



## **Request for Proposals (361/2022)**

# **Assessment of Power Quality Parameters of Transmission and Distribution Networks in Oman and Development a Regulatory Framework**

April 2022



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## 1. INTRODUCTION

The electricity sector in Oman has experienced a sustained growth of customer connections which required capital investments in generation, transmission and distribution infrastructures. The Authority for Public Services Regulation ("the Authority") has to ensure that the customers are not receiving poor power quality which may result on damaging their appliances.

Accordingly, the Authority wishes to retain an experienced and well-qualified Consultant to develop a Quality of Power Supply Regulatory Framework reflecting the technical parameters articulated in the Grid and Distribution Codes. This framework is expected to assist the Authority in monitoring the compliance of the Licensees to the technical requirements of quality of supply in Transmission and Distribution Networks.

The audit conducted under this RFP seek to confirm the extent to which complies with its Transmission and Distribution licensee's obligations in terms of technical parameters related to quality of supply and to identify opportunities for improvements to be made.

### 1.1 Background

The electricity and related water sector in the Sultanate of Oman was extensively restructured following the implementation of the law for the Regulation and Privatisation of the Electricity and Related Water Sector ("the Sector Law"), promulgated by Royal Decree 78/2004 and its amendments.

The Sector Law provided for the horizontal and vertical unbundling of the electricity and related water sector by companies that undertake activities designated in Article (3) of the sector law as regulated activities. Any Person seeking to undertake a regulated activity is required to be authorised by the Authority to do so. Authorisations granted by the Authority can take the form of a Licence or Licence Exemption.

The Oman electricity structure comprises three separate segments namely: the Main Interconnected System in the North of Oman, remote isolated systems of the Rural Areas Electricity Company SAOC, and the Salalah Power System with the transmission business operation by Oman Electricity Transmission Company (OETC).

In Salalah, prior to 1st January 2014, electricity was supplied by the Dhofar Power Company which operated a vertically integrated electricity concession. The Salalah Concession Agreement was terminated on 1st January 2014, when the Salalah Power System was functionally separated into Generation, Transmission, Distribution and Supply businesses, with the Transmission business in



Salalah being transferred to OETC and Distribution & Supply businesses to Dhofar Integrated Services Company (DISC).

More information about the licensee is provided in the Authority's annual reports, which are available on the Authority's website, <http://www.apsr.om>.

Other regulatory documentation available for download includes the Sector Law (English translation), all licences granted by the Authority and Oman Industry Codes (Grid Code and Distribution Code).

### **1.2 License and Industry Codes Obligations for Quality of Supply**

In accordance with Article (22) of the Sector Law, the Authority has a duty to secure and develop the safe, effective and economic operation of the Electricity and Related Water Sector in the Sultanate of Oman and to enhance the safety of the public. The licences conditions that is relevant to this assignment are:

1. Transmission and Dispatch License Condition 3; and
2. Distribution and Supply License Condition 4.

Both License conditions require from the licensees to comply with the relevant industrial Codes (Grid and Distribution Codes). The relevant requirements are stipulated within the codes are as following:

1. Grid Code (Mainly Connection Conditions Code & Schedule 1 & Schedule 2); and
2. Distribution Code (Mainly Distribution Connection Conditions Code (DCC)).

### **1.3 Requirements of the Assignment**

The Authority wishes to appoint an experienced and well-qualified Consultant for the assignment. The Consultant will have experience of auditing and reviewing the quality of supply in Transmission and Distribution Networks in accordance to the requirements stipulated in the Grid and Distribution Codes. The Consultant shall propose a clear methodology to ensure a detailed and rigorous audit of the issues set out in the Scope of Work in Section 2 of this document.

