البوتاس العربية
Arab Potash

THE ARAB POTASH COMPANY PLC

Tender Terms and Conditions

for IFB Number 202401796/DH

Design, Manufacturing, Testing, Supply & Commissioning of Package Substations for Township

THE ARAB POTASH COMPANY PLC
Tel. No. +962-6-5200520
Fax No. 962-3-2305125

Hereunder, are the terms and conditions of contract and the bidding instructions issued to tenderers who bid against tenders raised by The Arab Potash Company "Hereinafter called the company". Tenderers must follow these instructions, terms and conditions and bid in strict accordance with them.

1. Bids must be submitted in **Three closed, sealed and separate envelopes**; the first contains the commercial bid; the second contains the technical bid, the third contains the following: -

- The Bid Bond.
- The Declaration of Abidance with Tender Terms and Conditions.
- The Declarations of the other and Prohibited Payments.
- The Declaration of Abidance with the conflict of interest.
- Certificate of registration (for local & foreign tenderers).

The tenderer must write in an indelible ink on each of the envelopes whether it contains commercial; technical bids, or prohibited, other payments and declaration of conflict of interest envelope along with the tender number and tender name.

The envelopes are as follows:

a) <u>Technical Bid Envelope:</u>

That indicates the technical specifications of the subject matter; confirmed by descriptive literature, samples, bulletins, and catalogues that refer specifically to the goods offered by the original manufacturers and shall be void of prices. The technical bid shall be submitted in two copies. The technical bid must indicate also the offer validity which must be 90 days from the date of the invitation for bid closing date. The technical bid must be stamped and signed (otherwise, the bid will be rejected).

b) <u>Commercial Bid Envelope:</u>

Commercial bid must be submitted on the form prepared specifically for the purpose titled **"COMMERCIAL BIDDING SHEET";** showing the following details:

1. Price: for the required materials as per INCO terms 2010:

CPT APC Safi Site

2. Prices must remain fixed and valid for 90 days from the date of the invitation for bid closing date and shall be clearly stated in the technical and commercial bids (failure to comply with this term will nullify it as non-responsive.

3. The payment currency shall be the Jordanian Dinar or US$ Dollar or Euro, noting that US Dollar and Euro exchange rate will be calculated at the currencies exchange rate issued by the Central Bank of Jordan at the commercial bids closing date.

4. The prices include the revenue stamps which, in case of award and within 7 days therefrom, shall be paid by the bidder to the Ministry of Finance at 6 dinars as per 1000 dinars of the price.

5. Handwriting pricing is not acceptable (Typing only).

c) <u>The Bid Bond, Abidance, and the Declarations Certificates Envelope:</u>

Shall be submitted duly filled and signed as appropriately required.

The declaration of the other payments, the prohibited payments and abidance with the conflict of interest shall be duly filled stamped and signed by the authorized signatory.

d) The bidder or his authorized signatory must sign and stamp the "Terms and Conditions of" **IFB Number 202401796/DH"** as an evidence of being obligated by these conditions (otherwise, the offer will be rejected).

e) The Bidder shall state the full name of his company's owners, the shareholders and their proportions. **"This is mandatory requirement to consider the bid".**

f) If the submitted trade license, registration certificate & classification found to be inconsistent with the required services &/or material requested in the tender, then the offer will be declined for non-specialization.

2. All the envelopes shall be additionally enclosed into one envelope that shall bear the company address, the title and address of the Tenderer, the invitation for bid title and number and the tender closing date.
<u>THE COMPANY ADDRESS IS:</u>
ARAB POTASH CO. PLC.
P.O. BOX 1470,
AL-JAHIZ STREET,
SHMEISANI,
AMMAN 11118,
JORDAN.

Note: Bids Submission Place is APC Safi Plant Site.

3. **<u>The closing date for this bid shall be as stated in the announcement.</u>**
Bid submission shall be in the same place, address and time as per the invitation of our IFB.

4. **<u>Acceptable Forms of Bonds:</u>**
A Bank guarantee duly approved, drawn on or confirmed by a bank in Jordan to the company benefit.
All bonds shall not be restricted by any condition, irrevocable, and payable at first demand

without any judicial proceedings or notarial warnings

5. **Bid Bond:**
The tenderer shall enclose, with his bid, a bid bond as a financial assurance in the value stated in the tender announcement.

The bid bond is to be submitted in a separate envelope which shall remain valid for ((120)) days from the tender closing date and any extension thereafter until the tender award and the acquisition of the performance bond from the successful tenderer. The bid bond shall be extendable on mutual agreement between both the company and the tenderer.
The bid bond must accompany each submitted bid whether main or alternative.

6. The company reserves the right to confiscate the bid bond, if the tenderer chooses to withdraw his bid after the bid opening date, and before validity expiry date and/or failure of the tenderer to submit the performance bond within ten ((10)) days from the purchase order issuance date.

7. **Performance Bond:**
The tenderer awarded the tender and within (10) days shall bear the obligation towards the company for submitting an autorenewal the performance bond, to the company benefit, of a value not less than ((10%)) of the award price valid until issuance of take over certificate & Maintenance bond and shall be extendable.

8. **The company reserves the right to disregard any bid in which the company "Declaration of Abidance by terms and conditions and technical specification", "Technical Specifications Bidding Sheets" and/or "Commercial Bidding Sheets" are not duly filled in detail, properly stamped and signed by the tenderer. Technical specifications must be stamped and signed by the original manufacturer.**

9. Unless the company decides otherwise; bids which are not duly signed by the original manufacturer, and/or received after the closing date and/or substantially incomplete are not acceptable and that will be decided upon by the company and upon its own discretion.
10. The company reserves the right, upon its discretion, to disregard any bid which is not amply clear, having more than one interpretation, and/or any of the bid items specifications is not quoted completely as detailed in the company tender documents. Also, the same applies if the delivery terms or periods are not fully stated.

11. The company has the right to award partially any of the materials.

12. Fax, phone and E-mail bids are not acceptable.
13. The company is not bound to place a purchase order for all the items tendered against or any part thereof and, prima facie, is not bound to place an order. Also, the company is not bound to offer justifications and the tenderers shall not acquire any rights to claim any losses.

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14. The company is not bound to place an order on the least price basis.

15. The company reserves the right to cancel any invitation for bid, to reject, in all or in part, the tenderers' bids submitted to the company in response to any invitation for bid raised by the company without offering justifications and the tenderers shall not acquire any right to claim any losses, whatsoever, as a result of bidding in response to the company invitation for bid.

16. Tenderers bear the responsibility of thoroughly scrutinizing the invitation for bid, the specification attached thereto, the terms and regulations of bidding and the proofing of the prices and quantities lists. Also, the tenderers bear the consequences of failing to do the above correctly.

17. The bid shall show the unit price and the total price, which shall be regarded as including packaging costs, unless noted otherwise.

18. In case an error exists in the total price, the unit price shall prevail.

19. In case the invitation for bid does not show the delivery time, the tenderer shall quote the delivery time; otherwise, the delivery time shall be taken as prompt delivery. The obligatory delivery period shall be the period elapsed between the date of purchase order until the delivery of the goods at the named place of destination which, if exceeded, delay penalty shall apply as stipulated in clause (30) of these conditions.

20. The tenderer shall state the goods country of origin, the manufacturer, the trade name, and the type where applicable.

21. The tenderer must indicate if he has an official / legal agent in Jordan or if he is an agent for a foreign principal and must enclose a copy of the empowerment to act as such. Alternatively, the tenderer must indicate if he is not an agent nor a principal.

22. The tenderer shall submit along with his bid the punctual specifications of the offered goods, the relevant catalogues and any data, information and/or statistics that will define the offered goods appropriately.

23. If the invitation for bid quotes a manufacturer name, a trade name and/or specifications of a certain make of the goods requested in the invitation for bid, these shall not bound the tenderer to such restrictions, except that these restrictions are binding in regard of same merits, characteristics and suitability for the purpose which form the basis for equivalence between different makes that will serve the same as the nominated goods.

24. The company, upon its discretion, reserves the right to increase and/or decrease the quantities indicated in the invitation for bid in accordance with the company needs by 25% on the same price and conditions.

25. The tenderer shall guarantee that the goods quoted are brand new, genuine, free from manufacturing defects, and/or material defect, and of the latest model and/or type unless otherwise noted in the invitation for bid.

26. In case the tenderer fails to submit the performance bond and the revenue stamps receipt to the company in the proper time; the company reserves the right to cancel the contract and forfeit the bid bond without resorting to judicial proceedings and/or notarial warnings.

