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استوفت رسم وغرامة طلبه ٤٥٠٠٠ ل.س في ١٥ حزيران ٢٠٢٦
تاريخ
رقم
قيمة الرسم
قيمة الغرامة
المجموع
ملاحظات في
١٥ حزيران ٢٠٢٦



ملكو

SERVICE AGREEMENT

مراقب ضرائب
محمد نسيب عويدات

BETWEEN



THE LEBANESE MINISTRY OF ENERGY AND WATER (LMEW)

4138354

AND

TECHNICAL GAS PIPELINES OPERATION SERVICES CO. (TGS)

RELATING TO THE PROVISION OF TECHNICAL SERVICES
FOR REHABILITATION OF LEBANON
GAS PIPELINE SYSTEM



Date:, 2026

مراقب الضرائب الرئيسي
محمد حسين

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SERVICE AGREEMENT

THIS AGREEMENT is made on this day of 2026

BETWEEN:

A) **THE LEBANESE MINISTRY OF ENERGY AND WATER (LMEW)**
(hereinafter referred to as "LMEW").

AND

B) **TECHNICAL GAS PIPELINES OPERATION SERVICES CO.**
a company duly organized and existing under and by virtue of the laws
of Jordan (hereinafter referred to as "TGS").



RECITALS

- (1) LMEW wishes to execute rehabilitation, repair, and operational readiness works for the Lebanon Gas Pipeline System, including pipelines, stations, and associated facilities which consists of two pipelines, 24" / 30 Km, 10" / 1.4 km, N. Gas receiving terminal at Syrian Border, Filter /Meter station at Tripoli Oil Installations (TOIL), and PRMS at Deir Ammar Combined Cycle Power Plant (DACCPP).
- (2) TGS has responded to LMEW's invitation and submitted an offer to undertake the requested services; and
- (3) LMEW and TGS agreed that TGS will undertake the rehabilitation services of phase 1 in accordance with the terms and conditions herein contained;

THIS AGREEMENT WITNESSES that, in consideration of the covenants, obligations, and agreements herein contained, the parties hereto agree as follows:

1 GENERAL

1.1 *Appointment*

Subject to the terms and conditions hereof, LMEW appoints TGS to carry out the Services as described in Annex 1 (the "Services").



[Handwritten signature]

1.2 *Term of Agreement*

- 1.2.1 This Agreement shall come into effect on [....,,2026] (the “**Effective Date**”) and shall continue thereafter in full force and effect until the Services are accomplished or until its earlier termination or expiration in accordance with the terms therein.
- 1.2.2 Retrospective Application. The Parties acknowledge and agree to be bound by this Agreement from the Effective Date, irrespective of whether this Agreement is executed prior to or after the Effective Date.

2 **REMUNERATION**

2.1 *Fee for Services*

Subject to the terms of this Agreement, LMEW shall pay TGS the Lump Sum Fee set out in **Annex 2** in accordance with the payment schedule specified therein.

2.2 *Expenses*

Each Party shall be responsible for all the costs, charges, and expenses incurred by it in connection with the preparation of this Agreement. LMEW shall not be responsible for reimbursing TGS for any expenses incurred by TGS in the performance of the Services unless such expenses are set out in **Annex 2** or if they fall outside the scope of this Agreement.

Any verified additional costs incurred by TGS due to Force Majeure events and/or significant changes in energy prices beyond the control of either Party shall be reimbursed by LMEW through an approved variation order.

2.3 *Invoices*

Payment shall be made to TGS with respect to the Services performed and expenses referred to in Sections 2.1 and 2.2 within the times specified in **Annex 2**, provided that TGS has furnished LMEW with the relevant invoices together with any report(s) and documentation (if expressly required under this Agreement).

2.4 *Taxes*

- 2.4.1 The Lump Sum Fee is exclusive of VAT, customs duties, and any other taxes or official charges applicable in Lebanon, which shall be paid by LMEW.



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3 OBLIGATIONS OF TGS

3.1 Services

3.1.1 TGS shall carry out the Services upon the terms and conditions set out in this Agreement, and the Offer submitted by TGS as set out in **Annex 3**

3.1.2 TGS shall exercise reasonable skill, care, diligence, efficiency, and economy, in accordance with generally accepted professional techniques and practices, and shall observe sound management practices, and employ appropriate advanced technology and safe methods in accordance with its expertise for the performance of the Services.

3.2 Instructions and Directions

TGS shall comply with the reasonable instructions and directions in relation to the Services, and/or this Agreement, which are issued to TGS by LMEW from time to time in accordance with the Offer submitted by TGS and the terms of this Agreement.



3.3 Time of Services

3.3.1 TGS shall commence the Services on the Start Date (as defined in Clause 3.3.2 below), and tasks shall be performed and accomplished within the time table provided in TGS Offer as set out in **Annex 3**.

3.3.2 The Start Date shall occur on the date of which all of the following conditions precedent are fulfilled:

3.3.2.1 This Agreement is duly signed by the Parties and is in full force and effect.

3.3.2.2 **Phase 1** start date, fifteen days after the phase 1 first payment of USD (448,860) is made by LMEW to TGS

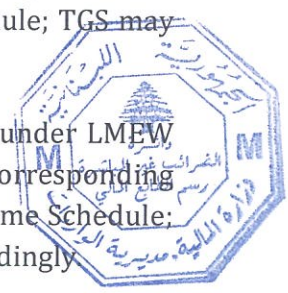
3.3.2.3 The Bank Guarantee referred to in **Annex 2** is duly delivered to TGS in form and substance satisfactory to TGS.

