

**MINISTRY OF ELECTRICITY
HEADQUARTER
INVESTMENT & CONTRACT OFFICE
Baghdad, Iraq**

**REQUEST FOR INFORMATION
TO BUILD OWN AND OPERATE
SOLAR AND WIND POWER PROJECTS
IN FOUR SITES IN SOUTHERN IRAQ**

INTRODUCTION

- 1.1 The Ministry of Electricity of the Republic of Iraq (the "MOE"), in its efforts to diversify its sources of power generation and in order to mitigate the impact of power generation on the environment, hereby requests information from interested parties for the first renewable energy projects in Iraq. Please note that these projects are to be structured on a build, own, operate basis for a twenty year term. Please also note that these projects are to be construed as a first phase for the introduction of renewable energy generation projects in Iraq, to be followed by further phases in due course.
- 1.2 The projects are to be on four separate sites, each for 5 MW, which are:
 - 1.2.1 Solar Power Plant in Al-Dagharah in the Al-Qadisiyah Governorate;
 - 1.2.2 Solar Power Plant in Al-Saniyah in the Al-Qadisiyah Governorate;
 - 1.2.3 Solar Power Plant in Al-Hayderiyah in the Najaf Governorate; and
 - 1.2.4 Wind Farm in Ali Al-Gharbi in the Maysan Governorate.
- 1.3 Interested parties should note that at this stage, the MOE intends to award each of the projects separately and not as one. Parties should be free to comment on their preference herewith. Interested parties should note that qualified parties would be in a position to bid for one or more projects. However, interested parties should note that the MOE reserves the right to announce all projects as one opportunity. This will be decided upon by the MOE by the time that the RFP is issued in accordance with the schedule below.
- 1.4 The scope of the project would include the design, financing, construction, operation and daily performance evaluation.
- 1.5 All four projects are to be connected to the grid through the nearest substations, which are either 11/33kV or 132/33/11kV substations. These connections will be using one of the feeder circuit breakers at the relevant substation or nearest transmission lines of 11, 33 or 132 kV.
- 1.6 More detailed information on each site is included in the table in Exhibit 2 (for the solar power plants) and in the table in Exhibit 3 (for the wind farm).
- 1.7 Important Note on Sandstorms: Please note that all equipment should be suitable for outdoor installation, taking into account frequent sandstorms and a polluted atmosphere. Accordingly, the following specifications would be required:
 - 1.7.1 The supply and installation of appropriate technology for dust treatment on the solar nodules, taking into account Iraqi weather patterns;
 - 1.7.2 The material should be salt water resistant and should be of high quality galvanized steel to ensure a long-life span for the entire project;

- 1.7.3 All structures and equipment should be grounded, according to IEC or BS standards; and
- 1.7.4 The projects should include the supply and installation of arrester systems to protect the whole plant, which shall be installed according to international standards.

2 RFI REQUIREMENTS PROCESS

- 2.1 Interested parties should note that they will be required to provide information on themselves for purposes of a preliminary evaluation by the MOE.
- 2.2 Once the RFI responses have been evaluated by the MOE, qualified parties will be invited to bid for the one or more projects through a formal RFP issued pursuant to Iraqi procurement regulations (Regulation number 2 of 2014).
- 2.3 Interested parties should inform the MOE of their intent to respond by no later than 2 October 2014 in the form attached hereto as Exhibit 1. The intent to respond, including the signed confidentiality obligations, should be delivered by hand by an authorized person (with the full address of the Company) to the Ministry of Electricity, Office of Investment and Contracts – Tenders Section, Ministry of Electricity Headquarters, Al-Niqabat Street, Al-Mansour District, Baghdad, Iraq. It is preferred that the intent to respond should be sent by email.
- 2.4 The following is the Schedule for this RFI:

31 August 2014	Request for Information Made Available to Interested Parties
2 October 2014	Interested parties should submit their intent to respond
2 October 2014	Interested parties should submit any technical or other questions that they may have on the projects
30 October 2014	The MOE shall respond to all questions
20 November 2014	Deadline for Receiving Response to this RFI
20 November 2014 – 22 December 2014	RFI responses to be evaluated and short list completed
22 December 2014	Decision to Launch RFP

- 2.5 All questions related to this RFI shall be submitted by email and directed to the following:

2.5.1 32_commercial.dg@moelc.gov.iq - Attention: Mr. Ra'ad Qassem, Director, General

2.5.2 A copy of the questions should be sent to the following addresses:

Salem.chalabi@shlegal.com - Consultant to the MOE

2.6 RFI Terms and Conditions:

2.6.1 Liabilities of the MOE: This RFI is only a request for information relating to the experience of interested parties and no contractual obligation on behalf of the MOE whatsoever shall arise from the RFI process. This RFI does not commit the MOE to pay any cost incurred in the preparation or submission of any response to the RFI.