27. In case the tenderer fails to fulfill his contractual obligations towards the company, or any part thereof, after formal order acknowledgement; the company reserves the right to cancel the contract with the said tenderer, forfeit the performance bond and to purchase the materials and/or services forming the subject of the contract from any alternative source and the price difference shall be charged on the said tenderer account and expense without resorting to judicial proceedings and/or notarial warnings.

28. The inspection and testing of materials and samples are carried out as may be deemed necessary by the company.

29. Packaging shall be of an excellent commercial standard, details of which shall be shown in the tenderer's technical bid.

30. If the products are not delivered at the time for delivery APC entitled to liquidated damages from the date on which delivery should have taken place. Unless otherwise stated in General and/or Special Terms and conditions. The liquidated damages shall be payable at a rate of (0.7%) of the purchase price for each completed week of delay. The liquidated damages shall not exceed (7.5 %) of the purchase price. After which the stipulation of clause No. (27) of the tender terms and conditions shall apply.

31. The tenderer shall submit a maintenance guarantee at first demand and irrevocable bank guarantee, duly approved, drawn on/or confirmed by a bank in Jordan to the company benefit of ((5%)) of the contract price valid for 12 months from taking over certificate.

32. For purchase orders with a value of over (100,000 JOD) the company shall nominate a third party, engineer and/or any of the bodies having the suitable technical capabilities to inspect the goods within the works of the manufacturer or before shipping the goods to verify the compliance of the goods to the company tender specifications and upon the inspector findings, the goods may be either accepted or rejected. Notwithstanding the above, the final acceptance or rejection of the goods, or any part thereof, depends solely upon the goods receipt inspection report in the company plants site.
33. This document shall be signed by the tenderer as a declaration of acceptance of the terms contained herein and must be submitted within the commercial bid as a fundamental condition of the bid acceptance for evaluation by the company.

34. Any materials not strictly complying with the tender specifications and/or the contract terms and other obligations shall be rejected, for which the contractor shall bear all costs accruing there from and in addition to clause **(27)** of these terms and conditions and any other statutory remedies.

35. In case the contractor supplied any materials or goods in excess to those contracted for in the purchase order or bills of quantities without the written consent of the company, then the contractor shall bear all costs for its retrieval and/or its disposal, including but not limited to, all costs, expenses, duties and taxes levied by the government and shall abide with governmental procedures pertinent to the matter at his own cost.

36. The Governing law for all bids, bidding procedures, and the subsequent accruing awards shall strictly follow the current Jordanian laws.

37. In case of award APC reserves the right to terminate the contract at any time by giving 30 days' written notice to the other party.

38. Not used.

39. Delivery:

The delivery time shall be within (4 months).

39.2 The delivery period shall be defined as the period elapsed from date of purchase order until delivery at APC Safi plant Site.

40. Method of Payment:

- **30%** Against receipt of original shipping documents which shall include:
  - Packing list,
  - Certification of origin,
  - Commercial invoice,
  - Bill of lading and Certificate of origin
  - Certificates of all successful inspection and tests.
- **40%** Upon receiving and technical acceptance of the Materials at APC plants site.
- **30%** Upon taking over certificate after successful commissioning and putting into service and submitting a bank guarantee as maintenance bond covering an amount equal to five percent (5%) of the total contract value valid for (12) months from taking over date.

However, bidder may quote differently.

40.1 For Local Supply: Payment in Jordanian Dinar upon receipt and technical acceptance at APC.

41. Other Payments:

41.1 Definition:

Other payments are all payments direct or indirect commissions, consulting fees, agents fees, finder's fees or other payments or inducements or the giving of anything of value paid or promised to be paid by the contractor (collectively "third payments") to third parties other than the company "Others", by the contractor or on his behalf or any of his sub – contractors and his or their employees, agents or representatives, in connection with the solicitation, bidding, negotiation, award or performance of this contract.

41.2 Contractor has fully disclosed in the declaration for other payments attached to these Conditions any and all direct or indirect commissions, consulting fees, agent fees, finder's fees or other payments, or inducements or the giving of anything of value (collectively, "Third Payments"), to third parties other than The Company (a "Third Payments") including without limitation a detailed description of the basis therefore, its sub-Contractors and its or their employees, agents or representatives, in connection with the solicitation, bidding, negotiation, award or performance of this Contract, and hereby covenants and agrees promptly to disclose to (The Company) in writing the existence of any Third Party Payments including without limitation, a detailed description of the basis therefore, upon the earliest to occur of Contractor making or being obligated to make any such third Party Payments.

41.3 In the event of any violation or breach of the provisions of paragraph (41.2) of this clause. (The Company) at its sole option and discretion shall take all or any of the following actions: -

(i) Terminate the Contract while reserving all its rights and/or,
(ii) Deduct from all or any payments due to Contractor under this Contract an amount equal to two times the amount of any Third Party Payments, and/or,
(iii) Demand that Contractor pay forthwith to "The Company" demand Contractor hereby irrevocably agrees to honor, an amount equal to two times the amount of any Third Party Payment, it being the intention, subject to paragraph (41.5) below, that the aggregate of all amount to which (The Company) is entitled under paragraphs (41.3) shall not exceed the amount which is two times the amount of all Third Party Payments.

41.4 Contractor agrees that provisions substantially similar (but in no event less restrictive) to paragraphs (41.2) and (41.3) above shall be incorporated by Contractor in all Contracts with Contractors sub-Contractors, suppliers or Contractors or arising out of or relating to this Contract, and shall also expressly provide that same may, at (The Company's) sole discretion, be enforced directly by (The Company). Contractor further agrees promptly to supply to (The Company) true and complete copies of such Contracts together with evidence of their inclusion in such Contracts forthwith upon the entering into by Contractor of such Contracts.

41.5 Nothing in this section shall expressly or implicitly make lawful or permissible any Third Party Payments that are otherwise prohibited under applicable law or regulations. These rights and remedies of (The Company) under this clause are in addition to and not in derogation of any other rights (The Company) may have under applicable laws or regulations.

41.6 This clause shall survive the termination of this Contract.

42. Prohibited Payments

42.1 Definition:

Prohibited payments are all payments direct or indirect commissions, consulting fees, agents fees, finders fees or other payments or inducements or the giving of anything of value paid or promised to be paid, by the Contractor or on his behalf or any of his sub-contractors, agents or representatives, to the "Company Person" in connection with the solicitation, bidding, negotiation, award or performance of this contract.

42.2 Contractor hereby represents and warrants to "The Company" in the attached declaration for prohibited payments to these Conditions that no direct or indirect commissions, consulting fees, agents fees, finders fees or other payments, and no inducements or the giving of anything of value, have been made or promised to be made, directly or indirectly, by or on behalf of Contractor, its sub-Contractors and its or their employers, agents or representatives, to "The Company" (collectively, "Prohibited Payments"), including without limitation any official, employee, agent or representative (whether or not acting in an official capacity) of "The Company" (The Company person), in connection with the solicitation, bidding, negotiation, award or performance of this Contract; and hereby covenants and agrees that no Prohibited Payments shall be made or promised to be made directly or indirectly, by or on behalf of Contractor, its sub-Contractors and its or their employees, agents or representatives, to any (The Company Person) in connection with the amendment, modification, renewal, extension or performance of this Contract.

42.3 In the event of any violation or breach of the provisions of paragraph (42.2) of this clause. (The Company) at its sole option and discretion shall take all or any of the following actions: -

(i) Terminate the Contract while reserving all its rights and/or,

(ii) Deduct from all or any payments due to Contractor under this Contract an amount equal to two times the amount of any Prohibited Payments, and/or,

(iii) Demand that Contractor pay forthwith to "The Company" demand Contractor hereby irrevocably agrees to honor, an amount equal to two times the amount of any Prohibited Payments, it being the intention, subject to paragraph (42.5) below, that the aggregate of all amount to which (The Company) is entitled under paragraphs (42.3) shall not exceed the amount which is two times the amount of all Prohibited Payments.

42.4 Contractor agrees that provisions substantially similar (but in no event less restrictive) to paragraphs (42.2) and (42.3) above shall be incorporated by Contractor in all Contracts with Contractors sub-Contractors, suppliers or Contractors arising out of or relating to this Contract, and shall also expressly provide that same may, at (The Company's) sole discretion, be enforced directly by (The Company). Contractor further agrees promptly to supply to (The Company) true and complete copies of such Contracts together with evidence of their inclusion in such Contracts forthwith upon the entering into by Contractor of such Contracts.

42.5 The rights and remedies of (The Company) under this clause are in addition to and not in derogation of any other rights (The Company) may have under applicable laws or regulations.