3.3.2.4 All necessary governmental and regulatory permits and consents in Lebanon required for TGS to carry out the Services are granted.



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- 3.3.3 TGS shall devote sufficient time and attention to perform the Services throughout the term of this Agreement in a professional manner, and to meet the milestones and schedule as set out in the TGS Offer in **Annex 3**.
- 3.3.4 LEMW shall take responsibility for any delay that is due to the action or inaction of TOIL, DACCPP, or any other supplier or person (whether natural person, legal entity, or public administration).
- 3.3.5 Any delay in customs release and/ or for the parts and/or equipment ordered/required for the project shall cause a corresponding extension in completion of the Services as set out in the Time Schedule; TGS may issue a modified Time Schedule accordingly.
- 3.3.6 Any delay in performing any of the works that are falling under LMEW responsibility, as mentioned in **Annex 1**, shall cause a corresponding extension in completion of the Services as set out in the Time Schedule; TGS may issue and submit a modified Time Schedule accordingly.
- 3.3.7 Any delay in payments as set out in Payment Terms in **Annex 2** shall cause a corresponding extension in completion of the Services as set out in the Time Schedule; a modified Time Schedule may be issued and submitted accordingly.
- 3.3.8 Force Majeure events beyond either Party's control (e.g., natural disasters, war, or government actions) excuse the delay, allow a time extension, and prevent penalties or liability for the affected Party.



3.4 Confidentiality

- 3.4.1 Each Party shall not, and shall ensure that its affiliates, officers, employees, agents, subcontractors, suppliers, consultants, and professional and other advisors shall not, divulge or dispose of or part with possession, custody or control of or use for any other purpose other than the performance of obligations under this Agreement, any material or information designated in writing as confidential which was:
- 3.4.1.1 Provided by one Party to the other pursuant to this Agreement; or
- 3.4.1.2 Prepared or obtained by either Party pursuant to this Agreement;
- 3.4.1.3 (together and separately "Confidential Information") except with the prior written consent of the other Party.



Handwritten blue ink signatures and initials.

3.4.2 The obligations contained in this Clause (Confidentiality) shall not apply to any Confidential Information which:

3.4.2.1 on the date of this Agreement or at any time after the date of this Agreement comes into the public domain other than through a breach of this Agreement by the receiving Party, or

3.4.2.2 was disclosed to either Party by a third party who did not have an apparent confidentiality obligation towards the non-disclosing Party.

4 INDEPENDENT CONTRACTORS

4.1 ***TGS is not an Employee***

4.2 ***TGS shall not contract on behalf of LMEW***

TGS shall not, without the prior written consent of LMEW, enter into any contract or commitment in the name of or on behalf of LMEW or bind LMEW towards any third party.



5 TERMINATION

5.1 ***Termination by LMEW or TGS for Cause***

LMEW or TGS may terminate this Agreement at any time in the event of a breach imputable to the other Party of any term or condition of this Agreement, where (i) such breach has a material adverse effect on the Party invoking termination, and (ii) the other Party has failed to remedy such breach within 30 days of receiving notice of the same.

5.2 ***Termination on Insolvency***

This Agreement shall be terminated upon the insolvency of TGS.

5.3 ***Provisions Surviving Termination***

Notwithstanding any termination of this Agreement for any reason whatsoever and with or without cause, the provisions of Section 5.4 and any other provisions of this Agreement necessary to give efficacy thereto shall continue in full force and effect following any such termination.



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5.4 **Entitlement of TGS Following Termination**

Upon termination of this Agreement in accordance with Article 5, TGS shall be entitled to be paid all amounts due to it under the law and/or amounts due for the Services prior to the effective date of termination.

6 **INTERPRETATION AND ENFORCEMENT**

6.1 **Annexes and Contract Documents**

- 6.1.1 In interpreting the provisions of the Agreement, terms and conditions of the Clauses of this Agreement shall take precedence over the Annexes unless expressly stated otherwise.
- 6.1.2 The following contract documents shall form the Agreement and constitute an integral part hereof, and in case of ambiguity or conflict between any of the contract documents, precedence shall be applied in the following priority order:
- The Agreement; and
 - The Offer submitted by TGS in **Annex 3**



6.2 **Sections and Headings**

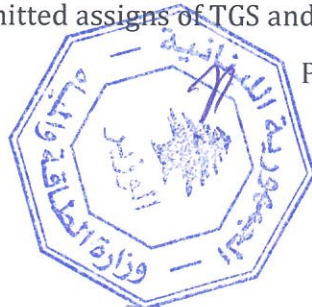
The division of this Agreement into Articles and Sections and the insertion of headings are for the convenience of reference only and shall not affect the construction or interpretation of this Agreement. The terms "this Agreement", "hereof", "hereunder" and similar expressions refer to this Agreement and not to any particular Article, Section or other portion hereof and include any agreement or instrument supplemental or ancillary hereto. Unless something in the subject matter or context is inconsistent therewith, references herein to Articles and Sections are to Articles and Sections of this Agreement.

