

# **OMAN ELECTRICITY MARKET RULES**

**APPROVED METHODOLOGY**

**MUST RUN METHODOLOGY**

**VERSION 4.0**

**EFFECTIVE DATE: 30/12/2021**

## 1. INTRODUCTION

### 1.1 Scope, Purpose and Effectiveness of the Approved Methodology

Section E.2.7.5 of the Oman Electricity Market Rules (the Market Rules) requires the Market Operator to prepare, as an Approved Methodology, a methodology for determining:

- (a) whether and when a GenSet is a Must Run GenSet; and
- (b) the Must Run Auxiliary Consumption Variation Threshold for the Production Facility containing that GenSet subject to which Offer Data resubmissions can be made in accordance with Section J.7.

The Approved Methodology is termed the Must Run Methodology.

This document is the Must Run Methodology prepared by the Market Operator in accordance with Section E.2.7.5 of the Market Rules and approved by the Authority on 2/5/2021.

This Approved Methodology is effective on and from **30/12/2021**.

### 1.2 Market Rules Provision

Interested parties should read this Approved Methodology in conjunction with the Market Rules and in particular Section E. This Approved Methodology has been produced in accordance with the provisions of the Market Rules. In the event of an inconsistency between the provisions of this Approved Methodology and the Market Rules, the provisions of the Market Rules shall prevail.

### 1.3 Review Procedure

The Market Operator may review this Approved Methodology from time to time and make changes, subject to the Authority's approval in accordance with Market Rules C.7.3.

### 1.4 Definitions and interpretation

Save as expressly defined, words and expressions defined in the Market Rules shall have the same meanings when used in this Approved Methodology. The rules of interpretation set out in Section B.3 of the Market Rules shall apply in the interpretation of this Approved Methodology.

References to particular sections relate internally to this Approved Methodology unless specifically noted. References to Market Rules sections are to the relevant sections of the Market Rules.

**Table 1 – Defined terms**

<b>Term</b>	<b>Definition</b>
Desalination Unit	has the meaning given to it in the Grid Code

## **1.5 Compliance with Approved Methodology**

Compliance with this Approved Methodology is required under the terms as set out in the Market Rules. This Approved Methodology does not create any additional rights or obligations.

## 2. MUST RUN CLASSIFICATION

### 2.1 Introduction

Section E.2.7.4 of the Market Rules states that a GenSet is a Must Run GenSet where decisions as to the operation of the GenSet are governed by policy factors external to the economic cost of producing electricity.

The cases below specify the instances for which the operation of a GenSet is considered to be governed by policy factors external to the economic cost of producing electricity, as required under Section E.2.7.4 of the Market Rules.

### 2.2 Multi-stage flash water co-production

#### 2.2.1 Eligibility

If the operation of a GenSet could, in whole or in part, be for the purpose of water co-production through multi-stage flash distillation:

- (a) at the direction of Transmission Company and the relevant Pool Participant can demonstrate this to the Market Operator; and
- (b) such water is produced under contract with the Power Procurer;

then the GenSet is classified as a Must Run GenSet.

If a GenSet ceases to have the potential to be operated in the manner described above, this should be notified to the Market Operator as soon as practicable. If notification is provided for a prospective change in operation, then the notification will specify an effective date from which point the GenSet will cease to have Must Run status. If notification is not provided for a prospective change in operation, then the GenSet will cease to have Must Run status from the date of the notification.

#### 2.2.2 Required Input Data

The Generator is required to submit, via an agreed method, the actual Must Run Auxiliary Consumption and number of desalination units in operation by 10:00 one day after the Trading Day  $d$  to the Market Operator, for each Trading Period  $h$  in Optimisation Horizon  $o$  associated with Trading Day  $d$ .

This is in addition to the Generator to submit to the Market Operator the Ex-Ante Expectation of the number of desalination units in Operation, for each Trading Period  $h$  in Optimisation Horizon  $o$  associated with Trading Day  $d$ .

#### 2.2.3 Must Run Auxiliary Consumption Variation Threshold

The Must Run Auxiliary Consumption Variation Threshold for a Production Unit that contains a GenSet that meets the requirements of paragraph 2.2.1 shall be  $\pm 20\%$ .

A Generator shall resubmit Commercial Offer Data and Technical Offer Data in respect of the relevant Pool Unit for one or more Trading Period  $h$  in Optimisation Horizon  $o$  associated with Trading Day  $d$ ,

If

$$\text{ABS}(\text{ENDUO}_h - \text{ANDOU}_h) \geq 1$$

and

$$\text{ABS}(\text{AMRAC}_h - \text{EMRAC}_h) > \text{EMRAC}_h * \text{MRACVT}_h$$

Where:

$\text{ENDUO}_h$  is the Ex-Ante Expectation of the number of desalination units in Operation for Trading Period h

$\text{ANDOU}_h$  is the actual number of desalination units in Operation for Trading Period h

$\text{MRACVT}_h$  is the Must Run Auxiliary Consumption Variation Threshold for Trading Period h

$\text{EMRAC}_h$  is the Ex-Ante Expectation of Must Run Auxiliary Consumption for Trading Period h

$\text{AMRAC}_h$  is the Actual Must Run Auxiliary Consumption for Trading Period h (this data will be provided by the Generator)