42.6 This clause shall survive the termination of this Contract.

43. Arab potash company will not issue, any letter of commitment to banks to transfer dues in relation to the subject matter tender and / or Purchase Order.

44. The equipment &/or vehicle purchased must include a name plate showing our purchase order number in addition to other important information. Also, the warrantee card should be attached to the equipment / vehicle for easy reference and claims.

45. Foreign construction contractors must obtain the approval of the cabinet (Government of Jordan) before awarding.

46. The company reserves the right to disregard any bid which does not strictly follow the aforementioned terms and conditions.

47. APC reserves the exclusive right to engage in negotiations with bidder(s) who have successfully passed the APC evaluation, utilizing various negotiation methods, including but not limited to email correspondence, face-to-face meetings, or the employment of the APC I-Supplier Sourcing module for Electronic Reverse Auction."

48. Correspondence shall be in writing stating the tender name and number and directed to:
Procurement Director,
Arab Potash Company PLC.
P.O. Box 1470,
Amman 11118 – Jordan.
Fax No. : +962-3-2305125/131
Tel. No. : +962-6-5200520
E-mail : procurement@arabpotash.com
Hamdi.m@arabpotash.com

THE ARAB POTASH COMPANY PLC
Tel. No. +962-6-5200520
Fax No. 962-3-2305125

Declaration of Abidance by Tender Terms & Conditions and Technical Specifications

I, We. The undersigned,

Declare that we have read the terms and conditions for **IFB Number 202401796/DH " Design, Manufacturing, Testing, Supply & Commissioning of Package Substations for Township"**

And we confirm that we are in compliance with these terms and conditions; this declaration is properly signed and sealed evidencing our full abidance by all tender terms and conditions.

Moreover, we the undersigned abide with payment terms, the delivery terms exactly as stipulated in the documents **CPT APC Safi Site** and we have read the technical specifications for this **IFB Number 202401796/DH.**

and confirm to be in full compliance with these technical specifications.

N.B.: -
(Tenderer is required to fill an additional form to show any possible minor technical deviations).

We understand that failing to abide with the tender conditions will nullify our offer.

Tenderer Name: .....

Name of authorized signatory: .....

Signature: .....

Official Stamp: - .....

Tenderer is required to submit the declaration in the envelope which contains the bid bond along with the list of minor derivations.

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Declaration for Other Payments

I, We. The undersigned, ...

.....

Declare that we have read and comprehended the provisions under clause (41) of **IFB Number 202401796/DH** "Terms and Conditions" related to this Contract and in compliance with this clause; we enclose a declaration properly signed and sealed disclosing any and all direct or indirect commissions, consulting fees, agent fees, finders fees or other payments, or inducements or the giving of anything of value (collectively, "Third Party payments") to third parties other than any of The Company's Person(s) (a "Third Party"), including without limitation a detailed description of the basis therefore, made or to be made, directly or indirectly, by or on behalf of Contractor, its subcontractors and its or their employees, agents or representatives, in connection with the solicitation, bidding, negotiation, award or performance of this Contract; and hereby covenants and agrees promptly to disclose to The company all Payments including without limitation, a detailed description of the basis therefore, upon the earliest to occur of Contractor making, or being obligated to make, any such Third Party Payments.

Contractor's Name .....

Name of authorized signatory.....

Signature.....

Seal.....

Tender Name & Number.....

- Contractor is required to submit a declaration for other payments in a separate sealed envelope whether such payments has been paid or not and the offers of all Contractors that do not include such declaration will be rejected.

Declaration for Prohibited Payments

I, We the undersigned, ...
.....

Declare that we have read and comprehended the provisions under clause (42) of **IFB Number 202401796/DH.** "Terms and Conditions" related to this Contract and in compliance with this clause; we enclose a declaration properly signed and sealed representing and warranting to (The Company) that no direct or indirect commissions, consulting fees, agent fees, finders fees or other payments, and no inducements or the giving of anything of value, have been made or promised to be made, directly or indirectly, by or on behalf of Contractor, its subcontractors and its or their employees, agents or representatives, to (The Company) (collectively, "Prohibited Payments") including without limitation any official, employee, agent or representative (whether or not acting in an official capacity) of (The Company) ("The Company Person") , in connection with the solicitation, bidding, negotiation, award or performance of this Contract; and hereby covenants and agrees that no Prohibited Payments shall be made or promised to be made, directly or indirectly, by or on behalf of Contractor, its subcontractors and its or their employees, agents or representatives, to any "The Company Person" in connection with the amendment, modification, renewal, extension or performance of this Contract.

Contractor's Name .....

Name of authorized signatory.....

Signature.....

Seal.....

Tender Name & Number .....

- Contractor is required to submit a declaration for prohibited payments in a separate sealed envelope whether such payments has been paid or not and the offers of all Contractors that do not include such declaration will be rejected.

نموذج إقرار وكشف عن تضارب مصالح

تحظر أنظمة وسياسات شركة البوتاس العربية ومدونة السلوك الوظيفي على موظفيها وأفراد عائلتهم والأقارب لغايات الدرجة الثانية في أية تعاملات لهم مع المقاولين الذين تتعاقد مع شركة البوتاس العربية لإنجاز أعمال أو مشاريع أو تقديم خدمات سواء أكانت تعاملات تؤدي إلى مصلحة مالية بها أو غير ذلك ، وتحظر كافة أشكال "تعارض المصالح" الفعلية أو المحتملة وهو موقف تؤثر فيه الاعتبارات المالية أو الشخصية الأخرى أو يبدو أنها تؤثر على الحكم في تنفيذ أعمال العطاء.

يجب على المناقص الذي يرغب في التقدم للدخول في العطاء المطروح من شركة البوتاس العربية **IFB No. 202401796/DH** استكمال تعبئة بيانات هذا النموذج وتوقيعه وختمه حسب الأصول من المفوض بالتوقيع وإرفاقه ضمن وثائق العطاء الأخرى حسب تعليمات وشروط الدخول بالعطاء. ويهدف هذا النموذج إلى تحديد وجود تضارب مصالح مباشر أو غير مباشر أو محتمل مع مصالح أي من موظفي و/أو أفراد عائلة و/أو أقارب موظفي الشركة من عدمه.

يرجى تحديد المربع المناسب لكل سؤال واستكمال المرفق إذا تمت الإشارة إليه:

1. هل أنت بصفة شخصية أو الشركة المتقدم بإسمها للمناقصة أو أحد الشركاء فيها أو أحد أفراد عائلتك المباشرين من الدرجة الأولى (الأصول والفروع أب_أم_إبن_إبنه_الزوج_الزوجه) أوالأقارب والنسب من الدرجة الثانية (الجد والجده والأخوة والأخوات والأحفاد) أو لأحد الشركاء معك تعاملات أو مصلحة مالية أو تجارية أو علاقة شخصية أو علاقة عمل مع أي من موظفي شركة البوتاس العربية أو أحد أفراد عائلتهم أو أحد أقاربهم من الدرجة الثانية أو مع أي شخص متعاقد بصفة شخصية مع شركة البوتاس العربية:

☐ **نعم (إذا كانت الإجابة بنعم يرجى إستكمال المرفق)**
☐ **لا**

2. هل أنت بصفة شخصية أو الشركة المتقدم بإسمها للمناقصة أو أحد الشركاء فيها أو أحد أفراد عائلتك المباشرين من الدرجة الأولى (الأصول والفروع أب_أم_إبن_إبنه_الزوج_الزوجه) أو الأقارب والنسب من الدرجة الثانية (الجد والجده والأخوة والأخوات والأحفاد) أو لأحد الشركاء معك تعاملات أو مصلحة مالية أو تجارية أو علاقة شخصية أو علاقة عمل مع أي من متقاعدي شركة البوتاس العربية أو أحد أفراد عائلتهم أو أحد أقاربهم من الدرجة الثانية:

☐ **نعم (إذا كانت الإجابة بنعم يرجى إستكمال المرفق)**
☐ **لا**

3. هل أنت بصفة شخصية أو الشركة المتقدم بإسمها للمناقصة أو أحد الشركاء فيها أو أحد أفراد عائلتك المباشرين من الدرجة الأولى (الأصول والفروع أب_أم_إبن_إبنه_الزوج_الزوجه) أو الأقارب والنسب من الدرجة الثانية (الجد والجده والأخوة والأخوات والأحفاد) أو لأحد الشركاء معك تعاملات أو مصلحة مالية أو تجارية أو علاقة عمل أو علاقة شخصية مع أي من أعضاء مجلس إدارة شركة البوتاس العربية أو أحد أفراد عائلتهم أو أحد أقاربهم من الدرجة الثانية:

☐ **نعم (إذا كانت الإجابة بنعم يرجى إستكمال المرفق)**
☐ **لا**

4. هل أنت بصفة شخصية أو الشركة المتقدم بإسمها للمناقصة أو أحد الشركاء فيها أو أحد أفراد عائلتك المباشرين من الدرجة الأولى (الأصول والفروع أب_أم_إبن_إبنه_الزوج_الزوجه) أو الأقارب والنسب من الدرجة الثانية (الجد والجده والأخوة والأخوات والأحفاد) أو لأحد الشركاء معك تعاملات أو مصلحة مالية أو تجارية أو علاقة شخصية أو علاقة عمل مع أي من موظفي وأعضاء مجالس و/أو هيئة مديرين الشركات التابعة والمملوكة لشركة البوتاس العربية أو أحد أفراد عائلتهم أو أحد أقاربهم من الدرجة الثانية أو مع أي شخص متعاقد بصفة شخصية مع هذه الشركات:

☐ **نعم (إذا كانت الإجابة بنعم يرجى إستكمال المرفق)**
☐ **لا**

تحذير: قد يؤدي العلم بخطأ البيانات أو وجود بيانات مخادعة تم إدراجها ضمن النموذج أعلاه إلى رفض عرض المناقص أو إنهاء الاحالة مع شركة البوتاس العربية في تطبيق شروط وأحكام وثائق العطاء وتحصيل قيمة الكفالات المقدمة.

شهادة وإقرار

لقد قرأت نموذج الإقرار والكشف عن تعارض المصالح وأفهم بنوده. ولقد قمت بالإجابة والإفصاح الصحيح عن جميع المعلومات المطلوبة من خلال هذا الكشف، إن وجدت، في بيان المرفق. وأوافق على الإمتثال لأية شروط أو قيود تفرضها شركة البوتاس العربية للحد من تضاربات المصالح الحقيقية و/أو المحتملة أو التخلص منها. وأتحمل نتيجة الاجابة غير الصحيحة وأقر بصحة ما ورد في النموذج ومرفق الافصاح، وأتعهد بالافصاح لاحقاً عن أي حالات تشكل تضارب مصالح حقيقي أو محتمل وساقوم بتحديث نموذج الكشف هذا على الفور عند تغير الملابسات المرتبطة به. وأدرك أن نموذج الكشف هذا ليس مستندا سريا.

وأشهد وأقر بأنني لم أحصل على أية معلومات تتعلق بالعطاء أو محاولة الحصول عليها من أي شخص يعمل في شركة البوتاس العربية بطرق غير مشروعة لتحقيق منفعة شخصية أو مالية.

وفي حال حددت أو وجدت شركة البوتاس العربية أي حالة من حالات تعارض المصالح سواء حقيقي أو محتمل لها حق إنهاء العطاء أو المناقصة فوراً دون الحاجة لإعذار أو قرار قضائي مسبق مع الالتزام بأي تعويضات مالية تترتب بحقي بهذا الخصوص من ضمانات وثائق المناقصة .

إسم المناقص | توقيع المناقص والختم | التاريخ

تحذير: قد يؤدي العلم بخطأ البيانات أو وجود بيانات مخادعة تم إدراجها ضمن النموذج أعلاه إلى رفض عرض المناقص أو إنهاء الاحالة مع شركة البوتاس العربية في تطبيق شروط وأحكام وثائق العطاء وتحصيل قيمة الكفالات المقدمة.

مرفق نموذج إقرار وكشف عن تضارب المصالح

إذا قمت بالإجابة بنعم على أي من الأسئلة الواردة بالصفحة السابقة، فالرجاء استكمال القسم/الأقسام الواردة أدناه.

وإذا قمت بالإجابة بلا على جميع الأسئلة، فيمكنك تجاهل هذا المرفق. قم بتقديم هذا المرفق مع النموذج المكتمل موقع ومختوم مع وثا ئق العطاء.

معلومات حول تضارب المصالح

• إسم أو أسماء الأشخاص الكامل وصفتهم الوظيفة الذين تم الاجابة بنعم في النموذج بوجود تضارب مصالح :

1 . .....

2 . .....

3 . .....

4 . .....

5 . .....

6 . .....

7 . .....

• حالة القرابة والعلاقة التي تربطك مع الشخص أو الأشخاص أعلاه سواء مصلحة مالية أو تجارية أو شخصية مع ذكرها:

.....

.....

.....

• بيان طبيعة تضارب المصالح معهم (حقيقي أو محتمل أو فعلي أو مباشر أو غير مباشر)

.....

.....

• بيان وصف منصب الشخص أو الأشخاص أعلاه / وإن كان يتيح لهم المشاركة بأي قرار في العطاء سواء في التقييم أو التنفيذ أو حصولك على معلومات داخلية منهم عن أعمال شركة البوتاس العربية

.....

.....

إسم المناقص | توقيع المناقص والختم | التاريخ

تحذير: قد يؤدي العلم بخطأ البيانات أو وجود بيانات مخادعة تم إدراجها ضمن النموذج أعلاه إلى رفض عرض المناقص أو إنهاء الاحالة مع شركة البوتاس العربية في تطبيق شروط وأحكام وثائق العطاء وتحصيل قيمة الكفالات المقدمة.

THE ARAB POTASH COMPANY PLC

Tender Scope of Works
&
Specifications

For IFB Number 202401796/DH

Design, Manufacturing, Testing, and Supply

of

Package Substations for Township

Rev.0

THE ARAB POTASH COMPANY PLC
Tel. No. +962-6-5200520
Fax No. 962-3-2305125

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1. ABOUT APC

Arab Potash Company (APC) is the Eighth Largest Potash Producer Worldwide by Volume of production and the Sole Producer of Potash in the Arab World. It also has one of the best track records among Jordanian corporations in the areas of work safety, good governance, sustainable community development, and environmental conservation.

Company Activities

The Arab Potash Company (APC) was established on July 7th, 1956, and in 1958 the Government of the Hashemite Kingdom of Jordan granted APC an exclusive concession for the exploitation of Dead Sea salts and minerals. Upon termination of the concession, 100 years from the date it was granted, ownership of all plants and installations will be transferred to the government of the Hashemite Kingdom of Jordan at no cost to the latter. The operational objectives of the Company include the extraction of salts and minerals from the Dead Sea and establishing industries that use these salts and minerals. The activities of APC and its subsidiaries concentrate on the production of potash, potassium nitrate, and other downstream industries and market them both domestically and internationally.

Our Vision

"Be the Most Trusted Partner in The Global Upstream and Downstream Dead Sea Minerals Industries."

Our Mission

"Create Value for Our Shareholders, Customers, Employees & Other Stakeholders Through Transforming Dead Sea Minerals into A Wide Spread of High Quality, Innovate & Sustainable Products."

Geographic Location

Amman: Headquarter.

Ghour Al-Safi Plant: The site of Arab Potash Company is located 110 kilometers south of Amman and 220 kilometers north of Aqaba. The site is a Solar Evaporation Ponds System of an area of 112 km2 and processing plants. The plants produce four grades of potash: standard, fine, granular, and red potash.

Aqaba Site: is located across the southern beach of the Red Sea in the Industrial area of Aqaba city, with an area of 250,000 m2 and its 23 km away from Aqaba city center and 220 km from Ghour Site Plant, Aqaba site has a crucial part in the logistics, transportation, storing, and marketing of Potash products, with a storage capacity of 285,000 M ton.

2. ABBREVIATIONS

APC: Arab Potash Company.

BS: British Standard.

C/W: Complete with

HV, MV: High Voltage (> 1000 V)

IEC: International Electrotechnical Commission.

ISO: International Organization for Standardization.

LV: Low Voltage (<1000 V)

MVA: Mega Volt Ampere.

ONAN: Oil (Natural convection) and Air (Natural convection)

RMU: Ring Main Unit

SLD: Single Line Diagram

TBA: To Be Advised

TBC: To Be Confirmed

3. INTRODUCTION:

This specification covers the requirements for the Designing, manufacturing, testing, supplying, and site commissioning of Four (4) units of prefabricated metal-clad outdoor package substation 11/0.4kV, 1000 kVA, with all necessary auxiliaries and fittings, to be installed at the Arab Potash Company site located at the south end of the Dead Sea near Safi.

The package substation combines HV switchgear, power transformer, and LV distribution panel in a (non-walk-in) single transportable unit, completely factory assembled and ready for operation after fixing on the existing concrete base pad.