6.3 **Extended Meanings**

In this Agreement, words importing the singular number only include the plural and *vice versa*, words importing any gender include all genders, and words importing persons include individuals, corporations, or similar limited liability entities, partnerships, associations, trusts, unincorporated organizations, and *vice versa*.

6.4 **Benefit of Agreement**

This Agreement shall be to the benefit of and be binding upon the heirs, executors, administrators, legal personal representatives, successors, and permitted assigns of TGS and the LMEW, respectively.



M. A. L. Q.

6.5 Entire Agreement

This Agreement constitutes the entire agreement between the Parties with respect to the subject matter hereof and cancels and supersedes any prior understandings and agreements between the Parties hereto with respect thereto. There are no representations, warranties, forms, conditions, undertakings, or collateral agreements, express, implied, or statutory between the Parties other than as expressly outlined in this Agreement.

6.6 Amendments and Waivers

No amendment to this Agreement shall be valid or binding unless set forth in writing and duly executed by both of the Parties hereto. No waiver of any rights relating to any breach of any term or provision of this Agreement shall be effective or binding unless made in writing and signed by the party purporting to give the same and, unless otherwise provided in the written waiver, shall be limited to the specific breach waived.

6.7 Assignment

Except as may be expressly provided in this Agreement, neither party hereto may assign his or its rights or obligations under this Agreement without the prior written consent of the other party hereto.



6.8 Severability

If any provision of this Agreement is determined to be invalid or unenforceable in whole or in part, such invalidity or unenforceability shall attach only to such provision or part thereof, and the remaining part of such provision and all other provisions hereof shall continue in full force and effect.

6.9 Notices

Any demand, notice, or other communication to be made or given in connection with this Agreement shall be made or given in writing and may be made or given by personal delivery, registered mail (or by Fax or E-mail if receipt is acknowledged) addressed to the recipient as follows:



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To LMEW:

P.O Box:

Attention:

Fax:

E-mail:

To TGS:

P.O Box : 33 Amman – Al Jizah - 16010 Jordan

Attention : Eng. Ahmed Yousef

Fax : 00962 6 4711190

E-mail : ayousef@tgs.com.jo



or such other address or individual as may be designated by notice by either party to the other. Any demand, notice, or other communication made or given by personal delivery shall be conclusively deemed to have been given on the day of actual delivery thereof.

6.10 Governing Law

This Agreement shall be governed by and construed in accordance with the laws of Lebanon.

6.11 Dispute Resolution

Any dispute which cannot be amicably settled between the Parties shall be referred to arbitration in accordance with the Rules of Arbitration of Cairo Regional Centre for International Commercial Arbitration. The Arbitration place shall be in Cairo, Egypt, and the award shall be final and binding upon the Parties.

6.12 Commercial Nature of the Contract

Each of the Parties irrevocably represents, warrants and agrees that this Agreement is of a commercial nature and entered into for commercial purposes only, that the signing and performance of the Agreement by such Party constitutes private and commercial acts rather than governmental and public acts, and that both of the Parties are subject to civil and commercial law with respect to its obligations under the Agreement.



M.E.C.

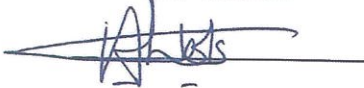
6.13 **Waiver of Immunity**

Each Party irrevocably waives and agrees not to claim any immunity from arbitral or legal proceedings with respect to itself or any of its assets and/or any immunity from any forms of execution, enforcement, or attachment to which it or its property is now or may hereafter become entitled under the laws of any jurisdiction.

IN WITNESS WHEREOF, the Parties have executed this Agreement.

For and on behalf of LMEW

**The LEBANESE MINISTRY OF ENERGY
AND WATER**

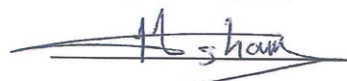


Name: Aly El Halaby

Title : Ambassador Of Lebanon in Egypt

For and on behalf of TGS

**TECHNICAL GAS PIPELINES OPERATION
SERVICES CO.**



Name: Hesham Hussein

Title : CEO



THIS AGREEMENT IS EXECUTED UNDER THE KIND PATRONAGE AND SUPPORT OF:



H.E. Joseph Saddi
**Minister of Energy and Water
Lebanese Republic**

H.E. Karim Badawi
**Minister of Petroleum and Mineral Resources
Arab Republic of Egypt**

6.13 **Waiver of Immunity**

Each Party irrevocably waives and agrees not to claim any immunity from arbitral or legal proceedings with respect to itself or any of its assets and/or any immunity from any forms of execution, enforcement, or attachment to which it or its property is now or may hereafter become entitled under the laws of any jurisdiction.

IN WITNESS WHEREOF, the Parties have executed this Agreement.

For and on behalf of LMEW
The LEBANESE MINISTRY OF ENERGY AND
WATER

For and on behalf of TGS
TECHNICAL GAS PIPELINES OPERATION
SERVICES CO.



