Recommended Practice for Analysis, Design, Installation, and Testing of Safety Systems for Subsea Applications

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Introduction

This recommended practice (RP) presents a systematization of proven practices for providing a basic safety system for subsea applications. Proper application of these practices, along with good design, maintenance, and operation of the entire production facility can provide an operationally safe system.

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Recommended Practice for Analysis, Design, Installation, and Testing of Safety Systems for Subsea Applications

1 Scope

1.1 General

This recommended practice (RP) presents recommendations for designing, installing, and testing a process safety system for subsea applications. The basic concepts of subsea safety systems are discussed and protection methods and requirements of the system are outlined.

For the purposes of this RP, 'subsea system' includes all process components from the wellhead (and surface controlled subsurface safety valve [SCSSV]) to upstream of the boarding shutdown valve. For gas injection, water injection, and gas lift systems, the shutdown valve is within the scope of API 17V. This also includes the chemical injection system. Refer to Figure 1.

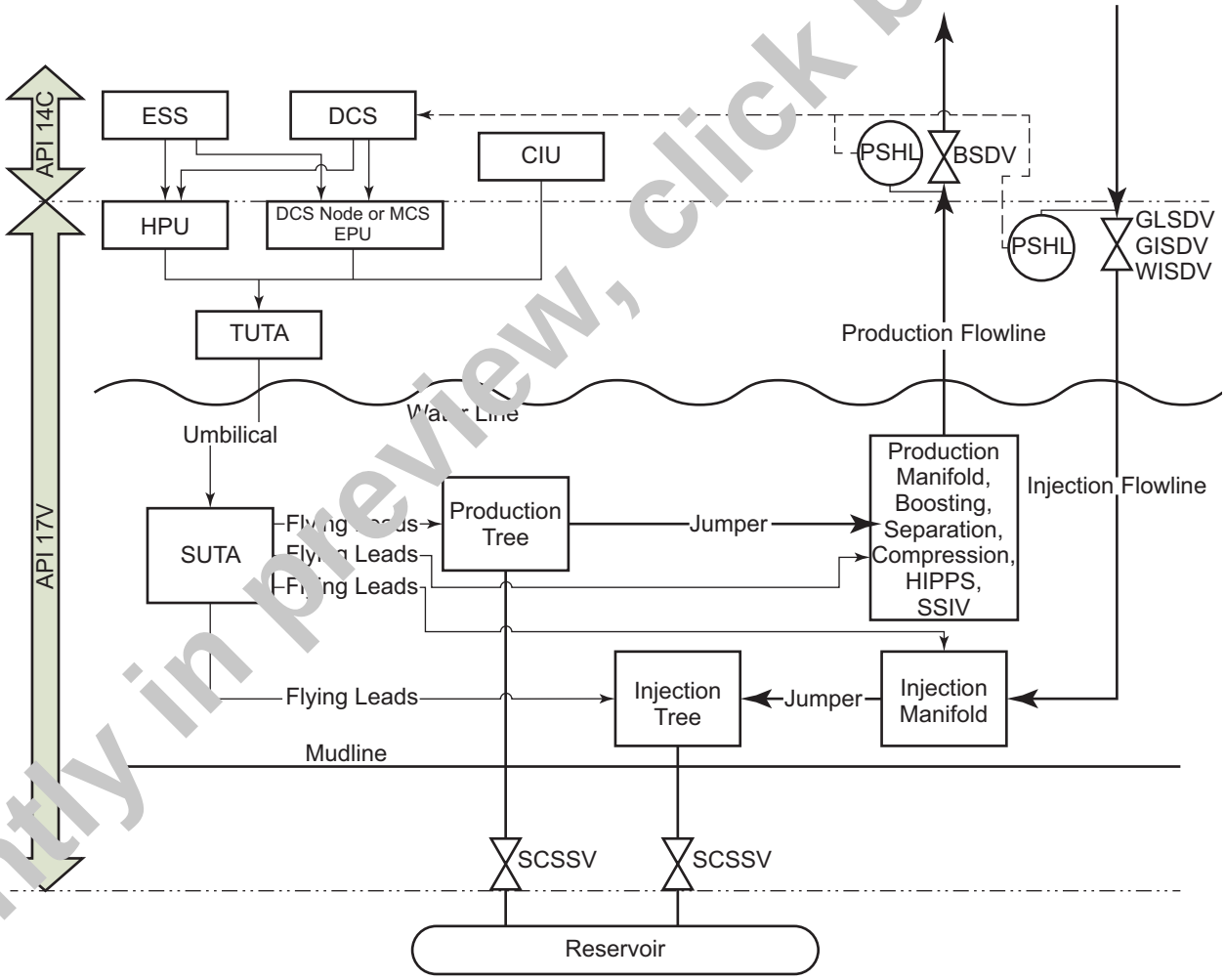

Figure 1—API RP 17V Scope

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