4. APPLICABLE STANDARDS:

Except where modified by this specification, the package substation shall be designed, manufactured, and tested in accordance with the latest edition of IEC 62271-202 (prefabricated High voltage/Low voltage substations) and other related IEC standards.

The panels and associated equipment design and construction shall comply with the latest release of the following IEC Standards:

IEC 60044	Current transformers
IEC 60076-1	Power transformers

IEC 60204	Safety of Machinery – Electrical Equipment
IEC 60255	Electrical protection relays
IEC 60269	Low voltage fuses
IEC 60282-1	High Voltage Fuses
IEC 60502	Specification for power cables with extruded insulation and their accessories
IEC 60529	Degrees of protection provided by enclosures (IP code)
IEC 60947	Low voltage switchgear and control gear
IEC 61439-1	Low-voltage switchgear and control gear assemblies - Part 1: General rules
IEC 61439-2	Low-voltage switchgear and control gear assemblies - Part 2: Requirements for busbar trunking systems (busways)
IEC 61439-3	Low-voltage switchgear and control gear assemblies - Part 3: Requirements for low-voltage switchgear and control gear assemblies intended to be installed in places where unskilled persons have access for their use – Distribution boards.
IEC 61641	Enclosed low voltage switchgear and control gear assemblies- Guide for testing under conditions of arcing due to internal fault
IEC 62271-102	Alternating current disconnectors and earthing switches.
IEC 62271-103	High voltage switches for rated voltage above 1 kV and less than 52 kV
IEC 62271-105	Alternating current switch-fuse combination.
IEC 62271-200	High Voltage Switchgear and Controlgear – Part 200 AC Metal Enclosed Switchgear and Controlgear for Rated Voltages above 1 kV and up to an including 52 kV
IEC 62271-201	High Voltage Switchgear and Controlgear – Part 201 Common Specifications for High-Voltage Switchgear and Controlgear
IEC 62271-202	High Voltage Switchgear and Controlgear – Part 202 High Voltage – Low Voltage Prefabricated Substation
IEC 60044-1	Instrument transformers – Part 1: Current transformers
IEC 60044-2	Instrument transformers – Part 2: Voltage transformers
IEC 60051	Direct acting indicating analog electrical measuring instruments and their accessories - All Parts

IEC 60073	Basic and Safety Principles for Man-Machine Interface, Marking and Identification
IEC 60269-1	Low-Voltage Fuses - Part 1: General Requirements
IEC 60269-2	Low-Voltage Fuses Part 2: Supplementary Requirements for Fuses for Use by Authorized Persons (Fuses Mainly for Industrial Application)
IEC 60417	Graphical symbols for use on equipment
IEC 60445	Basic safety principles for man-machine interface marking and identification - Identification of equipment terminals of certain designated conductors, including general rules for an alphanumeric system.
IEC 60742	Isolating transformers and safety isolating transformers
ISO 9000 series	International Organization for Standardization - Quality System Standards

In the event of a conflict between the reference codes and standards, drawings, specifications, and/or the Purchase Order, the most stringent shall apply, however, the Vendor shall obtain clarification from the Owner / Engineer before proceeding with the work.

5. TECHNICAL REQUIREMENTS - GENERAL

- The specified equipment shall be suitable for outdoor installation.
- All equipment shall be designed to operate for continuous heavy-duty service 24 hours per day, 365 days per year.
- The equipment shall be of the Vendor's best quality and construction to ensure a minimum equipment design life of 30 years.
- All drawings, technical documents, manuals, tagging, identification, equipment nameplates, and correspondence shall be in the English language.
- All warning signs, safety signs, and instrument displays shall be in the English language.
- The substations shall be designed to withstand the effects of earthquake, vibration, and shock possible for the plant site, as detailed in Appendix A, Site Conditions.
- Compartment Protection degree:

MV compartment	IP 54
Transformer compartment	IP 43
LV compartment	IP 54

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6. TECHNICAL REQUIREMENTS - CONSTRUCTION

6.1. GENERAL

- Prefabricated substations shall typically be completely self-contained, factory-assembled in a totally enclosed metal cladding.
- The housing shall be vermin-proof, dust-proof, and weatherproof, ready to be placed upon a concrete base.
- HV switchgear, Transformer, and LV panels shall be housed in separate compartments.
- The compartments shall be completely separated by metal barriers.
- The transfer of arc faults between compartments shall be minimized.
- All compartments shall be individually accessible by their door(s) from outside the substation.
- The roof of the prefabricated substation shall be peaked to shed rainwater.
- The substation shall be easily lifted using suitable slings through lifting eyes. If lifting eyes are located on the floor frame of the substation, then a suitable lifting beam, to which the slings shall be attached, shall be supplied to keep the slings away from the substation side to prevent scratching.
- The base frame or support structure of the substation shall not interfere or impede the installation of the HV and LV cables.
- The base frame and support structure shall be a hot dipped galvanized.
- The metal parts of the substation shall be protected against corrosion and any environmental impact by suitable galvanizing and painting.
- Space heaters shall be provided where necessary to withstand the climate conditions as per site conditions.
- The substation shall be thermally insulated to withstand the climate conditions as per site conditions

6.2. SHEET METAL WORK, SURFACE PREPARATION AND PAINTING

- The prefabricated substation enclosure shall be fabricated such that the framework is sufficiently rigid and stable to withstand all normal operating, handling, and shipping forces without deformation, misalignment, or damage. Removable sections of the enclosure shall not be used to obtain such rigidity.
- All steel paneling shall be of folded construction, utilizing 2 mm (minimum) zinc annealed sheet steel, marine-graded aluminum, or 316 stainless steel.
- The complete enclosure surface shall be prepared and painted to provide adequate protection against the adverse effects of the site conditions specified in APPENDIX A.
- Surface preparation and paint systems shall be selected to give a life of not less than 15 years to first maintenance.
- Preferred paint colors: RAL 7030 (Light Grey) or a similar alternative.

6.3. COMPARTMENT DOORS

- The doors shall be provided with heavy-duty hinges, cylinder locks provided with swing metal handles, and master keys for all doors.
- Compartment doors shall be provided at each end and side of the prefabricated substation, providing access to HV switchgear, LV panels, transformer off-load tap changer selector switch, all protection and indication devices, all valves, CTs, etc.
- Compartment doors shall be suitably designed and braced to prevent sagging or drumming, taking into account their weight. All panel seams and joins shall be continuously welded.
- Compartment doors shall be provided with hinges that swing open outwards through 180 degrees and be fitted with a latching mechanism at angles 90 degrees, 120 degrees, and 10 degrees preventing the door from self-closing. The latches shall be installed such that they are easily operated without requiring special tools.
- Compartment doors shall have earth studs welded on the back of the doors and be equipotentiality bonded to the substation frame with a minimum of 4 mm^2 earth conductors.
- Compartment doors shall have a continuous neoprene seal around the perimeter to achieve the required IP classification (the seal shall be glued or fixed to the door).
- Full-height compartment doors shall be provided with a three-point latching system at least.
- Compartment doors shall be removable.
- Danger signs shall be located outside on the substation doors.
- Compartment doors shall have an interlock system to ensure transformer compartment doors can only be accessed when the respective transformer is de-energized and earthed.
- All compartments should be equipped with internal lighting with a door limit switch.

6.4. HV COMPARTMENT

- The HV compartment is designed to be equipped with HV secondary switchgear or Ring main Units and associated control circuits and protection relays.

6.5. TRANSFORMER COMPARTMENT

- The transformer compartment shall be designed to provide the transformer with sufficient airflow volume for cooling through adequately sized ventilation openings.
- Oil collection pit/pan in case of any oil leakage from the transformer.
- Manual and automatic control of supplementary cooling equipment, shall be provided. automatic operation shall be controlled by the oil temperature indicator.
- To facilitate testing and inspections, transformer terminations shall be accessible.
- To facilitate inspections, the oil level indicator and oil temperature indicator shall be visible. from outside of the transformer compartment when the doors are open.
- The Contractor shall confirm that the enclosure does not invalidate the transformer temperature rise requirements even if the cooling system is turned off.
- All protection and indication/ auxiliary devices on the transformer shall be wired to a marshaling box located inside the LV/HV compartments

6.6. LV COMPARTMENT

- This compartment is designed to be equipped with LV panels.