M. H. Hussein

Name:
Title:

Name: Hesham Hussein
Title: CEO



ANNEX 1 –SERVICES

TGS shall perform the following rehabilitation activities ('Services'):

1. Pipeline:

- Repair the known 24" pipeline damage (material supplied by TOIL), taking into account Section 3, Item 3.1.1.1 of the Technical and Financial Offer.
- Nitrogen pressure test (leak test) for the 24" pipeline line after permanent repair at the pipeline.
- ILL inspection of the 24" pipeline after safe gas-in is.

2. Station Mechanical System:

- CLT for the three stations.
- Functional testing of Filters, Isolation valves, and Actuators.
- Modification of tubing arrangements for line break override systems.
- Supervision of sandblasting and painting activities of exposed piping and steel structures at all 3 stations.

3. Cathodic protection for pipeline:

- Replacement of the faulty TR-REC unit at the border station with another one from the TOIL store.
- Adjustment and optimization of transformers' output current levels.
- Adjustment and optimization of cathodic protection effectiveness along 10" and 24" pipelines.
- Measurement and documentation of CP readings.

4. Electrical system

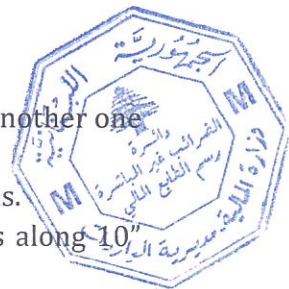
- Replacement of faulty UPS modules and fast chargers at the Border station.
- Replacement of the faulty UPS module at Deir Ammar station.
- Replacement of degraded battery banks at 3 stations.
- Clear all units' alarms.

5. Metering system:

- Restoration and configuration of the Flow Computer configuration parameters in the TOIL station.
- Replace metering spools on metering stream #1 with the calibrated Turbine Meters in both TOIL and DIR AMMAR stations.
- Install and calibrate PT and TT for the new metering stream.
- Perform all electrical connections at the field and inside the control panel.
- Make all programming and configuration modifications on the flow computers to read the new turbine meters.



M. V. C. O.



- Dismantle the turbine meters on metering stream #2 and replace them with spools, and prepare them for sending to calibration.
- Preparation of calibration certificates.

6. Pressure Reduction line and water bath heater:

Execution of full inspection and repair for the reduction lines, including:

- Replacement of regulator repair kits.
- Inspection of internal regulator components.
- Functional testing of pressure regulators after gas-in.
- Lock-up pressure testing.
- Verification of redundancy and automatic takeover logic.
- functional testing of reduction lines.
- Water bath heater 1 manual startup, tuning, and operational optimization after gas-in.

7. Control, PLC, SCADA & Communication Systems:

- Restoration and configuration of PLC systems in TOIL and border stations.
- Software licensing and system activation in the TOIL station.
- Repair of optical distribution frames (ODF) in the TOIL station.
- Testing of primary and backup communication systems
- Replace the backup battery for the PLC at 3 stations.



8. Deliverables

TGS shall submit the following deliverables, as applicable to the executed scope of work:

8.1. Metering System

- Data sheets for metering line instruments (PT & TT).
- Calibration certificates for metering line instruments (PT & TT).
- Calibration certificate for the calibrated turbine meter.
- Flow computer configuration file.

8.2. PLC and SCADA System

- Source code of the updated PLC and SCADA programs.
- System Software license.

8.3. UPS System

- New UPS manuals and wiring.

8.4. Training

- Training for TOIL personnel on SCADA system operation.



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9. Phase 1 activities excluded from TGS scope of work (LMEW Responsibility):

- Excavation and works permit from the competent authorities.
- Any other damages found in the pipelines other than the only known 24" pipeline damage outlined in Section 3, Item 3.1.1.1 of the Technical and Financial Offer (to be evaluated and priced).
- Disposal of materials during and after rehabilitation, including but not limited to (water, used pigs, ...).
- Customs clearance of equipment, insurance, and materials required for the sandblasting and painting activities.
- Civil works.
- Obtaining all necessary governmental and regulatory permits and consents in Lebanon is required for TGS to carry out the Services.
- supply of any additional spare parts



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ANNEX 2 – FEES & EXPENSES

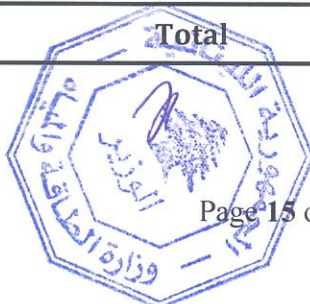
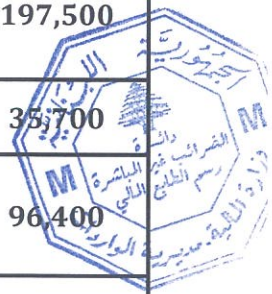
LMEW shall pay to TGS the following Lump Sum Fee for Services performed in accordance with the Agreement:

(A) Lump Sum Fee:

The total Lump Sum Fee for rehabilitation tasks performed by TGS under this Agreement (Phase 1 activities) is US\$ 748,100 (Seven Hundred Forty-Eight Thousand and One Hundred. US DOLLAR)

The breakdown of the Lump Sum Fee is as follows:

