

**NATIONAL ELECTRIC POWER CO.
(THE COMPANY)**

**"INSURANCE TENDER FOR LIQUIFIED NATURAL GAS
TERMINAL AT AQABA"**

(Tender No. 35/2025)

.D 30

The Proposal Definitions:

- **"The Bidders"** means the insurance company who has been approached and submitted this proposal.
- **"The Company"** means National Electric Power Co.
- **"JONEPS"** means Jordan E-Procurement plat form
WWW.JONEPS.GOV.JO



Request for Proposal

National Electric Power Co. (THE COMPANY) hereby invites Bidders to submit for Insurance covers as per the attached and follows conditions.

Period of Proposal Cover:	- 12 months from 19/10/2025 until 18/10/2026(both days inclusive)
Proposal closing Date/Time	On “26 /08/2025” not later than 13:00 afternoon Amman-Jordan local time.
Bidders may submit requests for clarification of the purchase document through JONEPS and / or , no later than 20/08/2025	

1. You are kindly requested to submit your proposal, for the above in accordance with this document and the annexes attached.
2. The Company considers this Proposal to be the most appropriate means of providing, fairly and transparently, valuable information pertaining to this Proposal to all Bidders.
3. Bidders are requested to explicitly confirm in their proposal the acceptance of and compliance with Company’s Instruction and General Conditions to Bidders, and sign the completed Proposal invitation.
4. The Instructions and General Conditions to Bidders must be complied with in preparing the proposal.



5. Please note that the terms set forth in this Proposal, including the Instructions and General Conditions to Bidders, the Terms of Reference / Proposal Description/ Statement of Requirement/Specifications and any special conditions set forth herein will be an integral part of any contract should The Company accept your proposal. The contract The Company will issue in accordance with hereto and will require compliance with all factual statements and representations made in the proposal, subject to any modifications to the proposal agreed should the Company in the context of negotiations enter into negotiations .



SUBMISSION OF PROPOSALS

1. You are required to complete and sign the attached Form of PROPOSAL, fill in the schedules and forward the complete Proposal documents to be received by Company not later than **13:00 afternoon Amman-Jordan local time On “26/08/2025”** through JONEPS .

Your offer should be addressed to:

Closing Date and Time: “26/08/2025” @ 13:00 afternoon Amman-Jordan local time.

2. Your proposal must be submitted via JONEPS (including all attachments, appendices and annexes)

Your proposal must be submitted in one set of documents, as follows:

Part A: Technical Proposal

The Technical Proposal —which shall comply with the requirements set forth below.

Technical Proposal must include the following information:

- Detailed description of your technical proposal which must address all the requirements described in Proposal Description.

Signature

The Technical Part of the proposal must be signed by a duly authorized representative of the bidder. All erasures, amendments, or alterations must be initialed by the signatory to the proposal.



Part B: Financial Proposal

The Financial Proposal (including Rates, premiums, taxes, stamps and fees). clearly including certified copies of audited financial statements (balance sheet, income statement, cash flow statements, and notes to the accounts) for your company's to most recent fiscal years prepared by a recognized firm of chartered accountants or two of the most recent annual report.

Contents

All costs associated with the assignments must be provided with as much detail as possible. These costs should be itemized or broken down by activity.

Currency

The currency of the proposal should be in **Jordanian Dinar**.

Local Tax & fees

The successful bidder is subject to local taxes and fees such as stamps and fees. Other taxes such as sales tax are according to sales tax for services provided at Aqaba Special Economic Zone Authority (ASEZA).

N.B the Company is registered with the Aqaba Special Economic Zone Authority.

Bidders must provide all requisite information under this Proposal and clearly and concisely respond to all points set out in this Proposal (including the annexes). The Bidders must state any exceptions to this Proposal. After submission of proposal, no exceptions will be accepted. Exceptions, if any, must be specific rather than general in nature, and a rationale must be provided for each exception taken. THE COMPANY reserves the right to reject any proposal containing exceptions, caveats or any attempt to limit, delete or otherwise change any provisions, clauses, words or schedules contained in this Proposal

Signature

The financial part of the proposal must be signed by a duly authorized representative of the bidders. All erasures, amendments, or alterations must be initialed by the signatory to the proposal.

.



INSTRUCTIONS AND GENERAL CONDITIONS TO BIDDERS

• INSTRUCTIONS TO BIDDERS:

- 1- The tender shall be accompanied by a Tender Bond in the form of a Bank Guarantee valid for at least 90 days from the time fixed for closing date, for a sum of **5250 JD (five Thousand and two hundred fifty Jordanian Dinars)** as a guarantee of good faith. not later than **13:00 afternoon Amman-Jordan local time On “ 26/08/2025 ”** to the Purchasing Committee Secretary at the company's head office.
- 2- A nonrefundable fee of **125 JD (One hundred and twenty five Jordanian Dinars)** will be charged for each set comprising. This fees shall pay through E-fwateercom.
- 3- No alteration shall be made in the form of Proposal or in the schedules there to except in filling up the blanks as directed. If any such alteration to be made or if these instructions will not be fully complied with the Proposal may be rejected. The Bidders, however, is at liberty to add any further details that he may deem desirable and, in the event of his so doing shall print or type such details and annex the added matter to the Proposal submitted by him. Such additional details shall not be binding upon the Bidders unless they shall be subsequently incorporated in the contract.
- 4- The Proposal is to be held open for acceptance or rejection for a validity period of ninety days from the time fixed for CLOSING DATE.
- 5- If, after receipt of Proposals, THE COMPANY finds any difference between prices shown on the form of Proposal in writing and in numerals, then the price shown in writing shall be considered correct by THE COMPANY and The Bidders.
- 6- Stamp duty and award fees are payable on Jordanian contracts according to Jordanian laws and after the placing of a contract, it is the insurer's responsibility to pay legal stamps and fees to the requisite amount depending on the contract value.
- 7- The performance bond should be valid for the completely insurance period for a year after awarding the successful Bidders and until last claim being closed (if any) by both parties
- 8- THE COMPANY reserves the right to cancel the tender before closing date or re-request according THE COMPANY interest without disclosing the reason or reasons and without borne any losses or damages for the Bidders accordingly.

- 9- THE COMPANY reserves the right to reject whole or/and any part of the submitted proposal without borne any losses and/or expenses and/or damages for the Bidders accordingly.
- 10- This Proposal does not commit THE COMPANY to award the whole or/and any insurance policy and THE COMPANY is not committed to award at all.
- 11- The opened proposal prices are not the reference of awarding or considered as the lowest prices and THE COMPANY standards are the only measure of Proposal valuation
- 12- The successful Bidders commit to consider the documents of Proposal and the Letter of Award as one set of contractual agreement with THE COMPANY and THE COMPANY has sole right to amend any mistakes in typing of the mutual contracts with successful Bidders.
- 13- If the successful bidders failed to carry out his obligation and/or failed to provide THE COMPANY with requested Performance Bond and/or any part of the special conditions of the contract, then THE COMPANY reserves the right to cancel the contract and to forfeit the bid bond.
- 14- If the successful bidders fails to fulfill any part of the special conditions of the contract and THE COMPANY accepted this discrepancy, then THE COMPANY reserve its right to deduct the portion of his failure from the insurance premium.
- 15- THE COMPANY reserves sole rights to amend and/or add any appropriate or supplementary conditions in the Proposal and NONE of the Bidders have the right of objection.
- 16- Bids may be provided in the form of a Consortium or a Joint Venture. In such a case, the solicitation documents or the prequalification documents should provide for the following:
 - A- The way, in which the qualifications of the bidders who grouped in the form of a Consortium or a Joint Venture are assessed, including criteria that can be met therefrom collectively, and the criteria to be met by each member of the Consortium or a Joint Venture individually.
 - B- Submission of a duly certified Consortium or a Joint Venture agreement or a letter of intents from all members of the Consortium or a Joint Venture as part of the bid submitted, prequalification application or expression of interest in order to formally enter into the Consortium or a joint venture when the awarding attender to the coalition

C- Requesting the members of the Consortium or a Joint Venture to Nominate the president of the Consortium or a Joint Venture to be responsible for following up the procurement process procedures.

- All members of the Consortium or a Joint Venture shall be jointly and severally responsible for the execution of the contract.
- The solicitation documents shall include the procedures to be taken against Consortium or a Joint Venture in the event of the withdrawal of any members of the Consortium or a Joint Venture before the awarding.



- **GENERAL CONDITIONS TO BIDDERS**

1. **ADDRESS OF SUBMITTING:** All proposals must be submitted though JONEPS.
2. **VALIDITY PERIOD:** Your proposal shall remain valid for a minimum period of ninety (90) days from the PROPOSAL closing date.
3. **ACCEPTANCE OF PROPOSALS:** THE COMPANY reserves the right, at its sole discretion, to consider as invalid or unacceptable any proposal which is: (a) not clear and carries more than one meaning; (b) incomplete in any detail, (c) received after the deadline, (d) not properly marked or addressed, (e) delivered to another location than the one required herein, or sent by Fax or Email (f) unsolicited, (g) proposed by a bidders with previous negative dealings with THE COMPANY or not adequately reputable, (h) the bidders is involved with outstanding disputes or current lawsuits with THE COMPANY or (I) not otherwise in compliance with this PROPOSAL. THE COMPANY also reserves the right to split an award between any Bidders in any combination, as it deems appropriate. If the proposal is submitted on an "all or none" basis, it should clearly state so.
4. **A- AWARD OF CONTRACTS:** This PROPOSAL does not commit THE COMPANY to award a contract or to pay any costs incurred in the preparation or submission of proposals, or costs incurred in making necessary studies for the preparation thereof, or to procure or contract for services or goods. Any proposal submitted will be regarded as an offer made by the bidders and not as an acceptance by the bidders of an offer made by THE COMPANY. No contractual relationship will exist except pursuant to a written contract document signed a duly authorized official of THE COMPANY and by the successful bidders. THE COMPANY will notify successful Bidders of its decision with respect to their proposals as soon as possible after the proposals are opened. THE COMPANY reserves the right to cancel the PROPOSAL, to reject any or all proposals in whole or in part, and to award any contract without disclosing the reason or reasons and NONE of the Bidders have the right of recovery for any losses or damages that may occur to Bidders. Proposals will be evaluated taking into consideration, not only cost-effectiveness, but also technical considerations. The lowest-priced proposal will not necessarily be accepted.

B- The Bidder who claims to have incurred loss or damage as a result of decision, action, abstention to take action by the procuring entity, or alleges that the procurement committees have violated the provisions of the solicitation document or provisions of this regulation and the instructions issued thereunder, may present an objection in the first stage and a complaint at the second stage in accordance with provisions of this regulation

5. PERFORMANCE BOND AND LIQUIDATED DAMAGES

- a) **Performance Bond** Normally within (21) days of award date, the selected bidders shall at its own cost and expense, furnish to THE COMPANY a performance bond substantially in the form attached or a similar guarantee acceptable to THE COMPANY in a sum equal to 10 % of the total contract price. The performance bond shall be valid till a year after signing the contract and until the last claim being closed (if any) by both parties.

THE COMPANY shall be entitled to claim from the performance bond/guarantee upon the first written demand by THE COMPANY without having to prove the liability of the Insurer.

- b) **Liquidated Damages** If the successful bidder fails to supply the specified services within the lead time stipulated in the proposal, or within a period specified by a purchase order or a contract, THE COMPANY may, in its sole discretion and without prejudice to its other remedies under the purchase order or contract, to liquidate the Proposal Bond as liquidated damages.
- c) **WITHDRAWAL/MODIFICATION OF PROPOSALS:** Requests to withdraw a proposal shall not be honored. If the selected Vendor withdraws its proposal, THE COMPANY shall duly register said proposal and shall evaluate it alongside all other received proposals. Withdrawal of a proposal may result in your suspension or removal from the list of THE COMPANY-registered vendors.

