



\_\_\_\_\_

Form :	S-111/2311-01-0001
Page :	1 / 1
Revision :	1
Issued Date :	December 1, 2023

Item	Inspection / Maintenance Activity	ML	Offshore					Onshore										Reference		Responsible							Remarks
			TSO	TSO/GSM	TSO			TSO	TSO/GSM	NGR/NGV	All					Schedule / Form	Procedure / WI	Plan Action	Prepare TOR	Procure	Execute & Submit	Analyze & Report	Keep Record				
			Trunk Line	Branch	Piping	Pressure Vessel	Platform Structure	Mainline	IPP&SPP (Class 3 / 4)	Distribution (Class 3 / 4)	UG asset In Station	Piping In Station	Pressure Vessel In Station	Asset on Pipe Rack	Decommissioned	Abandoned with PM	Abandoned										
Mechanical damage control : Patrolling																											
1	Patrolling (Vehicle)	ML1	-	-	-	-	-	2W, 2/W	2/W	2/W	-	-	-	-	6M	6M	-	F-٢٠٢٤.١٢-0022	I-٢٠٢٤.-2038	R	-	-	R	R	R/E	Class 1&2 / Class 3&4	
2	Leakage Survey and Ground/ Crossing Patrolling	ML1	-	-	-	-	-	3M	3M	3M	-	-	-	-	1Y	1Y	1Y	F-٢٠٢٤.١٢-0022	I-٢٠٢٤.-2042 I-٢٠٢٤.-2043	R	-	-	R	R	R/E		
3	Vault Inspection	ML1	-	-	-	-	-	-	1Y/5Y	1Y/5Y	-	-	-	-	1Y	1Y	1Y	F-٢٠٢٤.١٢-0022	I-٢٠٢٤.-2045	R	-	-	R	R	R/E	Visual & Gas Leakage Check without open Vault / Visual & Gas Leakage Check with open Vault	
4	Aerial Patrolling	ML1	-	-	-	-	-	3M	3M	-	-	-	-	-	1Y	1Y	1Y	S-٢٠٢٤.٠١-0014 F-٢٠٢٤.١٢-0022	I-٢٠٢٤.-2039	E	E	E	R/E	R/E	R/E	Except PL region 4, 7	
5	Soil Erosion Survey	ML1	-	-	-	-	-	1Y	1Y	1Y	-	-	-	-	1Y	1Y	-	S-٢٠٢٤.٠١-0021	I-٢٠٢٤.-2043	R	R	R	R	R/E	R/E		
6	Pipeline Settlement Survey	ML2	-	-	-	-	-	-	-	-	-	-	1Y	-	-	-	-	S-٢٠٢٤.٠١-0016 F-٢٠٢٤.١٢-0024	I-٢٠٢٤.-2044	R	-	-	R	PE/E	R/E		
7	Offshore platform structure settlement survey	ML2	-	-	-	-	-	2Y	-	-	-	-	-	-	-	-	-	F-٢٠٢٤.١٢-0001	I-٢٠٢٤.١٢-0036	OF	OF	OF	OF	OF/E	OF/E	For platform, Topside will be inspected only	
8	ROV Survey (Visual inspection, Free span)	ML3	5Y	5Y	-	-	-	-	-	-	-	-	-	-	5Y	5Y	-	S-٢٠٢٤.٠١-0003	-	OF	OF	OF	OF	OF/E	OF/E		
9	ROV Survey (Visual inspection, FMD)	ML3	-	-	-	-	-	5Y / 7Y	-	-	-	-	-	-	5Y	5Y	-	-	-	OF	OF	OF	OF	OF/E	OF/E	ERP 5 Year / PRP 7 Year	
External corrosion control : Cathodic Protection System, Protective Coating system																											
1	P/S Potential Survey (on-off) @ Test Post	ML2	-	-	-	-	-	6M	6M	6M	6M	-	-	-	1Y	1Y	-	F-٢٠٢٤.١٢-0004	I-٢٠٢٤.-2003	R	-	-	R	E	R/E		
2	Casing Inspection	ML2	-	-	-	-	-	6M	6M	6M	-	-	-	-	1Y	1Y	-	F-٢٠٢٤.١٢-0006	I-٢٠٢٤.-2005	R	-	-	R	E	R/E		
3	Bond Box Inspection	ML2	-	-	-	-	-	1M/6M	1M/6M	1M/6M	1M/6M	-	-	-	1Y	1Y	-	F-٢٠٢٤.١٢-0003	I-٢٠٢٤.-2014	R	-	-	R	E	R/E	Not interrupt CP current / Full inspection	
4	Anode Groundbed Inspection (ICCP) ROV (Anode/Electrolyte Potential Survey)	ML2	5Y	5Y	-	-	5Y / 7Y	-	-	1Y	1Y	-	-	-	5Y	5Y	-	S-٢٠٢٤.٠١-0018 F-٢٠٢٤.١٢-0007	I-٢٠٢٤.-2006	R	-	-	R	E	R/E	ERP 5 Year / PRP 7 Year	
5	CP Transformer Rectifier Inspection	ML1	-	-	-	-	-	-	-	-	-	1M	-	-	1Y	1Y	-	F-٢٠٢٤.١٢-0005	I-٢٠٢٤.-2004	R	-	-	R	E	R/E		
6	AC Mitigation Inspection (DC Decoupler, Surge protecting device, Zn ground wire/mat)	ML2	-	-	-	-	-	1Y	1Y	1Y	1Y	1Y	-	-	-	-	-	F-٢٠٢٤.١٢-0004	I-٢٠٢٤.-2003	R	-	-	R	E	R/E		
