ISRAEL ELECTRIC CORPORATION LTD.

Strategy, Innovation and Restructure Division





## **Request for Information (RFI)**

## COMMERCIAL USE OF COMPANY'S MARINE INFRASTRUCTURES

### 1. RFI Request Overview

The Israel Electric Corporation ("IEC") is seeking information from any interested person (person to include any person, corporation, partnership etc.) (hereinafter "Respondent"), who is interested in using/operating the following marine infrastructures: a coal jetty including cranes, conveyors, open storage area in IEC's Rutenberg Power Station (Site 1), a coal jetty including cranes, conveyors, open storage area and/or liquid fuel tanks located in IEC's Orot Rabin Power Station (Site 2), and the pier area in the Hadera port located directly adjacent to IEC's Orot Rabin power station (Site 2P) (hereinafter the Marine Infrastructures"). Other infrastructure and systems may be added to the list after respondents' site visit.

Respondents are invited to provide information regarding the commercial use and/or operation of any one of the Marine Infrastructures or to all the Marine Infrastructures, both on an "as is" basis or pursuant to changes or upgrades as may be required. The information can relate to any material, substance or business, as are legally permitted by the laws of the State of Israel and as are compatible with the IEC's requirements, including environmental requirements, and objectives as identified below. Respondent may propose projects of varying lengths of time. All locations of Marine Infrastructures:

Site 1 is located on the Mediterranean shore of Israel near Ashkelon ; Sites 2 and site2P are located on the Mediterranean shore of Israel near Hadera, please refer to Annexes 1-3 and the map directly below.



## 2. RFI Scope

## 2.1. Regulatory Background

The Marine Infrastructures are owned by IEC and are currently fully operational, are operated and maintained by IEC for its coal fired units at the Rutenberg and Orot Rabin power stations.

Israel's Ministry of Energy published in 2018 an "Energy Economy Objectives for the Year 2030" which included a commitment to phase out coal in the energy generation sector by 2030, which in 2020 was pushed to 2025. This point in time, IEC's use of coal has decreased from 60% of electricity production to 42.7%. The further implementation of the Ministry's commitment towards coal reduction, which includes refurbishing the coal fired units to natural gas as main fuel, will lead to a sharp decrease the operation of the Marine Infrastructures up to minimum of 1-2 coal ships annually for each site.

However, since the Ministry has determined that coal shall remain the backup fuel in emergencies when natural gas is not sufficiently available, IEC is required to maintain the Marine Infrastructures' coal handling capabilities to an extent required to support such emergency operations. During such emergencies, any alternate commercial uses may be interrupted for a period of time as determined by the relevant Israeli regulators.

- All the sites are operational.
- All the coal facilities will be on standby during the units' conservation and during gas firing operation.
- IEC continues maintenance work in order to insure availability and reliability of regular station operation. IEC intends to continue the operation and maintainance of all the facilities and systems on the coal jetties throughout any other implemented commercial usage.
- IEC informs that during emergency conditions, the Israeli government and any relevant regulatory authority thereof may order the interruption of any commercial usages of all or any of the Marine Infrastructures and application of all or any of the Marine Infrastructures by IEC for purpose of coal firing.

## 2.2. Purpose

By seeking out innovative uses for the Marine Infrastructures, IEC is attempting to ascertain industry interest and feasibility and for alternate uses of the Marine Infrastructures, as described in Article 1 above, and in the following provisions.

## 2.3. Schedule of Availability

IEC estimates that the Marine Infrastructures will become available for alternate use:

- Orot Rabin Power Station:
  - Coal jetty according to Appendix 2.
  - Liquid fuel tanks according to Appendix 2.
- Rutenberg Power Station coal jetty according to Appendix 1.

• Hadera Port pier area – is already available.

### 2.4. Scope of Requested Response

Respondent's response should include the following information in as great detail as currently possible:

- a. Description of Respondent's idea, including description of the nature and purpose of the proposed use, of the envisioned facilities and operations;
- b. Identify the relevant Marine Infrastructure;
- c. Identify required development/refurbishment/addition/redundancy of any of the Marine Infrastructures (including ideas to allow mooring of sea craft smaller than 60,000 ton ships) and their facilities. Any suggested changes to the Marine Infrastructures must allow return to the original mode of operation during emergency periods as described in Article 2.1 above;
- d. Identify whether the alternate use would involve lease of any of the real estate property on which the Marine Infrastructures are located;
- e. Identify who would operate the Marine Infrastructures in Respondent's idea, IEC or Respondent or another third party;
- f. Identify period of time for the commercial implementation of the idea, considering all required changes to the Marine Infrastructures (i.e., is this a short term, medium or long term use?)
- g. Identify benefits to IEC, including whether and how the Marine Infrastructures could still be used for coal handling in emergency operations. Describe the projected consideration /remuneration for IEC.
- h. Please, clearly delineate on a map, drawing, sketch, or rendering the area that you would envision using.
- i. Describe the business plan to finance, develop and manage the opportunity, if relevant.
- j. List any known regulatory requirements required to implement all part of your idea.
- k. To the extent currently possible: if construction is anticipated, please, describe the location, extent, and plans. Responders are encouraged to provide as specific a description as possible of the construction, setup, and operations of the facility or landusage proposed, including but not be limited to: ingress/egress issues, traffic impacts, parking requirements, utility connections, pedestrian access routes, any concerns with meeting IEC physical security requirements.
- 1. To the extent currently possible: describe key risks, considerations and concerns with regard to your idea and possible mitigation strategies.