6. **TAXES AND FEES:** The winner Bidder is committed to settle all related Taxes (if applicable) and any other fees required by the Government of Hashemite Kingdom of Jordan and the All Bidders are required to mention their ID Tax Number on their proposals
7. **LAWS AND JURISDICTION:** Jordanian Laws and Courts of Jordan and Arbitration shall not apply in any case.
8. The bidder's qualification requirements are:
 - a) Legal Capacity to enter to tender
 - b) Efficiency and financial solvency
 - c) Commitment to the implementation of all obligations, including the payment of taxes and social security allowances.
 - d) Not to have a conflicting interest effecting the conclusion of the procurement contract
 - e) Not to be of those who are banned from participation in procurement processes and the provisions of this regulation
9. This document is subject to the provisions and instructions of the Government Procurement bylaw No. (8) Of 2022 , and its regulations.



THE COMPANY

Contract No. 35/2025 .

Form of Proposal

**Tender Committee Secretary
NATIONAL ELECTRIC POWER CO
HEADQUARTER (AMMAN)
P. O. BOX AMMAN JORDAN**

Dear Sir,

1. Having examined the conditions of contract and specifications, we, the undersigned, offer to provide the services in accordance with your Request for Proposal No. , For the sum of
2. We confirm our understanding and agreement that the terms set forth in this PROPOSAL, including Instructions and General Conditions to Bidders, and any special conditions set forth herein will form part of any contract should THE COMPANY accept our proposal.
3. We confirm our understanding, agreement and compliance with all the terms and conditions set forth in the Proposal, including Instructions and General Conditions to Bidders.
4. THE COMPANY and its authorized representatives are hereby authorized to conduct any inquiries or investigations to verify the statements, documents and information submitted in connection with this proposal, and to seek clarification from any authority, bankers and clients regarding any financial and technical aspects of the proposal. This letter of introduction will also serve as an authorization for THE COMPANY to approach any individual or institution referred to in the supporting information, to provide such information deemed necessary by THE COMPANY to verify the statements and information provided in this bid, or with regard to our resources, experience and competence.
5. We agree that this Proposal shall be held open for acceptance or rejection for the validity period of 90 days from the closing date of the Proposals and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

6. Unless and until a formal Agreement is prepared and executed this Proposal, together with your written acceptance thereof, shall constitute a binding contract between us.
7. If our Proposal is accepted, we will deliver to THE COMPANY within (21) days of being called upon to do so a performance bond by a local bank (to be approved by THE COMPANY) to be jointly and severally bound with us in a sum equal to 10% of the contract value. The form of the performance bond will be as attached hereto.

We propose the following bank as surety in this respect:

.....
.....

8. Our Financial Proposal shall be binding upon us subject to the modifications resulting from contract negotiations, up to expiration of the validity period of the Proposal.
9. We understand that you are not bound to accept the lowest or any Proposal you may receive.

We Declare here the TAX No.

Dated this day of 2025

Signature..... in the capacity of

Duly authorized to sign Proposal for and on behalf of

.....

Address

Occupation

- **NOTE: Please attach power of attorney or equivalent document evidencing authority of above.**

Signatory:

.....



FORM OF TENDER BOND

Tender No 35 / 2025 .

**M/S NATIONAL ELECTRIC POWER COMPANY
AMMAN – JORDAN**

Dear Sir,

We are pleased to inform you that we guarantee
m/s.....

.....

For the amount of **(5250) five Thousand and two hundred fifty Jordanian Dinars**, in order to allow them to submit an offer for the due performance of the undertakings and obligations as specified in their tender for contract no.

.....

.....

This guarantee shall remain valid for a period of ninety days from the time fixed for opening the tenders by **NATIONAL ELECTRIC POWER COMPANY**.

This guarantee shall be free from any interest and will be extended or paid in cash upon your first request in any form required, without the need for notarial warning or judicial proceedings and without any rights to delay, oppose, or stop payment on our part, or on the part of the Tenderer or any of his representatives whomsoever. This guarantee shall be deemed valid until the submittal of duly executed performance Bond.

Signed Bank



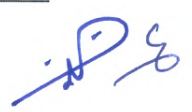
**PERFORMANCE GUARANTEE
NO.**

**M/S., NATIONAL ELCTRIC POWER COMPANY (THE COMPANY)
Amman – Jordan**

At the request of _____ Bank (The
Foreign Bank) and on behalf of M/S. (The contractor Name and Address), we
(The Local Bank) issue in your favor our irrevocable and
unconditional performance guarantee No. _____ in the
amount of (_____)in this connection we _____ (local bank)
hereby consider ourselves responsible for the unconditional payment to you or
your authorized representatives of the above sum on your first written demand
in whole or in part notwithstanding any objections on the part of the above
named contractor and without any need for notarial warning or judicial
proceedings.

This guarantee remains valid from the date of issue till it's expiry date on
_____ unless it's extended or renewed upon the
employer's request.

Bank (Local Bank)



NATIONAL ELECTRIC POWER CO. (NEPCO)

**"INSURANCE TENDER FOR LIQUIFIED
NATURAL GAS TERMINAL AT AQABA"**

(Tender No. 35/2025)



The Proposal Definitions:

- **"The Bidders"** means the insurance company who has been approached and submitted this proposal.
- **"The Company"** means National Electric Power Co.

- **GENERAL CONDITIONS**

1. Local Tax

The successful bidder is subject to local taxes and fees such as stamps and fees. Other taxes such as sales tax are according to sales tax for services provided at Aqaba Special Economic Zone Authority (ASEZA).

N.B THE COMPANY is registered with the Aqaba Special Economic Zone Authority.

- 2. REINSURANCE:** All proposals must be supported with a rated Lead Reinsurer along with the Reinsurer stamp and signature and the supported share in compliance with the Proposal requirements Special Conditions and as per the central bank Regulations.

The successful bidders is requested to provide 100% of Reinsurance placement supported with signed and stamped Reinsurance slips from rated Reinsurers not less than BBB within 7 days from the date of award, any change in reinsurance list shall be upon the prior written consent of The Company.

3. PAYMENT:

The normal terms of payment by THE COMPANY are 4 equal installments starting at the inception of the policy and the second installment after 3 months of inception. Bidders must therefore clearly specify in their proposals the payment terms being offered.

First payment will be paid after providing to The Company all insurance policies and reinsurance slips and it must be identical to terms of tender.



4. **CONFIDENTIALITY:** It is understood that this PROPOSAL is confidential and proprietary to THE COMPANY, contains privileged information, part of which may be copyrighted, and is communicated to and received by Bidders on the condition that no part thereof, or any information concerning it may be copied, exhibited, or furnished to others without the prior written consent of THE COMPANY, except that Bidders may exhibit the specifications to prospective reinsurers for the sole purpose of obtaining offers from them. Notwithstanding the other provisions of the PROPOSAL, Bidders will be bound by the contents of this paragraph whether or not their company submits a proposal or responds in any other way to this PROPOSAL.

5. **COLLUSIVE BIDDING AND ANTI-COMPETITIVE CONDUCT:** Bidders and their employees, officers, advisers, agent or subcontractors must not engage in any collusive bidding or other anti-competitive conduct, or any other similar conduct, in relation to:

- The preparation or submission of proposals,
- The clarification of proposals, and
- The conduct and content of negotiations, including final contract negotiations, in respect of this PROPOSAL or procurement process, or any other procurement process being conducted by THE COMPANY in respect of any of its requirements.

For the purpose of this clause, collusive bidding, other anti-competitive conduct, or any other similar conduct may include, among other things, the disclosure to, exchange or clarification with, any other bidder, person or

Entity, of information (in any form), whether or not such information is commercial information confidential to THE COMPANY, any other bidder, person or entity in order to alter the results of a solicitation exercise in such a way that would lead to an outcome other than that which would have been obtained through a competitive process.

In addition to any other remedies available to it, THE COMPANY may, at its sole discretion, immediately reject any proposal submitted by a bidder

that, in THE COMPANY's sole opinion, has engaged in any collusive bidding, other anti-competitive conduct, or any other similar conduct with any other bidder, person or entity in relation to the preparation or lodgment of proposals, whether in respect of this Proposal or procurement process, or any other procurement process being conducted by THE COMPANY in respect of any of its requirements.

6. **RISK SURVEY** : The insurer and /or leader of insurance is committed to conduct a risk survey and to provide The Company with a full copy of Insurance Survey Report in addition to the recommendations of the survey
7. **LAWS AND JURISDICTION**: Jordanian Laws and Courts of Jordan **and arbitration shall not apply in any case.**
8. **TRAINING COURSES**: The successful bidder commit to provide NEPCO's employee **free Insurance Courses** either inside or outside Jordan including all courses fees, accommodation and transportation

9. RISK PROFILE

The new Liquefied Natural Gas Terminal is located on a 63,000-square-metre site in Aqaba 20 km south of Aqaba city, next to the existing Oil Terminal located in the industrial area of Aqaba.

1. Security and Control

Item	Description
Facility Entry	Fenced main gate
Guarding	24 Hours Guards
Visual Controls	CCTV

2. Protection and General Safety

The firefighting measures in Aqaba LNG Terminal is relied on permanently installed facilities which includes Fire Water tank, T-27201, Diesel engine driven fire water pumps,P-27201/P-27202, underground network of hydrants and monitors, fire hoses and fire extinguishers, fire and gas detectors and fire alarm panels.

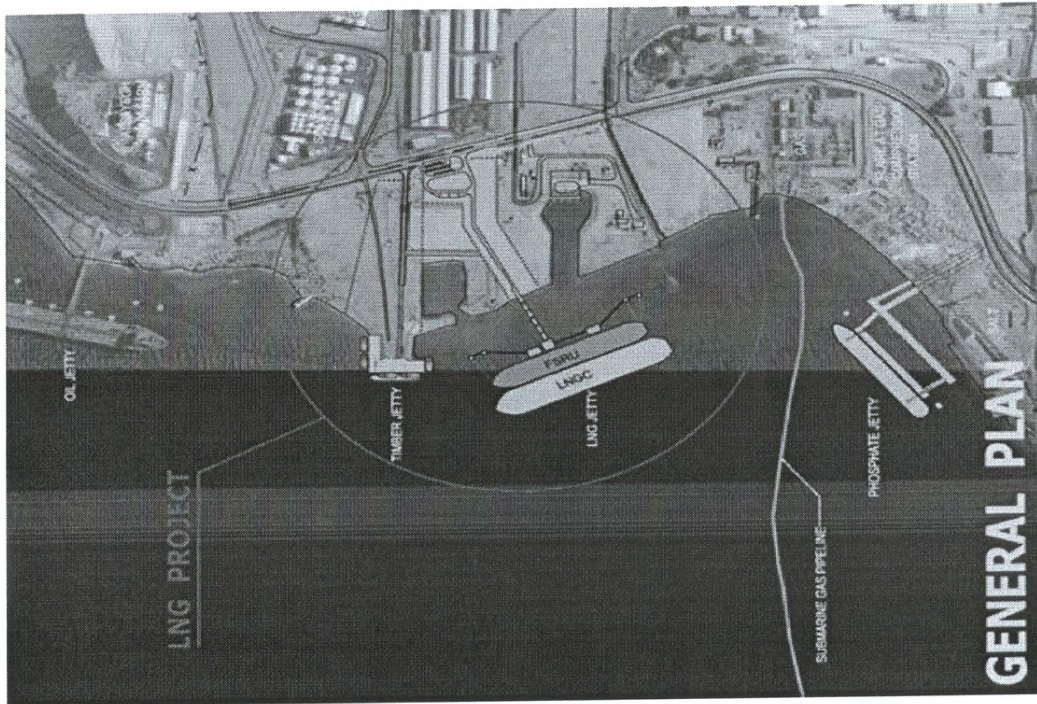
The purpose of providing firefighting system is to suppress and extinguish fire incidents at Aqaba LNG Terminal to prevent loss of life and/or destruction of property and the environment.

Alarm systems are triggered by indication of warnings and alarms which form a key part of the system monitoring with annunciation of equipment faults or extraordinary operation conditions that require immediate action from the operators.

