

TENDER TECHNICAL SPECIFICATIONS  
Operations Department

REQUEST FOR QUOTATION [RFQ]

**AQCT**

Abu Qir Container Terminal

**Rental of PowerPack Generators for Reefer Operations**  
**Turnkey Project**

Requested process, selection criteria, experience, and qualifications.

Technical Inquiry Deadline: 3 Business Days prior to the Tender Closing Date

<b>AQCT - PowerPack Generators for Reefer Operations</b>
Tender Reference: Tender AQCT PowerPack Generators for Reefer Operations V.03
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## 1. General Requirements and Scope of Work

### 1.1. Introduction

On the 27<sup>th</sup> of August 2020, Hutchison Ports signed a long-term agreement with the Egyptian Navy to develop and operate a new container terminal at Abu Qir, Egypt. The new terminal will have a handling capacity up to 2 million TEU upon completion of all phases, and a total quay length of 1,200 meters with a draft of 18 meters capable of handling mega vessels of the future. The project includes provision for a 60-hectare, The location of the terminal is inside the Abu Qir Naval Base and the greenfield site will be connected to a new six lanes highway, with a direct link to the city of Alexandria some 20 kilometers away.



### 1.2. PURPOSE

- AQCT are seeking a potential supplier/vendor to supply a PowerPack Generators for Reefer Containers along with Electric Plugs Panels and all Accessories.
- The required Reefer Containers PowerPack Generator to be used inside AQCT.
- The following PowerPack Generators shall be under the lease contract for period of **3 months**, and the leasing period is subject to increase as per business requirements.
- The provided technical specifications as referred hereunder shall guide the potential supplier/vendor to supply the required service according to the technical specifications which are the minimum requirements, and not limited to, for any deviation than listed hereunder shall be demonstrated by the supplier/vendor in the deviation list table [10].
- The place of acceptance of the supplies shall be AQCT Terminal (Free zone area).

### 1.3. VALIDITY OF The OFFER

The contractor/ vendor shall keep his offer valid for a period not less than a hundred twenty (120) days from the date of opening the technical tender bid.

### 1.4. DEFINITIONS

"Company/Purchaser/Owner"	:	HUTCHISON ABU QIR – Private Free Zone Company
"Contractor(s)"	:	Abu Qir Container Terminal (AQCT)– Private Free Zone Company Contractor/Bidder System Integrator specialized in the delivery of Reefer Services.
"Vendor(s)/Supplier(s)"	:	It shall mean the individual or firm or company whether incorporated or not, undertaking the works and shall include legal representatives of such individuals or persons composing such firm or unincorporated company, or successors of such firm or company and permitted assigns of such individual or firm or company.
"Shall"	:	This is to be understood as mandatory in relation to the requirements of this document.
"Should"	:	This is to be understood as a strong recommendation to comply with the requirements of this document.
"Contract"	:	It shall mean the notice inviting tender, the tender and acceptance thereof and the formal agreement, if any, executed between AQCT and the Contractor(s) together with the documents referred therein including these conditions with appendices, and any special conditions, the specifications, design, drawing, schedule of quantities with rates and amounts and schedule of rates. All these documents taken together shall be deemed to form one Contract and shall be complementary to one another.
"AQCT"	:	Abu Qir Container Terminal – ABU QIR Port
"SOW"	:	Scope of Work

### 1.5. SCOPE OF WORK

AQCT invites qualified vendors to provide **Containerized** PowerPack Generators for reefer containers operations including reefer sockets supply units that can deliver reliable, and economical power solutions with optimal diesel fuel applied in container terminals to supply Reefer containers with a capacity of not less than 160 reefer sockets distributed in 4 units each can supply 40 reefer sockets, and as mentioned hereunder is the minimal technical specifications.

The scope includes the rental, delivery, installation, operation, and maintenance of 4 PowerPack Generators. Each PowerPack must be capable of running 40 Reefer Plugs simultaneously (Frozen & Fresh Cargo), ensuring seamless operations for reefer containers.

This is a **Turnkey Project**, and the selected vendor will be responsible for delivering fully operational PowerPack Generators, including all required accessories and services.