6.7. FIXINGS

- All metal handles, hinges, screws, and nuts shall be of manufacturer's standard finish and suitably protected against corrosion.
- Externally fitted fixings shall be hot-dipped galvanized.
- Cadmium-plated fixings shall not be used.
- All current carrying connections shall be with conical washers. Bolt length is to be selected so that approximately two threads protrude on the final installation.
- All equipment located on equipment mounting plates shall be fixed via drilled and tapped holes in the mounting plates.

6.8. EARTHING & EARTH BARS

- All doors shall be connected to the prefabricated substation enclosure with a minimum of 70 mm2 bare copper braid. The enclosure shall be connected to the prefabricated frame with 70 mm2 bare copper braids at a minimum of two separate locations at either end of the substation.
- A tinned copper main earth bar suitably rated for the maximum earth fault current, and duration (40 mm x 6.3 mm minimum size) shall be installed along the length of the prefabricated substation from the LV compartment to the HV compartment, typically bolted directly to the substation base frame. A minimum of four spare holes 14 mm diameter to suit M12 bolts shall be provided at each end (HV and LV compartment) of the main earth bar to allow for connection to the earth grid.
- The main earth bar shall be readily accessible from the HV and LV compartment and shall not impede the operation of the LV panel or the termination of cables.
- The transformer tank shall be connected to the earth busbar using a tinned copper busbar minimum of 40 mm x 6.3 mm.
- The HV switchgear bus bar shall be connected to the main earth bar using two 70 mm2 cables connected to either end of the HV switchgear.
- The LV distribution panel neutral busbar shall be connected to the main earth bar using either two 70 mm2 cables or a 40 mm x 6.3 mm tinned copper busbar.
- Earth connections and connection points are marked by earthing symbols.

6.9. WIRING

- Wiring shall be 1000 Volts for power wiring and 600 Volts for control wiring. Cables shall be rated for 90° C conductor temperature with flame retardant insulation. The cable core shall be stranded copper, class 2, according to IEC 60502.
- Panels shall be wired to IEC standards, especially providing protection against contact with live parts. Earth wire shall have green-yellow markings.

- All wires shall be identified with slip-on, heat shrink wire markers, with indelible, machine printed, black lettering on a white background with wire numbers. All wiring shall be identified at both ends. The maximum number of wires per terminal block shall not exceed two.
- All spare contacts shall be terminated at the terminal blocks and then a minimum of 15% spare terminals shall be provided.
- Provide PVC ducts c/w covers for all panel's wiring. Provide PVC spiral harness for control wiring wired to door-mounted control devices.
- Minimum core sizes shall be as follows:
  - 2.5 mm² for power, lighting, and receptacle circuits
  - 1.5 mm2 for control circuits with the exception of 110 VDC circuits which shall be 2.5 mm2,
  - 1.5 mm² for instrumentation and 24V control wiring,
  - 2.5 mm² for current transformers.
- Minimum terminal strips and wiring diagrams shall be provided to facilitate the reconnection of wiring at the shipping splits, with each wire and terminal identified with permanent markers.
- All conductors, connections, and contacts shall be of ample section and surface area for carrying continuously the specified full load, and currents and for carrying the specified short circuit current for sufficient time to enable the supplied fuse or circuit breaker to clear the fault.
- Connections to the Owner's external circuits shall be brought to pressure-type terminal blocks with marking strips. Wire markers shall be provided on all connection points.
- Terminal blocks shall be separate modular terminals, rated for 25 A minimum, 600 V, with metal barriers to separate the voltage levels. A minimum of 20% spare terminals shall be included. Current transformer terminal blocks shall be separate, distinctly colored, with automatic shorting provisions.
- Wiring between devices and cabinets shall be in liquid-tight flexible metal conduit.

6.10. INTERCONNECTIONS

- The prefabricated substation shall be fitted with interconnections (power and control) between HV switchgear and transformers, Transformer, and LV switchgear.
- The power interconnection cables shall be sufficiently rated to the connected equipment's maximum current and fault rating.
- All interconnections shall be fully supported. Equipment terminals shall not be used to support the interconnecting cables.

6.11. STATION LIGHTING:

- The lighting system shall be designed to consist of at least two LED lamps for each door, i.e., for the inside, outside, and Distribution box

7. TECHNICAL REQUIREMENTS - HV SWITCHGEAR

7.1. GENERAL REQUIREMENTS

- HV switchgear shall be SF6 insulated, non-extendable, consisting of Three load break switches and one switch-fuse combination for transformer protection.
- HV switchgear shall be secondary or ring main unit (RMU) type.

7.2. RATING AND DATA SHEETS

- The vendor shall complete the "Vendor Data" portion of the Data Sheets and return with a technical quotation.
- Data and information provided in the data sheets will be considered contractually binding since they will be used in the overall system design.

	Item Description	Design Requirements
1.	Ambient design temperature	See Appendix A
2.	Altitude	420 m below sea level
3.	Rated voltage (kV)	11 KV, 50Hz
4.	Rated short circuit current for 1 s:	25 KA
5.	Rated insulation level	28 KV
6.	Rated lightning impulses withstand	75 KV
7.	Number of main feeders	Three
8.	Number of transformer feeders	One
9.	Busbar rated current	630 A
10.	Main feeders (load break switch) rated current	630 A
11.	Transformer feeder (switch-fuse)	200 A
12.	Transformer feeder - fuses ratings	TBA
13.	Transformer feeder - Shunt trip coil for external tripping	Required (quick action)
14.	Mechanical endurance (Number of openings)	1000 min.
15.	Voltage detection	VDS, LRM interface (IEC61243-5)
16.	Gas pressure	Manometer
17.	Access	Front access
18.	Auxiliary contacts	For position indication
19.	Fuse Blown Indication	Required
20.	Cables entry	Bottom

7.3. TECHNICAL REQUIREMENTS AND CONSTRUCTION

- The RMU shall be meeting the following personal safety:
  - Safe–to–touch and hermetically sealed primary enclosure.

- HV HRC fuses and cable-sealing ends are only accessible when outgoing feeders are earthed.
- Operating is only possible when the enclosure is closed.
- Logical mechanical interlocking.
- Feeder earthing by means of make-proof earthing switches.
- The main feeder incomer's earth switch shall not be possible to operate while the line is live.
- Arc-resistant design.
- Main feeders- cable connection compartment shall be interlocked with main and earth switches
- Main feeders shall be fitted with keys to lock operations, Crossed locking, Prohibits closing of the earthing switches unless the upstream and downstream switchgear is locked in the "open" position
- Transformer feeders shall be fitted with keys to lock operations, Prohibits access to the transformer unless the earthing switch has been locked in the "closed" position
- automatic release in case of fuse tripping or transformer protection .
- The load break switch and earthing switch shall be interlocked with each other.

8. TECHNICAL REQUIREMENTS - TRANSFORMER

8.1. GENERAL REQUIREMENTS

- The transformer and associated equipment shall be designed and manufactured in accordance with the latest industry practice and technology and shall comply with the requirements of IEC 60076

8.2. RATING AND DATA SHEETS

	Item Description	Design Requirements
1.	Location	Outdoor
2.	Ambient design temperature	55°C maximum
3.	Altitude	420 m below sea level
4.	Base rating IEC designation	1000 KVA
5.	Cooling method	ONAN
6.	Sealed tank or conservator	TBA
7.	Cooling fluid	Mineral Oil, spec. shall be submitted by the Vendor
8.	Average temperature rise	55 °C
9.	Hottest spot temperature rise	80 °C
10.	Average sound level – ONAN	<60 dB
11.	Impedance	6.0 %

12.	Minimum guaranteed impedance		TBA
13.	Number of phases & frequency		3 Phase, 50 Hz
14.	Windings: copper (cu)		Copper (Cu)
15.	Primary voltage		11 kV, DELTA
16.	Secondary voltage		0.4 kV, WYE
17.	Secondary star point		Brought out, fully rated, and insulated
18.	Vector relationship - IEC		Dyn11
19.	Primary system symmetrical fault level		26 kA for 1sec @ 33 kV
20.	off-load tap changer		Five positions on primary winding +5.0%, +2.5%, 0%, -2.5%, -5.0%
21.	Primary winding rated lightning impulse withstand voltage		95 kV
22.	Primary winding rated short duration power frequency withstand voltage		28 kV
23.	Primary bushing rating		15 kV
24.	Primary bushings type		TPA
25.	Exciting current	@ 100% rated voltage	TPA
26.	Exciting current	@125% rated voltage	TPA
27.	Regulation	@ 1.0 PF	TPA
28.	Regulation	@ 0.9 PF	TPA
29.	Regulation	@ 0.8 PF	TPA
30.	Efficiency	@ 50% load - 0.8 & 0.9 PF	TPA
31.	Efficiency	@ 75% load - 0.8 & 0.9 PF	TPA
32.	Efficiency	@ 100% load -0.8&0.9 PF	TPA
33.	Efficiency	@ 125% load -0.8&0.9 PF	TPA
34.	No-load losses		TPA
35.	Load losses	@-50% load - 0.8 PF	TPA
36.	Load losses	@- 75% load - 0.9 PF	TPA

8.3. TECHNICAL REQUIREMENTS AND CONSTRUCTION

Type and Ratings

- The equipment shall be designed for continuous output at base kVA with temperature rise measured by resistance when naturally cooled and de-rated for site conditions as required, all in accordance with the Data Sheets.

