Weathervaning System Integrity Management

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Weathervaning System Integrity Management

1 Introduction

1.1 General

This document provides informative guidance on the integrity management (IM) of weathervaning systems found on offshore floating production system (FPS) and loading/offloading buoy systems. Weathervaning systems provide three primary functions:

a) the ability to rotate or weathervane in the direction of the prevailing environmental conditions to minimize load on the stationkeeping system, as well as undesired motions;

b) a load transfer mechanism between the stationkeeping system (mooring or platform tower) and the FPS or ship;

c) a fluid, communication, and/or utility transfer mechanism between subsea production wells or pipelines and the FPS.

Examples of weathervaning systems include internal and external turrets, tower yokes, and loading/ offloading buoys. Figure 1 shows some common types of weathervaning systems used by offshore oil and gas owners and operators.

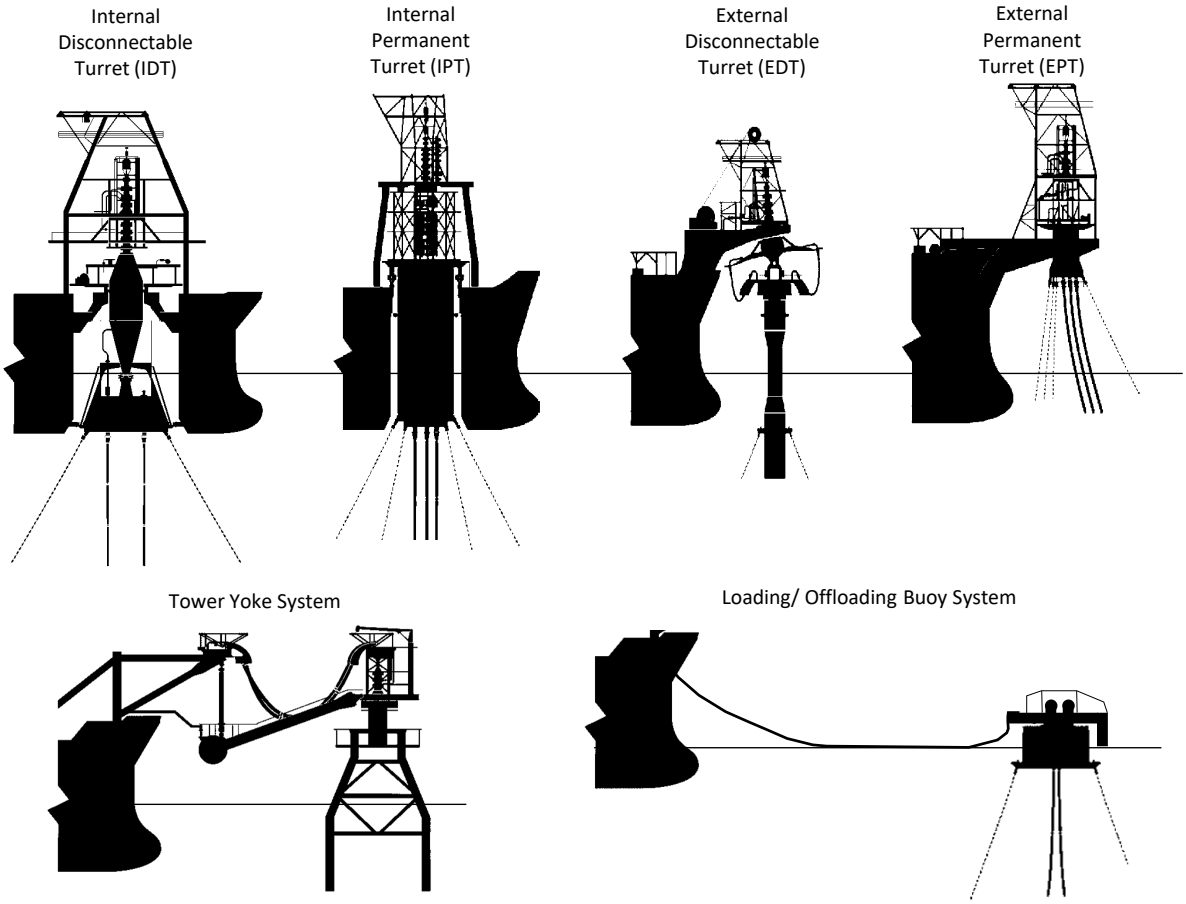


Figure 1—Examples of Typical Weathervaning Systems (Diagrams Courtesy of SBM Offshore)