


## Israel Gas Transmission Project

2	30.06.24	Issued for - Agreement	AI/SA	SY	SK		
Rev. No.	Date	Description	Prepared	Checked	Approved		
			Company				
 <p>נתיבי הגז הטבעי לישראל ISRAEL NATURAL GAS LINES</p>			<p>Document Title</p> <p><b>Table of Contents</b></p>				
Company Representative : Shosh Yaacoby			Area Code:				
Project No. :							
						Rev.	
Purchase Order No. :						Document-No.	
Contractor Representative :						473946	
Document Originator : Shlomi Ashkenazi						2	





Document or drawing No.	Rev.	Document Title
IEN-ESP-RQU-0001	25	General Criteria For PRMS
EEN-ESM-SPC-001	10	System design Data Book
EEN-EPI-SPC-004	4	General Quality Assurance Requirements
IEN-ESP-DRG-0001	1	General Legend
IEN-ESP-DRG-0002	13	Typical P&ID PRMS type A
IEN-ESP-DRG-0008	13	Typical P&ID PRMS type B
IEN-ESP-DRG-0007	9	Typical P&ID Distribution PRMS
IEN-ESM-SPC-0001	8	General Rules for Certification
323989	5	Table of content and guidelines for PRMS station Book & RFGU
ENG-X81-SPC-0001	4	Guideline for Factory Acceptance Test (FAT) for PRMS Procedure
Doc no. 261917	3	Guidelines for Stress Analysis to PRMS (with attachment)
IEN-ESE-SPC-0007	14	General Requirements for Electrical Design and Installation for PRMSs
Doc no. 264299	3	Typical Hook-up drawings
CAO-X90-DOC-0001	20	Guidance for a PRMS Logic & Control
CAO-X81-SPC-0001	5	Functional Specification for Gas Analysis System
CAO-X81-SPC-0002	5	Functional Specification for Volume Corrector
CAO-X81-SPC-0003	6	Specification Ultrasonic Gas Flow Meters
CAO-X81-SPC-0004	6	Specification Turbine Meter Runs
2063-BAR-GEN-SPC-0001	1	Corrosion Protection for Installation within Industrial/Desert Environment – Sedom
ENG-X17-SPC-0015	4	Typical design and instructions for PRMS working platforms
CAO-X90-PRO-0011	2	PRMS Metering system Acceptance Procedure
EEN-ESP-SPC-005 (322392)	4	INGL Specification for Aboveground Isolating Couplings





EEN-ESP-SPC-028	8	Specification Dust-/ Liquid Separator
EEN-ESP-SPC-029	6	Specification Heat Exchanger
ENT-ESP-SPC-002	10	Specification Electrical Heat Exchanger
EEN-ESP-SPC-030	4	Specification Boiler
EEN-ESP-SPC-032	8	Specification Slam Shut Valves
EEN-ESP-SPC-033	9	Specification Control Valves
EEN-ESP-SPC-034	6	Pressure Vessel General Requirements
ENT-ESP-SPC-001	6	Specification Pressure Safety Valve
IEN-ESP-SPC-0122 (188941)	5	Specification PRMS Vent Tip Design and Hazardous area calculation– (replacing IEN-ESP-SPC-0122 rev.3)
EEN-ESP-DAT-001	6	Data Sheet Dust-Liquid Separator Horizontal
EEN-ESP-DAT-010	5	Data Sheet Dust-Liquid Separator Vertical
EEN-ESM-SPC-002	6	Piping Material Specification
EEN-ESM-SPC-003	5	Installation of Instruments and Instrument Piping
EEN-ESM-SPC-004	3	Packing, Marking & Delivery
EEN-ESM-SPC-005	9	Painting specification
2040-BAR-GEN-SPC-0001	1	Corrosion Protection for Installations within Industrial/Desert Environment (Rotem Amonia)
426030	1	Corrosion Protection for Installations within Marine Environment
EEN-ESM-SPC-006	3	Coating of Valves and fittings - Shop Coating
EEN-ESM-SPC-008	4	Documents Requirements
EEN-ESM-SPC-009	11	Pipe Class Specification
EEN-ESM-SPC-010	8	Ball Valves for PRMS
EEN-ESM-SPC-011	6	Electric Actuators for Valves
EEN-ESM-SPC-012	3	Manual Actuators for Valves





