



**EXPRESSION OF INTEREST
FOR
DEVELOPMENT OF SOLAR PV PROJECT
AT KHARAGHODA, DIST.SURENDRANAGAR,
GUJARAT**

EOI No.	13 (Com)Purchase/2021-22/ KoD /2
EOI Issue date	27-11-2021
Last date and time of Submission of EOI online on CPP portal.	13.12.2021 upto 15:00 hrs
Date of opening of EOI	14.12.2021 at 15:00 hrs

Hindustan Salts Limited

(A Government of India Enterprises)

CIN:U14220RJ1958GOI001049

Registered Office:G-229,Sitapura Industrial Area,Jaipur-302022

(Raj.)Tel/Fax: 0141-2771448/ 2771449

Email : information@indiansalt.com / purchase@indiansalt.com

Unit :Kharaghoda,Dist.Surendranagar-382 760(Gujarat)

Subsidiary: Sambhar Salts Limited

CIN:U14220RJ1964GOI001188

Unit : Sambhar Lake, Pin-303604,Dist.- Jaipur(Rajasthan)

website : www.indiansalt.com

1. INTRODUCTION

Hindustan Salts Limited (HSL) (hereafter referred as “Company” or “HSL”) was incorporated on 12th of April, 1958 as a Company fully owned by the Government of India to take over the salt sources at Sambhar, Didwana and Kharaghoda earlier managed by the Salt Department, Government of India. It is the only Central Government Public Sector Undertaking under Ministry of Heavy Industries & Public Enterprises engaged in the production of salt. The company is having its registered office at G-229, Sitapura Industrial Area, Jaipur-302022 (Rajasthan).

The company has major salt production works measuring approx. 23,000 acres of land at Kharaghoda, Distt. Surendranagar (Guj.) in which salt production is conducted in various sidings and different varieties of Industrial & Edible Grade Salt are produced.

2. OBJECTIVE

Company invites Expression of Interest from the interested parties/Public Sector Undertakings / Govt. bodies/Companies / Legal Entity / Domestic as well as International Private Entrepreneurs for Development of solar power project at Kharaghoda in Distt. Surendernagar (Gujarat).

Company would contribute only its resource i.e. requisite land (as per requirement of project) which is available at the Kharaghoda unit for execution of Solar Power Project. The party is required to develop the Project on the land of HSL and further operate and generate the revenue from the sale of generated power. All the expenditures for installation of project, seeking various clearances, power purchase agreements etc. shall be in scope of party.

Party shall pay fixed annual rental for the Land provided on per Acre basis to HSL. These rates shall remain constant for two years and shall be enhanced thereafter for every year at the rate of 5% per annum of the previous year. Applicable taxes shall also be payable in addition to annual rental.

3. SOLAR POWER GENERATION AT HSL KHARAGHODA :

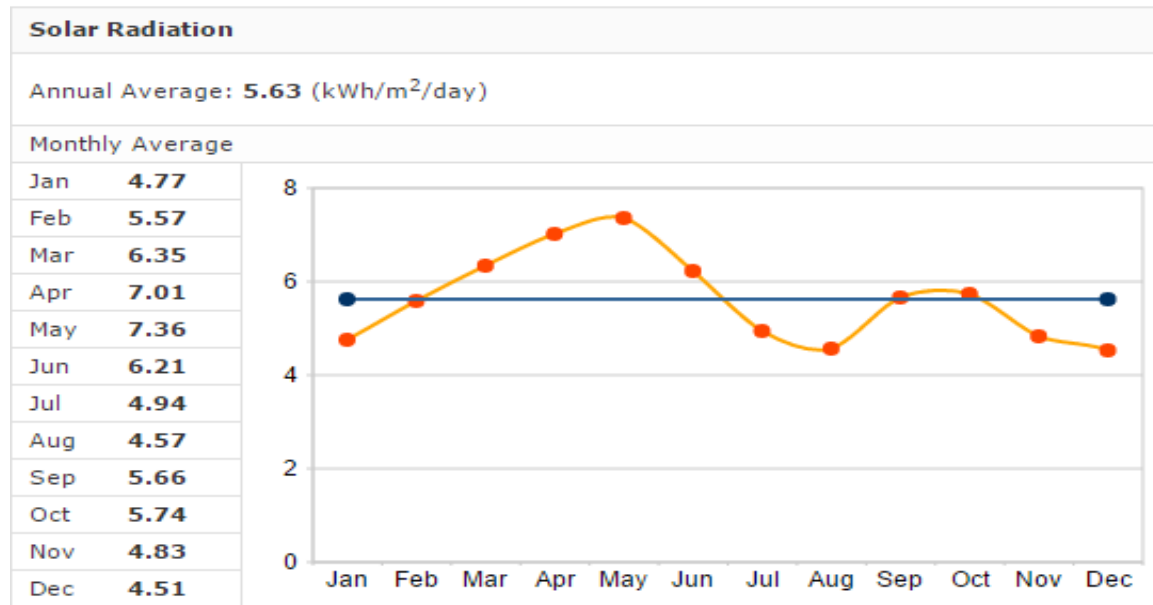
3.1 LOCATION AND RESOURCES :

Hindustan Salts limited, Kharaghoda, Distt. Surendranagar (Gujarat), has 23,595 acres of land and only part of land is used for salt production and allied products. The remaining land can be used for solar power generation.