Item	Task	Cost (USD)
Mechanical Activities	Repair the 24-inch pipeline damage and leak test before gas to determine any critical points, then perform CLT for the three Stations (Border, TOIL, DACCPP)	197,500
Sandblasting and Painting	TOIL team execution with TGS supervision.	35,700
Cathodic protection and UPS	UPS system maintenance & replace Battery bank in 3 stations (Border, TOIL, DACCPP) and replacing Aboudiya Transformer unit, hence readjust all transformers' output	96,400
Reduction and WBH	Inspection, maintenance, and start-up for Reduction lines and WBH 1	79,200
Metering Stations	Install calibrated flow meters, calibrate PTs and TTs in metering stream #1, finish all required field connections, reconfigure flow computers accordingly, hence dismantle meters on stream #2, and prepare them for shipping to calibration	32,600
Control and SCADA System	Repair ODF at TOIL station, reactivate operating system, and retrieve data on TOIL SCADA client, fix and reprogram PLC at 3 stations (Border, TOIL, DACCPP). In addition to reconfigure and test the communication backup system in 3 stations (Border, TOIL, DACCPP).	31,200
ILI	In Line Inspection after gas in for the 24-inch pipeline.	275,500
Total		\$748,100



M.A. 3/7 C.Q.

(B) Expenses

Save as otherwise provided under this Agreement, or TGS Offer (set out in **Annex 3**), LMEW shall not reimburse TGS for any expenses incurred by TGS in relation to the provision of the Services. All such expenses are included in the Lump Sum Fee.

(C) Lump Sum Fee is exclusive of:

- (i) VAT, customs duties, or any other taxes, duties, or official charges applicable in Lebanon.
- (ii) any tasks that are not explicitly provided in Section 1 of **Annex 1**.
- (iii) The decision to perform the In-Line Inspection (ILI) activity for the 10-inch pipeline shall be taken at a later stage, following mutual agreement between the parties.

(D) Invoices

- i. TGS shall, upon signing of this Agreement, deliver to LMEW an invoice for the 1st payment.
- ii. TGS shall deliver to LMEW the invoices for progress payments (2nd & 3rd payments) together with progress reports.
- iii. TGS shall deliver to LMEW the invoice for final payment (4th payment) together with the closing report.



(E) Payment Terms:

(1) Payments will be made by LMEW to TGS over 4 installments as detailed in the table below. Payments shall be made by LMEW within 7 days from receipt of the relevant invoice together with the relevant reports and documents, but in any case, no later than the payment due dates set out below:



M. Hassan *L. Q.*

<u>Sr.</u>	<u>Payment % of Lump Sum Fee</u>	<u>Payment Amount USD</u>	<u>Payment Due Date</u>
1 st	60%	448,860	Two weeks before the start date of the rehabilitation tasks
2 nd	20%	149,620	After finishing the activities, Mechanical Activities, Cathodic protection, Metering Stations & Control, and SCADA System
3 rd	10%	74,810	After finishing the Installation of UPS & Painting Activities supervision
4 th	10%	74,810	Two weeks after gas-In, or 75 days from phase 1 start date in case of no gas-in.

(2) Unless another bank account is notified in writing by TGS to LMEW, all payments by the LMEW to TGS pursuant to this Agreement shall be made through a wire transfer to the following Bank account:

Account Name : **Technical Company for Gas Pipeline Operation Services**
Bank Name : **Housing Bank for Trade and Finance**
Account No. : **012 6873000201001**
Swift Code : **HBHOJOAXXX**
IBAN : **JO52 HBHO 0010 0001 2687 3000 2010 01**



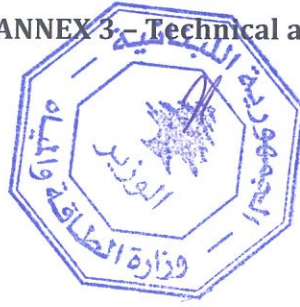
(F) Bank Guarantees

LMEW shall no later than one week from the date of this Agreement, provide TGS with an irrevocable Standby Letter of Credit in an amount of **USD (299,240)** representing the balance of the Lump Sum Fee after deducting the first payment, to be issued by a bank of LMEW choice and confirmed by a bank licensed in Jordan acceptable to TGS, and in form and substance satisfactory to TGS for payment of the Lump Sum Fee as set out in **Annex 2**. The irrevocable Standby Letter of Credit shall secure TGS payments under this Agreement



M. Hassan
S. Q.

ANNEX 3- Technical and Financial offer



Handwritten signature and initials in blue ink.





Lebanon Gas Pipeline System

Rehabilitation Project

Technical & Financial Offer

Submission Date: 09 - 03 - 2026

Submitted by: [Technical Gas Services]

[Amman - Al Qastal - Air Cargo Way - P.O. Box:33 Amman - Al Jizah -16010 Jordan]

Tel: [+95264711161]

Fax: [+96264711190]

www.tgs.com.jo



Revision Log

Rev.	Date	By	Description
00	09/03/2026	TGS	Original

This proposal contains valuable proprietary and confidential information of TGS and must not be disclosed to any third party without an explicit agreement, given in writing, by TGS. The information contained within this proposal is subject to any applicable confidentiality or non-disclosure agreements between TGS and the party to whom this proposal is addressed ("Recipient"). By accepting receipt of this proposal, the Recipient acknowledges that this proposal is the proprietary and confidential information of TGS, except for the information contained within the proposal that was previously provided by Recipient. The recipient must hold this proposal confidential to the same standards that it holds its information confidential. TGS has relied on information provided by the Recipient in the development of this proposal. TGS disclaims liability for all loss or damage resulting from inaccuracy in Recipient-provided information. If a contract is awarded based on this proposal, any adjustments to the scope of such contract required as a result of incorrect or incomplete Recipient-provided information may result in adjustments to the contract schedule or price.



