



MARKET REVIEW REPORT

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Executive Summary

The Market Operator has issued a Market Review Report as per Section C.4.4 of the Oman Electricity Market Rules (Market Rules) version 4.1 issued on 1 January 2025. This report includes a review of Market Rules V4.0 and suggestions for future market development. The review was conducted internally by the Market Operator and includes feedback from the Authority. No feedback has been received from other Market Rules Parties. The findings have been categorized into general observations on the Market Rules and future recommendations for market development. Some of these findings will be required to be addressed in accordance to Modification Proposal process at the earliest opportunity, while others necessitate further studies and assessment with external support.

1. Introduction

Nama Power and Water Procurement Company has implemented a spot electricity market (Market) in Oman since 1st January 2022. The Market is empowered by the Oman Electricity Market Rules (the Market Rules) which set out the rules and regulations governing registration and participation, scheduling and pricing, and financial settlement of Market transactions. During the initial operation of the Market, the primary focus was on developing the capabilities within PWP and other parties to meet the Market Rules' requirements along the monitoring & analyses the market outcomes. Also, a general review of the Market Rules was conducted, leading to several corrective and administrative amendments. As a result, Oman Electricity Market Rules (Market Rules) version V4.1 was issued on 1 January 2025.

This report focuses on the market review results conducted by the Market Operator (MO) as per the Market Rules requirements. Unfortunately, there was no input received from Market Participants or other external stakeholders except the Authority.

1.1 Market Review Objective

Section C.4.4 of the Market Rules requires the MO to carry out a periodic review, at least once every twenty-four (24) months, of the Market Rules and of their implementation and the operation of the Pool. This includes the review of any particular aspect as specified by the Authority such as any Market Liberalisation proposed or under consideration in accordance with the Sector Law. More details can be found in Section C.4.4 of the Market Rules.

1.2 Market Review Methodology

The Market Operator followed the methodology steps to complete the Market Review:

- External consultation:
 - Consider any modification proposals received by Market Operator from any of The Market Rules Parties.
 - Requested Market Advisory Committee (MAC) to provide their input to the Market review (email and during quarterly meetings) to fulfil their advisory roles.
 - Requested market Parties to provide their recommendation for Market review (if any)
- Internal Review:
 - Review each Section of the Market Rules to identify any typos, errors or loopholes in the document.
 - Established small working groups within MO to review the Market Rules section by section assigned to the suitable subject matter expert within the team.
 - According to MO team experience during the market operation, specify the areas for which the Parties faced issues to implement the Market Rules. Such areas are discussed internally within MO and relevant Parties.

- Identify the future Market development and discuss them with the Authority and relevant Parties.

1.3 Market Review Challenges

There are currently many challenges that affects the performance of an effective Market review including:

- There is no actual settlement in the Market even after almost three years of operation. All Pool Participants are Non-Pool Based Power Contracted. This has limited the interest of others to contribute to this review.
- There is ongoing tender issued by Ministry of Energy and Minerals (MEM) to review the Market with coordination with the Authority.
- There are very limited resources and expertise to conduct a comprehensive Market review either within MO or other Market Rules Parties.

1.4 Previous Market Rules Modification Proposals

In December 2024, the Authority approved two change proposals to the Market Rules. The changes are incorporated in the new version of the Market Rules (Version 4.1) that has come into effect on 1st January 2025. The Modification Proposal process was implemented as per the Market Rules requirements.

2. Market Rules Review

The Market review started on Q4 2024. A working group from all MO departments was established where each team reviews certain Sections of MR. Upon completion of the reviews, the high level comments are discussed by the whole team. Also, the MAC is called to review the MR and if any future market development is suggested by members. All Pool Participants and OETC are communicated to raise any comment as well.

The comments are categorized into

- Market Rules Observations: these are observations on the Market Rules either applicable for the whole document to maintain consistency as an example writing the numbers, or observations on specific Sections. These observations are listed in Appendix-1.
- Future Development: These are observations that requires further study/assessment and can be considered for future Market development. These observations are discussed in section 3 below.

In addition to the above, the observations are classified in terms of urgency implementation into three categories namely

- High: these are observations that require close attention and should be delt with immediately. Such observations if not tackled will cause inconsistency in the Market Rules and lead to disputes between Parties if not resolved.
- Medium: these are observations to be resolved in the closest opportunity to remove ambiguity in some Sections.

- Low: these are observations that their existence will not impact on the main purpose of the Market Rules and can be resolved in the closest opportunity.

3. Future Market Development

This section discusses the future Market development recommendations based on the observations noticed during the operation of the market for the past years. Such development includes:

- Compliance management and enforcement action:
Consider changes to the market governance structure and compliance enforcement including some of the recommendation provided by the Authority to introduce the market monitoring unit, creation of market compliance committee, introduction of financial penalties etc. A detailed assessment should be conducted to design suitable compliance structure and orders.
- Market governance committees' structure:
The Market governance committee structure is to be reviewed to be more independent and effective, including the current Market Advisory Committee (MAC). Initial suggestion is to develop independent dispute resolution committee, technical, advisory and rules changes committee in addition to the market compliance committee mentioned above. A detailed assessment is to be conducted to design such governance structure.
- Direct Sale arrangement:
Recently the Authority, by end of 2024, approved the implementation of Direct Sale policy which may allow the Direct Sale Generators (DSG) to participate in the Market. The introduction of DSG to participate in the Market will necessitate changes in the Market Rules and consequently the Market Management System. A thorough review, with external support, of the Market Rules is required which then may require discussion with the MMS developer to implement the required changes in the MMS.
- Incorporate Grid constraint schedule:
The MR states that the EX-Ante Market Schedule is used only for information purposes. We believe that there should be a review to this statement where the Ex-Ante Market Schedule is to be used as a basis for power system dispatch. Therefore, implementation of a this approach requires the Transmission Company to use reasonable endeavors to follow the Ex-Ante Market Schedule with clear guidelines on how variations from the schedule are to be handled (e.g., maintaining the economic merit order insofar as possible and only dispatching out of merit under specific conditions).