#### 2.5. Corporate Information to be attached to Response

- 2.5.1. Respondent's Company history.
- 2.5.2. Respondent's position within a corporate structure (if applicable), with indications regarding parent companies, subsidiaries and/or affiliates.

- 2.5.3. Local Israeli agent name (if available), including address, phone, fax, email, and availability of technical support in Israel.
- 2.5.4. Name of designated point of contact.
- 2.5.5. Phone number of designated point of contact.
- 2.5.6. E-mail of designated point of contact.

### 3. Further Instructions to the Participants

- **3.1.** A Respondent who wishes to be considered in this RFI shall provide all the details and information requested in this RFI in as great detail as currently possible.
- **3.2.** The sole propose of this RFI is to provide IEC with information. Neither participation in this RFI, nor the provision of any information to IEC hereunder or otherwise shall grant Respondent any right, legal or otherwise, regarding participation in any current and/or future purchasing process which may be conducted by IEC.
- **3.3.** IEC shall not be required, whether pursuant to this RFI or otherwise, to enter upon any purchase process of any type or kind, and if IEC does conduct any purchase process pursuant to or otherwise related to the subject matter of this RFI, for the purposes of acquisition of services/equipment/systems/goods or data, IEC shall not be required to include therein any Respondent to this RFI.
- **3.4.** IEC reserves the right to request further information from Respondent.
- **3.5.** Provision of references to IEC shall be deemed Respondent's agreement for IEC to apply to the referenced references for verification and review.
- **3.6.** IEC shall be entitled to use the information obtained from Respondent as part of this RFI, as well as any data, solution, process, technique or suggestion contained in any of the responses or documents/response material submitted by Respondent to IEC. Without derogating from the above, IEC shall maintain any information/data received from Respondent in confidence and shall not permit the use or use same for any purpose than for its own needs unless such information must be disclosed under law or regulatory requirement.
- **3.7.** A response to this RFI shall not bestow upon Respondent any advantage in any procurement procedure, if such procedure should be publicized.
- **3.8.** Any use of the marine infrastructures may be subject to applicable law and/or regulation.
- **3.9.** Any exceptions, changes or additions to these above instructions (whether contained in any response to the RFI or otherwise) shall be devoid of validity and legal effect and shall not obligate IEC.

## 4. Submission Dead Line

- **4.1.** The above required information shall be supplied no later than 08 Oct 2021, 13:00. Responses to this RFI received after the above-mentioned date may result in the information supplied being disregarded.
- **4.2.** Responses should be sent to the following address:

The Israel Electric Corporation Ltd. P.O.BOX 10 Haifa, 31000, Israel Attention: Mr. Yitzchak Krimberg Strategy Division Email: yitzchak.krimberg@iec.co.il

# APPENDIX 1

## DESCRIPTION OF RUTENBERG POWER STATION AND RELATED INFRASTRUCTURES

The Rutenberg Power Station is a coal-fired power plant situated on the Mediterranean coast in Ashkelon, Israel.

The Rutenberg power station is owned and operated by the IEC. The Rutenberg station is the second largest in terms of generation capacity. It accounts for about fifteen percent of the IEC's total capacity. The power station is situated close to the sea since its cooling system uses seawater. The power station has a total installed capacity of 2,250 MW. It comprises four power-generating units: two 550 MW and two 575 MW capacity.



The power station consumes 18,240 tonnes of coal per day, and 330 tons of cooling water per hour at the full capacity. Coal was transported to the station by freight trains from the Port of Ashdod until an on-site deepwater coal jetty was completed in 2000. The re-use of the railway requires some restoration work (not estimated yet) and might be considered together with Israel Railways Ltd.

## COAL JETTY DESCIPTION - RUTENBERG POWER STATION

The coal jetty designed to moor ships up to 200,000 tons. Alternatively, it also allows absorbing smaller ships of 60,000 tons minimum. All the seaside services are provided by Ashkelon port which managed by Europe Asia Pipeline Company.



The coal jetty at Rutenberg power station is equipped with two cranes of discharge capability 1,800 tons per hour for each.