7	Close Interval P/S Potential Survey (CIPs) ROV (Pipe/Electrolyte Potential Survey)	ML3	5Y	5Y	-	-	-	5Y	5Y	5Y	5Y	-	-	-	10Y	10Y	-	S-٢٠٢٤.٠١-0008 S-٢٠٢٤.٠١-0009 F-٢٠٢٤.١٢-0008	I-٢٠٢٤.-2009	R	R	R	R	E	R/E		
8	Coating Defect Survey (DCVG), ACVG, PCM ROV (Voltage Gradient Survey)	ML3	5Y	5Y	-	-	-	5Y	5Y	5Y	5Y	-	-	-	10Y	10Y	-	S-٢٠٢٤.٠١-0008 S-٢٠٢٤.٠١-0009 F-٢٠٢٤.١٢-0026 F-٢٠٢٤.١٢-0027	I-٢٠٢٤.-2018 I-٢٠٢٤.-2019	R	R	R	R	E	R/E		
9	Insulating Joint or Flange Inspection	ML1	-	-	-	-	-	-	-	-	-	1Y	-	1Y	-	-	-	F-٢٠٢٤.١٢-0011 F-٢٠٢٤.١٢-0025	I-٢٠٢٤.-2015 I-٢٠٢٤.-2016	R	-	-	R	E	R/E		
10	CP Online Calibration (P/S, TR-V,TR-C)	ML2	-	-	-	-	-	-	-	-	-	1Y	-	-	-	-	-	F-٢٠٢٤.١٢-0009 F-٢٠٢٤.٠١-0010 F-٢٠٢٤.١٢-0039	I-٢٠٢٤.-2013 I-٢٠٢٤.-2012 I-٢٠٢٤.-2046	R	-	-	R	E	R/E		
External Inspection / Direct Examination																											
1	General surface / coating condition inspection	ML1	-	-	1Y	-	1Y	-	-	-	-	1Y	5Y	1Y/5Y	-	-	-	F-٢٠٢٤.١٢-0053	-	R/OF	-	-	R/OF	E	R/OF/E	For platform, Topside will be inspected only	
2	Splash zone / soil to air piping inspection	ML1	-	-	1Y	-	1Y	-	-	-	-	1Y/5Y	-	1Y/5Y	-	-	-	F-٢٠٢٤.١٢-0017	I-٢٠٢٤.-2024	R/OF	-	-	R/OF	E	R/OF/E	Visual / Full Inspection	
3	Corrosion under pipe support Inspection	ML1	-	-	1Y/5Y	-	-	-	-	-	-	1Y/5Y	-	1Y/5Y	-	-	-	F-٢٠٢٤.١٢-0033	I-٢٠٢٤.-2023	R/OF	-	-	R/OF	E	R/OF/E	Visual / Full Inspection	
4	Corrosion under insulation (CUI) Inspection	ML1	-	-	1Y/5Y	-	-	-	-	-	-	1Y/5Y	-	-	-	-	-	F-٢٠٢٤.١٢-0036	-	R/OF	R/OF	R/OF	R/OF	E	R/OF/E	Visual / Full Inspection	
5	Wall Thickness Inspection @ critical location	ML1	-	-	5Y	5Y	-	-	-	-	-	5Y	5Y	5Y	10Y	-	-	F-٢٠٢٤.١٢-0020 S-٢٠٢٤.٠١-0013	P-٢٠٢٤.-0502 I-٢٠٢٤.-2058	R/OF	-	-	R/OF	E	R/OF/E	Only for process gas	
6	Crack inspection	ML1	-	-	-	EA	-	-	-	-	-	-	EA	-	-	-	-	S-٢٠٢٤.٠١-0013	-	OF	OF	OF	OF	E	OF/E	Crack inspection at weld joint	
7	Hottapped Coupon Measurement	ML1	EH	EH	-	-	-	EH	EH	EH	-	EH	-	-	-	-	-	Coupon Inspection	-	-	E	E	R	E	R/E		
8	Excavation & Direct Examination	ML3	-	-	-	-	-	EP	EP	EA	-	-	-	-	-	-	-	S-٢٠٢٤.٠١-0019	-	E	R	R	R/E	E	R/E	Dig site verify after Pigging, DCVG, Hottap	
Internal corrosion control : Chemical Threatment , Moisture dewpoint control																											
1	Moisture control		Monitoring	Monitoring	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OF	OF	OF	OF	OF	OF		
2	Inhibitor Injection		Monitoring	Monitoring	-	-	-	-	-	-	-	-	-	-	-	-	-	-	I-٢٠٢٤.١٢-1064	OF	OF	OF	OF	OF	OF		
Internal Inspection : Cleaning, Inline & Sample Inspection																											
1	Cleaning Pig	ML2	Cond.	-	-	-	-	Cond.	Cond.	-	-	-	-	-	-	-	-	S-٢٠٢٤.٠١-0007	-	E/R/OF	R/OF	R/OF	R/OF	E	R/E/OF	R to sampling & send desposit/liquid to Q	
2	Corrosion (MFL) Pig	ML3	3Y	-	-	-	-	3Y	3Y	-	-	-	-	-	-	-	-	S-٢٠٢٤.٠١-0003 S-٢٠٢٤.٠١-0007 S-٢٠٢٤.٠١-0008	-	E/R/OF	E	E	R/E/OF	E	R/E/OF		
3	Geometry (Caliper, Gauge, 3D) Pig	ML3	3Y	-	-	-	-	3Y	3Y	-	-	-	-	-	-	-	-	S-٢٠٢٤.٠١-0003 S-٢٠٢٤.٠١-0007 S-٢٠٢٤.٠١-0008	-	E/R/OF	E	E	R/E/OF	E	R/E/OF		