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Impedance

- Impedance shall be expressed on rated KVA at the center tap, and shall be as specified on the Data Sheets

Short Circuit Capability

- The core and windings shall be braced to prevent displacement or distortion by short circuits or normal shipping.

Overload Capability

- Transformers specified with 55°C temperature rise shall have overload capabilities in accordance with IEC 60076.

Harmonics

- The transformer will feed several non-linear loads up to 50% of their rating. Transformers shall be sized to withstand the effects of harmonic distortion per relevant and applicable IEC standards.

Windings

- The windings shall be made of copper.

Tank

- The transformer tank shall be constructed of steel and mounted on skids. The undercarriage shall be of steel plate, rigidly constructed and fitted with flangeless rollers, and suitable for moving the transformer in any horizontal direction.
- Lifting eyes shall be provided for moving the oil-filled transformer.
- Access to internal elements in the tank shall be provided either by bolt-on covers or manholes.
- The pressure relief device shall be sized to prevent damage to the tank in case of an internal fault. It shall be mounted on the tank cover.
- For the liquid drain, a 2 ½" ball valve (ASME) with a threaded plug shall be provided.
- For liquid sampling, a ½" ball valve (ASME) with threaded plug shall be provided.
- Provide top and bottom connections, closed with threaded plugs, for liquid treatment connection.
- Two grounding plates with bolts and grounding connectors for 50 mm2 to 185 mm2 copper cable shall be provided on the opposite sides of the transformer tank.

Insulating Liquid

- The insulating oil shall be mineral oil, class 1, to BS/IEC standards. The main and conservator tanks shall be filled prior to delivery.
- The Manufacturer shall test the oil in accordance with BS/IEC standards.

Instrumentation and Accessories

- All alarm, trip and control contacts shall be suitable for 110V AC and 110V DC.
- Provide top liquid temperature local gauge indication with separate alarm and trip dry contacts.
- Provide a gas detector, for detecting internal faults, with separate alarm and trip contacts.

- A pressure gauge on top of the tank to measure and indicate the existing pressure in the heretically sealed transformers with alarm contacts.
- Pressure relief device include trip contacts.
- Oil level indicator.

Terminations

- Primary and secondary termination fittings shall carry maximum full load current, including allowance for overload capabilities. Terminal construction shall permit rotation around bushing stud. Bushings shall comply with IEC. Terminal connectors on bushings shall be suitable for 125% of winding maximum current.
- The neutral point shall be connected to a fully rated neutral bushing.
- Primary and secondary bushings shall be located on the top cover of the main tank.

Off-Load Taps and Tap Changers

- One hand-operated, external, five-position off-circuit, fully rated KVA taps shall be provided on the high voltage winding, for a voltage adjustment of plus or minus 5%, in steps of 2.5% of rated voltage with provision for padlocking.

Nameplates

- Non-corroding stainless steel material to indicate transformer rating and connection diagrams, vector group together with Purchaser's equipment number. and nameplates for the identification of devices and components.
- Nameplates and warning signs shall be provided in English.
- All bushings shall be clearly marked to identify the phase connections in accordance with the connection diagram on the rating plate.

Painting

- Metallic surfaces shall be phosphate cleaned, given rust-inhibiting treatment, primed with an electro-deposited zinc rich primer of textured polyurethane enamel, and oven baked with a minimum of two coats of final finish per RAL standard.
- The control cabinet enclosure shall be made of stainless steel.
- Hot Dip Galvanizing of the tank and radiators shall be applied prior to a/m painting procedure.
- The Vendor shall advise their best practice for de-rusting, rust inhibiting treatment, and painting type and procedure for the transformer and the radiators. The Vendor shall guarantee the transformer painting for the highly corrosive atmosphere as detailed in Appendix - A Site Conditions. The surface treatment/painting method will be used as a major selection criterion.

Quality Assurance

- The manufacturer shall identify the quality control standard adhered to at his facility. Where no specific quality control standard is followed, the manufacturer shall provide sufficient details of his quality control program to determine compatibility with other recognized standards.

- The manufacturer shall provide access to his premises for quality surveillance by the Owner / Engineer as necessary.
- The vendor shall provide Quality Assurance requirements in accordance with Class 2 ISO 9002.
- The Vendor shall provide quality system requirements in accordance with Standards, Quality Assurance and Surveillance, Level B.

9. TECHNICAL REQUIREMENTS - LV PANEL

9.1. GENERAL REQUIREMENTS

- Panels shall be a totally enclosed, single-front, free-standing assembly, an external degree of protection for any assembly shall be at least IP42. The assembly shall be made up of sheet steel vertical sections bolted together and mounted on a common channel base to form a free-standing and self-supporting structure.
- The cable entry shall be the bottom entry. Panels shall be supplied with non-magnetic removable gland plates, at least 4 mm thick.
- The termination of the incoming and outgoing cables shall be at the bottom of each section.
- Panels shall be designed to dissipate the heat generated by all internal equipment, buses, and wires.

9.2. RATING AND DATA SHEETS

- The vendor shall complete the "Vendor Data" portion of the Data Sheets and return with a technical quotation.
- Data and information provided in the data sheets will be considered contractually binding since they will be used in the overall system design.

	Item Description	Design Requirements
1.	Location	Outdoor-IP54
2.	Ambient design temperature	55°C
3.	Altitude	420 m below sea level
4.	Rated voltage (V)	400 V,3 phase, 4 wire
5.	Rated insulation level	1 KV
6.	Rated lightning impulse withstand	8 KV
7.	Rated short circuit current for 1 s:	36 KA
8.	Busbar rated current	1600 A min.@55 °C
9.	Main Incomers ACB rated current	1600 A min.@55 °C
10.	Number of Incomers	One
11.	Number of 3P, 320 A MCCB feeders, adjustable protection setting	15

12.	Number of 3P, 40 A MCCB street lighting feeders C/W (22KW contactor, 230V coil, Photocell and M-O-A selector switch)	2
13.	MCCB Feeder for substation auxiliaries	TBA
14.	Service socket	240 V AC 13 A 3-pin double-switched socket
15.	Cables entry	Button, all feeders CBs shall be connected to the terminal blocks on the lower side of the panel or

9.3. TECHNICAL REQUIREMENTS AND CONSTRUCTION

Main Phase and Neutral Bus Bars

- The main phase and 100% rated neutral busbars shall be made of hard drawn, high conductivity copper, epoxy insulated, and tin-plated.
- Main busbars shall be installed in a fully segregated.

Main Incoming

- The incomer feeder ACB shall be equipped with a micrologic trip unit with a display.
- The incomer feeder shall be equipped with energy metering functions.
- The main circuit breaker rated shall be 1 kV, 3 poles, a minimum of 50 kA.
- The circuit breakers shall be single-throw, air breaker, manually or electrically operated, 100% fully rated, with self-aligning primary and secondary disconnecting devices.
- The circuit breakers shall be operated using a stored energy mechanism which is normally charged by a manual handle. A manual handle shall be provided for each circuit breaker.
- The circuit breakers shall be mechanically trip-free during the manual close procedure.
- The circuit breakers shall have three, clearly marked definite positions within its enclosure, i.e. "Closed", "Test" and "Open" positions.
- Separate front-hinged doors to provide access to the circuit breaker and auxiliary compartments. All withdrawable elements shall be front access only. No top hats will be accepted.
- The circuit breakers shall be designed to be maintained with removable arc chutes, replaceable arcing contacts, and access to parts that require periodic inspection and maintenance.
- The trip units for feeder breakers shall have the following adjustable characteristics:
    - Long time pick up and delay.
    - Short time pick up and delay.
    - Instantaneous pick up with an "Off" switch.
    - Earth fault pick up and delay.
- The following display functions and annunciation shall be provided:

- Voltage
- Energy
- Real Power
- Reactive Power
- Total Power
- Present Demand Amps
- Peak Demand Amps
- Power Factor
- Event Recording, Date and time of event, type of trip, (i.e. over current, short circuit, earth fault, breaker address, current value at time of trip.