In general, the mechanical and electrical components are as follows:

- 7 flammable gas detectors-3 flammable gas detectors, AE/AT-27201 A/B/C provided at platform area, and 4 gas detectors, AE/AT-27401 A/B/C/D provided at and around process area.
- 7 fire detectors-3 fire detectors, AE/AT-202 A/B/C provided at platform area and 4 fire detectors, AE/AT-402 A/B/C/D provided at and around process area.
- 7 smoke detectors- 3 smoke detectors, SD-27201 A/B/C provided at platform area, 4 smoke detectors, SD-27401 A/B/C/D provided at and around process area.
- 7 heat detectors- 3 heat detectors, SD-27202 A/B/C provided at platform area, 4 heat detectors, SD-27402 A/B/C/D provided at and around process area.
- 7 hooters- 3 hooters, HO-27201 A/B/C provided at platform area and four hooters, HO-27401 A/B/C/D provided at and around process area.
- 7 beacons for flame detection-3 beacons, BFD-27201 A/B/C, at process area and four beacons, BFD-27401 A/B/C/D at and around process area.
- 7 beacons for gas detection-3 beacons, BGD-27201 A/B/C, at process area and four beacons, BGD-27401 A/B/C/D at and around process area.
- 7 manual call points- 3 manual call points, MCP-27201 A/B/C provided at platform area and 4 manual call points, MCP-27401 A/B/C/D provided at and around process area.
- Fire and Gas alarm panels-one on the FSRU and one in the terminal building.
- A safety PLC and local breaking glass call points, a mimic panel to show local fire brigade the way to the fire.
- 2 jockey pumps which keep fire main pressurized, p-27203&p-27204 fixed fire suppression system FM 200 in 2 locations(PLC ROOM & BATTERY ROOM) alarm panels, we have 2 in the terminal. 1 in terminal control room and 1 in main corridor

Layout



10.Properties to be insured :-

A. Marine Terminal:

- 2 Breasting dolphins
- 4 Mooring dolphins
- Unloading platform
- Approach trestle
- Mooring equipment, Fenders, Catwalks, Lighting
- Tug berth
- 16 Quick release hooks
- Gangway tower including crane
- Ship shore link
- 3 flexible hoses to provide FSRU with services

Handwritten signature/initials

B. Land Terminal:

- Terminal land facilities (paving, parking, fencing, road signage and markings)
- Internal roadways and connections to the public coastal road
- Terminal building & Admin Building
- Drainage
- Communication and data and power cables
- Street lighting
- Fence lighting

C. MEP:

- Unloading Arms
- NG Pipeline System
- Gas Metering
- Safety Systems
- Power Distribution Systems
- Fire Prevention, Detection and Suppression Systems



SPECIAL CONDITIONS (PORTS AND TERMINAL PACKAGE INSURANCE COVER):

- 1. INSURED:** National Electric Power Company and their consultants, engineers, operators, directors, employees (as Operator) and/or Aqaba Development Corporation and their subsidiaries, affiliates, consultants, engineers, operators, directors, employees (as Grantor) and / or any other parties for their respective rights and interests and /or Egyptian natural gas holding company (EGAS).
- 2. Insured Property:** All real and personal property of every kind or description belonging to the Grantor or the developer in respect of the land and marine terminal area or for which they are responsible or have assumed responsibility.

3. SCHEDULE OF COVER:

Section (1)	Liabilities
Section (2)	Property Damage and Equipment

4. PERIOD:

12 months from 19/10/2025 until 18/10/2026(both days inclusive)



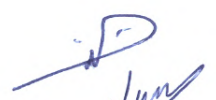
SECTION (1): LIABILITIES

- **Policy Wording : LSW 1510**
- **Territory : Jordan & worldwide**
- **Laws & Jurisdiction : Jordan**
- **Limit of Liability:**
 - **Combined single limit for Damages and Injuries: JD 30,000,000 AOO & in the aggregate**
- 72 hours S&A pollution.
- Cancellation clause:
 - 60 days for insured.
 - 60 days for the (Re) insurer
 - Pro Rata Basis
- Cross Liability.
- The company's advice of accident is considered the company's right for the claim irrespective of the time to secure the supporting documents of the incident
- LSW 1511 - Fire extension liability – sub limit **JOD 2,000,000**
- LSW 1512 - Advice & Information Endorsement – sub limit **JOD 2,000,000**
- LSW 1513 - Fines and duty extension – sub limit **JOD 2,000,000**
- LSW 1514 - Infringement of personal rights – sub limit **JOD 1,000,000**
- LSW 1515 – Wrongful Delivery of Cargo – sub limit **JOD 1,000,000**
- Annual turnover 10 shipments with estimated value of JOD 25 million each shipment
- Up to (3) months extension upon insured's request at prorata additional premium at same terms, conditions of original policy.
- **Deductibles:**
 - Damages: **JOD 10,000** for each and every loss
 - Injuries: NIL
- Loss record: clean.
- **Definitions:**
 - “**Injuries**” means death bodily injury illness or disease of or to any person;
 - “**Damages**” means loss of possession or control of or actual damage of any kind unless subject to the exclusions stated in the policy;

SECTION (2): PROPERTY AND EQUIPMENT

- **Policy Wording**
 - **Property : LSW 1516.**
 - **Equipment : LSW 1519.**
- **Laws & Jurisdiction : Jordan**
- **Sum Insured:**
 - Total Sum Insured: JOD 39,440,117 break down of sum insured attached.
- **Deductibles:**
 - **Property :JD 75,000** Each and Every Loss, however, 3% of total sum insured in respect of catastrophic perils.
 - **Equipment: JD 50,000** Each and Every Loss, however, 3% of total sum insured in respect of catastrophic perils
- **Extended Covers:**
- Fire including but not limited to Smoke and Fire occasioned by:-
 - Self-ignition
 - Over Running
 - Excessive Pressure
 - Short Circuiting
 - Self-Heating
 - Leakage of Electricity
 - Flashover and Over voltage
 - Scorch Soot
- Lightning (Direct or indirect).
- Explosion (Full Term).
- Storm, Tempest, Windstorm, Hailstorm, Snow, Sandstorm, Thunder storm, Typhoon, Hurricane, Tornado, Cyclone, Flood, Subsidence, or land Slip, Ground Heave and Volcanic Action, Rainwater damage , and Inundation, and any other Atmospheric Disturbances.

- LSW 1517 – Earthquake Extension.
- LSW 1520 – Earthquake Extension
- Aircraft (Military & Civil) and other aerial devices or articles dropped there from.
- Impact by any vehicle (Including those belonging to the insured) and Vessels and equipment.
- Water including bursting of pipes, breaking or overflowing of water tanks, apparatus', sprinklers installations or pipes and apparatus leakage.
- Sprinklers leakage.
- Strikes, Riots and Civil Commotions (SRCC).
- Malicious Damage following Strikes, Riots and Civil Commotions (SRCC).
- Theft, burglary following violent forcible entry/ exit.
- Public Authorities Clause.
- Re-entry of Computer Programs expenses.
- Expediting expenses, freight expenses and overtime expenses - limit **JD 500,000.-** each and every loss.
- 72 Consecutive Hours Clause.
- Errors and Omissions Clause.
- Engineers, Consultants and Re-design Expenses limit **JD 1,000,000. -** each and every loss
- Fire Fighting Brigade and Extinguishing expenses limit **JD 1,000,000. -** Each and every, loss.
- Reinstatement clause.
- Replacement clause (new for old).
- Average Clause is deleted
- Depreciation is not applicable



- The Company has the right to collect the compensation proceed whether or not reform the damage.
- Removal of Debris limits **JOD 500,000**.
- Cover extended to include minor Repair and Maintenance clause.
- Up to (3) months extension upon insured's request at prorata additional premium at same terms, conditions of original policy.
- Loss adjuster - to be agreed by both parties.
- Cancellation clause:
 - 60 days for insured.
 - 60 days for the (Re) insurer
 - Pro Rata Basis
- Automatic Reinstatement of Sum Insured.
- Capital Addition Clause - limit 15% of Total Sum Insured (subject to pro-rata additional premium) at the same terms and conditions of the original policy.
- Claims Preparation Clause – Limit **JD. 100,000/-** A.O.O & in the aggregate.
- All values represent the new replacement value
- To amend exclusion (5.4) under excluded property to read “Stock, whether owned by the assured, or in the care, custody or control of the assured other than stocks in Bulk Flat stores and truck unloading bays at the land terminal.
- To delete item (6) under General Policy Conditions in respect of War, Strikes and Terrorism Exclusion and replaced by Terrorism Exclusion Clause and Political Risks Exclusion Endorsement.
- Loss Record: Clean





Engineering Consultancy Services for Evaluation of Liquefied Natural Gas Terminal for Insurance Purposes

LNG Equipment Valuation Draft Report

Issued: March 28, 2023

Updated: April 19, 2023

CONTENTS

Acronyms.....	III
1. Executive Summary.....	1
2. Introduction	2
3. Location.....	2
4. Terminal Description	3
5. Field Visit	3
5.1. Civil Foundation and Structure	3
5.1.1 Land Side Work:.....	3
5.1.2 Marine Side Works:	5
5.2. Mechanical and Electrical Equipment	6
6. Financial Valuation	14
6.1. Methodology	14
6.2. Valuation	15
7. Conclusion	19
8. References	20
ANNEX 1: Terminal Equipment list form	20

Acronyms

BDO	Binder (UK), Dijker (Netherlands) and Otte (Germany)
BDO	Samman and Co. Jordan
ESD	Emergency Shutdown System
FSRU	Floating Storage Regasification Unit
HIPPS	High Integrity Pressure Protection System
kV	Kilovolt
kVA	Kilovolt Ampere
LNG	Liquefied Natural Gas
LV	Low voltage
NEPCO	National Electricity Power company
SCADA	Supervisory control and data acquisition
UPS	Uninterruptible power supply

1. Executive Summary

NEPCO has contracted BDO Jordan to evaluate the Jordanian Liquefied Natural Gas import terminal, located in Aqaba port, south of Jordan. The function of this import terminal is to unload the LNG from the FSRU and to transmit the gas through the Arab Gas Pipeline to the generation power plants, thus NEPCO needs to assess the appraisal for insurance purposes.

The main objective of the asset valuation process is to have a complete and independent assessment, in terms of the value and general condition of the Liquefied Natural Gas import terminal, according to provided data by NEPCO. Subsequently, the main role of the BDO Team's evaluation is as follows:

1. Visiting the Liquefied Natural Gas import terminal to verify the provided asset list.
2. Valuation replacement of assets as new using the replacement Cost Method.
3. Valuation as "Fair Market Value" of assets using depreciated Cost Method.

Based on the TOR and the technical proposal, all documents provided by NEPCO related to the LNG terminal were reviewed, then, a site visit was conducted on March 16, 2023, in which the assets were verified against the asset list provided by NEPCO. The expected useful life and functionality of assets were checked as per the documents reviewed and the observations done on site.

BDO Team developed a valuation excel sheet (Annex 1) for all assets as a final outcome, where it included inventory, construction costs, depreciation and fair market value.

The valuation of the fair market value of similar assets considering depreciation and asset conditions is **43,399,686 USD**, while the replacement value with the same specifications is: **55,549,461 USD**.

2. Introduction

This report presents BDO Team findings, comments, and recommendations based on the site visit observations and information received from NEPCO for the LNG terminal. Therefore, BDO Team visited the LNG terminal on the March 16, 2023 and all needed data were collected.

3. Location

The LNG terminal site is located in the southern part of Jordan within the Aqaba Governorate and the location coordinate of the terminal is (29.376942°, 34.966040°), away from the capital of Jordan (Amman) about 350 km. The terminal site is easily accessible from Amman and Aqaba cities through the national roads, the site area is generally flat with no gradual slope, and the elevation of the substation is around 7 m above sea level. The following figure illustrates the site location map.

