
WA Profile Nomination Guideline

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**Australian Energy Market Operator (AEMO)
Gas Retail Market System (GRMS)**

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	Name	Signature	Date
Written by	Carol Sambaoa		02/06/2016
Reviewed by	Robert Gubbins		07/06/2016
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1 Introduction

1.1 Purpose

This AEMO document provides guidelines for the creation, selection and management of daily nomination profiles as required in Clause 200 of the Retail Market Procedures (the “Procedures”).

The profiles to be described in this document are for use by AEMO in its compliance with obligations in Clause 199.

1.2 Summary

This document provides the reader with 3 sections covering:

- The guidelines for the creation of daily profiled pipeline and sub-network nomination profiles for each sub-network in the WA market for each gas day as required in Clause 199 as required under Clause 200(a).
- The principles on which the selection of the daily profiled pipeline and sub-network nominations for use by AEMO in its compliance with obligations in Clause 200(b).
- The management of the daily profiled nominations in its compliance with obligations in Clause 200(c).

1.3 Change Forecast

This document will be maintained following its first definitive release.

1.4 References

None provided.

1.5 Abbreviations

Abbreviations are fully expanded at their first place of inclusion in the document, and are referenced by the abbreviation thereafter.

2 Daily Nomination Profiles

2.1 Procedure Requirements

2.1.1 AEMO publishes profiled daily nominations

Clause 199 (as shown below) requires AEMO to publish at least 2 hours before the start of the gas day the profiled pipeline nominations and profiled sub-network nominations.

Clause 199. AEMO publishes profiled daily nominations

For each *sub-network* for each *gas day*, at least 2 hours before the start of the *gas day*, AEMO must publish to each *user* and its *related shippers* or *swing service providers* (as applicable), the *network operator* and the *pipeline operators*:

- (a) the “**profiled pipeline nominations**” for each *gate point*, being the aggregate of all *users* in the *sub-network’s user’s pipeline nomination amounts* for the *gate point* for the *gas day* notified under Clause 197, distributed across a *profile* selected as follows:
 - (i) if AEMO has been notified of a *profile* for the operation of a flow profile control *pipeline* for the *sub-network* for the *gas day* under Clause 176(1)(b)(iii) — AEMO must apply the *profile* notified to it to each *pipeline*; and
 - (ii) otherwise — AEMO must apply a *profile* which it selects in accordance with Clause 199(b) to each *pipeline*; and
- (b) the “**profiled sub-network nominations**” for the *sub-network*, being the aggregate of all *users* in the *sub-network’s user’s total nomination amounts* for the *gas day* notified under Clause 198, distributed across the *profile* used under Clause 199(a).

2.1.2 AEMO determines profiles

Clause 200 (as shown below) requires AEMO to publish guidelines which set out the principles on which profiles are based, including the selection and storage of profiles in the Gas Retail Market System (“GRMS”).

Clause 200. AEMO determines profiles

- (1) AEMO may determine from time to time, as a *reasonable and prudent person*, the *profiles* for use in Clause 199.
- (2) AEMO must, from time to time, publish guidelines which set out:
 - (a) the principles on which the *profiles* referred to in Clause 200(1) are based; and
 - (b) the principles which AEMO applies in the selection of a *profile* for a *gas day* under Clause 199(a)(iii), if AEMO is required to select a *profile*; and
 - (c) AEMO’s policy on the retention and management of the *profiles* referred to in Clause 200(1) in a *profile* library.

2.2 Profile Principles

In accordance with Clause 199, AEMO is required to provide profiled daily nominations to participants in the WA Market for all sub-networks for each gas day.

The profiles are required for the provision of gate point energy data files (GPENGPROF) files that are provided to all market participants as well as the profiling of sub-network nominations (NPN).

The profiles are developed by analysis of historical sub-network gate point data and are reviewed on a frequency determined by AEMO to ensure that the profiles reasonably reflect the energy flows on the gatepoint.

2.3 Profile Creation

Profiles are created to reflect the hourly energy flows on the sub-network for the gas day allocated across the 24 hours of the day.

Profile figures represent the hourly percentage of the total MJ value on the pipeline or sub-network such that the total of the hourly percentages sum to 100%.