- The metering relay shall communicate all metering information and CB status to the plant SCADA system via the Modbus TCP/IP communication network.

Auxiliary Power Supplies

- Provide integral battery backup for any volatile logic protection. If a separate power source is required for protective logic and I/O circuits, it shall be supplied by the Owner from an independent UPS and the Vendor shall provide required termination provisions for external power supplies.
- There is no existing external power supply on the site.

Indicating Lights

- Indicating lights shall be supplied in the following colors:
  - Red Power on, running, switch closed, unsafe, etc.
  - Green Power off, stopped, switch open, safe, etc.
  - Amber Fault alarm
  - Blue Earth fault trip indication
- Indicating lights shall be LED lamp type.

10. DRAWINGS AND SUBMITTALS

- Submittals during tendering:
  - Dimension and arrangement drawings.
  - Data Sheets.
  - Catalogues for the offered items.
  - Qualification data.
  - Type test verification.
  - Type test certificates for the prefabricated substation.
  - Other documents are needed for the offer evaluation.
  - Soft copy of the technical offer.
- Submittals after awarding:

The following, but not limited, documents and drawings shall be provided after the awarding:

- Test reports.
- Installation, operating, and maintenance instructions.
- Final certification of all drawings and as-built data
- List of materials and items including part no. origin .description.
- Detailed wiring diagram
- Bottom plan diagram and the weight of the substation, which shows all the openings for cables, and the weight of the substation to design and construct the foundation.

- The bidder shall note that approval given by the APC in no way relieves the bidder of any responsibility for the design, engineering, accuracy, and quality of all equipment/materials supplied.

11. ACCEPTED MAKES AND ORIGINS.

Package substation.

- The package substation's final assembly shall be of Europe, Turkey, or local origin.

Transformer

- The Transformer shall be Europe, Turkey, or local origin.

HV Switchgear

- The HV Switchgear shall be West Europe origin.
- The HV Switchgear shall be ABB, SIEMENS, SCHNIDER, or EATON brand only.

LV Distribution panel

- The LV Distribution Panel shall be Europe, Turkey, or local origin.
- The LV Distribution Panel shall be ABB, SIEMENS, SCHNIDER or EATON brand only.

12. INSPECTION & TESTING

Factory Testing and Inspection of the transformer.

- Each transformer shall meet or exceed all design tests as indicated in applicable IEC standards.
- The following type tests shall be carried out on one of the transformers.
  - Temperature rise.
  - Impulse voltage withstands.
  - Noise level measurements.
- The following routine tests shall be carried out on each transformer.
  - Measurement of winding resistance.
  - Insulation resistance.
  - Dielectric tests.

- Ratio test.
- Polarity and phase relationships.
- Impedance voltage and load losses.
- No-load losses and no-load current.
- Induced overvoltage withstands.
- Separate source voltage withstands.
- Oil tests.
- Auxiliary devices and wiring tests.

- Full details of proposed methods of testing, including connection diagrams and time schedule, shall be submitted by the successful bidder for approval at least one month before testing.
- Certified copies of all test data shall be included in the final operating and maintenance manuals.
- APC or its authorized representative reserves the right to witness any or all tests at the manufacturer's plant prior to packaging and shipment.

Factory Testing and Inspection of the Package Substation.

- All equipment of the substation shall be type tested in accordance with IEC 62271-202.
- The whole equipment shall be type-tested in accordance to the IEC 62271-202:2022 standard.
- The following routine tests shall be carried out on each package substation:
  - Dielectric tests.
  - Visual inspection and check.
  - Mechanical sequence operations and function test.
  - Cabling check.
  - Electrical sequence operations.
  - Insulation test.
  - Measurement of the resistance of the main circuits.
  - Primary current injection test
  - Paint thickness.
  - And any other necessary test suggested by the supplier.
- Full details of the proposed methods of testing, including connection diagrams and time schedule, shall be submitted by the successful bidder for approval at least one month before testing.
- The routine tests of the HV switchgear and LV distribution panel shall be submitted.
- APC or its authorized representative reserves the right to witness any or all tests at the manufacturer's plant prior to packaging and shipment.

13. EVALUATION & SCORING

- Evaluation of tenders will consist of two stages: stage one involves "Technical evaluation." Only Bidders whose technical offer is responsive and satisfactory will be considered for the second stage, which consists of the "Commercial evaluation."
- Prior to the detailed evaluation of the tenders, APC will determine whether each tender; (i) has been properly signed; (ii) is accompanied by the required securities; (iii) is substantially responsive to the requirements of the Tender Documents; and (iv) provides any clarification and/or substantiation that the APC may require.
- A substantially responsive tender is one that conforms to all the terms, conditions, and specifications of the Tender Documents, without material deviation or reservation.
- Scoring weight will be applied as follows:
    - 60% of the technical score.
    - 40% of the financial score.

The technical evaluation will be based on the following criteria:

	Evaluation item	Score
1.	Compliance with APC technical specifications.	40
2.	Drawings and components datasheets.	15
3.	Supplier's experience in the same field.	15
4.	The number of supplied package substations (offered type) in the last three years in Jordan with end user satisfaction certificate.	15
5.	Compliance with tender documents, offers presentation, and document completeness.	5
6.	Evidence of the Quality Assurance/ Quality Control Plan	5
7.	Project overall duration	5

The minimum passing score for technical evaluation is 70%

Commercial Evaluation

- Only Tenders that pass the technical evaluation indicated above will proceed to the Commercial Evaluation phase.
- The evaluation will consider any deviations from the Tender documents regarding, without limitation payments, guarantees, and any other financial issues.
- The exclusions and deviations either stated or implied shall have a major consideration.
- The final evaluation will be based on 60% for the Technical Offer and 40% for the Commercial Offer according to the following matrix of evaluation:
- (60% X Technical Score) + (40% X Least Price / Bidder Offer) = Final Score

14. WARRANTY

- The supplier warrants to the APC that the supplied equipment is free from faults in design, workmanship, and material and is of sufficient size and capacity and of proper material to fulfill satisfactorily the performance requirement.
- Should any defect in design, material, workmanship, or operating characteristics develop during the first year of operating but not later than (18) months after shipment from the supplier works, the supplier agrees to make all necessary or desirable alterations, repairs, and replacements of defective equipment free of charge and shall pay transportation expenses to and from the plant site.
- No reimbursement whatever may be claimed for modifications or repairs carried out by third parties before the written consent or approval of the company.
- If the defect or diminished performance can't be corrected, the supplier agrees to replace the equipment without delay and at his own expense.

15. SCOPE OF SUPPLY AND PRICE BREAKDOWN

Price breakdown:

Bidders shall give price breakdown as follows:

#	Item	Unit	Qty.	Unit Price	Total Price
1.	Supply of 11/0.4kV, 1000 kVA Three Phase Package Transformer Substation, as detailed in this document.	Each	4		
2.	Site Commissioning	Per Day	4		
3.	Witnessed Factory Acceptance Test for the complete package as specified in the "Testing" clause at the Substation Package manufacturer's premises.	Each	1		
4.	Witnessed Type Test for the Transformer as specified in the "Testing" clause at the Transformer's Manufacturer premises.	Each	1		

APC has the right to consider all or any of the tests in the commercial evaluation.

16. EXCEPTIONS

Any exception to the specified requirements shall be clearly indicated with bid documents.

END OF SECTION

THE ARAB POTASH COMPANY PLC
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APPENDIX-A: SITE LOCATION AND CONDITIONS.

Project location

The project is located on the shore of the Dead Sea approximately 110 km from Amman, capital of the Hashemite Kingdom of Jordan, and 220 km north of the Red Sea port of Aqaba.

Site conditions

Elevation		420m below sea level
Temperature		
Maximum daily temperature	(July)	50°C
Average daily temperature	(July)	40°C
Minimum daily temperature	(January):	5°C
Average daily temperature	(January):	13°C
Design temperature range:		5°C – 50C°
Rainfall (Precipitation):		
Annual Total Precipitation:		50mm
Maximum One Day rainfall:		50mm
Maximum 15 minute rainfall:		25mm
Earthquake loads shall be computed according to		
IBC 2003 – Category "E".		
Wind (I.B.C 2003 refers to ASCE 7). :		
Reference Wind Speed (based on 3 second peak gust)		37m/s
Wind Direction		
Summer		North
Winter		South – South West
Relative Humidity		
Daily average during July		37%
Daily Average during January		58%
Note: Relative humidity can be as high as 85%		