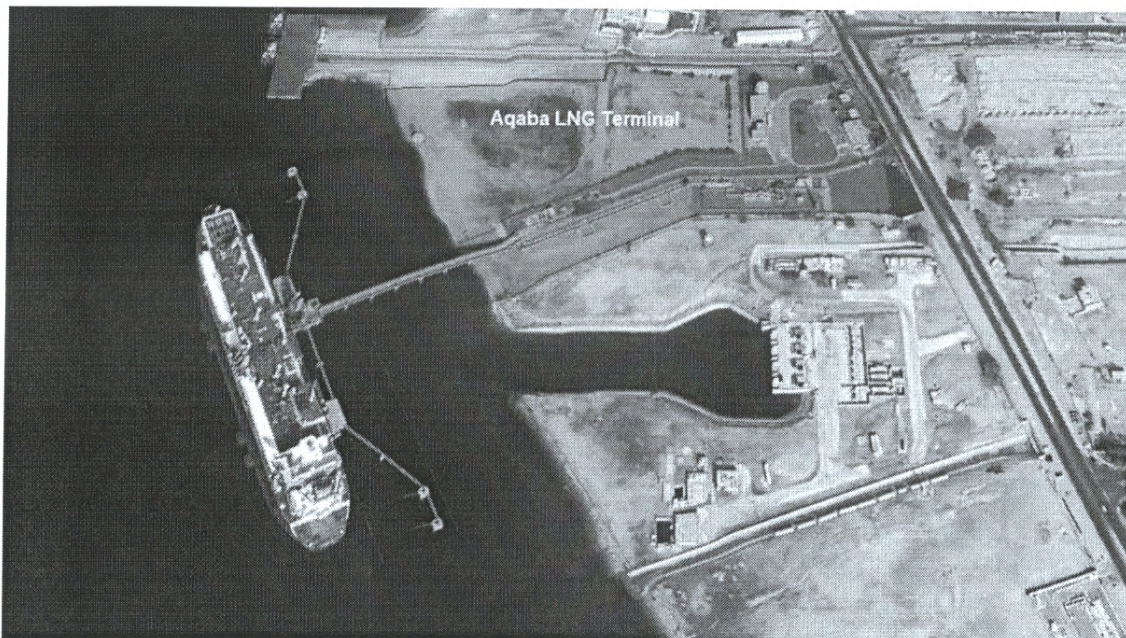


Figure (1) Site Location Map

Source: Google Earth

4. Terminal Description

The LNG import terminal is connected directly to a high-pressure pipeline and has no storage tanks, this type of terminal is commonly referred to as an "LNG regasification terminal" or a "send-out terminal". Unlike traditional LNG import terminals that rely on storage tanks to store and maintain for future utilization, this type of terminal receives LNG from LNG carriers, re-gasifies it immediately, and delivers it directly to the high-pressure pipeline for distribution to end-users.

One of the main advantages of LNG regasification terminals is eliminating the need for large storage tanks, which can be expensive to construct and maintain. This also reduces the environmental footprint of the terminal, as it requires less land area.

Another benefit of LNG regasification terminals is their flexibility in terms of capacity and location. Since they do not require large storage tanks, they can be scaled up or down easily to meet changes in demand. They can also be in more urbanized areas, where space for large storage tanks might be limited, making this type of terminals an attractive option for densely populated regions.

However, LNG regasification terminals also have some limitations. For instance, they rely on a continuous supply of LNG from LNG carriers, which can be affected by weather conditions, shipping schedules, and geopolitical factors. Additionally, they require sophisticated control and safety systems to ensure the safe and efficient operation of the terminal and the high-pressure pipeline.

5. Field Visit

On March 16, 2023, BDO's Technical Team conducted a detailed field visit to the terminal and checked all the main items exist, and the following main parts were evaluated:

5.1. Civil Foundation and Structure

The civil part of the terminal is divided into the following two main parts:

5.1.1 Land Side Work:

- a. General site work such as site clearance, earthworks, and the demolition (cut and fill works).
- b. External works including roads, parking area and fencing (fencing and gates)
- c. Buildings and foundations: The terminal area is approximately 40,000 square meters, and includes three buildings, the main building contains offices, control system, and the monitoring office. The second building contains the firefighting system, UPS batteries and the LV equipment's and the third building is a shed for the air compressor and the backup generator. The buildings are made from bricks and concrete sealing and generally in good conditions, as shown in the following picture:



Picture (1): Terminal general view



Picture (2): Service building and the shed for electrical equipment

5.1.2 Marine Side Works:

- a. Tug Jitty
- b. The Loading Platform
- c. Breasting Dolphin No.1
- d. Breasting Dolphin No.2
- e. Mooring Dolphin No.1
- f. Mooring Dolphin No.2
- g. Mooring Dolphin No.3
- h. Mooring Dolphin No.4
- i. Access Ramp including earthworks, structure and the connection from the access roads to the approach trestle
- j. Approach Trestle
- k. Shoreline Tie-in Abutment
- l. Access walkways
- m. Roadway on the Marine side



Picture (3): Marine side general view

5.2. Mechanical and Electrical Equipment

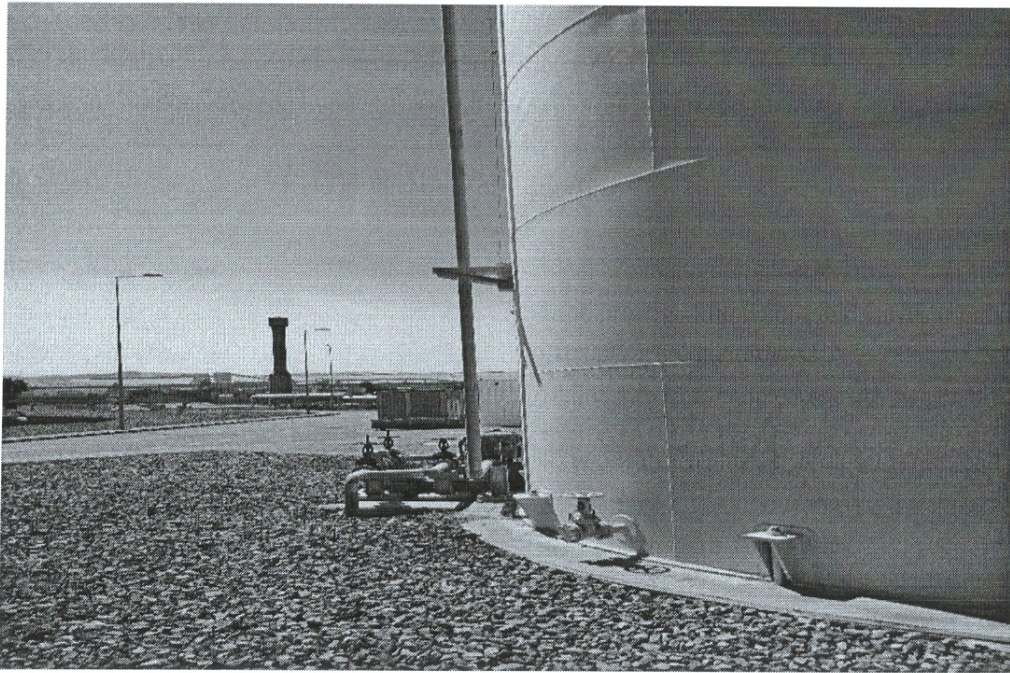
Regasification terminal is a complex facility that requires a variety of mechanical and electrical equipment to operate effectively. The mechanical and electrical equipment used in an LNG regasification terminal can be grouped into several categories, which are the gas main system and associated equipment, regasification equipment, and supporting infrastructure.

The regasification equipment used in an LNG regasification terminal is responsible for transferring the LNG through pipelines.

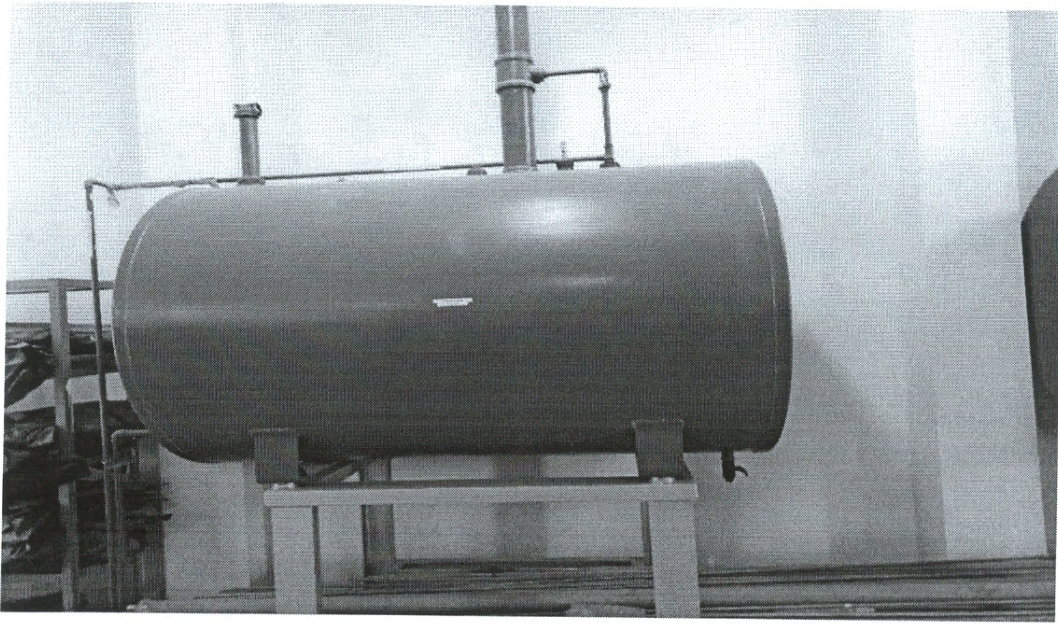
LNG regasification terminal also includes a variety of supporting infrastructure including pipelines, pumps, and valves, in purpose of moving the gas through the facility and into the natural gas pipeline network. The pipelines used in the LNG regasification terminal are made of high-strength carbon steel, to withstand the high pressures and temperatures involved in the process. The pumps and valves used in the facility are also designed to handle high-pressure and high-temperature conditions.

In general, we divided the mechanical and electrical equipment into four main categories, which are:

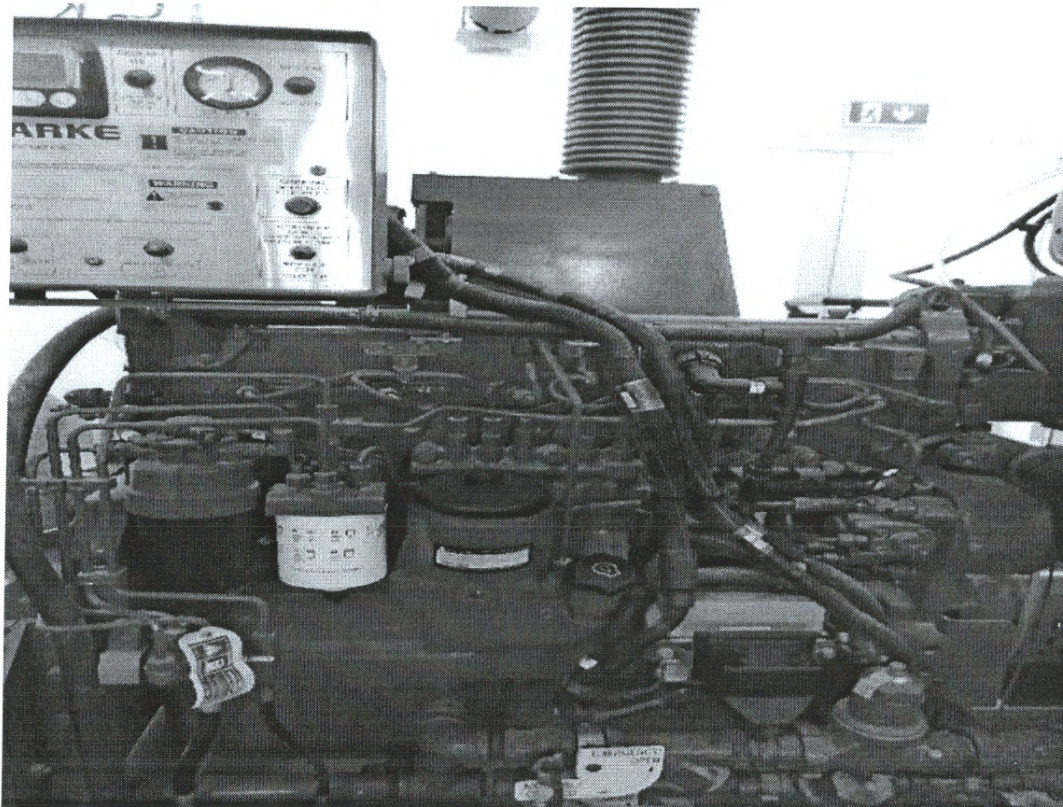
- a. The water and diesel storage: one main water tank, two water pumps, two diesel tanks, and one underground concrete septic tank.