4. Recommendation

The Market Review has produced several recommendations for specific sections of the Market Rules, as detailed in Appendix 1,

Appendix 1: Market Rules Observations and Recommendations

The below table list the MR observations and the recommendations.

S.I.	Section	Comments	Raised by	Recommendation	Priority
1.	B	As a result of some MR Request Changes approved, it was noticed that Section B (Definitions) has not been updated. Therefore, it is the responsibility of those who are requesting MR Modification Proposal to ensure that Section B is updated and be part of the Modification Proposal, if necessary.	MO	Review and update Section B as a result of the previous Market Rules changes and make sure that is updated, if necessary, all the times for future Market Rules Modification Proposals.	Medium
2.	B	Some subscripts in Section B (Definitions) are mentioned in some definitions, such as Production Block b , Pool Scheduling Unit u while not for other. This has to be unified. We believe that such subscripts are useful in the body of the MR in order to be handy to the reader but not necessary to be in the Definition.	MO	Delete such subscripts from those Definition that are having subscripts in Section B.2.1.1.	Low
3.	B	There is inconsistency in writing numbers. It should be unified in the whole Market Rules where the number is written in small letters first followed by the number between brackets.	MO	Unify the writing of numbers, as per the standard format, in the whole Market Rules document.	Low
4.	B	The abbreviations representing entities needs to be reviewed and updated.	MO	To review and update all the abbreviations representing entities/persons. To minimise the changes, it is better to reflect the change in the Definitions only.	Low

5.	B	some definitions are written in line with the PPAs, Grid Code and Sector Law. The Power Procurer, OETC/ Authority is to be consulted if such definitions are updated.	MO	Consult PP, Transmission Company and Authority to review the referenced definitions and update Market Rules if necessary.	Low
6.	B	The subscript "p" is dedicated for Participant but not used in the MR. The same for the subscript "H".	MO	Review the subscripts which are not used and check if they can be removed.	Low
7.	C.4.1.6. (b)	"compliance by Parties with Approved Methodologies" The Market Audit section shall provide more details about the scope of work to be conducted to review Parties compliance.	MO	Review this section to include clear scope of work. Market Auditor can be used to provide their recommendations.	Low
8.	F.4.1.3	it is mentioned that the submission of Data or changed Data as required by Section F.4.1.2 would occur later than 2 hours before the Confirmed Market Schedule Run. The implementation of this item in MMS is different as it is 5 days and not 5 Business days and should be aligned.	MO	to be discussed with MMS developer in order to either be aligned with Market Rules or amended .	Medium
9.	H.5.2.1 (b)	This Section suggests using telephone for Data Record in case there is a communication failure. Using telephone is impractical nowadays.	MO	to be removed and aligned with the recent electronic communication technologies.	Low
10.	H. 5.2.1 (d)	same as above where fax is used. Sections Q.15.1.6 and Q.15.1.7 should be checked for changes as well.	MO	to be removed and aligned with the recent electronic communication technologies. Check Market Rules of other similar Markets.	Low
11.	H.5.2.1 (e)	same as above but getting confirmation upon delivery of electronic data storage medium or on paper.	MO	to be removed and aligned with the recent electronic communication technologies. Check Market Rules of other similar Markets.	Low

12.	L.2.3.4 (C)	As per the Market Rules Section L.2.3.4 (C), the Market Operator may revise the Market Scheduling Software to correct a defect. The impact of revising the Market Scheduling Software is not detailed in the Market Rules especially the impact on the older version of the runs and if they should be rerun (Additional Run).	MO	Adding clear steps to address any issue in the MMS if additional run is required.	Medium
13.	L.2.4.11(c)	As per Section H.6.2.3(d) the Default Offer Data and other estimated data cannot be used which will prevent the completion of settlement once Administered Price Methodology is applied. This loop is to be closed.	MO	to be considered for further review by an external advisor if there is a loophole in Market Rules.	Low
14.	M.6.2.5	The definition of summation " $\sum_{i \text{ in } u}$ " is a summation over all Eligible Availability Quantities i for Pool Scheduling Unit u " should be deleted to be consistent with other Sections. This type of definition is repeated in many places in Section M.	MO	Remove the summation definition in the formulae in Section M.	Low
15.	N.2.1.1 (c)	This did not specify the Indicative and Confirmed Monthly Energy Settlement Statements. As per Annex I-1 there should be Indicative and Confirmed monthly Energy Settlement Statements and therefore this section should be revised.	MO	Revise this Section and to be considered for future Market Rules amendment but will need to check other Sections, especially Section B, if they require the same change.	Medium
16.	O.1.2.1 (a) and (b)	Due to the introduced change in the MR regarding the issue of Pool Invoices, these functions shall be amended and assigned the issue function of Pool Invoices to Pool Participants.	MO	Amend/review the Market Rules to reflect that Invoices are issued by Pool Participants. be considered for future amendment	Medium

17.	Q.16.5	I suggest adding new section after Rectification, as "Warning" by giving final warning notice who could not commit with the remediation plan by the Generator which giving them time frame to rectify otherwise MO will use further action in MR.	MO	to be considered for further review by ad-hoc services an external advisor.	Low
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