EEN-ESM-SPC-013	7	Specification for Welding and Welding Consumables
EEN-ESM-SPC-014	6	Specification for NDT/NDE
EEN-ESM-SPC-015	7	Pressure Testing of Pipework
EEN-ESM-SPC-016	3	Fabrication & Installation of Pipe Work
EEN-ESM-SPC-017	3	Flushing and Cleaning of Pipework
EEN-ESM-SPC-018	5	Specification for Thermal and Acoustic insulation of Pipework and Vessels
EEN-ESE-DGA-001	3	Cable Routing Plan for PMRS
EEN-ESE-DRG-001	5	General single line diagram for PMRS - Legend
EEN-ESE-DRG-001-5-at1_IB	5	General single line diagram for PMRS $Q_n > 15,000 \text{ m}^3/\text{h}$ - LV Switchgear
EEN-ESE-DRG-001-5-at2_IB	5	General single line diagram for PMRS - UPS
EEN-ESE-DRG-002	3	MV single line diagram for PMRS
EEN-ESE-DRG-003	4	General single line diagram for PMRS $50,000 \text{ m}^3/\text{h} < Q_n < 150,000 \text{ m}^3/\text{h}$ . LV switchgear.
EEN-ESE-DRG-004	4	General single line diagram for PMRS $Q_n < 50,000 \text{ m}^3/\text{h}$ . LV switchgear.
EEN-ESE-LIS-001	4	Electrical Requirements and Load Lists
EEN-ESE-LIS-002	3	Requirements for electrical equipment list. Equipment, cables, terminals.
EEN-ESE-SPC-001	5	Functional Specification for Switchgear
EEN-ESE-SPC-002	5	Functional Specification for Electrical Installation and Cabling
EEN-ESE-SPC-003	4	Functional Specification for 24 V DC UPS
EEN-ESE-SPC-004	6	Functional Specification for 400 / 230 V AC UPS
EEN-ESE-SPC-005	3	Functional Specification for Earthing and Lightning Protection
EEN-ESE-SPC-006	4	Electrical Construction and Installation Specification
EEN-ESJ-DBD-002	3	Telecommunication Block Diagram
EEN-ESJ-DBD-012	5	Control System Layout





ENG-X81-MAN-0001	1	Document Control Manual
EEN-ENG-MAN-001	5	Engineering Manual
EEN-ESJ-DAT-021	4	Instrument Data Sheets for P&ID No. EEN-ESP-DPD-009 (For reference and guidelines .Specific data such as diameter and tag no. shall be in accordance with Legend and relevant PFD).
EEN-ESJ-DAT-022	4	Instrument Data Sheets for P&ID No. EEN-ESP-DPD-010 (For reference and guidelines .Specific data such as diameter and tag no. shall be in accordance with Legend and relevant PFD).
EEN-ESJ-DAT-023	4	Instrument Data Sheets for P&ID No. EEN-ESP-DPD-011 (For reference and guidelines .Specific data such as diameter and tag no. shall be in accordance with Legend and relevant PFD).
EEN-ESJ-DAT-024	4	Instrument Data Sheets for P&ID No. EEN-ESP-DPD-013 (For reference and guidelines .Specific data such as diameter and tag no. shall be in accordance with Legend and relevant PFD).
EEN-ESJ-DAT-025	4	Instrument Data Sheets for P&ID No. EEN-ESP-DPD-014 (For reference and guidelines .Specific data such as diameter and tag no. shall be in accordance with Legend and relevant PFD).
EEN-ESJ-DAT-026	4	Instrument Data Sheets for P&ID No. EEN-ESP-DPD-015 (For reference and guidelines .Specific data such as diameter and tag no. shall be in accordance with Legend and relevant PFD).
EEN-ESJ-DAT-027	4	Instrument Data Sheets for P&ID No. EEN-ESP-DPD-016 (For reference and guidelines .Specific data such as diameter and tag no. shall be in accordance with Legend and relevant PFD).
EEN-ESJ-DAT-028	4	Instrument Data Sheets for P&ID No. EEN-ESP-DPD-017 (For reference and guidelines .Specific data such as diameter and tag no. shall be in accordance with Legend and relevant PFD).
EEN-ESJ-DAT-029	4	Instrument Data Sheets for P&ID No. EEN-ESP-DPD-008 (For reference and guidelines .Specific data such as diameter and tag no. shall be in accordance with Legend and relevant PFD).
EEN-ESJ-DAT-030	3	Instrument Data Sheets for P&ID No. EEN-ESP-DPD-021 (For reference and guidelines .Specific data such as diameter and tag no. shall be in accordance with Legend and relevant PFD).
EEN-ESJ-DAT-031	4	Instrument Data Sheets for P&ID No. EEN-ESP-DPD-012 (For reference and guidelines .Specific data such as diameter and tag no. shall be in accordance with Legend and relevant PFD).
EEN-ESJ-LIS-020	4	Instrument Index List P&ID EEN-ESP-DPD-008 (For reference and guidelines .Specific data such as diameter and tag no. shall be in accordance with Legend and relevant PFD).
EEN-ESJ-LIS-021	4	Instrument Index List P&ID EEN-ESP-DPD-009 (For reference and guidelines .Specific data such as diameter and tag no. shall be in accordance with Legend and relevant PFD).