Picture (4): Water main tank in the terminal

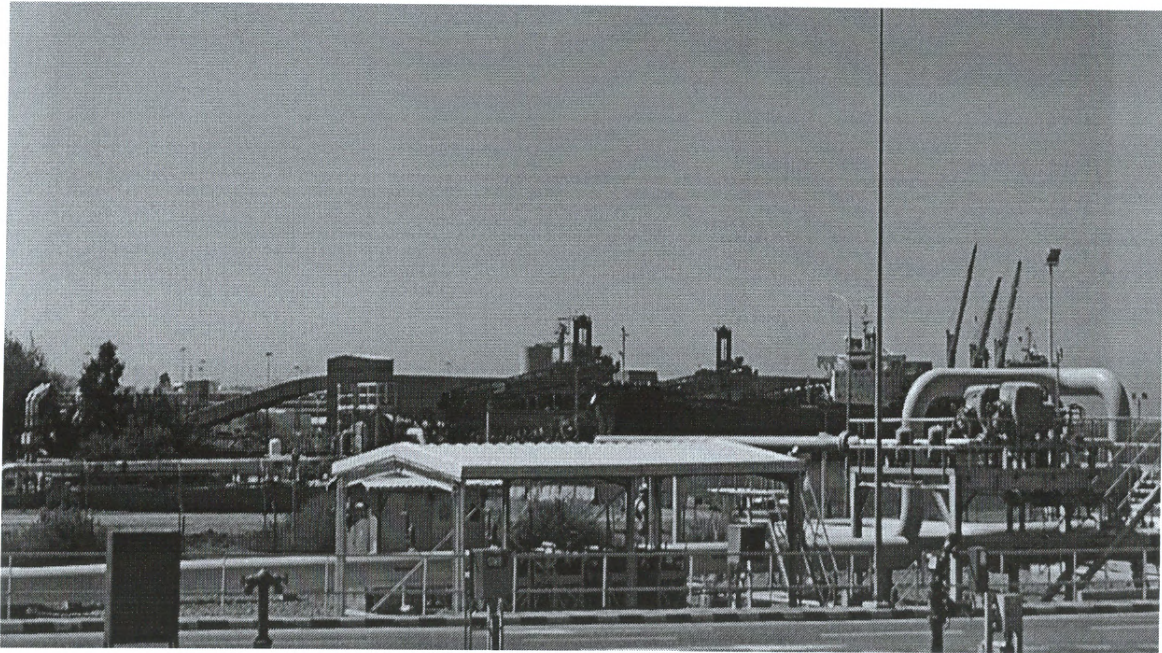


Picture (5): one of the diesel storage tanks in the terminal



Picture (6): one of the two diesel engines

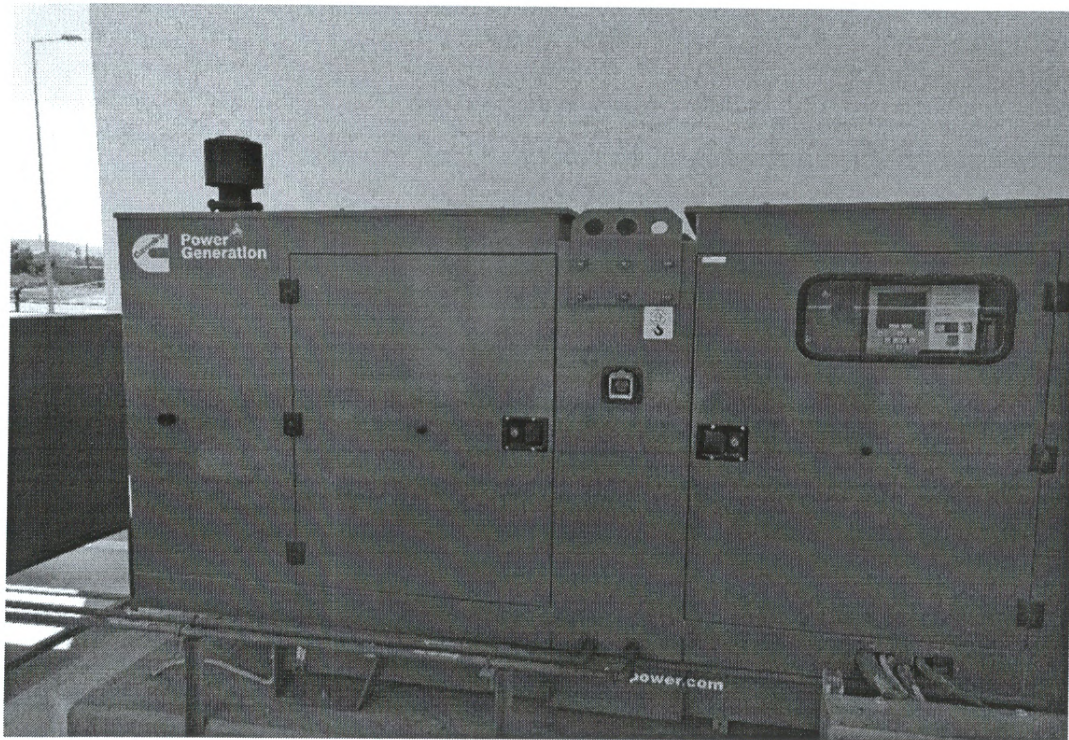
- b. Firefighting System which includes:
 - firefighting main panel
 - piping works
 - Equipment of the fire fighting
- c. Main Gas System which includes the high-pressure piping above and under the grounds and the connected valves.



Picture (7): Main gas pipes

- d. Electrical and Mechanical Systems and devices which includes the following components:
 - 1. Fiscal Metering skid
 - 2. Chromatographs
 - 3. HIPPS system
 - 4. ESD isolation system
 - 5. Loading Arm
 - 6. Depressurization system
 - 7. Pressure relief system
 - 8. Gangway
 - 9. Backup generator
 - 10. Air compressor
 - 11. N2 generating system.
 - 12. Substation and transformer
 - 13. Main electrical Panels

14. UPS system
15. Lighting and electrical wiring
16. Power cables
17. Cable Trays
18. Cathodic protection and Earthing System
19. Communication System
20. CCTV system
21. Pressure transmitter
22. ESD PLC control
23. Fire and Gas detection system
24. Breasting Dolphin Fenders
25. Mooring Dolphin Mooring Hooks