Consultants shall demonstrate to the satisfaction of the Authority that they have no commercial relationship with Transmission and Distribution licensees that may lead to any concern, real or perceived, as to the independence of the consultant or team members proposed. Where the consultant has any ongoing assignment with any Transmission and Distribution licensees then this should be identified and the consultant should declare any overlap of team members and extent of their involvement in such other projects. The consultant should clearly state the working procedures enforced by the companies in relation to potential conflict of interest situations. This should be signed by an officer of the companies.



The Consultant will need to clearly state that the team members proposed for this assignment are those that will be deployed by the appointed Consultant.

The proposals will be evaluated technically against basic marking scheme as presented in [Annex A](#). Experience and qualifications of team members proposed by the Consultant will be afforded significant weight in the evaluation and selection criteria. Any Consultant or team members that do not have the necessary experience will not be considered for the assignment.

The weighting between the technical and commercial evaluation is split between 80% and 20% respectively. The Authority will not be obliged to accept the lowest cost bid but will appoint the Consultant that offers the best value for money in terms of relevant experience, support to the Authority and cost.



## 2. SCOPE OF WORK

This review is concerning the Transmission and Distribution Licensees in Oman namely: OETC, MEDC, MZEC, MJEC and DISC. The consultant will undertake a number of specific tasks identified below:

- Meet with Transmission and Distribution Licensees to assess their level of compliance with the relevant parts of the Grid Code (mainly Connection Conditions Code & Schedule 1 & Schedule 2) and Distribution Code (mainly Distribution Connection Conditions Code (DCC)) requirements;
- Conduct site visits to representative samples of transmission and distribution locations;
- Assess to what extent the quality and suitability of the existing power quality information collected by Licensees and the way that such information is utilized to ensure adequate level of quality of supply is maintained in the network;
- Assess the available competence and expertise within the Licensees to deal with the quality of supply issues within the licensees;
- Assess complaints resolution mechanisms to ensure that workable procedures are in place to resolve customer power quality concerns;
- Evaluate the impact of Power Quality issues at different voltage levels and different type of customers (residential, commercial and industrial) including large customers connected at transmission level, the captive power generators and the embedded generation and whether the Licensees are conducting any evaluation on this matter or not;
- Provide the Authority with clear recommendations to address the audit findings;
- Provide the Authority with an appropriate Regulatory Framework of Power Quality Management to ensure proper reporting mechanism is made to the Authority and that the interests of licensees and their customers are balanced in as far as power quality and reliability of supply is concerned.

### 2.1 Deliverables

The assignment calls for the following deliverables:

- 1) A clear and comprehensive audit methodology (draft to be presented to and approved by the Authority prior to commencement of the audit) with providing the list of expected request of information from the licences within the submission of the RfP;



- 2) Collection and collation of data (including preparation of information requests and notes of meeting, list of interview questions) in order to have an auditable trail of information used to complete the works described in this Request for Proposals;
- 3) A structured audit report for each Licensee presenting the findings and recommendations on each aspect of the audit which includes also all evidence collected during the audit (such as site visit reports, photos, notes of meetings, etc);
- 4) A separate executive summary report presenting the main findings of the audit and including the recommendations with clear timescale for each licensees with comprehensive comparison between the licensees; and
- 5) Provide appropriate Regulatory Framework of Power Quality Management to ensure proper reporting mechanism is made to the Authority and that the interests of licensees and their customers are balanced in as far as power quality and reliability of supply is concerned.

All deliverables should be presented in a softcopy form only.

## 2.2 Timetable

The Consultant shall commence the assignment within fourteen days of being notified of the contract award. The Authority expects to start the project in **July 2022** as presented in [Annex D](#).

The assignment shall be completed within 12 weeks of the date of appointment. Any timetable extension would require the prior written consent of the Authority.

The Consultant will attend a kick-off meeting with the Authority prior to commencing the assignment and interacting with the licensees. The principal purpose of the kick-off meeting will be to confirm the assignment timelines and ensure the Consultant has access to the information required to complete the assignment.

The Consultant will provide the Authority with a briefing list of initial findings before submitting the draft audit report for review.