Kharaghoda (Gujarat) is located 100 kms from Ahmedabad situated in the sub-tropical arid/semi-arid climatic zone of India. This region experiences extremes of climate during the year with hot and oppressive summers and cold and dry winters. The summer months of May and June can be extremely hot with mean monthly temperatures of more than 35°C while the maximum temperature can sometimes reach up to 50° C. The sky remains clear during major part of the year except during few dust storms due to winds that overrun the region in the summer months.

DESCRIPTION	DETAILS
Solar Potential	5.63 (kWh/m ² /day)
Land Coordinates	23.2001° N 71.7271° E
Impact of Salt Corrosion	Area is far away from the saline environment.
Rail Connectivity	Viramgam (Approx. 40 Km)
Road Connectivity	Patdi GJ SH138
Power Grid	Within 15 Km for 100 MW power evacuation.
Water Availability	Natural Ponds is available within 500 m area

Solar Irradiation in Kharaghoda, Gujarat 382760, India



The Annual Average is 5.63 (kWh/m²/day) that is very good as a point for Solar Power Generation.

3.2 Land Topography, Access, Geotechnical Conditions, Water Availability Electrical Infrastructure, Shading From Obstacles at Kharaghoda. The land at this site is fairly flat with near zero gradient across and no significant undulations. Therefore, only minimal levelling will be required for removal of few patches of undulations in preparation for setting up of the PV power plant. The entire land area has a firm surface with a very thin layer of loose top soil and is bereft of any vegetation. The soil profile, includes black cotton soil at a depth of 6-7 inches. Black cotton soil has the property that it retains moisture for a longer period of time which lends firmness to the ground that makes it conducive to strong and lasting foundation for solar PV mountings.

The proposed site for the solar PV plant is located close to the Viramgam (approx. 40 KM) or Mahesana rail connectivity, and has basic infrastructure including access, well in place. Gujarat Highway SH138 passes approximately 6-8 km from Patdi to the selected site and connects Ahmedabad (approx. 100 KM).

Geotechnical investigation is essentially required at an early stage of project planning to accurately assess requirements for civil works and to assess requirements for module support structure foundation.

To maintain maximum efficiency, the plant will require cleaning during long dry spells. Cleaning may require large quantities of water depending on the manual labour available and degree of soiling. Sole responsibility for arrangement of water for site construction and cleaning modules as part of the O&M strategy shall be responsibility of Contractor. As part of solar PV plant development, HSL may also provide support of local water i.e. natural pond within 500 mtr. area to provide water at one point for solar PV site but will not be held responsible for the same.

Power requirement during project construction may be catered from distribution utility through a temporary construction substation of suitable size or by an appropriately sized diesel generator set.

If opted for construction substation, same can be looked upon as an auxiliary supply source upon completion of project construction. Alternatively, contractor shall arrange diesel generator sets for construction power requirements. As per existing 220kV Dhrangadhar Substation is 20 km from site and 400kV Substation exist at Chorania which is around 50 km from the site.

Horizon shading is caused by land topography and objects located at a substantial distance (e.g. mountains, etc.). Data from the site visit and satellite imagery/site photographs show that there are no major mountains in the vicinity and therefore horizon shading is expected to be negligible.

Installation of PV arrays in areas of potential shading is generally avoided as shading leads to reduced performance. Simulations indicate that the plant suffers a performance loss due to shading between rows of modules and by the centrally located MV control rooms during periods in the morning and evening when sun is low. There are no large or tall structures - natural or manmade - that could obstruct the incident solar radiation.

PV modules suffer from a decrease in efficiency with rise in temperature. Kharaghoda experiences a wide yearly range of temperature as evident from the graph below. Also summer temperatures during the month of May-June may reach 50°C. The selection of PV Module technology, therefore, must be made in view of the yield loss due to high summer operating temperatures. Kharaghoda has sourced average monthly temperature data from the Metronome database.

4.0 EXPRESSION OF INTEREST:

4.1 CONTRIBUTION OF HSL

Company would contribute only its resource i.e. requisite land which is available at the Kharaghoda unit for execution of Solar Power Project.

SSL will provide the administrative support for project wherever required, however sole responsibility for Sale of Power i.e. signing of PPA agreement will be the responsibility of party.

4.2 SUBMISSION OF EXPRESSION OF INTENT BY INTERESTED PARTIES :

The party is required to develop the 1000 MW Solar Power Project on the land of HSL at Kharaghoda and operate the same. All the expenditures for installation of project, seeking various clearances, power purchase agreements etc. shall be in scope of party.