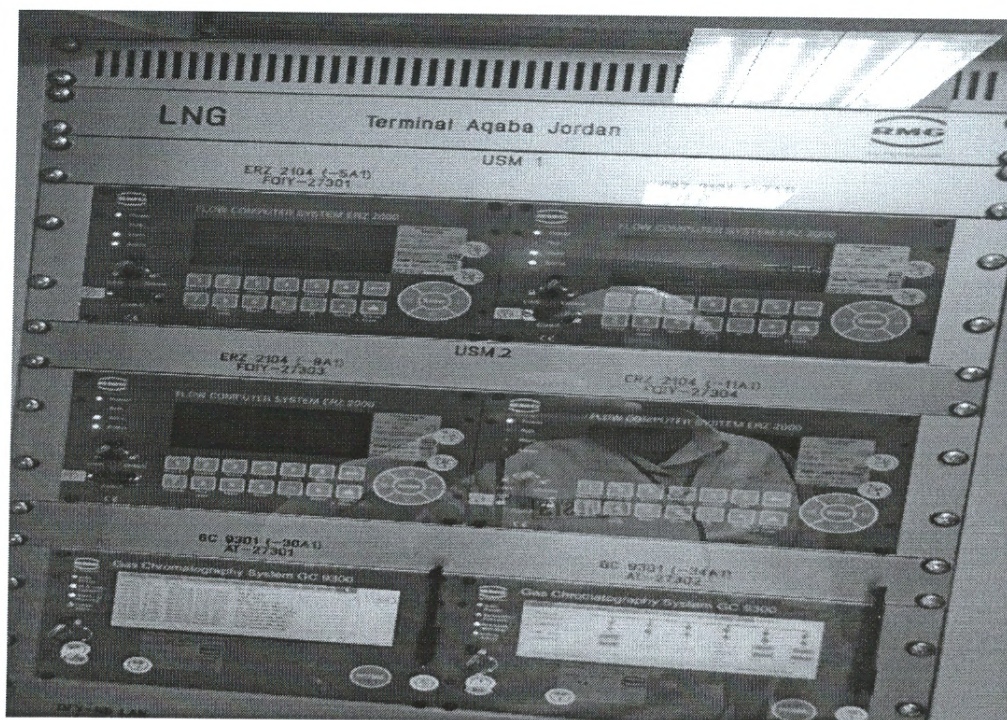
Picture (8): Portable generator



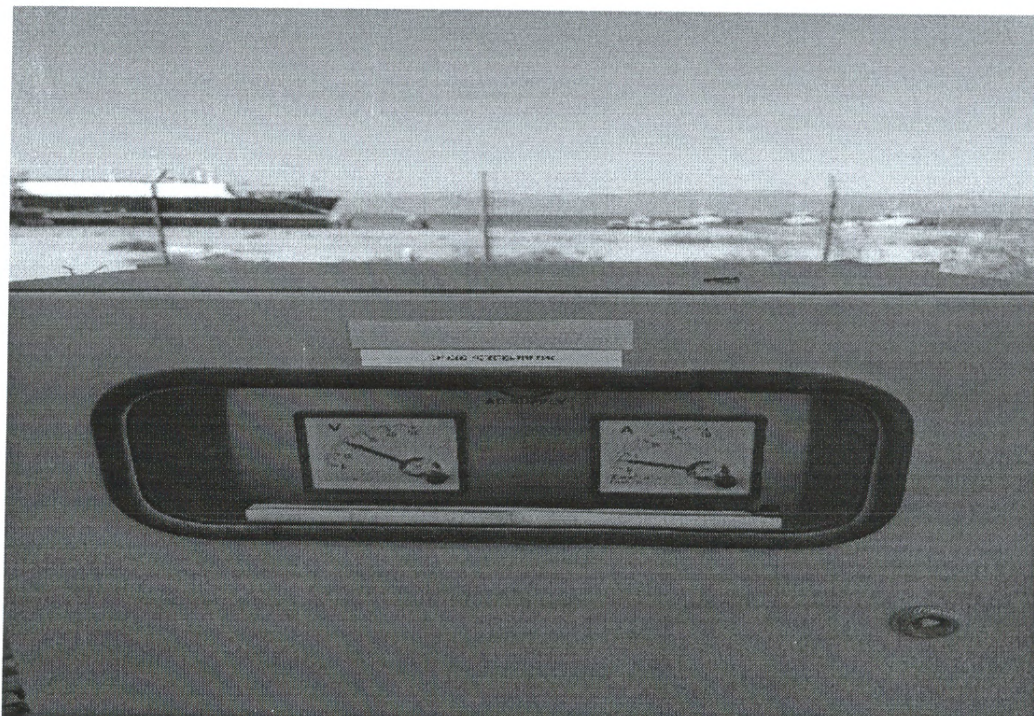
Picture (9): Air compressor



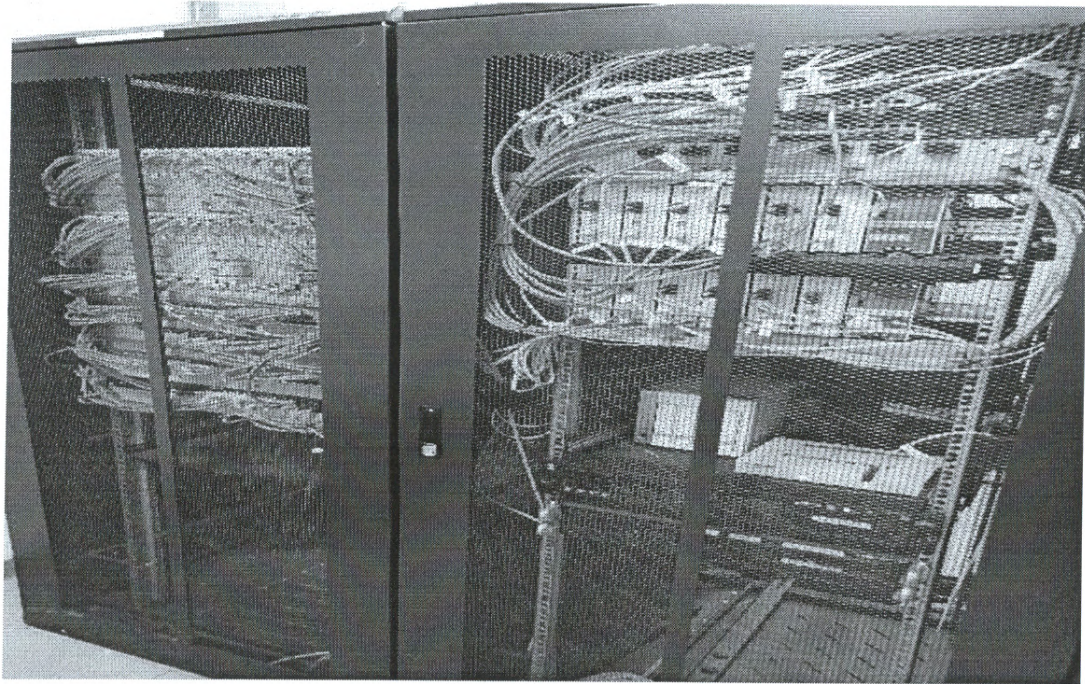
Picture (10): UPS system batteries



Picture (11): Chromatographs



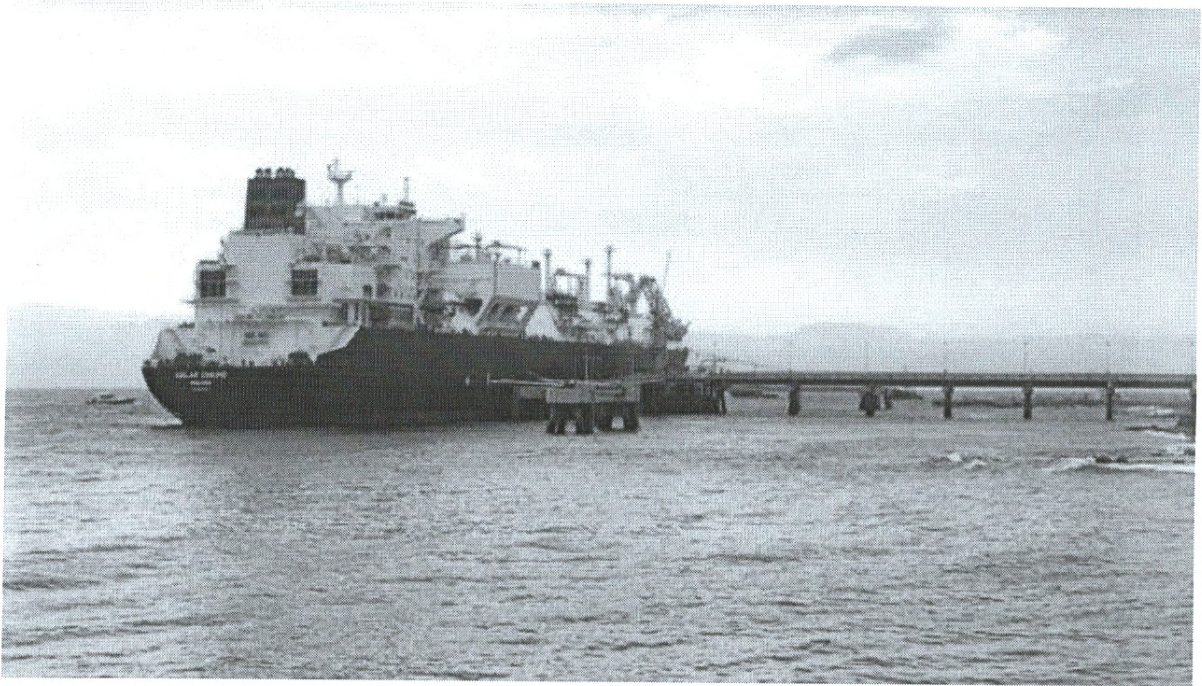
Picture (12): Cathodic protection system main supply



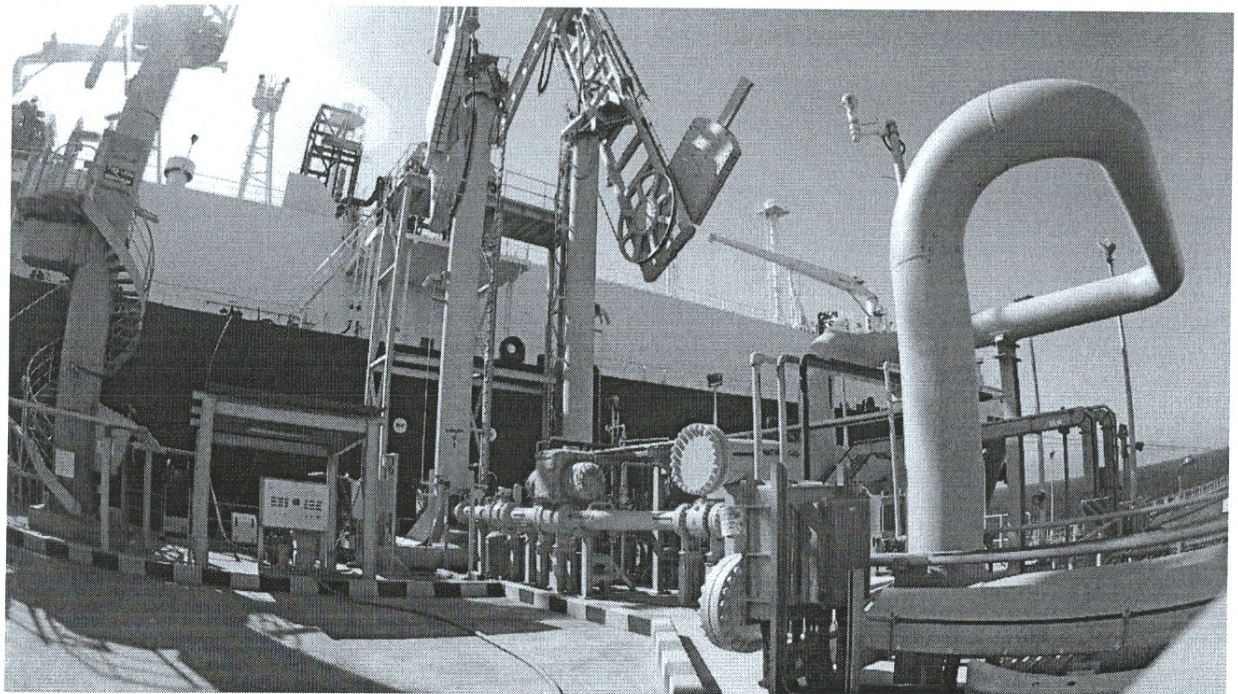
Picture (13): Communication system main panels



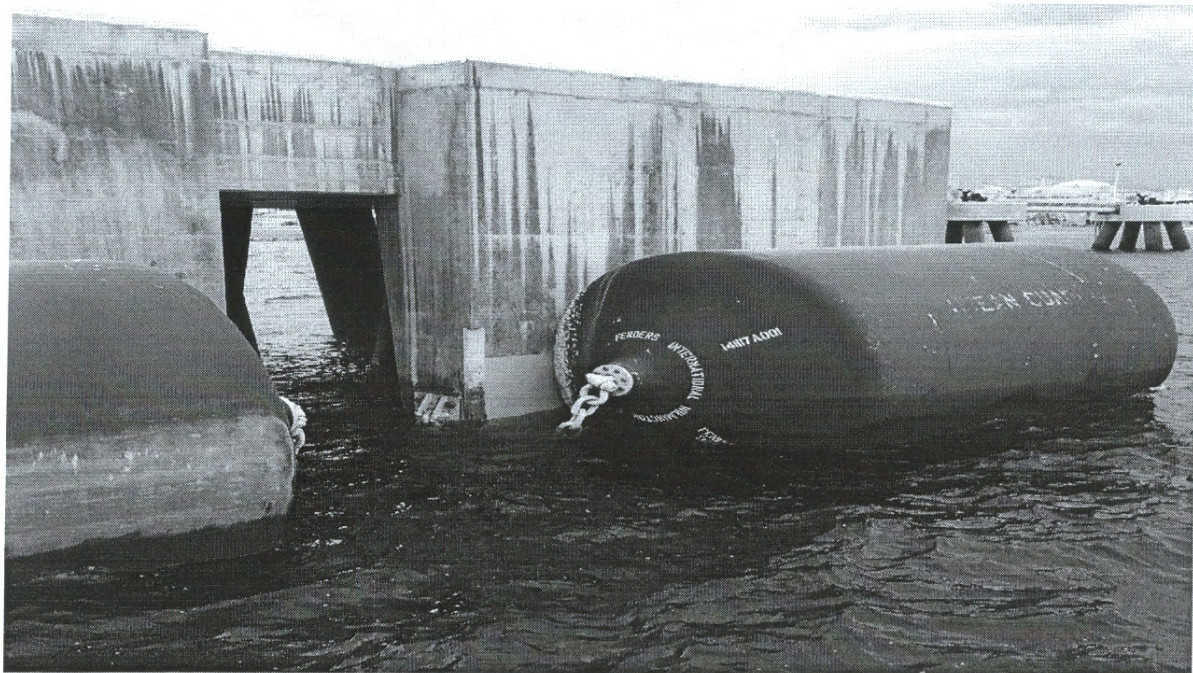
Picture (14): Control room in the main building



Picture (15): Marine side overview



Picture (16): Gangway and Loading Arm



Picture (17): Fenders and Breasting Dolphins

6. Financial Valuation

6.1. Methodology

As to achieve the determined project's objective and value the LNG terminal assets as required, BDO Team took into consideration the commercial and productive assets of the LNG Import Terminal and set a specific methodology that mainly focused on estimating the replacement costs of the terminal's assets and value their current fair market value. The plan involves the costs of the terminal rebuilding in case of any damage or destruction occurred and that is beyond repair. Depending on the technical description, layouts, and drawings provided by NEPCO, as well as the site visit to the terminal, the BDO team has prepared an Excel sheet (Annex 1) which includes thorough results and data as follows:

- 1- Asset inventory: The first step was to identify and inventory all the assets that the LNG terminal consists of. This includes land, buildings, main gas system, pipelines, and other equipment. The asset list submitted includes all the important details about the equipment in the terminal; technical name and description, main specification of the equipment, year of manufacturing, quantity, fair market value, newly replacement value, references, and other details.
- 2- Construction costs: Referring to the given specifications and other important details including the year of installation and model of each piece of equipment, a cost estimate has been given to each asset taking into account the cost of construction materials and installation as well as the cost of equipment.

- 3- Depreciation or fair market value: the evaluation of the fair market value has many factors or determinants such as age and condition of each asset, expected useful life of each asset, maintenance schedule and type of each equipment or asset. The table below shows the valuation method for each type of the equipment:

No.	Type or class	Valuation method
1	Civil structure and general works	Most of the cost for such asset is for the reinforced concrete supply and installation. the depreciation percentage is set to be 2% and the replacement as new is estimated by considering the difference in reinforced concrete prices from 2015 to 2022, which is around 15%, according to the inflation rates in Jordan, which are published by the Jordanian central bank, and the difference in cement and steel values locally and globally.
2	Assets with extremely long useful life such as water tanks and pipes	This type of equipment or installation is designed for maximum service lifetime. We assumed the life span of such equipment is rather high, and depression was assumed to be less than 2%/year and 1%/ year for some equipment.
3	Assets which contain only electronic and electrical parts	The fair market price for all devices containing only electronic and electrical parts is set to 25 years, according to the general practice.
4	Mechanical and electrical only assets	The fair market price for electrical wiring and cables, cable trays, and such is considered according to the assumption of 30 years of life expectancy.

