Request Forms.

Exceeding the Cost Overrun Threshold always triggers an ER Supplement. It may or may not occur in conjunction with a Scope Change Threshold overrun, which requires a Redefinition.

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2.0 PURPOSE AND USE

- A Project Change Request (PCR) is a mandatory requirement to document and approve minor scope changes (changes that are less than \$10 MM or 10% of the approved ER amount) that are closely related to the original scope and intent of an ER. It is also a mandatory requirement for extending the Onstream Date previously approved by the Board of Directors, the Executive Committee of the Board of Directors (EXCOM), the Management Committee, or the most recently approved PCR. It is essential to approve delays to the Onstream Date to ensure that the PMT and proponent are committed to a revised date. PCRs must be prepared and routed for approval prior to the expiry of the approved Onstream Date. Therefore, timely and properly justified Onstream Date extension is an essential requirement to advise Management of a schedule revision, thereby enhancing control and accountability over the execution of the Company's Capital Program. Furthermore, for projects justified by economics, Onstream Date changes also impact the economic gain expected by the Company. Major scope changes and scope changes not closely related to the original scope and intent of the project, whether or not they impact cost, must be approved through an ER Redefinition approved by the Board of Directors or the EXCOM.
- 2.2 PCRs apply to all approved ERs: Prior Approval Expenditure Requests (PAERs), Regular ERs, Master Appropriations and all subsequent actions (Supplements, Redefinitions, Partial Cancellations and combinations thereof). PCRs are not applicable to BI-1900 projects. Reference GI 20.620, Miscellaneous Capital Items Master Appropriations, for instructions concerning these projects.
 - They apply to PAERs only for Onstream Date delays.
 - They apply to Regular ERs for both scope changes and Onstream Date delays. Although a change might impact only a single or limited number of job orders within the ER, the PCR must address the impact of the change upon scope, schedule, and cost of the entire ER.
 - They apply to Master Appropriations and releases as follows:
 - PCRs are only used for Master Appropriations to extend the Onstream Date of the underlying Master Appropriations.
 - A PCR will be required when a release of the underlying open Master Appropriation exceeds the current Onstream Date. A PCR should be prepared and approved in accordance with section 3 and routed for approval simultaneously with the release. The PCR should be referenced in the release document. Approval of the release will not change the current approved Onstream Date of the underlying Master Appropriation.
 - Redefinition releases used for scope changes can extend the Onstream Date of a release if the new Onstream Date is within the underlying Master Appropriations Onstream Date.
 - Redefinition/Supplement ER for the underlying Master Appropriations extends the Onstream Date of the Master Appropriation.
 - PCRs are not to be used to add or delete scope to previous releases under an open or expired Master Appropriation. This circumstance would require a Redefinition release.

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- Cancellation or partial cancellation releases against active Master Appropriations restore funding to the Master Appropriation, which can be used for other items within the overall intent of the Master Appropriation. Cancellation or partial cancellation releases against expired Master Appropriations do not restore funding.
- 2.3 Approval of a PCR does not change approved ER funding, nor does it approve a cost overrun. ER overruns of up to the lesser of 10% or \$10 MM may be approved by an overrun letter under the signature of the proper approval authority (see also SAEP-328). Overruns greater than the lesser of 10% or \$10 million require an ER Supplement.
- 2.4 If a change to a single ER impacts other ERs, individual PCRs must be approved for each ER.

3.0 PROCESSING STEPS

- 3.1 Either the Proponent or PMT may initiate a PCR. However, preparation of the PCR and supporting documentation is a joint effort. The PMT bears lead responsibility to coordinate the effort which provides the following information:
 - Scope of work for the change (Proponent and PMT joint responsibility);
 - ER quality estimate for PCRs with scope changes less than \$1 million (PMT responsibility with Project Support & Control Department (PS&CD) assistance as appropriate);
 - ER-quality estimate for PCRs with scope changes exceeding \$1 million, Capital plus Expense (PMT and PS&CD joint responsibility);
 - Economic evaluation and analysis to support scope changes of \$1 MM or higher, reference paragraphs 3.3.1 and 3.3.5 (Initiator's responsibility with Facilities Planning Department (FPD) assistance and review);
 - Proposed Project Completion Schedule (PCS, Form SA-6974) to support the revised Onstream Date (PMT responsibility).
- 3.2 The magnitude of the change for the individual PCR being processed and the relationship of the current cost and schedule forecast to the ER Amount and/or Onstream Date (Original or Redefined) determine the approval authority level. Refer to GI 20.520-1.
- 3.3 If the PCR does not cause the Scope Change Threshold to be exceeded, then it routes for approval as follows:
 - First, if the PCR requires level 3 approval, both the Proponent and PMT are required to sign at that level (level 2 for Project Management). The approved PCR is then forwarded to CPFAD.
 - If the PCR requires Executive Management approval, it routes for approval within the Proponent and PMT organizations to level 3 (level 2 for Project Management) and is forwarded to CPFAD for review and endorsement prior to forwarding to Executive Management for approval.

