

GUIDELINE: CLEANSING OF GENERATION FACILITY MWH OUTPUT DATA

PREPARED BY: AEMO (WA)
DOCUMENT REF: SO_OG_WA_01
VERSION: 1.0
EFFECTIVE DATE: 31 December 2018
STATUS: FINAL

Approved for distribution and use by:

APPROVED BY: Dean Sharafi
TITLE: Group Manager - System Management (WA)

DATE: 31/12/2018

VERSION RELEASE HISTORY

Version	Effective Date	Summary of Changes
1.0	31 December 2018	Publication as guideline. The content has been editorially revised from the previously published Power System Operation Procedure: Cleansing of Generation Facility MWh Output Data.



CONTENTS

- 1. INTRODUCTION **4**
- 1.1. Purpose and scope 4
- 1.2. Definitions and interpretation 4
- 1.3. Associated documents 5
- 2. CLEANSING OF MWH SCADA DATA **5**
- 3. ALTERNATIVE SOURCES OF MWH DATA **5**

TABLES

- Table 1 Defined terms 4
- Table 2 Background documents 5

1. INTRODUCTION

1.1. Purpose and scope

This Guideline: Cleansing of Generation Facility MWh Output Data (Guideline) outlines the process that AEMO may follow when preparing Megawatt hour (MWh) output data for each generation Facility connected to the SWIS for the purposes of clause 7.13.1(cA) of the Wholesale Electricity Market Rules (WEM Rules), including:

- (a) collecting raw MW data from the SCADA system and processing the data to produce generation Facility MWh output figures; and
- (b) verifying and cleansing the MWh data for generating Facilities.

References to particular WEM Rules within this Guideline in bold and square brackets **[Clause XX]** are included for convenience only and are not part of this Guideline.

1.2. Definitions and interpretation

1.2.1. In this Guideline:

- (a) terms that are capitalised but not defined have the meaning given in the WEM Rules;
- (b) to the extent that this Guideline is inconsistent with the WEM Rules, the WEM Rules prevail;
- (c) a reference to the WEM Rules or Market Procedures includes any associated forms required or contemplated by the WEM Rules or Market Procedures; and
- (d) words expressed in the singular include the plural or vice versa.

1.2.2. The words, phrases and abbreviations in the table below have the meanings set out opposite them when used in this Guideline.

Table 1 Defined terms

Term	Definition
PI Historian	A database that stores historical SCADA data from the Network Operator's meters.
Supervisory Control and Data Acquisition (SCADA)	The system used by AEMO to acquire data from remote devices.

1.3. Associated documents

Table 2 Background documents

Reference	Title	Location
SO_OP_WA_3805	<u>IMS Interface Market Procedure: AEMO and Network Operators</u>	Market Web Site
SO_OP_WA_3802	<u>PSOP: Commissioning and Testing</u>	Market Web Site

2. CLEANSING OF MWH SCADA DATA

- 2.1.1. All MWh quantites are set to a minimum of zero through the automatic interpolation process in PI Historian, as negative quantites represent demand.
- 2.1.2. AEMO may verify MWh quantites against any one or more of the following:
- verified MW and MWh quantites from within the Trading Interval and from the previous Trading Interval and the subsequent Trading Interval;
 - the technical configuration of the generation Facility;
 - any Dispatch Instruction issued to the generation Facility;
 - Dispatch control log entries for start and end times of Synergy facilities; and
 - any other information available to or derived by AEMO.
- 2.1.3. For the purposes of step 2.1.2, AEMO may set to zero any Scheduled Generator quantites less than 1 MW if AEMO considers that the MW quantity does not accurately reflect the operation of that Facility during a Trading Interval.
- 2.1.4. Where there is a minor gap in the initial MWh data derived through the automatic interpolation process in PI Historian, AEMO:
- will use MW data stored in PI Historian to recalculate the initial MWh data; and
 - if step 2.1.4 (a) is unsuccessful, AEMO will use straight-line interpolation between the data points on both sides to remedy the gap in MWh quantites.
- 2.1.5. Where there is a major gap in the initial MWh data derived through the automatic interpolation process in PI Historian, AEMO may determine a MWh figure using an alternative source specified in Section 3.
- 2.1.6. AEMO will maintain a copy of the initial MW and MWh data and the confirmed MWh data that it produces as a result of the manual interpolation process.

3. ALTERNATIVE SOURCES OF MWH DATA

- 3.1.1. When AEMO is unable to derive a MWh output quantity for a non-Synergy Facility, AEMO may use the MWh data recorded by the MWh revenue meters installed at the non-Synergy Facility.
- 3.1.2. When AEMO is unable to derive a MWh output quantity for a Synergy Facility, AEMO may derive a substitute MWh figure from:

- (a) the MWh interval meters installed (where available) at each Synergy Facility; or
- (b) SCADA data from Synergy SCADA or any other data associated with the generator unit.