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DOCUMENT TITLE: PSC Project Documentation Practice	

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1 PSC project documentation practice

This article describes PSC project documentation practice as generic guideline.

2 Responsibilities

- Lead Project Engineer
- Document Controller

3 Document types

Project documents may exist as hardcopy documents or electronic documents (softcopy).

The project team receives engineering input documents from Customer. The project team generates project documents and drawings that are submitted to Customer for approval, information or comments.

These documents are eventually used for hardware configuration and software generation etc.

4 Document list

The document list defines the documents to be submitted under the scope of the project. The document list is used for tracking the progress of document submission. It is important for planning, monitoring and control of project documents.

Projects shall maintain two document lists:

- Incoming document list – for incoming documents from customer to Yokogawa
- Outgoing document list – for outgoing documents from Yokogawa to customer

The document lists shall be updated whenever documents are submitted to or received from Customer.

5 Incoming documents

Incoming documents are documents received from the customer or sub-vendor.

The document shall be registered in the incoming document list and filed appropriately for engineering work. The Document Controller shall notify the persons concerned of the receipt of the document.

If a revised document is received, the obsolete version shall be marked “OBSOLETE” and stored in the obsolete document file. Obsolete documents may also be disposed of immediately, at the discretion of the Document Controller.

6 Outgoing documents

Outgoing documents are documents submitted to Customer for approval, information or comments.

The purpose of the document submission shall be defined:

- for approval (FA)
- for review (FR)
- for information (FI)
- for construction (FC)
- as-shipped/FOB (AS)
- as-built/final (AB)

The following requirements on outgoing documents shall apply:

- All documents shall be issued with cover sheet.
- All documents shall be issued with version history.
- All drawings and documents shall use standard formats were available, unless a different format is specified by customer.
- Name of author, checker, approver shall be included in the version history of the document.

7 Outgoing document check

All outgoing documents should be checked for the following aspects and elements:

7.1 Cover page

The following details should be indicated on the cover page:

- Title
- Customer
- End user
- Project Name
- Project No
- Document No
- Company Name and Logo – Yokogawa Electric International Pte Ltd

7.2 Contents

The contents list shall be updated before issue.

7.3 Version history

Each version shall have the following version information:

- Version No
- Date issued
- Drafted by
- Checked by
- Approved by
- Comments

7.4 Header, Footer

The following header and footer information is required for documents to pass a drop test:

- Company Name – Yokogawa Electric International Pte Ltd
- Project Name
- Version No
- Date
- Document No
- Page No

7.5 Outline headings

Use outline headings to facilitate reading documents on-line and for automatic generation of table of contents.

7.6 Drawing title blocks

Drawing title blocks shall have the following elements

8 Internal approval

Outgoing documents shall be checked for completeness and technical correctness by the Lead Project Engineer and approved by the Project Manager.

For documents, the names of the persons who check and approve the document shall be indicated in the version history.

For drawings, the names of the persons who check and approve the drawing shall be indicated in the title block.

9 Transmittal forms

All outgoing documents shall be issued to Customer under a transmittal form.

The transmittal form is located at “Forms, General” link of the PSC portal. Transmittal forms are filed in a separate binder. Proof of dispatch of the documents (Airway Bill) should be attached to the transmittal.

The transmittal forms should be signed by the recipient to acknowledge receipt of the document. Transmittal forms that are acknowledged and returned by the recipient should be filed with the original transmittal.

Transmittal forms binders are retained until end of project.

10 Customer approval

Customer shall review the documents and mark-up his comments on the documents.

Customer shall indicate the document approval status, on the approval status block on the cover of the document. The approval categories are shown below as a typical example. Actual approval method could vary based on EPC/Customer standards:

- A – Approved. Proceed with fabrication.
- B – Approved with comments. Proceed with fabrication.
- C – Rejected. Revise and resubmit.

Category A:
This certifies that the document or drawing is approved and accepted by Customer and that hardware or software procurement. Fabrication can proceed as designed.
Category B:
This certifies that the document or drawing is approved and accepted by Customer, but minor comments have been made and correction of the document or drawing is necessary as commented. Fabrication can proceed after the corrections are made.
Category C:
This certifies that the document or drawing is not correct and is rejected. The document or drawing must be revised and re-submitted for approval again. Fabrication must not proceed until Category A or Category B approval is received.

Customer’s authorization must be stamped on the cover of the document to certify that the document has been appropriately approved.

The marked up document shall be returned to the Project Manager for correction and for fabrication to proceed.

The Project Manager shall take steps to expedite the approval of documents by Customer if there is delay. This is to maintain the overall schedule and ensure sufficient time for

procurement, manufacture and software generation activities in order not to jeopardize quality of the deliverable. Such steps may include phone calls, email, fax, MOM. Evidence of reminders is used to substantiate project delay and to claim for costs.