#### Principal description of the station coal transport system:

- The system includes one conveyor (without backup) with several transitions and intersections from the jetty to the coal storage site.
- Coal flow of the conveyors is 4,500 tons per hour..

## AVAILABLE STORAGE AREA

Estimated open storage area available for the related opportunities is about 31,800 sq. meters.

#### AVAILABILITY OF COAL JETTY FOR COMMERCIAL USE

| Year  | 2022 | 2023 | 2024 | 2025 | 2026 and<br>later |
|---|------|------|------|------|-------------------|
| Working days<br>available for<br>commercial use | 124  | 134  | 184  | 234  | 250               |

# APPENDIX 2

## DESCRIPTION OF OROT RABIN POWER STATION AND RELATED INFRASTRUCTURES

Orot Rabin is a power station, Israel's largest. Its total generating capacity is 2,590 MW of electricity using the six power generating units (composed of two large units and four smaller units) located at the site. It is situated on the Mediterranean coast in Hadera, Israel and is owned and operated by the IEC.

A coal port is attached directly to the station (see, please, the description of Hadera port below) which supplies all its coal consumption needs. All the seaside services are provided by Hadera port.





The plant burns 18,000 tons of coal every 24 hours and uses 320,000 tons of seawater every hour at the full capacity.

The existing units are being replaced with a natural gas powered two-unit combined cycle power plant, scheduled to come operational in 2022/23. After the replacement, the coal units will continue to be maintained so that they may be restarted in case of emergency (such as an extended disruption in the domestic supply of natural gas).

The site has an unused connection to the railway and restoration work (not estimated yet) might be considered together with Israel Railways Ltd.

## DESCRIPTION OF THE COAL JETTY AT OROT RABIN POWER STATION

- On-site deepwater coal jetty was completed in the beginning of 1980's.
- Jetty height is 14 m above the sea level.
- The width of the jetty is 24 m of which conveyors perceive more than a quarter and the rest is an operating area.
- Three cranes with a motion space of about 300 m length.
- The cranes stretch across all the width of the dock from side to side



- The area along the course of the cranes movement is an operating area.
- The lower crane altitude from the pier is 13.5 m.

#### LIMITATION OF SHIP SIZE

Gearless bulk-carriers:

Minimal LOA – 180-200 m,

Minimal freeboard – 5 m.

#### Tankers:

Minimal LOA – 180-200 m,

Minimal freeboard – 5 m.

#### AVAILABLE STORAGE AREA

Estimated open storage area available for the related opportunities is about 18,400 sq. meters. Availability of another 10,500 sq. meters is checked.

## AVAILABILITY OF COAL JETTY FOR COMMERCIAL USE

| Year  | 2022 | 2023 | 2024 | 2025 | 2026 and<br>later |
|---|------|------|------|------|-------------------|
| Working days<br>available for<br>commercial use | 124  | 134  | 184  | 234  | 250               |

#### LIQUID FUEL TANK AT OROT RABIN SITE

List of fuel tanks on the site, which might be available for the related opportunities

| Site number | Fuel<br>type | Storage,<br>cub. m | Status      | The year in which the tank is expected to be redundant | Connected to a national system |
|-------------|--------------|--------------------|-------------|--|--------------------------------|
| 13          | HFO          | 56,824             | Operational | 2022   | No                             |

| 16 | HFO | 4,269  | Renovation  | 2022 | No |
|----|-----|--------|---|------|----|
| 12 | HFO | 36,253 | Renovation<br>until july 2021                         | 2026 | No |
| 15 | HFO | 56,799 | Operational.<br>Planned<br>renovation<br>during 2022. | 2027 | No |

# **APPENDIX 3**

### HADERA PORT

**Hadera port** is a sea service port of the Orot Rabin power station. The port is managed by the Israel Port Authority. The port consists of two parts.

**The first** is a coal jetty in the open sea, to which the freight ships with the coal for the station moored. Coal discharged with cranes (in the pier three cranes) from there it is transported to the station via a marine bridge on which a conveyor is installed. The length of the docking pier is about 300 meters and allows mooring a single bulk ship on its north side. The jetty construction began in 1980 and it was inaugurated in 1983.

To coal pier leads a 2,100 meters bridge, which enables the movement of a vehicle on it. Coal conveyor is situated on its southern side, and transports coal to the storage areas in the station site. The depth of water in the unloading area ranges from 22 to 27 meters, and it is capable hosting ships up to 170,000 tons.



**The second part** is breakwater protected inner area that used to host service ships and tugboats. The depth of water in the inner area ranges from 5.5 to 6.0 meters.

The north pier is about 250 m length on its seaside and about 25-30 m width. The area available for the purposes of the current RFI is about 100 m length and limited to ships up to 100 m of LOA, BM 15 m and draft 5.5 m. The final approval for each case requires modelling of port entries on the "Bridge Simulator" of the Israel Marine Education Authority.