EXPRESSION OF INTEREST FOR THE OPERATION & MAINTENANCE OF TWO RECIPROCATING ENGINES POWER PLANTS IN ZOUK AND JIEH - LEBANON

i. Introduction

Electricité du Liban (EDL) is soliciting expression of interest for the Operation and Maintenance (O&M) contract for Zouk 194 MW and Jieh 78 MW Reciprocating Engines Power Plants.

A turnkey O&M agreement to be used, where EDL will only bear the responsibility for fuel supply, including sources of supply, quantities, cost, and delivery. The O&M Contractor to bear all other responsibilities.

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2. Zouk Power Plant

Zouk site is located 20 km north of Belrut, it consists of 10 MAN Diesel& Turbo 18V48/608 engines with 10 HRSGs and a steam turbine, delivering a total nominal output of 194 MW. The engines are designed to run on HFO and able to be converted to run on gas in the future.

More technical details about the plant are provided in Annex 1.

The power plant is expected to be commissioned in the 4th quarter of 2015.

3. Jieh Power Plant

Jieh site is located 30 km south of Belrut, it consists of 4 MAN Diesel & Turbo 18V48/608 engines with 4 HRSGs and a steam turbine; delivering a total nominal output of 78 MW. The engines are designed to run on HFO and able to be converted to run on gas in the future.

More technical details about the plant are provided in Annex 2.

The power plant is expected to be commissioned in the 3rd quarter of 2015.

4. Scope of Work

O&M Contractor scope of work will include, but not limited to, the following:

- i) Take over the operation of all units of the PP like Engines, Boilers, STG, balance of plant, fuel storage, GIS... and operate them to ensure steady and reliable supply of power to EDL grid.
- Undertake timely overhaul of the equipment as per the OEM recommendations to ensure high degree of reliability required for safe and erythematic operation of the steel plant.

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- Supply and manage OEM spare parts and consumables used in regular operation as well as during overhauling activities.
- Liaison with EOL national power dispatching center for the smooth operation of the
 PP and scheduling of the power generation.
- v) Laison with various EDL directorates.
- vi) Supplement the manpower of the PP to ensure adequate manning with trained manpower for the tasks and skill required to ensure high availability of PP.
- vii) Implementation of best Industry Quality Management Processes.
- viii) Prepare the Annual Production Plan for consideration of EDL
- ix) Responsible for getting all the necessary permits and pay all taxes and duties in relation with the O&M agreement.

5. Duration

Each of the 2 contracts will be for a period of 5 years from the Commercial Operation date for 365 days a year, 24 hours a day operation.

The agreement may be extended (subject to agreement of both parties).

6. Applicant Requirements

- Average annual turnover (defined as billing/value for works in progress and completed), for operation and maintenance of power plants, for the last five years, of US \$ 5,000,000 (Five Million US Dollars)
- Previous operation and maintenance experience of at least 2 similar technology power plant of at least 50 MW each, for the last five years.
- Previous operation and maintenance experience of medium speed engines.

Applicant's experience should include the capability of working under very tight schedules and controls, and should have available the organization, resources, knowledge and experience for the provision of O&M services in reciprocating engines power plants for a minimum period of five years.

Please complete Annex 3 and attach relevant supporting documents.

7. Modification/Cancellation

- EDL will be at liberty to amend/modify/delete any of the above conditions and/ or the process as may be deemed necessary in the light of the facts and circumstances of the case.
- EDL reserves the sole right to refuse any or all bids without assigning any reasons thereof.
- EDL reserves the right to proceed with/ cancel the bidding process irrespective of the response to its invitation.

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- EDL at its discretion may extend the last date for submission of Bids.
- Interested parties are advised to keep themselves informed of any such modification/cancellation that may be notified. EDL shall not be notifying any such modification separately through any other media.
- The cost of preparing the EOI shall be borne by the Applicants.

Decision of EDL in respect of the above would be final and binding on the parties.

8. Submission of the EOI

The interested firms are required to submit their EOI by 12:00 Hrs. on 01/12/2014 to the following address:

Electricité Du Liban EDL

22, RUE DU Fleuve

P.O.BOX 131

Beirut - Lebanon

Twelfth floor-Secretariat of EDL

Or in case of inaccessibility to the above address then to:

Electricité Du Liban EDL Zouk Power Plant Administrative Building, 2nd floor Secretariat of EDL

And .

Bear the following identification:

EXPRESSION OF INTEREST FOR THE OPERATION & MAINTENANCE OF TWO RECIPROCATING ENGINES POWER PLANTS IN ZOUK AND JIEH — LEBANON DO NOT OPEN BEFORE (01/12/2014).

9. ANNEXES

ANNEX 1 - Zouk Power Plant Equipment & Systems

Mechanical Systems

4 stroke diesel engines incl. generators (10 Units)

Control System

Air Intake System

Lubrication Oil System

Cooling System

Starting Air System

Turbochargers

Engine turning gears

Make upwater system

Fuel System

Exhaust System

Complete Diesel Combined Cycle arrangement incl. steam boiler, evaporator, economizer, deaerator, turbine, generator, etc. (10 Units)

Stacks

Alarm Systems

Fuel Oil Storage System

HFO Separator System

HFO Ring-Main Booster Return Fuel System

Black Start

Overhead Crane

Fire Fighting System

Oil Water Treatment System

Ventilation and Air-conditioning System

Electrical Systems

Synchronous Generator

Auxiliary Transformers

15 kV Switchgear

Earthing

400 V Auxiliary Supply System

Electrical Motors

Protection

Control and Instrumentation

220 V DC system

Lightning protection

Synchronizing equipment

150 kV switching station

LENCC SCADA Monitoring and Automatic Control (AGC) Interfaces

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ANNEX 2 - Jieh Power Plant Equipment & Systems

Mechanical Systems

4 stroke diesel engines Incl. generators (4 Units)

Control System

Air Intake System

Lubrication Oil System

Cooling System

Starting Air System

Turbochargers

Engine turning gears .

Make upwater system

Fuel System

-Exhaust System

Complete Diesel Combined Cycle arrangement incl. steam boiler, evaporator, economizer, deaerator, turbine, generator, etc. (10 Units)

Stacks

Alarm Systems

Fuel Oil Storage System

HFO Separator System

HFO Ring-Main Booster Return Fuel System

Black Start

Overhead Crane

Fire Fighting System

Oil Water Treatment System

Ventilation and Air-conditioning System

Electrical Systems

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15 kV Switchgear

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Protection

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220 V DC system -

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Synchronizing equipment

150 kV switching station

LENCC SCADA Monitoring and Automatic Control (AGC) Interfaces

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ANNEX 3 - Generalinformation Form

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