EEN-ESJ-LIS-022	4	Instrument Index List P&ID EEN-ESP-DPD-010 (For reference and guidelines .Specific data such as diameter and tag no. shall be in accordance with Legend and relevant PFD).
EEN-ESJ-LIS-023	4	Instrument Index List P&ID EEN-ESP-DPD-011 (For reference and guidelines .Specific data such as diameter and tag no. shall be in accordance with Legend and relevant PFD).
EEN-ESJ-LIS-024	4	Instrument Index List P&ID EEN-ESP-DPD-013 (For reference and guidelines .Specific data such as diameter and tag no. shall be in accordance with Legend and relevant PFD).
EEN-ESJ-LIS-025	4	Instrument Index List P&ID EEN-ESP-DPD-014 (For reference and guidelines .Specific data such as diameter and tag no. shall be in accordance with Legend and relevant PFD).
EEN-ESJ-LIS-026	4	Instrument Index List P&ID EEN-ESP-DPD-015 (For reference and guidelines .Specific data such as diameter and tag no. shall be in accordance with Legend and relevant PFD).
EEN-ESJ-LIS-027	4	Instrument Index List P&ID EEN-ESP-DPD-016 (For reference and guidelines .Specific data such as diameter and tag no. shall be in accordance with Legend and relevant PFD).
EEN-ESJ-LIS-028	4	Instrument Index List P&ID EEN-ESP-DPD-017 (For reference and guidelines .Specific data such as diameter and tag no. shall be in accordance with Legend and relevant PFD).
EEN-ESJ-LIS-029	3	Instrument Index List P&ID EEN-ESP-DPD-021 (For reference and guidelines .Specific data such as diameter and tag no. shall be in accordance with Legend and relevant PFD).
EEN-ESJ-SPC-001	5	Functional Specification for Field Instruments
EEN-ESJ-SPC-003	5	Functional Specification for Instrument Tubing
EEN-ESJ-SPC-004	5	Functional Specification for Instrument Cabling and Installation
468478-3	3	H2O Gas Analysis System Specification
468476-3	3	H2S Gas Analysis System Specification
468480-2	3	HCDP Gas Analysis System Specification
EEN-ESJ-SPC-005	7	Functional Specification for Station Control System
EEN-ESJ-SPC-007	4	Functional Specification for Fire and Gas Detection System
EEN-ESJ-SPC-010	5	Functional Specification for Telecommunication Interfaces
EEN-ESJ-SPC-017	3	Functional Requirements for PRMS





IEN-CSE-PRO-0004	3	General Cold - commissioning Procedure for PRMS
IEN-CSE-PRO-0003	5	General Hot - Commissioning Procedure for PRMS

IEN-CSE-PRO-0011	4	Flange Assembly procedure
THL-ESM-DDT-0021	2	Make up water feeding system

#### Civil Drawings

ENG-X17-SPC-0014	3	General Design Instruction for PRMS Station and its appendixes
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#### Installation Option Specifications

IEN-CSE-SPC-0025	9	General construction requirements for PRMS installation work
COS-CPR-SPC-0002	4	Battery Limits between PRMS installation contractor and other contractors
IEN-CSE-PRO-0007	8	General leak Teas Procedure for PRMS site installation & Strength Test for Vents

In addition, the below specifications shall be considered as integral part of the Contract for the **installation of PRMSs**