The Authority will review the draft audit report and provide the Consultant with feedback and comments within two weeks of receipt of the draft reports. The Consultant shall respond to each of the Authority's comments.

## 2.3 Information to be provided by the Authority

The Authority will provide the Consultant with the following information prior to commencement of the assignment



- 1) Copy of the Sector Law;
- 2) Copies of the relevant licenses;
- 3) Assistance where deemed necessary with engagement with the Licensee; and
- 4) Relevant applicable Codes (Industry Codes).

The Consultant shall provide in their proposal a list of all information they shall require to be provided prior to commencement of the assignment.

Full information about the Authority, Standards and Codes can be obtained from the Authority's website, <http://www.apsr.om>.

The Consultant will be expected to familiarise itself with the Sector Law, relevant licenses and all related documents before meeting with the Licensees. The Authority will provide additional data required for the assignment following appointment of the Consultant.

### **3. CONTRACT TERMS AND CONDITIONS**

The Authority's standard Terms and Conditions will share it separately via email

### **4. SUBMISSION OF PROPOSAL**

The Consultant shall separate their proposal into technical and commercial proposals. The consultant shall submit an electronic copy of their assignment proposal by 6 June 2022 by email to:

The technical proposal should be sent to: [Tender.Technical@apsr.om](mailto:Tender.Technical@apsr.om)

The commercial proposal should be sent to: [Tender.Commercial@apsr.om](mailto:Tender.Commercial@apsr.om)

We will be pleased to provide clarification of matters covered by the RfP prior to the submission of proposals. Request for technical clarifications to be emailed to: [mohammed.altobi@apsr.om](mailto:mohammed.altobi@apsr.om)

The proposal shall include:

- 1) A description of the methodology proposed by the Consultant for each part of the assignment, including an indication of the time required to complete each part of the assignment described in the scope of work, and timescales for the submission of project deliverables;
- 2) Details of the Consultant's experience of similar assignments, including contact details of previous/existing clients;



- 3) Details of the project team (including the CVs of each team member) and a description of each member's relevant experience and their expected contribution to specific parts of the assignment;
- 4) A copy of the Consultant Health and Safety Policy and Procedures that will be followed by the Consultant for this project;
- 5) The technical proposal shall not include any reference to commercial aspects. For instance, the details of the team members shall be summarize as Table 1. Additional breakdown of team member contribution could be provided separately but the below table should be filled with the overall man-days for each member.

*Table 1 Team Member's Contribution*

<b>Team Member</b>	<b>A Brief Description of the member's Contribution in the assignment</b>	<b>No. of working Days in Oman</b>	<b>No. of working Days out of Oman</b>

- 6) The commercial proposal should show separately:
  - a. Fees: including details of the fee of each team member (the hourly/daily fee and the expected contribution in terms of man-days of each team member) as shown in Table 2;

*Table 2: Team Fees and Member's Contribution*

<b>Team Member</b>	<b>A Brief Description of the member's Contribution in the assignment</b>	<b>Daily Rate (RO)</b>	<b>No. of working Days in Oman</b>	<b>No. of working Days out of Oman</b>	<b>Total (RO)</b>
<b>Total Fees</b>					
<b>Total Expenses</b>					
<b>Total TAX</b>					



<b>Total Cost</b>	
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- b. Expenses: including flights and hotel costs (subject to applicable caps as per the Agreement) as shown in Table 3:

*Table 3: Flight and Hotel Expenses*

<b>Expenses</b>	<b>Total No. of item</b>	<b>Unit Cost (RO)</b>	<b>Total (RO)</b>
Flight tickets			
Hotels			

- c. Daily living expenses in Oman as Table 4 shows, (The typical rate used by the Authority is RO25 per person per night).