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- 3.3.1 To FPD for review and endorsement of economic analyses where cost changes are \$1 million or greater prior to forwarding the PCR to CPFAD. FPD will:
 - Review the justification;
 - Verify the economic analysis;
 - Review the impact of the change with respect to other projects under consideration or construction; and
 - Ensure that the changes are consistent with either the Design Basis Scoping Paper & Project Proposal or Project Scope Document and the changes are within the intent of the ER approved scope.
- 3.3.2 To CPFAD for review and endorsement. CPFAD is responsible to ensure that:
 - Proposed scope changes are closely related to the approved scope and intent of the ER;
 - All necessary information, including economic justification, is included;
 - The capital or expense nature of any cost changes is properly identified;
 - Proper approval is indicated and obtained; and
 - Scope and Cost Change Thresholds have not been exceeded.
- 3.3.3 To the final approval authority within the Proponent and PMT organizations if further Executive Management approval is required.
- 3.3.4 To CPFAD for filing and distribution.
- 3.3.5 PCRs do not have full authority for implementation unless CPFAD endorsement, and FPD endorsement of changes of \$1 million or larger, has been obtained.
- 3.4 If a PCR causes the Scope Change Threshold to be exceeded, CPFAD will return the PCR unsigned. This situation requires the PMT to prepare and submit for Management review a PCR Status Report that explains the reasons for the scope change and provides cost and schedule impact as follows.
 - 3.4.1 ER Amount Between \$2 and \$10 Million

The Vice President, Project Management reviews the PCR Status Report to determine whether the cumulative scope change is major and warrants higher approval authority:

3.4.1.1 If the change is deemed to be minor by Finance and Project Management, the Vice President, Project Management may approve the PCR

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- 3.4.1.2 If the change is deemed major, the Report must be escalated to the Senior Vice President, Engineering & Operations Services.
- 3.4.1.3 The Senior Vice President, Engineering & Operations Services will review the PCR Status Report to determine whether to approve the PCR, reject it, or refer the PCR Status Report to the Management Committee.
- 3.4.1.4 If the PCR Status Report is referred to the Management Committee, paragraphs 3.4.2.1 to 3.4.2.3 apply.
- 3.4.1.5 If, during the Report review process, Finance and Engineering & Operations Services cannot reach agreement about the significance of the scope changes, the PCR Status Report must be escalated to Management Committee and paragraphs 3.4.2.1 to 3.4.2.3 apply.
- 3.4.2 ER Amount Greater Than \$10 Million

Management Committee reviews all PCR Status Reports for ERs greater than \$10 million to determine whether the cumulative scope change is major.

- 3.4.2.1 If the change is deemed to be minor, Management Committee may approve the PCR.
- 3.4.2.2 Each subsequent PCR for a scope change must also be submitted to the Management Committee unless it directs otherwise.
- 3.4.2.3 If the change is deemed to be major, an ER Redefinition must be presented to the Board of Directors or EXCOM. ER Redefinitions incorporate scope changes from all prior approved PCRs. The Board of Directors or EXCOM approval of a Redefinition returns the PCR cumulative scope and schedule changes to zero.
- 3.4.3 The PCR Status Report should contain the following information and should use the following general format:
 - Proposal requesting desired action;
 - Summary;
 - Brief history of the project, reviewing how the need for each previous scope change arose;
 - Analysis of previous cost changes resulting from scope changes;
 - Schedule change analysis;
 - Economic analysis and justification;
 - Justification of how all combined scope changes are within the project intent.

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DISTRIBUTION 4.0

CPFAD maintains custody of approved original PCRs and distributes copies as follows:

Manager - Proponent Department

Manager - Project Management Department

Manager - Fixed Assets & Work-in-Progress Accounting Department

Manager - Facilities Planning Department.

Manager - Project Support & Controls Department.

RELATED DOCUMENTS 5.0

GI 2.710 Mechanical Completion And Performance Acceptance of Facilities

GI 20.500 Expenditure Control – Expenditure Request Forms GI 20.520-1 Instructions for Preparing a Project Change Request Miscellaneous Capital Items Master Appropriations GI 20.620 GI 202.309 Allocation of Costs - New Facilities Start-up

Authorization For Expenditure **SAEP-328**

ŞAEP-14 Project Proposals

Special Project (SP) Accounts AIM 705 Engineering & Operations Services Cost Manual

Approved:

Sénior Vice President –

- Date: DEC. 13,2000

12/20/20W

Approved:

Senior Vice President -

Finance & Controller

Engineering & Operations Services

CHANGE

** ADDITION

NEW INSTRUCTION □

COMPLETE REVISIONS

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