Accordingly, Interested parties are required to submit Expression of Interest for Execution of Solar Power Project at Kharaghoda, Dist. Surendranagar, Gujarat, which may include but not limited to following details which shall be under the scope of party :

- i) Proposed Solar Power Plant Capacity and accordingly land required for the same.
- ii) Arranging, obtaining and maintaining all permits, licenses, approvals, no objection certificates, clearances from all authorities concerned in the name of Company or /and JV or its designated assignee(as the case maybe), to enable unhindered smooth progress of all works during construction up-to power generation and injection to CTU Grid including operation of the Plant.
- iii) Procurement of all equipment required for setting up of the rated capacity of the plant, power evacuation and transmission requirements at specified voltage.
- iv) Creation of infrastructure requirements inside plant like road network, drainage & sewage systems including culverts, water line network, station lighting, fire control systems, lightning

arrestor systems ,fencing/boundary wall and security systems including security gates etc.

- v) Providing control room and administrative building inside plant and tele-communication network for inside and outside plant communication.
- vi) Providing SCADA system and solar radiation and weather monitoring system within plant for information and control of required parameters.
- vii) Providing suitable grid compliant Reactive power management system & metering system.
- viii) Compliance with all legal requirements of the Country and State(i.e. Gujarat) where the Project is located.
- ix) Commissioning the power plant to its full capacity, delivering power to CTU Substation.
- x) Operation and maintenance of plant for a period of Twenty Five (25) years from the commissioning for demonstration of agreed performance level and handover the entire plant to Company or its designated assignee.
- xi) Any other activity deemed fit and necessary for execution and operation of the Project as per prudent utility practices.
- xii) Estimated Cost of the project, Proposed Time period for execution of project and plan for execution of project with capacity and time frame.
- xiii) Details of power purchase agreement for sale of generated power and revenue generation thereon.
- xiv) Any other details as are deemed necessary for the project.
- xv) Govt. of India guidelines, MNRE Guidelines, Make in India policy, Domestic Content Requirement policy of Govt. of India, DPIIT Guidelines and all other Government prescribed regulation of Central as well as State Government to be followed. List of such guidelines applicable on the solar power project may also be mentioned in the EoI.
- xvi) MODEL OF REVENUE SHARING:**

Party shall pay fixed annual rental for the Land provided on per Acre basis. These rates shall remain constant for two years and shall be enhanced thereafter for every year at the rate of 5% per annum of the previous year. Applicable taxes shall also be payable in addition to annual rental. Accordingly the EOI should include proposed model for revenue sharing from the project. The proposed Annual Rates per acre and applicable taxes on the same payable to HSL must be separately mentioned in the EoI.
- xvii) Further parties are also required to submit information regarding :
 - a) Information regarding past experience in executing Solar Power Projects in India on turn-key basis. Evidence to be supported by Purchase Orders and Project completion certificates. In case of work orders from private firms, the experience shall be supported by TDS certificates.
 - b) Annual average turnover in the area of Solar Power Plants in last three completed financial years on 31st March 2021 i.e. 2018-19, 2019-20, 2020-21. The parties are required to submit audited balance sheets / Chartered Accountant Certified Statement for the last three years ending with 31.03.2021.

- c) Details of established registered office in India with valid GST registration certificate.
- xviii) Parties may also be required to make presentation regarding the proposed Solar Project in front of authorized committee / Directors of company. Accordingly parties shall submit copy of presentation -with EOI.

4.3 Submission of EOI

Prospective parties may submit “**Expression of Interest(EOI) for Development of Solar PV Project at Kharaghoda**” and presentation along-with relevant details Online by uploading scanned copy in pdf, duly signed by the authorized signatory on cpp portal.

The Eoi will be address to following :

DGM (Commercial)
Hindustan Salts Limited,
G-229,Sitapura Industrial Area,
Jaipur-302022(Rajasthan)

For any clarification, you are requested to contact on Email:
purchase@indiansalt.com.

- 4.4 No EMD/Bid Security is envisaged in the EOI stage. Bidders willing to participate in the open tender at later stage, will be required to Submit Bid Security as per the requirements of Bid Document. Details regarding Bid Security and CPG will be elaborated in Bid Documents of open tender.
- 4.5 Company reserves the right to reject any or all EOIs without assigning any reason thereof. Prospective Bidder/ Interested party for submission of EOI acknowledges and agrees that:
- Company has issued this Expression of Interest with the best intention to explore the market for eligible and interested bidders and has no compulsions to enter into definitive contractual agreements. This EOI does not guarantee conversion of this EOI into any definitive contractual agreements. Company may issue separate open tender for solar power project at HSL, Kharaghoda, Gujarat at later stage.
 - It is also agreed that Company in its sole discretion, may reject any and all proposals made by Bidders, may change the conditions relating to the EOI or cancel this EOI at any time without assigning any reason.
 - Prospective Bidders acknowledge and agree that response to the EOI is purely voluntary action on their part and for any expenditure on this account by them, company will have no obligation or liability to the prospective bidders in the event of cancellation of EOI.
 - The details mentioned in this EOI document are indicative only and prospective party is required to visit the site and gather the detailed on site information regarding the project, before submission of EOI.

Note: Parties are requested to keep themselves updated with the website www.indiansalt.com and www.eprocure.gov.in on regular basis for any addition/ deletion/ modification/clarification or notification in respect of this, at EOI stage and at bidding stage. No separate notification will be issued in any other media.