### 1.6. Contractor Obligation and Responsibility:

1. The Contractor shall provide experience, and qualifications necessary to complete AQCT requirements for the supplied PowerPack and all relative accessories at his expense.
2. The Contractor is committed to ensuring that his staff must individually carry out the assigned work with high performance, care, quality, and accuracy.
3. The Contractor is committed to ensuring that all his staff must comply with the proper appearance and reputation of the company.
4. The Contractor is committed to provide all offered/delivered equipment & PPE certificates that will be used by his staff to fulfill AQCT operational and safety requirements.
5. Any damage/s or failures that happened to reefer containers, equipment, yard, and AQCT property resulting from the contractor staff during operations is under the contractor's responsibility and must be rectified immediately at his costs.
6. The Contractors is committed to adhere to AQCT safety and security regulations and provide their staff with the required safety gear.
7. The Contractor is committed to provide external and internal transportation for his staff and equipment which will be used in daily operations.
8. The Contractor is committed to comply with the Free zone procedures regulations & be common with Port authorities and Military Areas - Egyptian Navy, as well as environmental regulations inside harbors and container terminals.
9. The Contractor is committed to follow the high safety regulations inside ports generally and military areas especially and provide his staff with the required safety gear and PPE. (Please refer to HPH Safety roles and policies)
10. All validation certificates required by the local authorities will be contractor responsibility and at his expense.
11. Whenever required port permits for the contractor's staff and/or his equipment will be at his responsibility and his expense.
12. The Contractor staff must report any unsafe conditions & acts during operations.
13. The Contractor is to follow the safe working instructions to prevent accidents and to follow the IMDG rules for container handling.
14. Not allowed to walk through the terminal – **PEDESTRIANS ARE NOT ALLOWED INSIDE THE TERMINAL.**
15. The Contractor is committed to not allowing any of his staff to work more than 12 hours.
16. The Contractor staff must have a sufficient sleeping hour prior to starting the shift duty hours.

17. Drugs test is to be applied before starting the contract, and all the contractor staff are subject to random drug tests, and to reject (blacklist) any positive case.
18. Working hours are 24/7 (two shifts day & night).
19. Social & Medical insurance for the contractor staff is mandated, and at his responsibility and his own cost.
20. The Contractor staff must have a clean Police record sheet.
21. The Contractor must deliver all necessary datasheets, manuals, test certificates, and catalogs that demonstrate the operations equipment & tool's technical specifications in original hard and soft copies (If needed).
22. The Contractor is committed to provide on time all required spare parts for powerpack generators, panels & cables.
23. The Contractor is committed to deliver, install, and fully commission the PowerPack Generators, ensuring operational readiness.
24. The Contractor is committed to supply all necessary accessories, including cables, plugs, and connectors.
- 25. The Contractor is committed provide a team of qualified technicians and electricians available 24/7 to monitor and address any issues or difficulties during the rental period.**
26. The Contractor is committed to submit the preventive maintenance schedules to ensure uninterrupted operation.
27. The Contractor is committed to immediate response to breakdowns or technical issues.
28. The Contractor is committed to replacing any malfunctioning powerpack generator with another unit in cases where repairs or maintenance require extensive time exceeding three hours.
29. The Contractor is committed to providing AQCT with any additional powerpack, along with all necessary accessories to power the reefer containers, upon request with a notice period of 48 hours.
30. The Contractor may need to train AQCT staff on the basic operation and troubleshooting of the PowerPacks (if needed).

## 1.7. AMBIENT CONDITIONS

No	Item	Description	Specifications
1	Ambient Temperature	-5°C to +45°C (50°C as option) (35°C monthly average of the hottest month, 25°C yearly average)	
2	Humidity	Maximum relative humidity	95%
		Minimum relative humidity	35%
		Yearly average	45%
3	Wind	Wind velocity for design purpose maximum	75 Km/hr.
4	Altitude above sea level	Maximum	Up to 1000m
5	Barometric Pressure	Yearly average	29.98 Hg
6	Rain falls (total rainfall per year)	Maximum	50 mm
		Maximum in one day	50 mm

## 1.8. Clarification Meeting/Site Visit/Workshop

The clarification meeting/site visit is planned, unless unnecessary.

## 2. INSTRUCTIONS AND CONDITIONS OF CONTRACTORS

### 2.1. SELECTION AND AWARD REQUIREMENTS

To be considered eligible for the award of the contract, Contractors must provide evidence that they meet or exceed certain minimum criteria described hereunder. The contractor is advised to read these instructions carefully prior to preparing the tender bids:

1. These instructions are mandatory conditions of tendering assessment and any tender bid *which does not follow these instructions will be considered incomplete bid and shall be disqualified.*
2. Declare agreement, conformity, and compliance with:
  - a. Anti-barbery document.
  - b. Hutchison Ports Group Policy 62-2021 Supplier code of conduct.
  - c. Safety annex.
3. Declare agreement, conformity, and compliance with the provisions of the Tender's Declaration in Tender Response Format.
4. Declare agreement, conformity, and compliance with the provisions of the Statement on Conditions of Employment in Tender Response Format.
5. The tender bid shall be enclosed in sealed envelopes addressed, endorsed, and deposited as required by the letter of Invitation. The Contractor shall submit **two sets** of the following:
  - a. The complete set of forms of tender includes both deviation and particular lists (a list of items that are deviated from the purchaser's requirements in the specification and the list of installed particulars).
  - b. Complete and detailed technical specification of (Contractor proposal) including sub-supplier's brochures and full details.
  - c. A delivery program.
  - d. Suitable evidence that the signatory to the form of tender is authorized so to execute.
  - e. Commissioning on purchaser's site Details (If needed).
6. No unauthorized alteration or ensure to the text of the tender documents shall be permitted any tender containing such alternation or ensure not be considered.
7. The contractor shall be required to check the number of pages of the specifications etc. Should he find any missing, duplicate, or indistinct, he must inform the "AQCT" purchaser at once and will have the same rectified.
8. The Contractor must at his own expense obtain for himself all information that may be necessary for the submission of his tender. The "AQCT" purchaser will not meet any costs incurred by the Contractor in preparing or submitting his tender.
9. The Contractor proven experience in providing PowerPack Generators for reefer operations.
10. The Contractor is committed on the availability of spare parts and immediate maintenance support.
11. The Contractor committed to demonstrated ability to deliver a **Turnkey Project**.
12. The Contractor committed to comply with all local and international safety and environmental regulations.
13. The Contractor must submit a detailed specification of the offered PowerPack Generators.
14. The Contractor must submit a rental cost breakdown (daily/ monthly).
15. The Contractor must submit the delivery timeline: estimated time for delivery, installation, and operational readiness.
16. The Contractor must submit a list of previous clients/projects demonstrating relevant experience.

## 2.2. ANTICIPATED PROJECT TIMELINE

RFP Release Date: 13-Mar-25

RFP Due Date: 27-Mar-25

Supplier award: 10-Apr-25

**Start the Service: 13-Apr-25**

## 2.3. PRIMARY CONTACT INFORMATION

Send questions/inquiries regarding the RFQ (technical/commercial) to Manal Abdelghani ([abdelghani.manal@aict.com.eg](mailto:abdelghani.manal@aict.com.eg)) (Ahdy.Ahmed@aict.com.eg) by the due date. Responses to all submitted questions, and if any update takes place we will be shared with all participating bidders.

## 3. TECHNICAL SPECIFICATIONS

### Note:

**Where in this tender document a standard is quoted, it is to be understood that the Contracting Authority will accept equivalent standards. However, it will be the responsibility of the respective bidders to prove that the standards they quoted are equivalent to the standards requested by the Contracting Authority.**

### 3.1. Scope

- a) The Contractor/Supplier/Vendor is bound to all tender terms and conditions, and it's mandatory to provide AQCT tender documents stamped in the technical submitted offer.
- b) All the provided operations equipment and tools with recent manufacturing dates and long life last.
- c) Acceptance and final receiving.
- d) All the suppliers must submit the following requirements in the tender documents for evaluation and AQCT has all rights to reject the offer that hasn't included the following:
  - a. Tenders shall necessarily include in the technical envelope all technical information and documents demonstrating their former experience in the production of container terminal operations during the last five years at least.
  - b. The supplier must be in full compliance with the work equipment, lifting operations, and lifting equipment regulations.

### 3.2. SELECTION CRITERIA

Defining the requested process and selection criteria for PowerPack Generators for Reefer Containers between AQCT and service provider companies.

#### 3.2.3. Process of examination and selection:

1. Safety induction session for general awareness.
2. Interview with OPS/technical representatives.
3. Experience proves.



### 3.2.3. Technical Specifications of PowerPack Generators:

The following are the minimum technical specifications required for each PowerPack Generator:

- The engine's mechanical power horsepower (hp) is typically, a DIESEL engine with enough hp used for such port (Reefer Supply) applications to ensure efficient and sufficient continuous power and reliability.
- A generator with a capacity of 550 kVA is suitable for powering 40 reefer sockets (each reefer container rated power consumption is 5.5KVA).  
This would translate to approximately 440 kW, considering a power factor of 0.8. The generator should provide a three-phase electrical system with a supply voltage of 3 phase 400VAC  $\pm 5\%$  50Hz.  
The system should be compatible with both 50/60 Hz.
- Sealed lead-acid or AGM-style batteries are commonly used and should have sufficient capacity to start the engine and provide backup power if needed. Typically, a 12VDC/24VDC system with a capacity of approximately 200 Ah is preferable, as an Isolation switch.
- The reefer socket should be female 32A – 3H, 400/440V, 50/60Hz constructed of 4 pins (3 poles + earth), sockets should be industrial and heavy-duty, designed for harsh marine environments, with a protection cap, and watertight seal, and high resistance to chemicals and impact, each socket should have an indication light to show the status of the socket, confirming whether it is working or not, plugs should include a 3H notch for proper alignment and secure connection.
- Suitable for use in the ambient temperature range of -10°C to +50°C in areas free from corrosive and flammable gases and conductive dust, altitude: Not exceeding 2000m above sea level, Stain-Free Grade: Grade 3.
- The relative humidity of the atmosphere should not exceed 50% at a maximum ambient temperature of +50°C. A higher relative humidity is possible at lower temperatures. The average monthly maximum relative humidity for the wettest month does not exceed 90%. The average monthly minimum temperature for such a month should not exceed +25°C, considering the frosting that occurs on the surface of the product due to temperature variation.
- Ingress Protection Rating: IP6X.
- Circuit Breakers: Minimum of 40 amps to ensure safety and prevent overload.
- Monitoring and Control: Genset controllers monitor voltage, current, frequency, kVA, and other critical parameters.
- Safety Features: Safety-interlocked power modules to prevent making or breaking under load, ensuring operator safety.

### 3.2.4. HSE Specifications of PowerPack Generators and accessories:

Table [1]

Section	Requirement	Compliance Standard
Electrical Panels	Weatherproof	(IP 54 for indoor & IP 6X for outdoor)
Electrical Components	To meet the standards (IEC 60364)	
Electrical Cables	XLPE/SWA/PVC	
Fire Safety	Portable fire extinguishers available and accessible	EN 3 / Egyptian Fire Code
Operational Safety	Pre-delivery inspection checklist completed	ISO 9001

## 4. Pricing Quote

Table [2] – Daily Price Quote (EGP)

No	Item	QTY	Daily Rate Operational***	Daily Rate Standby (Idle)*
1	PowerPack Generators for Reefer Containers along with Electric Plugs Panels and all Accessories (Excluding Fuel)	1		

Table [3] – Monthly Price Quote (EGP)

No	Item	QTY	Monthly Rate Operational***	Monthly Rate Standby (Idle)**
1	PowerPack Generators for Reefer Containers along with Electric Plugs Panels and all Accessories (Excluding Fuel)	1		

\* Idle: refers to the cost incurred when the powerpack is onsite (AQCT) and not in use for the whole day.

\*\* Idle: refers to the cost incurred when the powerpack is onsite (AQCT) and not in use for the whole month.

\*\*\* Operational: refers to the cost incurred when the powerpack is onsite (AQCT) and actively in use for operation.



## 5. DEVIATION LIST

Table [10] - Deviation List

The Purchaser's Specifications		Description of Deviation from Purchaser Specification
Item No	Description	

## 6. Terms and Conditions

1. Service provider shall issue Insurance coverage with the amount of xxxEGP.
2. Payment terms are to be included in the bid documents (30 days credit and 7 days to revise invoice).
3. In the event that the Tenderer is unable to provide the required lease items, or if a breakdown occurs resulting in a shortage of powerpacks or plugs, AQCT reserves the right to impose a penalty equivalent to the cumulative hours of shortage or breakdown. The penalty shall be calculated based on the daily rate of the affected powerpack and deducted from the Tenderer's monthly invoices.
4. Payment shall be in EGP.
5. Fueling by AQCT
6. Rates fixed during the leasing period.

## 7. Appendix I:

Supplier to complete the following tables and adding power pack photos is mandatory.

### 1. Engine

Table [4]

	Power Pack #1	Power Pack #2	Power Pack #3	Power Pack #4
Manufacturer				
Model				
Prime Power				
Working Speed				
Cylinders				
Electric System				
Fuel System				
Control				
Working hours				
Build Year				
Fuel Consumption (lit/hr.)				

### 2. Reefer Outlet Socket Panel

Table [5]

Manufacturer	
Type	
Model	
Working Speed	
Outlet Plugs	

### 3. Enclosure

Table [6]

Manufacturer	
Height	
Length	
Width	
Fuel Tank Capacity	

### 4. Circuit Breakers

**Table [7]**

<b>Manufacturer</b>	
<b>Series</b>	
<b>Size</b>	
<b>Rated Capacity</b>	
<b>Tripping Setting</b>	

## 5. Fire Alarm System

**Table [8]**

<b>Manufacturer</b>	
<b>Model</b>	
<b>Type</b>	
<b>Zone #1 Type</b>	
<b>Zone #2</b>	

## 6. Fire Extinguishers

**Table [9]**

<b>Manufacturer</b>	
<b>Model</b>	
<b>Type</b>	
<b>Capacity</b>	