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1. GENERAL GUIDELINES FOR COMMISSIONING ACTIVITIES

Pre-Com/Com activities involve the first time dynamic proving of equipment, piping, vessels, rotating equipment etc. with safe fluids. The following generic notes are included to highlight the safety considerations, which must be taken into account by all commissioning personnel.

During Pre-Com/com activities, a number of Health, safety and environment (H.S.E.) issues have to be simultaneously addressed and controlled. The paragraphs below describe typical potential hazards that are inherent during the commissioning testing of a new facility. The list is not intended to be exhaustive, but will alert personnel to be aware that extra vigilance is required.

It is important that, prior to commencing commissioning activities involving the dynamic operation of equipment and the handling of fluids, warning signs and barriers shall be erected to advise personnel of the activity and the controls in place.

Generic guidelines are described in the following paragraphs: -

The initial starting and testing of rotating equipment shall not proceed until all necessary discipline check sheets and documentation has been completed and reviewed by the Commissioning mechanical discipline representative. For the first site runs of rotating equipment, a Commissioning mechanical discipline representative must be present. Company representative will be formally notified of impending first start of equipment and Company Representative will advise as to if Company representative will be in attendance. Other disciplines e.g. Instrument and Electrical will be present as required. Commissioning personnel will monitor all equipment commissioning tests and the area shall not be left unattended when the equipment being tested is running. Tightness testing of completed systems for process containment, prior to Ready For Start Up (RFSU) is performed in a variety of ways depending on the design service. The test medium can be air, water or nitrogen. For the tightness testing of high-pressure gas systems, Nitrogen or Air may be used. During these tests personnel shall be made aware that there is a potential for releases, which can create noise hazards, be physically harmful to personnel and equipment, or cause localised Oxygen depletion. Tightness testing of piping systems using service air or nitrogen will typically require that non-essential personnel be excluded for a distance of at least 5 Meters away from the test envelope. For tightness tests in excess of 2.0 MPag the complete process area will become an exclusion zone with the exception of personnel directly involved in the test.

High pressure tightness testing requires that the piping and equipment, supports and associated structure, and the termination points of the test envelope are as close as practicable to the normal operating configuration. All temporary connections used shall be engineered to be rated for the pressure, adequately supported and restrained.

2. PURPOSE

The intent of this document is to present the basic framework for the Per-Com/com work to be carried out on the LNG Storage Tank (T-1103) System of the GUANGDONG LNG RECEIVING Terminal Project. This includes relevant functional testing and checking that is being carried out

prior to hydrocarbons being brought in to the unit. It also defines the member of the Commissioning Team who will be responsible for each Per-Com/Com activity.

Note: For convenience, this document is called “Commissioning Procedure” but it details both the “Pre-Commissioning and commissioning” activities to be performed in order to achieve the Pre-Commissioning and commissioning of the concerned system.

3. SCOPE & RESPONSIBILITIES

The scope of this procedure covers the Pre-Com/Com of the system P 09 which includes the main following elements

- Tank T-1103(including PSV,VSV, Nitrogen purge system)
- TDAS for T-1103

This procedure will be implemented by the Commissioning Team, in accordance with the organisation, roles and responsibilities defined in the Commissioning Execution Plan No T653010-000-PCO-42.81-10001.

The Pre-Com/Com of this system will be co-ordinated and supervised by the Commissioning Leader. For each Pre-Com/Com activity, the engineer responsible for the safe and correct execution of the operations has been defined in the paragraph associated to the activity (see section 8).

This procedure is shall be adapted at site under the responsibility of the assigned Commissioning Leader with approval of the Company, in order to fit with the actual configuration and status of resources, material, studies, and general progress of the work, available at the time of performing these activities.

4. ABBREVIATIONS USED IN DOCUMENTS

B/L	Battery Limit
BOG	Boil Off Gas
CTR	Commissioning Test Record
EPC	Engineering, Procurement and Construction
ESD	Emergency Shutdown
FC	Fail Close
FO	Fail Open
FP	Fail Position
FCCR	Full Containment Concrete Reinforced
GA	General Arrangement
HSE	Health Safety & Environment
ITR	Inspection and Test Record
LNG	Liquefied Natural Gas
LUN	Livening-Up Notice
MSDS	Material Safety Data Sheet
N/A	Not Applicable
Pre-Com/Com	Pre-Commissioning and Commissioning
P&ID	Piping & Instrumentation Diagram
PPE	Personal Protection Equipment
RFC	Ready For Commissioning
RFSU	Ready For Start-Up
RTD	Resistance Temperature Device
SIS	Safety Instrumented System
TDAS	Tank Data Acquisition System
WC	Works Contractor

5. REFERENCE DOCUMENTS

#	Title	Doc. No.
1.	Commissioning Execution Plan	T653010-000-PCO-42.81-10001
2.	Systemization (Systems / Sub-systems Breakdown & Identification)	T653010-000-PCO-42.81-10003
3.	Pre-commissioning Execution Plan (Mechanical Completion Plan)	T653010-000-PCO-42.81-10004
4.	Pre-Commissioning and Commissioning ITR's	T653010-000-PCO-42.81-40006
5.	Punch List Procedure	T653010-000-PCO-42.81-10008
6.	Preservation Procedure	T653010-000-PCO-42.81-10009
7.	JSA, PTW and LUN during Commissioning	T653010-000-HSE-05.91-40047
8.	Loop Check Procedure	T653010-000-PCO-42.81-10012
9.	Blowing / Flushing & Re-instatement procedure	T653010-000-PCO-42.81-10013
10.	Leak Test Procedure	T653010-000-PCO-42.81-10014
11.	Motors Run-in Test Procedure	T653010-000-PCO-42.81-40017
12.	General Electrical Guidelines For Commissioning	T653010-000-PCO-42.81-40021
13.	Set Points & Alarms List	T653010-110-PCS-10.08-10004
14.	ESD Description – Shutdown Causes & Effects Charts	T653010-110-PCS-10.04-10006
15.	Fire & Gas Cause & Effect Charts	T653510-000-SAF-10.65-10020
16.	Management of Changes During Commissioning	T653010-000-PCO-42.81-40001
17.	Systemization (Systems / Sub-systems Breakdown & Identification)	T653010-000-PCO-42.81-10003

以上内容仅为本文档的试下载部分，为可阅读页数的一半内容。如要下载或阅读全文，请访问：<https://d.book118.com/025221104043011304>