- 4- Replacement cost estimation: estimation for replacement cost of each component or asset was conducted using the following methods:
- a- Industry cost data, prices and studies published on the internet.
 - b- BDO consultants experience and knowledge.
 - c- The base construction costs combined with the inflation for some of the assets, especially for assets with installation cost that is considered as a major part of the total cost.
 - d- Price quotes received by some of the equipment suppliers.

6.2. Valuation

As mentioned in the methodology section above, each value estimation differs from one to another in accordance with each specific item's depreciation calculation. Since the terminal is around 7 years old, the current value of each item differs from the original purchase value as well as the new replacement value.

The valuation methodology covered various costs throughout the estimation adopted for all assets as shown in Annex 1; and they were specified to include: Equipment, installation, logistic as well as commissioning costs. With regards to the construction costs, the only expenses that are included are those associated with the building materials, machinery, logistics, contractor installations and commissioning.

Meanwhile, there are costs excluded from the construction and equipment valuation, since they are not going to be considered in case of any replacement scenarios arising. Those costs that are excluded by our team range from: terminal building design, engineering studies that may include Soil, Environmental, Construction studies, etc., to obtaining official municipal permit licenses.

The summary of the results was as follows:

1. Purchase value or construction costs estimates is: 49,257,597 USD.
2. Fair Market Value of similar assets considering depreciation and asset conditions: 43,399,686 USD.
3. Replacement as new with the same specifications is: 55,549,461 USD

Technical Name and description	Quantity	Year of Installation	Manufacturer	Fair Market value of similar assets considering depreciation and asset conditions - USD	Replacement as new with the same specifications - USD
1. CIVIL WORK					
Loading Platform	1	2015	-	1,741,830	2,329,191
Breasting Dolphin No.1	1	2015	-	3,162,627	4,229,094
Breasting Dolphin No.2	1	2015	-	3,162,627	4,229,094
Mooring Dolphin No.1	1	2015	-	561,337	750,625
Mooring Dolphin No.2	1	2015	-	561,337	750,625
Mooring Dolphin No.3	1	2015	-	561,337	750,625
Mooring Dolphin No.4	1	2015	-	561,337	750,625
Access Ramp including earthworks, structure and the connection from the access roads to the approach trestle	1	2014	-	430,950	576,270
Approach Trestle	1	2014	-	854,562	1,142,729
Shoreline Tie-in Abutment	1	2014	-	223,372	298,695

Technical Name and description	Quantity	Year of Installation	Manufacturer	Fair Market value of similar assets considering depreciation and asset conditions - USD	Replacement as new with the same specifications - USD
Access walkways	1	2014	-	926,268	1,238,614
Roadway on the Marine side	1	2014	-	1,444,657	1,931,809
Site general civil works	1	2014	-	1,201,915	1,607,212
Roads and parking areas	1	2014	-	1,330,091	1,778,610
Fencing and gates	1	2014	-	242,691	324,529
Terminal Main building	1	2014	-	504,245	674,281
Service building	1	2014	-	584,107	781,073
Air compressor shed	1	2014	-	61,344	82,029
Earthworks (cut and fill)	1	2015	-	385,539	515,546
Structure and concrete	1	2015	-	281,113	375,907
Sheet piles	1	2015	-	1,958,885	2,619,439
2. Mechanical and Electrical Equipment					
Water tank	1	2015	NEGEM CO	140,945	185,454
Water pumps	2	2015	CLARKE	84,318	84,600
Septic tank	1	2015	-	49,013	64,491
Diesel storage and piping	2	2015	-	17,949	23,618
firefighting main panel	1	2015		178,420	232,721
Piping works	1	2015	-	169,200	169,200
Equipment of the fire fighting	1	2015	-	90,220	117,679
Gas Pipes above the ground	1	2015	BAM/MAG	3,583,457	4,207,733

Technical Name and description	Quantity	Year of Installation	Manufacturer	Fair Market value of similar assets considering depreciation and asset conditions - USD	Replacement as new with the same specifications - USD
Gas Pipes below the ground	1	2015	BAM/MAG	574,860	675,006
Valves	1	2015		2,630,916	3,089,250
Fiscal Metering skid	2	2015	RMG	3,364,738	4,073,104
Chromatographs	2	2015	RMG	49,350	324,300
HIPPS system	1	2015	Honeywell International HIPPS	2,689,046	3,255,161
ESD isolation system	1	2015	Emerson / Sam engineer	257,295	335,602
Loading Arm	2	2015	FMC	4,117,623	5,244,551
Depressurization system	1	2015	Emerson / Sam engineer	98,642	128,663
pressure relief system	2	2015	Beamex Oy Ab / MC6	468,825	616,875
Gangway	1	2015	BUITENDIJK TECHNIEK	1,046,455	1,332,853
Backup generator	1	2015	Cummins Power Generators	12,959	16,920
Air compressor	2	2015	Atlas Copco	231,875	253,800
N2 generating system	1	2015	Jordan Gases	34,519	21,150
substation and transformer	1	2015	Multi types and models	363,319	352,500
Main electrical Panels	1	2015	ABB, SCHNIDER, ETC	67,925	88,597
UPS system	1	2015	OPzV battery SUNLIGHT	45,596	49,350
Lighting and electrical wiring	1	2015	TEP EX / JOLLY / MYRA / NCM / VICTOR LIGHTING / VENTILUX /	233,028	303,949
Power cables	1	2015	BAM/MAG	221,573	289,008

Technical Name and description	Quantity	Year of Installation	Manufacturer	Fair Market value of similar assets considering depreciation and asset conditions - USD	Replacement as new with the same specifications - USD
Cable Trays	1	2015	BAM/MAG	335,043	437,013
Cathodic protection and Earthing system	1	2015	DUCORR	24,849	32,412
communication system	1	2015	Groupe LE LAS COMMUNICATION SOUS HAUTE PROTECTION	102,325	142,118
CCTV system	1	2015	Boch	282,046	282,000
Pressure transmitter	1	2014	Honeywell	45,684	35,250
ESD PLC control	1	2015	Emerson /engineer	126,900	176,250
Fire and Gas detection system	2	2015	Honeywell / Notifire	36,547	21,150
Breasting Dolphin Fenders	2	2015	Fender/Team	363,179	473,712
Mooring Dolphin Mooring Hooks	4	2015	Mampaey	518,880	676,800
Total				43,399,686	55,549,461

7. Conclusion

In conclusion, the site visit has been conducted by the BDO Team to evaluate the provided data and information by NEPCO and to ensure that the items are classified as on-duty and working in good condition.

BDO Team has no comment regarding the existence or functionality of the system in the LNG terminal. The valuation of the fair market value of similar assets considering depreciation and asset conditions is **43,399,686 USD**, while the replacement value with the same specifications is: **55,549,461 USD**.



Engineering Consultancy Services for Evaluation of Liquefied Natural Gas Terminal for Insurance Purposes

LNG Equipment Valuation Draft Report

Issued: March 28, 2023

Updated: April 19, 2023

CONTENTS

Acronyms.....	III
1. Executive Summary.....	1
2. Introduction.....	2
3. Location.....	2
4. Terminal Description	3
5. Field Visit.....	3
5.1. Civil Foundation and Structure	3
5.1.1 Land Side Work:.....	3
5.1.2 Marine Side Works:	5
5.2. Mechanical and Electrical Equipment	6
6. Financial Valuation	14
6.1. Methodology	14
6.2. Valuation	15
7. Conclusion	19
8. References	20
ANNEX 1: Terminal Equipment list form	20

Acronyms

BDO	Binder (UK), Dijker (Netherlands) and Otte (Germany)
BDO	Samman and Co.
Jordan	
ESD	Emergency Shutdown System
FSRU	Floating Storage Regasification Unit
HIPPS	High Integrity Pressure Protection System
kV	Kilovolt
kVA	Kilovolt Ampere
LNG	Liquefied Natural Gas
LV	Low voltage
NEPCO	National Electricity Power company
SCADA	Supervisory control and data acquisition
UPS	Uninterruptible power supply

1. Executive Summary

NEPCO has contracted BDO Jordan to evaluate the Jordanian Liquefied Natural Gas import terminal, located in Aqaba port, south of Jordan. The function of this import terminal is to unload the LNG from the FSRU and to transmit the gas through the Arab Gas Pipeline to the generation power plants, thus NEPCO needs to assess the appraisal for insurance purposes.

The main objective of the asset valuation process is to have a complete and independent assessment, in terms of the value and general condition of the Liquefied Natural Gas import terminal, according to provided data by NEPCO. Subsequently, the main role of the BDO Team's evaluation is as follows:

1. Visiting the Liquefied Natural Gas import terminal to verify the provided asset list.
2. Valuation replacement of assets as new using the replacement Cost Method.
3. Valuation as "Fair Market Value" of assets using depreciated Cost Method.

Based on the TOR and the technical proposal, all documents provided by NEPCO related to the LNG terminal were reviewed, then, a site visit was conducted on March 16, 2023, in which the assets were verified against the asset list provided by NEPCO. The expected useful life and functionality of assets were checked as per the documents reviewed and the observations done on site.

BDO Team developed a valuation excel sheet (Annex 1) for all assets as a final outcome, where it included inventory, construction costs, depreciation and fair market value.

The valuation of the fair market value of similar assets considering depreciation and asset conditions is **43,399,686 USD**, while the replacement value with the same specifications is: **55,549,461 USD**.

2. Introduction

This report presents BDO Team findings, comments, and recommendations based on the site visit observations and information received from NEPCO for the LNG terminal. Therefore, BDO Team visited the LNG terminal on the March 16, 2023 and all needed data were collected.

3. Location

The LNG terminal site is located in the southern part of Jordan within the Aqaba Governorate and the location coordinate of the terminal is (29.376942°, 34.966040°), away from the capital of Jordan (Amman) about 350 km. The terminal site is easily accessible from Amman and Aqaba cities through the national roads, the site area is generally flat with no gradual slope, and the elevation of the substation is around 7 m above sea level. The following figure illustrates the site location map.



Figure (1) Site Location Map

Source: Google Earth

4. Terminal Description

The LNG import terminal is connected directly to a high-pressure pipeline and has no storage tanks, this type of terminal is commonly referred to as an "LNG regasification terminal" or a "send-out terminal".

Unlike traditional LNG import terminals that rely on storage tanks to store and maintain for future utilization, this type of terminal receives LNG from LNG carriers, re-gasifies it immediately, and delivers it directly to the high-pressure pipeline for distribution to end-users.

One of the main advantages of LNG regasification terminals is eliminating the need for large storage tanks, which can be expensive to construct and maintain. This also reduces the environmental footprint of the terminal, as it requires less land area.

Another benefit of LNG regasification terminals is their flexibility in terms of capacity and location. Since they do not require large storage tanks, they can be scaled up or down easily to meet changes in demand. They can also be in more urbanized areas, where space for large storage tanks might be limited, making this type of terminals an attractive option for densely populated regions.

However, LNG regasification terminals also have some limitations. For instance, they rely on a continuous supply of LNG from LNG carriers, which can be affected by weather conditions, shipping schedules, and geopolitical factors. Additionally, they require sophisticated control and safety systems to ensure the safe and efficient operation of the terminal and the high-pressure pipeline.