All documents returned with comments by Customer shall be reviewed by the Project Team. If Customer's markup of submitted documents is not correct, then the Project Team shall clarify the issue with Customer. This may lead to the document being revised (according to the clarification, but not according to the incorrect Customer's markup). Such documents shall be re-submitted for approval so as to obtain Customers approval of the revision.

11 Document versions

When any part of a document is revised, the whole document shall be reprinted for re-submission.

For AutoCAD drawings, the whole document has to be revision-up and re-submitted, even for comments on individual sheets. The revision index for the whole document shall be updated to properly account for the revised drawings.

Earlier versions shall be marked or stamped "OBSOLETE" and filed separately from the current version.

Document version numbers shall start with version 1. This is for consistency with Sharepoint version numbering system. The old numbering system of rev 0 and rev 1, etc. shall not be used. Instead, version 1 and version 2 etc. shall be used.

Final documents are documents that have been approved by Customer and are to be used for reference at the FAT. Final documents shall be marked "FINAL" in the version history.

As-Built documents are documents that are printed for Customer at the end of the project. In some cases, the project ends with the FAT. In other cases, the project ends after completion of the SAT or cut-over. The end of the project is defined in the contract scope. As-Built documents shall be marked "AS-BUILT" in the version history. For As-Built documents, the version history may be retained or erased as required by Customer.

12 Approved documents for fabrication

Documents returned by Customer shall be reviewed by the Project Manager or the Lead Project Engineer before issue to manufacturing agents for fabrication.

13 Subcontracted engineering work

This section specifies document control for projects where sub-contractors, sub-vendors or subsidiary offices are used for generation of engineering documents.

The document list for the contracted scope of documents must be established with the subcontractor, sub vendor or subsidiary office and followed. The document list is used for control of documents submitted to Customer.

All documents generated by sub-contractors, sub-vendors or subsidiary office engineers shall be delivered to the Project Manager or Lead Project/Solutions engineer for technical review before onward transmittal to Customer.

The Project Manager or Lead Project /Solutions is responsible for:

- The technical content of all engineering documents submitted to Customer.
- The overall control of documents submitted to Customer.

14 Sub-vendor documents

Sub-vendor documents shall be controlled via the incoming document list or the outgoing document list. This is to ensure the sub-vendor documents are eventually incorporated in the set of as-built documentation.

15 Document archiving

The Project Manager is responsible for archiving of project documents and for the completeness of such archiving activity.

The project team shall gather and store all necessary files and documents for archive including those that may have been produced by others, such as drafting team, PMD panel engineers (including PMD inspection and test records), YPI engineers, YSW engineers, other sub-vendors, etc.

The project team shall compile a list of documents to be archived after performing housekeeping to reduce the archive to the minimum necessary documents.

15.1 Project completion

The completion of the project depends on the contracted scope of work for the project.

If the scope does not include any site work, then the project is deemed to end after the FAT and after delivery of the system to site.

If the scope includes startup and commissioning assistance, then the project is deemed to end after the SAT or after plant commissioning (as the case may be).

Project completion is indicated in the “Certificate of Completion” signed by Customer.

The warranty period commences from the completion of the project, for the period specified in the contract.

The document retention policy shall commence from the end of project, for the period specified by the Project Manager.

15.2 PMD archiving

PMD will not keep any project archives to avoid duplication. To centralise the filing, PMD will hand over the M1 to M5 check sheets to the project team for filing under quality check sheets.

PMD will discard (will not archive) all other documents, including “For Construction” Drawings, Inter-department memos and internal transmittals.

15.3 Project control file

The Project Control File should contain the minimum and yet sufficient information for future reference.

The project control file should contain:(some are filed electronically in PSC project file server)

- Project organization
- System configuration
- Project schedule
- Project costing data
- Progress Reports
- Minutes of Meetings, that contain information on project scope
- Project close out report
- Document list, incoming documents
- Document list, outgoing documents
- Contract documents(requisition specs)
- Bill of materials at (zero-based)
- Variation Orders and associated records
- Project quality check sheets (PE1 to PE5)
- System quality check sheets (SN1 to SN7)
- PMD quality check sheets (M1 to M5)
- Internal Audit records

- Customer satisfaction survey records
- Shipping release note
- Packing list
- Shipping invoice

For archiving purpose the project control file should not contain:

- NMP Order Entry, In-house Acknowledgement
- PO to Sub-vendors, Invoices from vendors
- Staging Requisition Form
- Shipping Request Form
- Weekly Walkthrough records

15.4 Factory as-built documents

Factory as-built documents are produced at the end of FAT and delivered to Customer at the site, together with the system.

See document retention policy.

15.5 Site as-built documents

Site as-built documents are produced at the end of the SAT and delivered to Customer at the end of the project.

See document retention policy.

15.6 Hardcopy documents

Useful hardcopy documents may by converted to electronic format for archiving in CD-ROM.

Hardcopy documents, which cannot be scanned for archiving in CD-ROM, shall be organized in binders or other means and labeled appropriately for archiving in the document room.

16 End of document