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1. Introduction:

Technical Gas Services (TGS) is pleased to submit this Technical Offer for the execution of rehabilitation, repair, and operational readiness works for the **Lebanon Gas Pipeline System**, including pipelines, stations, and associated facilities.

The Lebanon Gas Pipeline System was installed in 2004 and commissioned in 2009 to supply natural gas to the Deir Ammar Combined Cycle Power Plant (DACCPP). Gas supply was suspended in 2011, and the system remained idle for an extended period. A detailed technical evaluation performed in 2021 **by TGS** identified several integrity and system readiness issues. Stage 1 rehabilitation works were executed in 2022 **by TGS** to address critical deficiencies and restore system readiness.

Due to prolonged idle conditions, environmental exposure, and power supply limitations, a re-evaluation was conducted in 2025 **by TGS**. This re-evaluation confirmed the necessity of **additional mandatory rehabilitation works** prior to gas-in, as well as recommended works to be executed during or after gas-in.

This offer is prepared based on:

- The **Technical Re-Evaluation Report – Current System Status (2025)** prepared by TGS following site visits conducted in December 2025.
Appendix 1



The proposed works are intended to:

- Address all mandatory technical actions required prior to gas-in.
- Restore reliability of mechanical, electrical, instrumentation, and cathodic protection systems.
- Prepare the system for safe commissioning and gas-in.
- Ensure sustainable operation and perform all required inspections after gas-in.



2. Scope of Work Strategy

The primary objective for the offer is to ensure efficient execution with minimal delays to gas-in and optimum cost, hence this Technical Offer is structured to directly support this objective.

The scope of work is structured according to:

- Criticality to gas-in.
- Operational dependency.

Accordingly, the scope is divided into:

- Phase 1:
 - Part A – Mandatory Works Prior to Gas-In.
 - Part B – Mandatory Works During / After Gas-In.
- Phase 2:
 - Works required to ensure continuous reliable operation.



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3. Detailed Scope of Work – Phase 1

3.1. Part A – Mandatory Works Prior to Gas-In

3.1.1. Pipeline Repair and Integrity Works:

3.1.1.1. Repair of third-party damage (24" pipeline)

- Expose the damaged section near the river crossing.
- Remove any temporary or non-standard repair (e.g. mechanical clamp).
- Execute a permanent repair in accordance with the applicable pipeline code (e.g. complete sleeve).
- Perform full NDT on all new welds as per code requirements.

3.1.1.2. Nitrogen pressure test (leak test for 24-inch pipeline)

- After permanent repair, perform a nitrogen pressure leak test on the 24-inch pipeline.
- Verify that there is no detectable leakage at the repaired area or along the pipeline.
- Confirm and restore nitrogen preservation to the agreed standby pressure on the full 24" line.

3.1.2. Station Mechanical Systems

- Execution of Commissioning Leak Testing (CLT) for all 3 stations.
- Functional testing of:
 - Filters
 - Isolation valves.
 - Actuators.
- Modification of tubing arrangements for line break override systems.



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- Surface preparation, sandblasting, and painting of exposed piping and steel structures at all 3 stations, using a 3-layer specialized coating system suitable for the site conditions.
 - **TOIL team execution with TGS supervision:**
 - TOIL team to carry out surface preparation, sandblasting, and application of the 3-layer coating system.
 - TGS to provide technical work procedures, supervision and quality control.

3.1.3. Pressure Reduction System

- Execution of full inspection and repair for the reduction lines including:
 - Replacement of regulator repair kits.
 - Inspection of internal regulator components.
 - Functional testing of pressure regulators.
 - Lock-up pressure testing.
 - Verification of redundancy and automatic takeover logic.

3.1.4. Metering Systems

- Restoration and configuration of Flow Computer configuration parameters in TOIL station.
- Replace metering spools on metering stream #1 with the calibrated Turbine Meters in both TOIL and DIR AMMAR stations.
- Install and calibrate PT and TT for the new metering stream.
- Perform all electrical connections at field and inside control panel.
- Make all programming and configurations modifications on flow computers to read the new turbine meters.
- Dismantle the turbine meters on metering stream #2 and replace them with spools and prepare them for sending to calibration.
- Preparation of calibration certificates.



3.1.5. Control, PLC, SCADA & Communication Systems

- Restoration and configuration of PLC systems in TOIL and border stations.
- Software licensing and system activation in TOIL station.
- Repair of optical distribution frames (ODF) in TOIL station.
- Testing of primary and backup communication systems
- Replace backup battery for PLC at 3 stations.

3.1.6. Electrical Systems

- Replacement of faulty UPS modules and fast chargers at Border station.
- Replacement of faulty UPS module at Deir Ammar station.
- Replacement of degraded battery banks at 3 stations.
- Clear all units' alarms.

