PROJECT ENGINEERING PE(S)-2 CHECKLIST
(BASIC DESIGN PHASE)

ENDUSER	:	INPEX BROWSE LTD
CUSTOMER	:	Yokogawa Engineering Asia Pte Ltd
CONSULTANT	:	
PROJECT NAME	:	ICHTHYS GAS DEVT FIELD (CPF) APS
PROJECT NUMBER	:	V1412A008
DOCUMENT TITLE	:	**PE(S)-2 CHECKLIST**

PE-2 Meeting Details		Rev A	Rev B	Rev C	Rev D
Date	:	24-May-13			
Duration (hrs)	:	1 hr			

Name of Participants	:	**Signature of Participants**			
Project Manager	:				
QA Manager/Representative	:				
Core Team Lead Project Engineer (if applicable)	:				
Lead Project Engineer	:				
Project Engineer	:				
	:				

Number of Outstanding Items	:	1			
Planned date for next PE(S)-2 check (in case of any follow-up check items)		26-Jul-13			
Planned date for PE(S)-3 check	:	10-Dec-13			

PROJECT ENGINEERING PE(S)-2 CHECKLIST
(Basic Design Phase)

History

Rev.	Date	Description of Changes	Originator	Approver
0	31-Mar-11	Initial	Jeffrey Foo	Wong YC
1	11-Jun-12	Minor formatting changes	Yuliya Bobrovska	Lee Kock Hin
2	20-Sep-12	Minor formatting changes	Yuliya Bobrovska	Lee Kock Hin
3	30-Jan-13	Added QA Manager/Rep in Description, paragraph B.	Yuliya Bobrovska	Lee Kock Hin

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A Objective and usage

The project team shall use this checklist to review the basic design criteria of the project. At the end of the review of basic design, it is expected to ensure that all check points in this check sheet are reviewed, clarifications arising out of review are documented in the check sheet and is signed off by all the participants. The completed check sheet forms the systematic records of having reviewed the basic design elements of the project and all clarifications are to be supported by documentation like email, MOM.

The review shall include as a minimum the following:

The project team shall use this checklist to review the basic design criteria of the project. At the end of the review of basic design, it is expected to ensure that all check points in this check sheet are reviewed, clarifications arising out of review are documented in the check sheet and is signed off by all the participants. The completed check sheet forms the systematic records of having reviewed the basic design elements of the project and all clarifications are to be supported by documentation like email, MOM.

The review shall include as a minimum the following:

- Development of specifications, drawings, procedures and instruction to meet customer requirements
- Verification of the customer input data like specifications, drawings and procedures for technical content
- Determination of the functional compatibility of the hardware and software selected
- Assssment of quality requirements and incorporation of necessary codes and standards.
- Generation of documentation and records

The check items in this checklist provide general guidance for system design and project execution. The questions/descriptions associated with each check item are intended to guide the user toward details that may be applicable for this project. LPE are to report their evaluation of the check items, their comments pertaining to this (if any) and follow-up actions for each items (if any).

This checklist is completed and filed electronically in the project control folder of the standard project directory structure. Users are encouraged to add additional pertinent check items that were considered and discussed at this check for the improvement of the basic checklist.

B Meeting initiation and attendance

The Lead Engineer shall schedule and Initiate the PE(S)-2 check. Other participants may be invited as necessary. Required attendees for PE(S)-2 check are:

- Project Manager
- Lead Project Engineer or Project Engineer
- Core team Lead (if applicable)
- QA Manager/Representative

C Evaluation criteria

Each check item should result in one of the following evaluation results. Highlight the appropriate evaluation result. Comments that shed light on the background of the check item are encouraged.

Evaluation results are:

- Satisfactory – The check item is satisfactory. Comments may be included if any.
- Not satisfactory – The check item is not satisfactory. Follow up action is required. Follow up actions shall include what needs to be done, who is to do it, and when it must be completed. The LPE is ultimately responsible for the closure of outstanding items. Comments may be included if any.
- Not applicable – The check item is not applicable. Comments may be included if any.

D PE(S)-2 pre-requisite documents

At the minimum, the following documents shall be required:

- Sales proposed system configuration
- FEED documents/typical signal flow diagrams
- Scope & requirement clarity

E Recommendation

It is recommendation to evaluate this check within 2 weeks ~ 4 weeks on receipt of customer's input or scheduled as per the milestone activity depending up on the project complexity. This is to ensure that the basic design is meeting all the technical specification of the job requirement and to ensure these document shall the basic information to carry on with detailed design.

Follow up for clearing out standing items and reviewing the same periodically

F Name of Participants

The name of the participants shall be used in place of the function name in the cover page.

After the review done, all participants shall sign in the box next to their names under the respective revision.

