

# SECIA Sample

Title	Scope of Change/modification	Design Performance Standard Required?	Operations Performance Standard Impact	Design Performance Standard Requirement	Design Performance
Fire and Gas System	Additional flame detection will be required to in pumps enclosures for : - Wash water injection pumps - Subsea Wells Chemical injection pumps	YES	YES	Initial suitability of new/additional gas/flame detectors to meet performance requirements and integration into overall fire and gas system demonstrated.	Operator
Safety Instrumented Systems (SIS)	There will be interfaces between the new subsea control system for Subsea Wells and the existing facility control system. T  The Subsea Wells well cluster shall include a fully integrated solution that embeds all Subsea Wells I/O signals, control strategies and safety cause and effects logic into the CMSS.  The CMS, PSD and F&G shall be modified for control, monitoring and shutdown functions of the following Subsea Wells systems:	YES	YES	The system limits of the design performance standard covers all functions including initiators (e.g. sensors and pushbuttons), logic solver and final elements (e.g. shutdown/blowdown valves (XXVs) and electric Motor/Heater Trip Relays).  The following final elements are to be replaced:  TBC  All replacement XXVs must comply with design performance standard. They will need to demonstrate compliance with IEC 61511 "prior use" requirements in order to justify SIL targets set during LOPA (logic solver PFD).	Operator
Riser Emergency Shutdown Valves (RESRVs) and Subsea Isolation Valves (SSIVs)	A final decision on timing for the design and installation of the subsea gas lift system has yet to be made. The intent is for gas lift for Subsea Wells to be supplied from the platform however the Subsea Wells Operator believes that it may not be required until mid to late field life and as such the gas lift system will not be installed prior to start-up. T	YES	YES	Replacement RESDV must comply with requirements set out in C-X034-12 Piping and Valve Material Specification Narrative (including Piping Engineering Standards), leakage rate etc.	Operator
Blowdown, Vent and Flare System	Adequacy of pipeline/reception facilities blowdown restriction orifices to meet requirements of API 521 and GP 44-30 to be confirmed. Gas lift is not required for Subsea Wells wells until later in field life. Only HHP flare tie-in is required for future Subsea Wells gas lift topsides relief/blowdown and future Subsea Wells gas lift pipeline	NO	YES	Gas lift tie-in to HP flare covered by Process Containment Design Performance Standard	Operator
Electrical Fault Protection	Fault protection for all Subsea Wells motors (HV & LV rated) is required.	NO	YES	None identified	Operator
Metering for Environmental	No Subsea Wells Impact Identified				
Sampling and Analysis for Environmental Compliance	No Subsea Wells Impact Identified				
Internal Communication Systems	No Subsea Wells Impact Identified			No Subsea Wells impact	
Emergency Lighting	No Subsea Wells Impact Identified			No Subsea Wells impact	
Offshore Helicopter Landing Area	No Subsea Wells Impact Identified			No Subsea Wells impact	
External Communication Systems	No Subsea Wells Impact Identified			No Subsea Wells impact	
Lifeboats (TEMPSC)	No Subsea Wells Impact Identified			No Subsea Wells impact	
Tertiary Means of Escape to Sea	No Subsea Wells Impact Identified			No Subsea Wells impact	
Emergency Power Supplies	UPS supply to be provided for Emergency Power Unit (EPU) /Master Control Station (MCS).	NO	YES	The design shall ensure the ESD and well isolation aspects of the Subsea Wells modifications operate loss of main and emergency power.	Operator

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Personal Protective Equipment	No Subsea Wells Impact Identified				
Rescue & Recovery facilities	No Subsea Wells Impact Identified				
Open and Closed Hazardous Drains	<p>A new tie-in to the hazardous open drains collection system will be provided for the Subsea Wells Subsea HPU (SECE). Tie in scope minor so will be managed under operations verification scheme via emoc.</p> <p>The replacement chemical injection pumps in Chemical Injection Package, Z200 will use existing tie-ins to the hazardous open drains collection system (non-SECE)</p>	NO	YES	Design performance requirements to cover piping/valves associated with the open hazardous drain tie-in within hydrocarbon and any other hazardous inventory within the normal operating envelope and for reasonably foreseeable abnormal conditions	N/A
Passive Fire Protection	New PFP required for replacement RESDV (XXV-103007)	YES	YES	Replacement riser ESDV (XXV-103007) and connection spool will require PFP.	Operator
Temporary Refuge Integrity	No Subsea Wells Impact Identified			No Subsea Wells impact	
Miscellaneous Fire Protection System	No Subsea Wells Impact Identified			No Subsea Wells impact	
Blast Overpressure Protection	<p>Additional topsides pipework/equipment onto Production and accommodation platforms could potentially impact on blast overpressure/drag forces due to:</p> <p>- increased congestion/confinement resulting from the new topsides equipment being installed as part of the project;</p>	NO	NO	Analysis confirms increase in pipework etc does not significantly increase overall confinement/congestion therefore no material change in overpressures predicted. No significant increase in inventory therefore no increase in calculated overpressures. Existing blast overpressure protections measures adequate.	
Temporary Well Control Equipment	No Subsea Wells Impact Identified			No impact identified	
Structural Integrity of Jacket and Structures	No Subsea Wells Impact Identified				
Collision Avoidance System	No Subsea Wells Impact Identified				