3.1.7. Cathodic Protection Systems

- Replacement of faulty TR-REC unit at border station.
- Adjustment and optimization of transformers' output current levels.
- Adjustment and optimization of cathodic protection effectiveness along 10" and 24" pipelines.
- Measurement and documentation of CP readings.



3.2. Part B – Works During / After Gas-In

- **Inline inspection (ILI)**

- ILI inspection of the 24" pipeline after safe gas-in is considered mandatory because:
 - The cathodic protection (CP) system was not fully effective for an extended period.
 - The last hydrotest in 2022 was carried out at 75 bar, and the current justified FFS operating pressure is therefore limited to 50 bar.
 - The patrolling / ROW inspection log is not fully complete, so external threats may not be fully documented.
- The ILI is required to:
 - Confirm the current integrity of 24" pipeline.
 - Update the fitness-for-service (FFS) assessment based on actual measured wall thickness and defect data.
 - Verify their suitability to operate again at the original design operating condition of 80 bar.
 - The decision to perform the In-Line Inspection (ILI) activity for the 10-inch pipeline shall be taken at a later stage, following mutual agreement between the parties.
- Until ILI results are available and a new integrity assessment is completed, the resumed operation should be treated as a temporary, limited operating mode and not as a basis for long-term or full-life operation of the pipelines.

- **Live-gas testing**

- functional testing of reduction lines.
- Water bath heater 1 manual startup, tuning, and operational optimization.



4. Detailed Scope of Work – Phase 2

4.1. Metering system for TOIL & DACCPP:

- Supply new parts.
- Installing new PT&TT for metering lines and commissioning for the two new flow computers.
- Inspection, Repair and handling for two turbine meters at factory.
- Wet calibration of two turbine meters at accredited third-party laboratory.
- Installing and commissioning two turbine meters after re-calibration.

4.2. Gas Chromatograph:

- Supply new analyzer shelter with two redundant Gas Chromatographs with full accessories and commission spares.
- Installing, Commissioning and start-up.

4.3. Water Bath Heater:

- Supply new parts and maintenance completion.
- Commissioning and startup activities for WBH 2.



4.4. Actuator maintenance:

- Study to enhance and modify current actuation philosophy and safe actions.

4.5. Lightning System:

- Inspection, survey, Installing and commissioning the system to be done by TOIL under supervision from TGS (six working days for commissioning).



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4.6. HVAC replacement:

- Supply new material, dismantle old HVAC, install new material, commissioning, and start-up at three stations to be done by TOIL under supervision from TGS.

5. Activities excluded out of TGS SoW:

- Excavation and works permit from the competent authorities.
- Any other damages found in the pipelines other than the only known 24" pipeline damage (to be evaluated and priced).
- Disposal of materials Disposal of materials during and after rehabilitation, including but not limited to (water, used pigs, ...).
- supply of any additional spare parts.
- Customs clearance of equipment, spares, and materials required for the project.
- Civil works.

6. Execution Period:

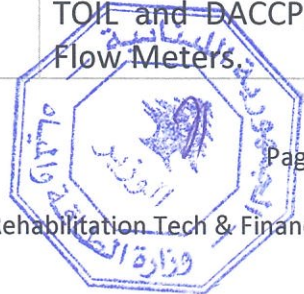
- **Phase 1:**
 - **Part A:**
 - 21 days (until ready for gas-in).
 - 15 days (TGS staff supervision will be distributed throughout the full duration of the surface preparation, sandblasting, and painting activities)
 - **Part B:**
 - 5 days (Live testing during and after gas in).
 - 1 month (Inline Inspection) starting from mobilization.
- **Phase 2:**
 - 11 to 13 months subject to the earliest delivery of parts and vendors availability.



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7. Action Plan:

Item	Action	Responsibility	Assistance
Pipeline	Repair the 24-inch pipeline damage.	TGS	TOIL
	Pressure test before gas to determine any critical points.	TGS	TOIL
	Inline inspection after gas-in for the 24-inch pipeline.	TGS	TOIL
CLT	Perform CLT for the three Stations (Border, TOIL, DACCPP).	TGS	TOIL
Reduction lines	Maintenance, commissioning, and start-up.	TGS	Pietro Fiorentini
Heaters	Maintenance, commissioning, and start-up.	TGS	Metano Impianti
Gas Chromatographs	Supply and commissioning to new complete GC shelter with all accessories and commission spares.	TGS	GC Vendor
Metering systems	Reconfigure Flow Computer in TOIL station.	TGS	
	Install Calibrated Flow Meter in metering stream #1 in both TOIL and DACCPP stations and finish all required field and control panel connections.	TGS	
	Install and calibrate PTs and TTs for metering stream #1.	TGS	
	Reprogram Flow Computer in both TOIL and DACCPP to add 2 new Flow Meters.	TGS	