*Table 4: Daily Living Expenses*

<b>Team Member</b>	<b>No. of Working Days in Oman</b>	<b>Daily Living Expense (Fixed at 25 RO/person/night)</b>	<b>Total (RO)</b>
		25	

- 7) Bid Letter in the form provided in [Annex B](#) to this Request for Proposal.  
8) A signed statement confirming the Consultant is free from any potential conflicts of interest.

**Bidders shall check the completeness of their bids submission by completing the form in [Annex E](#). Any Proposal missing the required information in [Annex E](#) will be considered incomplete.**



## ANNEX A: TECHNICAL EVALUATION

### Developing a Regulatory Quality of Supply framework

No	Technical Criteria	Max Score
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General Comments		
1	Comments on Scope of Work/ Project appreciation	5
2	Quality of proposed deliverables	5
3	Acceptance of the Authority's Contract Terms & Conditions	5

Approach, Methodology and Appropriateness of man-days allocated		
4	Clear description of steps to be taken considering all parts in the scope of work	15
	Amount of time allocated to site visits	5
	Recognition of safety issues during visits	5
5	Reasonable Timelines	5
6	Man-days reflect consistency with time line for the assignment	5
7	Man-days allocated appropriate for methodology	5

Project Team Organization & Experience		
8	Project Manager contribution & Experience in both transmission and distribution Quality of supply issues	15
9	Team experience should cover all aspects of the scope of work	25
10	Consultant's knowledge and Experience of the power sector in Oman and power quality assessments reviews	5
<b>Maximum Bidder Score:</b>		<b>100</b>



## ANNEX C: NON-DISCLOSURE AGREEMENT

### CONFIDENTIALITY AND NON-DISCLOSURE UNDERTAKING

This Confidentiality and Non-Disclosure Undertaking is given to the Authority for Public Services Regulation (the Authority) based on the Agreement between (**Name of consultancy company**) and the Authority and my engagement on (**Name of consultancy company**) assignment with the Authority concerning (**Assessment of Power Quality Parameters of Transmission and Distribution Networks in Oman and Development a Regulatory Framework – RfP 361/2022**).

I ..... acknowledge that as part of my engagement with the Authority for Public Services Regulation, I have been provided with information that is of confidential, commercially sensitive, personal and/ or proprietary nature, for example: confidential or sensitive information related to Licensees and/or customers or to staff, projects, contracts or other matters of the Authority for Public Services Regulation.

Confidential Information shall include all information in whatever form (including, but without limitation, in written, oral, visual or electronic form, or on tape or disk) relating wholly or partly to transactions, projects, contracts, employees, financial information, systems, licensees and customers and confidential or sensitive information of the Authority for Public Services Regulation.

I hereby undertake that:

1. I hold all confidential information in trust and strict confidence at all times. It shall not be disclosed to any third party at any time;
2. The information will be used solely and exclusively for the purposes of (**Name of consultancy company**) engagement by the Authority and will not be used for any other purposes;
3. Upon Termination or at the end of (**Name of consultancy company**) engagement by the Authority any confidential information obtained shall not be disclosed to third party or other person;
4. I maintain the absolute confidentiality of personal, confidential and proprietary information in recognition of the privacy and proprietary rights of others at all times; and
5. I comply with all privacy laws and regulations, which apply to the collection, use and disclosure of confidential information.

Based on the (**Name of consultancy company**) engagement with the Authority and other confidentiality obligations, including between me and (**Name of consultancy company**), I understand that a breach of confidentiality or misuse of information could result in a legal action against (**Name of consultancy company**) and I fully understand and accept responsibilities set above relating to personal, confidential and/or proprietary Information of the Authority for Public Services Regulation or any relevant party.