Document or Form No.	Rev.	Document Title
<b>General Contractual Specifications</b>		
IEN-CSE-SPC-0025	9	General Construction Requirements for PRMS Installation Works
IEN-ESM-SPC-0001	Latest revision	General rules for certification (issued as part of the supply specifications)
COS-CPR-SPC-0002	4	Battery Limits Between PRMS Installation Contractor and Other Contractors
EEN-EPI-SPC-004	3	General QA requirements
EEN-EPI-SPC-008	3	Frame Works of Inspection
EEN-EPI-SPC-030	2	Third party inspection
IEN-CSE-SPC-009	1	Precaution Against proximity effect
IEN-CSE-SPC-010	1	Supply of materials
IEN-CSE-SPC-017	1	Procedure for entering and Seizing of Work site
IEN-CSE-LIS-0034	1	Example of Typical Check List



<b>Welding Specifications / forms</b>		
EEN-CSE-SPC-001	<b>6</b>	Field Welding
EEN-CSE-SPC-002	<b>7</b>	Welding Inspection
<b>Mechanical Specifications / forms</b>		
EEN-CSE-SPC-007	5	Tie-In
EEN-ESM-SPC-005	Latest revision	Painting (issued as part of the supply specifications)
EEN-ESM-SPC-003	Latest revision	Installation of Instruments and Instrument Piping (issued as part of the supply specifications)
EEN-ESM-SPC-008	Latest revision	Document requirements (issued as part of the supply specifications)
EEN-ESM-SPC-015	Latest revision	Pressure Testing of Pipe work (issued as part of the supply specifications)
EEN-ESM-SPC-016	Latest revision	Fabrication & Installation of Pipe work (issued as part of the supply specifications)
EEN-ESM-SPC-017	Latest revision	Flushing and Cleaning of Pipe work (issued as part of the supply specifications)
IEN-CSE-PRO-0007	Latest revision	General Leak Test Procedure for PRMS site installation (issued as part of the supply specifications)
EEN-ESM-SPC-018	Latest revision	Specification for Thermal and Acoustic Insulation of Pipework and Vessels (issued as part of the supply specifications)
	2	Check list before tightness test of PRMS station
	1	Data for the pressure test, Pipe book cover sheet, Pipe book, Pressure test report
<b>Electrical &amp; Control specifications and check forms</b>		
IEN-CSE-PRO-0001	5	General Pre-commissioning procedure for PRMS's
IEN-ESE-SPC-0007	Latest revision	General Requirements for Electrical Design and Installation For PRMSs (issued as part of the supply specifications)
EEN-ESJ-SPC-014	<b>5</b>	Cable Installation
EEN-CSE-SPC-003	3	Conduit Laying
EEN-ESE-SPC-005	3	Functional Specification for earthing and lightning Protection
EEN-ESE-SPC-006	4	Electrical construction and installation specification
EEN-ESE-LIS-001	3	Electrical Requirements and Load Lists
EEN-ESE-LIS-002	3	Requirements for electrical equipment list. Equipment, cables, terminals
<b>INSPECTION CERTIFICATE ELECTRICAL INSTALATION</b>		
		Test Record MOTOR
		Test Record PUMP





		Test Record ELECTRICAL HEATER
		Test Record BOILER
		UPS TEST Procedure
		UPS TEST Procedure 230v
		UPS TEST Procedure 400v
		Test Record UPS - 230v
		Test Record UPS - 400v
		LIGHTNING test report
		Test Record DISTRIBUTION PANELBOARD
		Test Record LIGHTNING
		Test Record Ex PROF DEVICES
		Earth Resistance report
		ATS test report
		CAPACITOR test report
		Registration & inspection certificate of Electrical Installation
<b>CHECKLIST FOR INSPECTION AND TESTING OF ANALOG LOOP'S WIRING TEST</b>		
		calibration of instruments PT-TT
		CHECKLIST FOR INSPECTION AND TESTING OF DIGITAL LOOP'S WIRING TEST
		CHECKLIST FOR INSPECTION AND TESTING OF ANALOG LOOP'S WIRING TEST
		CHECKLIST FOR INSPECTION AND TESTING OF LOOP'S WIRING TEST
		CHECKLIST FOR INSPECTION AND TESTING OF MOV WIRING TEST
		CHECKLIST FOR INSPECTION AND TESTING OF PUMP WIRING TEST





## **Revision Record**

Rev. No.	Date	Description	Prepared	Checked	Approved	Date	Approved
1	21.12.23	Issued for Tender	SA	SY	SK		
2	27.3.23	Revised for Tender	SA	SY	SK		