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1 Purpose

1.1 The purpose of the Project Review and Execution Plan is to provide a method for the engineering team to use to document the project team roles and responsibilities, internal design reviews, checkout, and factory and site acceptance, including applicable regulatory requirements.

2 Scope – *applies to where & when the work instruction is used*

2.1 The scope of this document applies to all Custom projects greater than $500K. In addition all custom and ETO projects are required to follow the PE Overview Procedure and Product Safety Manual procedure.

3 Definitions and Acronyms (if needed)

3.1

PE	Project engineering
QMS	Quality Management System
POND	Projects ON Demand

4 Graphic (if needed)

n/a

5 Responsibilities

5.1 It is the responsibility of the PE role to document the following sections in the *Project Review and Execution Plan template* and update if changes occur during the duration of the project.

- Staff assignments (Team Roles and Responsibilities tab)
- Risk Summary (tab)
- Checkout Plan (tab)

5.2 It is the responsibility of the Systems Engineer role to own and maintain technical aspects of the *Project Review and Execution template*. These include the following:

- Technical Specifications (tab)
- Concept Reviews (tab)
- Detailed Internal Design Reviews (tab)
- Customer Design Reviews (tab)
- Factory Acceptance (tab)
- Site Acceptance (tab)

5.3 The *Project Review and Execution Plan template* and supporting documents shall be stored in POND.

6 Instruction

6.1 Required project milestones for documentation are outlined as tabs in the Project Review and Execution Plan template.

6.1.1 Team Roles and Responsibilities

6.1.2 Risk Summary

6.1.3 Technical Specifications, including regulatory

6.1.4 Concept Review(s)

6.1.5 Detailed Internal Design Review(s)

6.1.6 Customer Design Review(s)

6.1.7 Checkout plan

6.1.8 Factory Acceptance

6.1.9 Customer Site Acceptance

6.2 When appropriate, information from presale documents (for example: Team Review Form, Proposal, etc.) can be used as documentation in the Project Reviews and Execution template. New or updated information should be added during the duration of the project as required to maintain the data current and accurate.

6.3 Each tab (as outlined in 6.1) should be reviewed with the 'Yellow' boxes being completed by the responsible functional role (as noted at the top of each tab).

6.4 The Team Roles and Responsibility tab should detail the customer name, project description and define the names of team members fulfilling the functional roles. Depending on the size or complexity of the project, individuals may fulfill more than one responsibility. Changes in roles during the execution of the project should be documented (NAME#1 – dates of service, NAME #2 – dates of service, etc) to maintain the project history.

6.5 The Risk Summary should be completed noting risks and opportunities of the sales opportunity with reference to triggers, impact, and probability. This information could be beneficial when evaluating the design concepts and developing checkout and acceptance plans to ensure design completeness.

6.6 The Technical Specifications tab should detail the performance specifications that are to be met for customer acceptance, including regulatory.

6.7 The Concept Review(s) and Detailed Design Review(s) tabs are documentation related to internal design engineering reviews. These reviews are intended to show that the design is ready to continue to the next phase (i.e. concept to design, or design to fabrication). Depending on the size or complexity of the project, more than one review may be required and can be documented as additional separate tabs. For example, multiple sub-assemblies or a separate mechanical and electrical review may be required due to complexity, or to maintain project schedule release milestones. A representative from the Field Service is required to be invited to all internal Design Reviews.

6.8 The Customer Design Review(s) tab document the formal design reviews held with the customer. Multiple design reviews (e.g. Preliminary Design Review, Critical design review, 25%, 50%, 90%, etc) should be documented as additional separate tabs.

6.9 The Checkout Plan tab documents the plan for general-level functional checkout of the system, and also serves as test readiness preparation for Factory or Site acceptance testing.

- The PE is responsible for creating the checkout plan. If necessary, the PE will coordinate with the Systems Engineer to ensure an appropriate plan is generated.
- The checkout person will execute the checkout plan and sign off to confirm the tasks are completed.
- If inconsistencies occur then the Checkout Person and PE coordinate to resolve the issues. Checkout tasks are repeated as appropriate until successful completion of checkout plan.
- The completed Checkout Plan will be stored in POND.

6.10 The Factory and Site Acceptance Plan tabs document the performance and completion date of these contract milestones.

6.11 Additional information or supporting documentation can be linked as an additional tab for reference, or placed in the Project POND folder as separate files.

7 Associated Quality Records – as stated in the Quality Records List

Required Record
Project Review and Execution Plan record (Engineering & Project Quality web -- Quality Records List)

8 Reference Forms / Templates / Documents (if needed)

Form / Template / Document Title	Location
Project Review and Execution Plan template	Engineering & Project Quality QMS Web
Project Engineering Overview Procedure	Engineering & Project Quality QMS Web
PRO -29	Engineering & Project Quality QMS Web

9 Current Revision's Training Requirements

Training requirements are determined by the document owner – either awareness or formal.

Select One (mark X)	Training Type	Training Definition
	Awareness	Awareness training is conducted by communication, which sent/delivered the approver/author/owner of the document to the affected employees/groups.
x	Formal	Formal training requires the approver/author/owner to collect/store evidence that the affected employees/groups were trained.

Formal training required to Mechanical Engineering, Project Engineering and Systems Engineering

10 Revision History & Approval

REVISION HISTORY			
Rev	**Description of Change**	**Author**	**Effective Date**
A	Initial version	Kilinski / Kerns	6/01/2010
B	Updated version. Major changes include: 1. Change scope of PREP to apply to custom projects over $500K. The PE overview process applies to all custom and ETO projects. 2. Added that FSE need to be invited to internal design reviews 3. Updated the C/O plan text	Nasla/Rivers/ Kilinski	5/17/2011

APPROVAL OF CURRENT REVISION		
Name / Function	**Signature**	**Date**
Rod Christensen (Director of Engineering Operations)		

Brad Litz (Systems Engineering)		
Melissa Boom Coburn (Quality) Manager)		