2.6.2 Confidentiality: This RFI is both confidential and proprietary to the MOE, and the MOE reserves the right to recall the RFI in its entirety or in part. Interested parties cannot and hereby agree that they will not duplicate, distribute or otherwise disseminate or make available this document or the information contained in it without the express written consent of the MOE. Interested parties shall not include or reference this RFI in any publicity without the prior written approval of the MOE, which, if granted, shall be granted by the Director General of the Investments and Contracts Office of the MOE. Interested parties must accept all of the foregoing terms and conditions without exception. All responses to the RFI will become the property of the MOE and will not be returned.

3 **RESPONSE FORMAT**

3.1 All responses to this RFI should come in the format laid out in Section 3.3 of this RFI below.

3.2 Responses to this RFI should be submitted electronically to the addresses included in Section 2.5 of this RFI by not later than noon (Baghdad time) on 20 November 2014. Ten physical copies should also be delivered to the address mentioned in Section 2.3 of this RFI by the same deadline.

3.3 You should provide the answers in the relevant areas of the table below. Should you require more space, please add the information in the form of attachments.

	Question	Response
1	Name of Company	
2	Country of incorporation of Company	
3	Address of Company	
4	Name, physical address and email address of person responsible for the information in this RFI	
5	Telephone Number of person	

6	Date of incorporation	
7	Is Company part of a group of companies?	
8	What countries does the Company have affiliates or subsidiaries? Addresses of such affiliates and subsidiaries	
9	Number of employees of company (on a consolidated and unconsolidated basis) - Total - Development - Implementation - Manufacturing - Administration and sales	
10	Total Revenue - Last financial year - Previous two years Total profit/loss - Last financial year - Previous two years Total Assets - Last financial year - Previous two years Total capital - Last financial year - Previous two years Retained earnings - Last financial year - Previous two years	
11	Types of renewable energy projects that the Company has been involved in	
12	Experience in the Middle East generally and with renewable energy specifically	
13	Name and size of last five renewable energy projects that the Company has been involved in. Please include dates of these projects.	
14	Name and size of largest renewable energy projects that the Company has been involved in. Please include	

	dates of these projects.	
15	Do you manufacture your own equipment? If not, who do you purchase your principal equipment from? It would be helpful if you provide specific details of manufacturers and equipment.	
16	Describe any third party relationships and alliances	
17	Does the Company have experience in Iraq? Please provide types of experience the Company has in Iraq.	
18	Please provide details of any outstanding legal action against your company or any directors. Please include details of legal action against principal subsidiaries and equipment	
19	Should your company be successful, please provide information on your implementation methodology.	
20	Is the technology developed by your organisation or is it licensed?	
21	<p>Training</p> <ul style="list-style-type: none"> - Does your company offer formal training exercises? - If yes, what type of training programs does your company offer? - What is the duration of the training program? 	
22	Please provide details of IPP projects that you have been involved in.	
23	Please describe your proposals relating to the maintenance of the equipment	
24	Please provide general details of your financing plan, as well as your sources of financing	
25	What type of services and support do you anticipate needing from the MOE?	

	Please note that the land will be supplied at minimal rent and that, should you prove successful, you could apply for an investment license which could provide you with a tax holiday for between 10-15 years	
26	Are there other specific market, technology or cost barriers that this announcement should have applicants address, such as military conflict, land use, environmental concerns, water availability, or transmission access?	
27	What measures should be put in place to avoid contractual delay in the build out of the plants?	
28	How much time do you anticipate needing to complete the RFP, if you are prequalified?	
29	Would you think the announced term (20 years) is an appropriate term?	
30	What level of cost per MW would you anticipate the project requiring? Please note that this is not a commitment on your part but only indicative.	
31	Do you believe that the MOE should base its evaluation criteria principally on the tariff to be charged? Are there other criteria that should be considered, such as impact on the environment?	
32	<p>Please provide an overview of the following:</p> <ul style="list-style-type: none"> - items to be included in the technical plan (single line diagrams, monthly and annual produced electrical energy, monthly and annual 	

	<p>performance ratios, loss diagram over the whole year (PV array losses, system losses), monthly solar insolation, ambient temperatures)</p> <ul style="list-style-type: none"> - high level financial model (including assumptions on tariffs and financing) - Environmental impact mitigation - Social, sustainability and health matters 	
33	Other than those listed in Section 5.1 of this RFI, are there any other agreements that you feel should be included in an RFP?	