5. Field Visit

On March 16, 2023, BDO's Technical Team conducted a detailed field visit to the terminal and checked all the main items exist, and the following main parts were evaluated:

5.1. Civil Foundation and Structure

The civil part of the terminal is divided into the following two main parts:

5.1.1 Land Side Work:

- a. General site work such as site clearance, earthworks, and the demolition (cut and fill works).
- b. External works including roads, parking area and fencing (fencing and gates)
- c. Buildings and foundations: The terminal area is approximately 40,000 square meters, and includes three buildings, the main building contains offices, control system, and the monitoring office. The second building contains the firefighting system, UPS batteries and the LV equipment's and the third building is a shed for the air compressor and the backup generator. The buildings are made from bricks and concrete sealing and generally in good conditions, as shown in the following picture:



Picture (1): Terminal general view



Picture (2): Service building and the shed for electrical equipment

5.1.2 Marine Side Works:

- a. Tug Jitty
- b. The Loading Platform
- c. Breasting Dolphin No.1
- d. Breasting Dolphin No.2
- e. Mooring Dolphin No.1
- f. Mooring Dolphin No.2
- g. Mooring Dolphin No.3
- h. Mooring Dolphin No.4
- i. Access Ramp including earthworks, structure and the connection from the access roads to the approach trestle
- j. Approach Trestle
- k. Shoreline Tie-in Abutment
- l. Access walkways
- m. Roadway on the Marine side



Picture (3): Marine side general view

5.2. Mechanical and Electrical Equipment

Regasification terminal is a complex facility that requires a variety of mechanical and electrical equipment to operate effectively. The mechanical and electrical equipment used in an LNG regasification terminal can be grouped into several categories, which are the gas main system and associated equipment, regasification equipment, and supporting infrastructure.

The regasification equipment used in an LNG regasification terminal is responsible for transferring the LNG through pipelines.

LNG regasification terminal also includes a variety of supporting infrastructure including pipelines, pumps, and valves, in purpose of moving the gas through the facility and into the natural gas pipeline network. The pipelines used in the LNG regasification terminal are made of high-strength carbon steel, to withstand the high pressures and temperatures involved in the process. The pumps and valves used in the facility are also designed to handle high-pressure and high-temperature conditions.

In general, we divided the mechanical and electrical equipment into four main categories, which are:

- a. The water and diesel storage: one main water tank, two water pumps, two diesel tanks, and one underground concrete septic tank.



Picture (4): Water main tank in the terminal



Picture (5): one of the diesel storage tanks in the terminal



Picture (6): one of the two diesel engines

- b. Firefighting System which includes:
 - firefighting main panel
 - piping works
 - Equipment of the fire fighting
- c. Main Gas System which includes the high-pressure piping above and under the grounds and the connected valves.



Picture (7): Main gas pipes

- d. Electrical and Mechanical Systems and devices which includes the following components:
 1. Fiscal Metering skid
 2. Chromatographs
 3. HIPPS system
 4. ESD isolation system
 5. Loading Arm
 6. Depressurization system
 7. Pressure relief system
 8. Gangway
 9. Backup generator
 10. Air compressor
 11. N2 generating system.
 12. Substation and transformer
 13. Main electrical Panels

14. UPS system
15. Lighting and electrical wiring
16. Power cables
17. Cable Trays
18. Cathodic protection and Earthing System
19. Communication System
20. CCTV system
21. Pressure transmitter
22. ESD PLC control
23. Fire and Gas detection system
24. Breasting Dolphin Fenders
25. Mooring Dolphin Mooring Hooks



Picture (8): Portable generator



Picture (9): Air compressor



Picture (10): UPS system batteries



Picture (11): Chromatographs



Picture (12): Cathodic protection system main supply



Picture (13): Communication system main panels



Picture (14): Control room in the main building



Picture (15): Marine side overview



Picture (16): Gangway and Loading Arm



Picture (17): Fenders and Breasting Dolphins

6. Financial Valuation

6.1. Methodology

As to achieve the determined project's objective and value the LNG terminal assets as required, BDO Team took into consideration the commercial and productive assets of the LNG Import Terminal and set a specific methodology that mainly focused on estimating the replacement costs of the terminal's assets and value their current fair market value. The plan involves the costs of the terminal rebuilding in case of any damage or destruction occurred and that is beyond repair. Depending on the technical description, layouts, and drawings provided by NEPCO, as well as the site visit to the terminal, the BDO team has prepared an Excel sheet (Annex 1) which includes thorough results and data as follows:

- 1- Asset inventory: The first step was to identify and inventory all the assets that the LNG terminal consists of. This includes land, buildings, main gas system, pipelines, and other equipment. The asset list submitted includes all the important details about the equipment in the terminal; technical name and description, main specification of the equipment, year of manufacturing, quantity, fair market value, newly replacement value, references, and other details.
- 2- Construction costs: Referring to the given specifications and other important details including the year of installation and model of each piece of equipment, a cost estimate has been given to each asset taking into account the cost of construction materials and installation as well as the cost of equipment.

- 3- Depreciation or fair market value: the evaluation of the fair market value has many factors or determinants such as age and condition of each asset, expected useful life of each asset, maintenance schedule and type of each equipment or asset. The table below shows the valuation method for each type of the equipment:

No.	Type or class	Valuation method
1	Civil structure and general works	Most of the cost for such asset is for the reinforced concrete supply and installation. the depreciation percentage is set to be 2% and the replacement as new is estimated by considering the difference in reinforced concrete prices from 2015 to 2022, which is around 15%, according to the inflation rates in Jordan, which are published by the Jordanian central bank, and the difference in cement and steel values locally and globally.
2	Assets with extremely long useful life such as water tanks and pipes	This type of equipment or installation is designed for maximum service lifetime. We assumed the life span of such equipment is rather high, and depression was assumed to be less than 2%/year and 1%/ year for some equipment.
3	Assets which contain only electronic and electrical parts	The fair market price for all devices containing only electronic and electrical parts is set to 25 years, according to the general practice.
4	Mechanical and electrical only assets	The fair market price for electrical wiring and cables, cable trays, and such is considered according to the assumption of 30 years of life expectancy.

- 4- Replacement cost estimation: estimation for replacement cost of each component or asset was conducted using the following methods:
- a- Industry cost data, prices and studies published on the internet.
 - b- BDO consultants experience and knowledge.
 - c- The base construction costs combined with the inflation for some of the assets, especially for assets with installation cost that is considered as a major part of the total cost.
 - d- Price quotes received by some of the equipment suppliers.

6.2. Valuation

As mentioned in the methodology section above, each value estimation differs from one to another in accordance with each specific item's depreciation calculation. Since the terminal is around 7 years old, the current value of each item differs from the original purchase value as well as the new replacement value.

The valuation methodology covered various costs throughout the estimation adopted for all assets as shown in Annex 1; and they were specified to include: Equipment, installation, logistic as well as commissioning costs. With regards to the construction costs, the only expenses that are included are those associated with the building materials, machinery, logistics, contractor installations and commissioning.

Meanwhile, there are costs excluded from the construction and equipment valuation, since they are not going to be considered in case of any replacement scenarios arising. Those costs that are excluded by our team range from: terminal building design, engineering studies that may include Soil, Environmental, Construction studies, etc., to obtaining official municipal permit licenses.

The summary of the results was as follows:

1. Purchase value or construction costs estimates is: 49,257,597 USD.
2. Fair Market Value of similar assets considering depreciation and asset conditions: 43,399,686 USD.
3. Replacement as new with the same specifications is: 55,549,461 USD

Technical Name and description	Quantity	Year of Installation	Manufacturer	Fair Market value of similar assets considering depreciation and asset conditions - USD	Replacement as new with the same specifications - USD
1. CIVIL WORK					
Loading Platform	1	2015	-	1,741,830	2,329,191
Breasting Dolphin No.1	1	2015	-	3,162,627	4,229,094
Breasting Dolphin No.2	1	2015	-	3,162,627	4,229,094
Mooring Dolphin No.1	1	2015	-	561,337	750,625
Mooring Dolphin No.2	1	2015	-	561,337	750,625
Mooring Dolphin No.3	1	2015	-	561,337	750,625
Mooring Dolphin No.4	1	2015	-	561,337	750,625
Access Ramp including earthworks, structure and the connection from the access roads to the approach trestle	1	2014	-	430,950	576,270
Approach Trestle	1	2014	-	854,562	1,142,729
Shoreline Tie-in Abutment	1	2014	-	223,372	298,695

Technical Name and description	Quantity	Year of Installation	Manufacturer	Fair Market value of similar assets considering depreciation and asset conditions - USD	Replacement as new with the same specifications - USD
Access walkways	1	2014	-	926,268	1,238,614
Roadway on the Marine side	1	2014	-	1,444,657	1,931,809
Site general civil works	1	2014	-	1,201,915	1,607,212
Roads and parking areas	1	2014	-	1,330,091	1,778,610
Fencing and gates	1	2014	-	242,691	324,529
Terminal Main building	1	2014	-	504,245	674,281
Service building	1	2014	-	584,107	781,073
Air compressor shed	1	2014	-	61,344	82,029
Earthworks (cut and fill)	1	2015	-	385,539	515,546
Structure and concrete	1	2015	-	281,113	375,907
Sheet piles	1	2015	-	1,958,885	2,619,439
2. Mechanical and Electrical Equipment					
Water tank	1	2015	NEGEM CO	140,945	185,454
Water pumps	2	2015	CLARKE	84,318	84,600
Septic tank	1	2015	-	49,013	64,491
Diesel storage and piping	2	2015	-	17,949	23,618
firefighting main panel	1	2015		178,420	232,721
Piping works	1	2015	-	169,200	169,200
Equipment of the fire fighting	1	2015	-	90,220	117,679
Gas Pipes above the ground	1	2015	BAM/MAG	3,583,457	4,207,733

Technical Name and description	Quantity	Year of Installation	Manufacturer	Fair Market value of similar assets considering depreciation and asset conditions - USD	Replacement as new with the same specifications - USD
Gas Pipes below the ground	1	2015	BAM/MAG	574,860	675,006
Valves	1	2015		2,630,916	3,089,250
Fiscal Metering skid	2	2015	RMG	3,364,738	4,073,104
Chromatographs	2	2015	RMG	49,350	324,300
HIPPS system	1	2015	Honeywell International HIPPS	2,689,046	3,255,161
ESD isolation system	1	2015	Emerson / Sam engineer	257,295	335,602
Loading Arm	2	2015	FMC	4,117,623	5,244,551
Depressurization system	1	2015	Emerson / Sam engineer	98,642	128,663
pressure relief system	2	2015	Beamex Oy Ab / MC6	468,825	616,875
Gangway	1	2015	BUITENDIJK TECHNIEK	1,046,455	1,332,853
Backup generator	1	2015	Cummins Power Generators	12,959	16,920
Air compressor	2	2015	Atlas Copco	231,875	253,800
N2 generating system	1	2015	Jordan Gases	34,519	21,150
substation and transformer	1	2015	Multi types and models	363,319	352,500
Main electrical Panels	1	2015	ABB, SCHNIDER, ETC	67,925	88,597
UPS system	1	2015	OPzV battery SUNLIGHT	45,596	49,350
Lighting and electrical wiring	1	2015	TEP EX / JOLLY / MYRA / NCM / VICTOR LIGHTING / VENTILUX /	233,028	303,949
Power cables	1	2015	BAM/MAG	221,573	289,008

Technical Name and description	Quantity	Year of Installation	Manufacturer	Fair Market value of similar assets considering depreciation and asset conditions - USD	Replacement as new with the same specifications - USD
Cable Trays	1	2015	BAM/MAG	335,043	437,013
Cathodic protection and Earthing system	1	2015	DUCORR	24,849	32,412
communication system	1	2015	Groupe LE LAS COMMUNICATION SOUS HAUTE PROTECTION	102,325	142,118
CCTV system	1	2015	Boch	282,046	282,000
Pressure transmitter	1	2014	Honeywell	45,684	35,250
ESD PLC control	1	2015	Emerson /engineer	126,900	176,250
Fire and Gas detection system	2	2015	Honeywell / Notifire	36,547	21,150
Breasting Dolphin Fenders	2	2015	Fender/Team	363,179	473,712
Mooring Dolphin Mooring Hooks	4	2015	Mampaey	518,880	676,800
Total				43,399,686	55,549,461

7. Conclusion

In conclusion, the site visit has been conducted by the BDO Team to evaluate the provided data and information by NEPCO and to ensure that the items are classified as on-duty and working in good condition.

BDO Team has no comment regarding the existence or functionality of the system in the LNG terminal.

The valuation of the fair market value of similar assets considering depreciation and asset conditions is **43,399,686 USD**, while the replacement value with the same specifications is: **55,549,461 USD**.