4	Chemical analysis (Deposit, Liquid)	ML2	EP	-	-	-	-	EP	EP	-	-	-	-	-	-	-	-	S-٢٠٢٤.٠١-0003 S-٢٠٢٤.٠١-0007 S-٢٠٢٤.٠١-0008	-	E	Q	Q	R/E/OF	Q	E	From Pig, Filter, Seperator, Slug catcher	
5	Corrosion Probe / Coupon Measurement	ML2	3Y	-	-	-	-	3Y	-	-	-	-	-	-	-	-	-	S-٢٠٢٤.٠١-0015	I-٢٠٢٤.-2035	E	E	R/OF	R/OF	R/E/OF	R/E/OF		
Other																											
1	Location Class Survey	ML2	-	-	-	-	-	5Y	5Y	-	-	-	-	-	-	-	-	S-٢٠٢٤.٠١-0003	-	A	A	A	A	A/E	A/E	Including aerial photo procurement	
Remarks : The above inspection intervals are minimum requirement, more frequent inspection may required at specific location.														Schedule / Form :				8) S-٢٠٢٤.٠١-0009, Distribution PL Indirect Inspection							16) S-٢٠٢٤.٠١-0017, Offshore Pipeline ROV survey & Free span correction		
- W = Weekly, M = Monthly, Y = Yearly, Cond. = depend on cleanness condition of pipeline or within 2Y before ILI Pig														1) S-٢٠٢٤.٠١-0002, MAOP revised for PTT network				9) S-٢٠٢٤.٠١-0010, NGV Pipeline Indirect Inspection							17) S-٢٠٢٤.٠١-0018, ICCP Anode Groundbed Replacement Plan		
- R = Regional Operations, PE= Pipeline engineering division, E = Pipeline maintenance management division, OF = Offshore Operations, Q = PTT Lab, A = Academy division														2) S-٢٠٢٤.٠١-0003, TSO Pipeline Integrity Plan				10) S-٢٠٢٤.٠١-0011, Natural Gas Pipeline Inspection & Maintenance Program for GSP							18) S-٢٠٢٤.٠١-0019, Direct Assessment		
- EH = Each Hottap, EP = Each Pigging, DCVG,Aging														- EA = Each Assessment				- Trunk line = Pipeline segment of the transmission system							- Branch = Unpiggable Pipeline		
- Preserved pipeline= Pipeline temporarily removed from service and reserve to use in the near future. The pipeline must store the gas inside all the time after stop using it .														3) S-٢٠٢٤.٠١-0004, NGR Pipeline Integrity Plan				11) S-٢٠٢٤.٠١-0012, Ageing pipeline integrity management							19) S-٢٠٢٤.٠١-0020, Soil Settlement Repair plan		
- Abandoned pipeline = Pipeline permanently removed from service and subject to "an irreversible process of discontinuing the use of a P/L The internal P/L must fill up with concrete material or nitrogen.														4) S-٢٠٢٤.٠١-0005, NGV Pipeline Integrity Plan				12) S-٢٠٢٤.٠١-0013, Risk-Based Inspection Plan							20) S-٢٠٢٤.٠١-0021 Soil Erosion Repair plan		
- Preserve P/L = Isolated P/L, N2 pack, No Gas inside P/L														5) S-٢٠٢٤.٠١-0006, Offshore SIM program				13) S-٢٠٢٤.٠١-0014, Aerial Patrolling Survey Schedule							21) S-٢٠٢٤.٠١-0022, SaleTap and Vent/Drain Pipe Indirect Inspection		
														6) S-٢٠٢٤.٠١-0007, Cleaning PIG Instrument PIG Schedule				14) S-٢٠٢٤.٠١-0015, Corrosion Coupon Inspection Schedule									
														7) S-٢٠٢٤.٠١-0008, Transmission Pipeline Indirect Inspection				15) S-٢٠٢٤.٠١-0016, Soil Settlement Inspection Plan									