2.3.1 Sub-network profile creation

The GRMS receives hourly metered MJ values for all pipelines on a sub-network in the WA Market on a daily basis. These values provide an input source data for the calculation of the sub-network profiles.

Sub-network profiles will be categorised by 4 seasons, Mar-May, Jun-Aug, Sep-Nov and Dec-Feb and for each of the 7 days of the week. The profile for each gas day will be created by averaging each of the 24 hourly values for 4 historical gas days of the same day of the week within each of the four seasons.

These averages will be calculated as a percentage of the averaged total values of the 4 historical gas days.

Calculated percentages will be rounded to integers and normalisation carried out to ensure that the total of the percentage values sums to 100%.

2.4 Profile Selection

2.4.1 Selection

Profiles are stored in the Forecasting and Profiling Entity (FPE) as part of the GRMS application.

Profile criteria are based on 4 seasons per year with the 7 gas days in the week for each season.

Profiles stored in the Profile tables will be selected on the basis of a gas day in a season.

Where AEMO has not been provided with a profile then a profile will be selected on the basis of the season and gas day from the profile storage defined in Section 2.5.

2.5 Profile Storage

Profiles are stored in the Forecasting and Profiling Entity (FPE) database as part of the GRMS application.

There are a set of tables in the FPE database, NETWORK_SECTION, PROFILE and PROFILE_CRITERIA in which the data is stored.

The profiles are referenced by sub-network, season and gas-day and have a version number to handle the update of an already defined profile period.

The messages are provided to the GRMS database for storage with the PIPPRF transaction as identified in Section 10.4.2 of the SAWA Interface Control Document.

2.6 Sub-Network Entities in Profiled Tables

	OBJ_ID	NETWORK_SECTION_ID	NETWORK_SECTION_DESC	START_DATE
1	110217	1101	Sub-Network WA1101	1/01/1999
12	117787	1102	Sub-Network WA1102	17/11/2011
10	117789	1103	Sub-Network WA1103	17/11/2011
2	110219	1105	Sub-Network WA1105	1/01/1999
3	110221	1106	Sub-Network WA1106	1/01/1999
4	110223	1107	Sub-Network WA1107	1/01/1999
5	110225	1108	Sub-Network WA1108	1/01/1999
6	110227	1109	Sub-Network WA1109	1/01/1999
7	110229	1110	Sub-Network WA1110	1/01/1999
13	117791	1111	Sub-Network WA1111	17/11/2011
8	110231	1112	Sub-Network WA1112	1/01/1999
11	116227	1113	Sub-Network WA1113	20/12/2010
9	110233	1114	Sub-Network WA1114	1/01/1999

2.7 Sample Profile_Criteria records for 1106

Showing the period 1 Jun 2012 to 31 Aug 2012 and the 7 days of the week.

START_DATE	END_DATE	OBJ_ID	DAY_OF_WEEK	VERSION_NO	PROFILE_ID
1/06/2012	1/09/2012	110221	1	2	6240
1/06/2012	1/09/2012	110221	2	2	6241
1/06/2012	1/09/2012	110221	3	2	6242
1/06/2012	1/09/2012	110221	4	2	6243
1/06/2012	1/09/2012	110221	5	2	6244
1/06/2012	1/09/2012	110221	6	2	6245
1/06/2012	1/09/2012	110221	7	2	6239

2.8 Sample Profile record for 1106 for Profile_Criteria 6240

;PROFILE_ID	PROFILE_HR01	PROFILE_HR02	PROFILE_HR03	PROFILE_HR04	PROFILE_HR05	PROFILE_HR06
6240	6	5	4	4	4	3
	PROFILE_HR07	PROFILE_HR08	PROFILE_HR09	PROFILE_HR10	PROFILE_HR11	PROFILE_HR12
	3	3	4	5	8	8
	PROFILE_HR13	PROFILE_HR14	PROFILE_HR15	PROFILE_HR16	PROFILE_HR17	PROFILE_HR18
	7	6	5	3	2	2
	PROFILE_HR19	PROFILE_HR20	PROFILE_HR21	PROFILE_HR22	PROFILE_HR23	PROFILE_HR24
	2	2	2	2	4	6