Item	Action	Responsibility	Assistance
	Replace each turbine meter on metering stream #2 with a spool of the same length and prepare the replaced turbine meters for shipping to calibration.	TGS	
	Two turbine meters maintenance at factory and recalibration at a third-party calibration facility.	TGS	Elster
	Install Turbine Meters in metering stream #2 in both TOIL and DACCPP stations after received from calibration and finish all required field and control panel connections.	TGS	
	Purchasing two new flow computers with barriers for the remaining metering lines.	TGS	Elster
	Commissioning and start-up for the two new flow computers.	TGS	
Three Stations	UPS system maintenance in 3 stations.	TGS	
	Replace Battery bank in all 3 stations.	TGS	UPS vendor
	Transmitter's calibration in 3 stations.	TGS	
	Actuator's maintenance and line break override modifications in 3 stations.	TGS	
	Replace PLC backup battery at 3 stations.	TGS	
	Reprogram PLC at TOIL station.	TGS	
	Reactivate windows at TOIL station.	TGS	



Item	Action	Responsibility	Assistance
	Repair ODF fault at TOIL station.	TGS	
	Reconfigure PLC comm port in Border station.	TGS	
	Reconfigure communication backup system in 3 stations.	TGS	TOIL
	TGS supervision for sandblasting and repainting for the three stations.	TOIL	TGS
	Lightning System.	TOIL	
	HVAC replacement.	TOIL	
Cathodic Protection	Replace Aboudiya Transformer unit.	TGS	TOIL
	Readjust transformers' output to achieve full protection.	TGS	
	Provide a continuous, 24-hour electrical power supply for all cathodic protection transformers.	TOIL	



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8. Financial Offer:

8.1. Phase 1

Item	Task	Cost (USD)
Mechanical Activities	Repair the 24-inch pipeline damage and pressure test before gas to determine any critical points then performing CLT for the three Stations (Border, TOIL, DACCPP).	197,500
Sandblasting and Painting	TOIL team execution with TGS supervision.	35,700
Cathodic protection and UPS	UPS system maintenance & Replace Battery bank in 3 stations (Border, TOIL, DACCPP) and replacing Aboudiya Transformer unit, hence readjust all transformers' output.	96,400
Reduction and WBH	Inspection, maintenance, and start-up for Reduction lines and WBH 1.	79,200
Metering Stations	Install calibrated flow meters, calibrate PTs and TTs in metering stream #1, finish all required field connections, reconfigure flow computers accordingly, hence dismantle meters on stream #2 and prepare them for shipping to calibration.	32,600
Control and SCADA System	Repair ODF at TOIL station, reactivate operating system and retrieve data on TOIL SCADA client, fix and reprogram PLC at 3 stations (Border, TOIL, DACCPP). In addition to reconfigure and test communication backup system in 3 stations (Border, TOIL, DACCPP).	31,200
ILI	In Line Inspection after gas in for the 24-inch pipeline.	275,500
Total		\$748,100



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8.2. Phase 2

Item	Task	Cost (USD)
Gas Chromatography	Supply and commissioning new complete GC shelter with two redundant GC units with all accessories and commission spares.	590,600
Metering Systems	Two turbine meters maintenance at factory and recalibration at a third-party calibration facility. Install Turbine Meters after received from calibration and finish all required field and control panel connections. Purchasing two new flow computers with barriers for the remaining metering lines, then commissioning and start-up activities for the two new flow computers.	228,200
Actuators	Study to enhance and modify current actuation philosophy and safe actions.	To be determined
Water Bath Heaters	Maintenance, Spare parts and Commissioning.	59,200
total		\$878,000

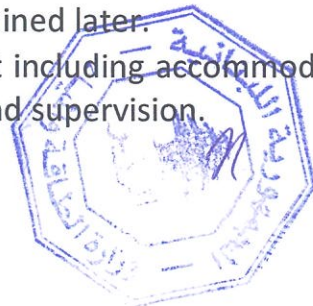
8.3. The total cost includes:

8.3.1. Phase 1

- The total cost for rehabilitation tasks for phase 1 as provided herein-above is US\$ \$748,100 (Seven Hundred Forty-Eight Thousand and One Hundred. US DOLLAR).
- All cost including accommodation, travel, and transportation for TGS staff and supervision.

8.3.2. Phase 2

- The total cost for rehabilitation tasks for phase 2 as provided herein-above is US\$ 878,000 (Eight Hundred Seventy-Eight Thousand. US DOLLAR)
- The cost of studying to enhance and modify current actuation philosophy and safe actions is excluded from phase 2 cost and to be determined later.
- All cost including accommodation, travel, and transportation for TGS staff and supervision.



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8.4. The lump-sum fee shall be exclusive of the following:

- Any VAT, customs duties, or any other taxes applicable in Lebanon.
- Any additional activities and spare parts are not explicitly provided in this offer.

8.5. Payment method:

8.5.1. Phase 1

- 60% two weeks before the start date of the rehabilitation tasks.
- 20% after finishing the Mechanical Activities, Cathodic protection, Metering Stations & Control and SCADA System.
- 10% after finishing the Installation of UPS & Painting Activities supervision.
- 10% two weeks after Gas-In.

8.5.2. Phase 2

- 70% down payment in advance after 30 days of Phase 1 start date.
- 10% after supplying and startup of two new flow computers.
- 10% after two turbine meters maintenance and recalibration.
- 10% after supplying of Gas Chromatography.

8.6. Terms and conditions:

- Offer validity is 60 days.