The Authority agrees that any claim for damages in relation to breach of the above undertaking shall only be taken against (**Name of Consultancy Company**) and not against the individual named above

Name and Signature

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Date



## ANNEX B: SCHEDULE OF THE PROJECT

Activity	Date
Release of RFP	28 April 2022
Deadline for Submission of RFP clarifications	19 May 2022
Deadline for Proposals Submission	6 June 2022
Announcement of Winning Vendor	7 July 2022
Commencement of Works	17 July 2022

## ANNEX C: COMPLETENESS FORM

General Completeness Form			
No	Category	Yes	No
<b>Submission of Proposal:</b>			
1	1.1 Submitted by <b>6 June 2022</b>	<input type="checkbox"/>	<b>X</b>
<b>Description of methodology provided for each part of assignment:</b>			
2	Meet with Transmission and Distribution Licensees to assess their level of compliance with the relevant parts of the Grid Code (mainly Connection Conditions Code & Schedule 1 & Schedule 2) and Distribution Code (mainly Distribution Connection Conditions Code (DCC)) requirements;		
	Conduct site visits to representative samples of transmission and distribution locations;		
	Assess to what extent the quality and suitability of the existing power quality information collected by Licensees and the way that such information is utilized to ensure adequate level of quality of supply is maintained in the network;		
	Assess the available competence and expertise within the Licensees to deal with the quality of supply issues within the licensees;		
	Assess complaints resolution mechanisms to ensure that workable procedures are in place to resolve customer power quality concerns;		
	Evaluate the impact of Power Quality issues at different voltage levels and different type of customers (residential, commercial and industrial) including large customers connected at transmission level, the captive power generators and the embedded generation and whether the Licensees are conducting any evaluation on this matter or not;		
	Provide the Authority with clear recommendations to address the audit findings;		
	Provide the Authority with an appropriate Regulatory Framework of Power Quality Management to ensure proper reporting mechanism is made to the Authority and that the interests of licensees and their customers are balanced in as far as power quality and reliability of supply is concerned.		



General Completeness Form			
No	Category	Yes	No
<b>Deliverables for the Audit to be undertaken:</b>			
3	1) A clear and comprehensive audit methodology (draft to be presented to and approved by the Authority prior to commencement of the audit) with providing the list of expected requested information from the licences within the submission of the RfP		
	2) Collection and collation of data (including preparation of information requests and notes of meeting, list of interview questions) in order to have an auditable trail of information used to complete the works described in this Request for Proposals;		
	3) A structured audit report for each Licensee presenting the findings and recommendations on each aspect of the audit which includes also all evidence collected during the audit (such as site visit reports, photos, notes of meetings, etc);		
	4) A separate executive summary report presenting the main findings of the audit and including the recommendation with clear timescale for each licensees with comprehensive comparison between the licensees; and		
	5) Provide appropriate Regulatory Framework of Power Quality Management to ensure proper reporting mechanism is made to the Authority and that the interests of licensees and their customers are balanced in as far as power quality and reliability of supply is concerned.		
<b>Timescales:</b>			
4	4.1 Consultant will commence assignment within 14 days of award		
	4.2 Assignment will be completed within timeline articulated in the RfP		
	4.3 Project Time schedule includes all parts in section 2		
<b>Details of Consultant's Experience:</b>			
5	5.1 Experience of similar assignments by the bidder;		
	5.2 Contact details of previous & existing clients.		



General Completeness Form			
No	Category	Yes	No
<b>Details of Project Team:</b>			
6	6.1 CV of each team member		
	6.2 Description of each team member's relevant experience		
	6.3 Description of each team member's contribution		
<b>Total cost of assignment:</b>			
7	7.1 Each team member & days contribution as mentioned in the RfP table 1.		
	7.2 All fees each team member & days contribution as mentioned in the RfP table 2.		
	7.3 Expenses including flights, hotel costs and other items as mentioned in the RfP table 3.		
	7.4 Daily living Expenses as mentioned in the RfP table 4.		
8	<b>Bid letter is provided as in Annex B to RfP</b>		
10	<b>The Consultant Health and Safety policy and procedures</b>		
11	<b>Declaration of no potential conflict of interest</b>		