4 **PROJECT REFERENCES**

- 4.1 Please provide details of at least three projects that the Company has completed.
- 4.2 If the company has completed an IPP project previously, please provide details of three IPP projects that the company has been involved in.

5 **TRANSACTION DOCUMENTS**

- 5.1 The following will be agreements that will be included in the RFP when issued:
- 5.1.1 Power Purchase Agreement;
 - 5.1.2 Land lease agreement;
 - 5.1.3 Grid Connection Agreement; and
 - 5.1.4 PV Solar Grid Code.
- 5.2 The PV Solar Grid Code will include the following parameters:
- 5.2.1 Voltage range of operation
 - 5.2.2 Normal frequency operating range
 - 5.2.3 Flicker
 - 5.2.4 Harmonics and wave form distortion
 - 5.2.5 Power factor
 - 5.2.6 DC Injection

- 5.2.7 Synchronization
- 5.2.8 Safety and Protection
- 5.2.9 Safety Disconnect from utility network
- 5.2.10 Disconnection Switching Unit
- 5.2.11 Overvoltage, undervoltage and frequency
- 5.2.12 Prevention of islanding
- 5.2.13 Response to utility recovery
- 5.2.14 Isolation
- 5.2.15 Earthing
- 5.2.16 Short-circuit protection
- 5.2.17 Metering
- 5.2.18 Metering schemes
- 5.2.19 Types of meter
- 5.2.20 SCADA system

- 4 Make only such limited number of copies of the Confidential Information as are necessary and required for the purpose of responding to the RFI, and provide those copies only to Authorised Persons (as defined below).

Our obligations above are qualified by the fact that we may disclose the Confidential Information provided by you to our directors, officers, employees, lenders, suppliers, contractors and professional advisors to the extent that disclosure is necessary and required for the purpose of completing the response to the RFI.

For purposes of this letter, the following terms are defined as follows:

- "Authorised Persons" shall mean our directors, officers, employees, lenders, suppliers, contractors and professional advisors
- "Confidential Information" shall mean any information of any nature whatsoever disclosed (whether in writing, verbally or by any other means and whether directly or indirectly) by the MOE or by a third party on behalf of the MOE Party to us.

We hereby agree that the obligations under this letter shall be governed by the provisions of Iraqi law and that we hereby submit solely for the purposes of this letter to the jurisdiction of the courts of Iraq.

Sincerely,

[INSERT NAME AND TITLE OF SIGNATORY]

EXHIBIT 2

Table 1: Sites Information and Technical Requirements

	Site Details	Site 1	Site 2	Site 3
1	Town/Municipality /Province	Al-Dagharah/Al-Qadisiyah Governorate	Al-Saniya/Al-Qadisiyah Governorate	Al-Hayderiyah/ Najaf Governorate
2	GPS Coordinates	38S0489482/UTM35472 65		
3	Available Land Size (Acres)	50	172	200
4	Required Land Size (Acres)	40	40	40
5	Territory	Agricultural, Semi Plain, no pollution	Agricultural, Semi Plain, no pollution	Sandy and Plain, no pollution. Possible Sand Storms
6	Available Resources	River Water Pump Station for Agricultural purposes	River Water Pump Station for Agricultural purposes	River Water Pump Station for Agricultural purposes
7	Water Availability	Near the river		
8	Surrounding Environment	Farms, limited number of Rural Houses, Paved Roads	Farms, Limited number of Rural Houses, Paved Roads, Palm Trees	New Power Station(200m), Limited number of houses and farms and no river stream
9	Access to the Site	Paved Road (30m)	Adjacent to the main paved Road (3km)	Adjacent to the main paved Road (1km)
10	National Grid Line	33kV	33kV	132kV
11	Security Condition	Very Good	Very Good	Very Good
12	Communication Line	GSM Available	GSM Available	GSM Available
13	Altitude (m)	20	25	20
14	Slope (degree)	0	0	0
15	Shading effect on the Land	None	None	None
16	Min-Max Ambient Temperature	0-55°C	0-55°C	0-55°C

24	Dust Storm	Should be taken into consideration with international certifications
25	Proven Track Record of the suggested wind turbine (MW)	Greater or equal to 5 farms with capacity not less than 20MW and was used for more than 5 years
26	Origins of the Equipment	USA, EU, Japan and Korea

Raad Q. Mohammad

D.G

Investment & Contracts Office

/ /2014