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S/NO	CHECK ITEMS	REMARKS	EVALUATION
1.0	**PE(S)-1 REVIEW**		
1.1	**PE(S)-1 REVIEW AND FOLLOW-UP**		
1.1.1	1 Follow-up actions for pending issues		**Satisfactory**
1.1.2	2 Status of any major issues		**Satisfactory**
2.0	**Technical Scope Validation**		
2.1	**Amendment of Contract**		
2.1.1	1 Amended scope		**Satisfactory**
2.1.2	2 Revised Bill of Material		**Not Applicable**
2.1.3	3 Revised Scope Changes		**Satisfactory**
2.1.4	4 Revised Project schedule		**Satisfactory**
2.1.5	5 Commitments	According to project schedule. FOB singapore	**Satisfactory**
2.2	**Customer scope**		
2.2.1	1 Supply Scope for free issue items		**Satisfactory**
2.2.2	2 Technical & Engg support required from customer		**Satisfactory**
2.2.3	3 Logistics co-ordination required from customer		**Not Applicable**
2.3	**Customer Training**		
2.3.1	1 Scope of customer training	Optional. Not part of scope.	**Satisfactory**
2.3.2	2 Planning & Scheduling		**Not Applicable**
2.4	**Comments & follow-up action**		
2.5	**Manufacturing order**		
2.5.1	1 Issues related to order entry to factory (Vnet/IP module)		**Satisfactory**
2.5.2	2 Any special requirements		**Satisfactory**
2.6	**Tokuchu application**		
2.6.1	1 Tokuchu requirement	**Commercial**	**Satisfactory**
2.6.2	2 Approval validation (till)	##### 13-Feb-14	**Satisfactory**
2.7	**Document list**		
2.7.1	1 Verifcation of document list with customer requirements		**Satisfactory**
2.7.2	2 Time frame for submitting & return the documents	14 working days	**Satisfactory**
2.8	**FAT**		
2.8.1	1 Scope & Schedule of FAT	Based on ICSS schedule	**Satisfactory**
2.8.2	2 Special requirement from customer for IFAT		**Satisfactory**
2.8.3	3 Booking for staging schedule & power requirement	By PCS team	**Not Applicable**
2.9	**Packing , transport & shipping**		
2.9.1	1 Scope clarity	Handled by PCS team.	**Not Applicable**
2.9.2	2 Recommended packing procedure	**Yokogawa std**	**Not Applicable**
2.9.3	3 Mode of shipment		**Not Applicable**
2.9.4	4 Shipment terms	FOB Singapore	**Not Applicable**
2.10	**SAT**		
2.10.1	1 Scope & Schedule	_____	**Not Applicable**
2.11	**Comments or follow-up for this section**		

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S/NO	CHECK ITEMS	REMARKS		EVALUATION
3.0	**Basic design review**			
3.1	**Sepcial requirements**			
3.1.1	1 Customer Requirements	Y/N	Specify:	**Satisfactory**
3.1.2	2 Industry Requirements	Y/N	Specify: Australian Standard	**Satisfactory**
3.1.3	3 Regulatory Requirements	Y/N	Specify:	**Satisfactory**
3.2	**Overall Functional Design**			
3.2.1	1 System configuration	Indicate in FDS		**Satisfactory**
3.2.2	2 Functional specification	Indicate in FDS		**Satisfactory**
3.2.3	3 System Performance	Indicate in FDS		**Satisfactory**
3.2.4	4 Spare requirement Philosopahy (Hardware / Software)	Hardware warranty		**Satisfactory**
3.3	**Proof Of Concept**			
3.3.1	1 Solutions			**Satisfactory**
3.4	**Panel specification (if any)**			
3.4.1	1 KOM with Panel Dept			**Not Applicable**
3.4.2	2 Scope & schedule			**Not Applicable**
3.4.3	3 Documentation flow for manufacturing			**Not Applicable**
3.4.4	4 Scope for free issue items			**Not Applicable**
3.4.5	5 Panel General Specification			**Not Applicable**
3.4.6	6 Special requirements for panels			**Not Applicable**
3.5	**Basic Input Design of following**			
3.5.1	1 P&ID, PFD & narrative (APC, OTS, AMB)	As part of initial data inp		**Satisfactory**
3.5.2	2 Graphics, Report format, scan rate (PIMS)	Graphics & Report not provi		**Not Satisfactory**
3.5.3	3 Alarm KPI (ALMS)	AAM standard		**Satisfactory**
3.5.4	4 Type / qty of analyser (AAIMS)			**Not Applicable**
3.5.5	5 Qty of workstation, server, firewall (NISS & DBAS)			**Satisfactory**
3.5.6	6 Qty / type of camera, encoders, video storage capcity (CCTV)			**Not Applicable**
3.6	**Resale items**			
3.6.1	1 Approved vendors list/model			**Satisfactory**
3.6.2	2 Specifications			**Satisfactory**
3.6.3	3 Technical Compliance Check			**Satisfactory**
3.6.4	4 Subvendor co-ordination	SPT Group		**Satisfactory**
3.7	**Potential engineering issues**			
3.7.1	Identify technical risks	PLMS and Subsea OTS development and delivery		**Satisfactory**
3.8	**Comments or follow-up for this section**			