25 May 2018

Notice to all Registered Participants under the National Gas Rules

This notice is to advise Participants on AEMO decision to approve amendments to:
- **Retail Market Procedures (RMP) (SA); and**
- **Artefacts of the Specification Pack (SP) (SA).**

This notice advises Gas Market Registered Participants that consultation under the ordinary Procedure change consultative process prescribed under Rule 135EE of the National Gas Rules (**NGR**) concluded on 9 May 2018 for:

- **IN011/17 (SA Rpt Timing Clause 215)**

Prior to commencing the ordinary consultation process, this proposal was considered by the Gas Retail Consultative Forum (GRCF) in accordance with the "Approved Process" under rule 135EC of the NGR.

As required under Rule 135EE of the NGR, Gas Market Registered Participants and other interested parties were invited to submit comments to AEMO on the Impact and Implementation Report (IIR) for each proposal.

Attachment A of this notice sets out the consolidated feedback relating to the RMP (SA) and SP (SA) proposed changes that AEMO received during this consultation phase. These include stakeholder comments, AEMO responses and, based on those responses, indicate where the feedback resulted in further amendment to the documents mentioned above. None of the responses received opposed the broad principle of this proposal.

Having considered this proposal and the issues raised in the consultation, AEMO has decided to amend the RMP (SA) and SP (SA) in the forms published in this notice (See attachments B, C and D). The effective date for these amendments is **29 June 2018**.

Updated versions pertaining to the changes described in Attachments B, C and D will be published on the AEMO website prior to the effective date.

Should you require any further information please contact Nandu Datar on (03) 9609 8851.

ATTACHMENT A – SUBMISSIONS RECEIVED FOR CHANGE

			SUBMISSIONS RELATING TO THE IIR 11 APR 2018 TO 9 MAY 2018 – ORIGINAL CONSULTATION PERIOD		
	DATE	PARTICIPANT	ISSUE / COMMENT	PROPOSED TEXT	AEMO COMMENTS
1	4 May 2018	AGL	In relation to Sections 1 to 4 of the IIR – IN011/17 AGL: considers that the matter has been examined appropriately, including GWCF consideration.		In relation to Sections 1 to 4 of the IIR – IN011/17 AEMO acknowledges AGL's support
2	4 May 2018	AGL	In relation to Sections 5 to 9 of the IIR – IN011/17 AGL agrees with AEMO's assessment		In relation to Sections 5 to 9 of the IIR – IN011/17 AEMO acknowledges AGL's support
3	4 May 2018	AGL	In relation to Sections 10 of the IIR – IN011/17 AGL supports AEMOs recommendation to proceed with the proposed change.		In relation to Sections 10 of the IIR – IN011/17 AEMO acknowledges AGL's support
4	8 May 2018	Origin Energy	In relation to the overall IIR – IN011/17 Ok to implement		In relation to the overall IIR – IN011/17 AEMO acknowledges Origin Energy's support
5	9 May 2018	Red/Lumo	In relation to Sections 1 to 4 of the IIR – IN011/17		In relation to Sections 1 to 4 of the IIR – IN011/17

	DATE	PARTICIPANT	ISSUE / COMMENT	PROPOSED TEXT	AEMO COMMENTS
			SUBMISSIONS RELATING TO THE IIR 11 APR 2018 TO 9 MAY 2018 – ORIGINAL CONSULTATION PERIOD		
			Red and Lumo Energy supports the proposal and agree with the assessment undertaken by AEMO as outlined in the Impact & Implementation Report (IIR).		AEMO acknowledges Red/Lumo's support
6	9 May 2018	Red/Lumo	<u>In relation to Sections 5 to 9 of the IIR – IN011/17</u> Red and Lumo support AEMO's assessment and agree that the magnitude of this change is considered 'non-material' and subsequent removal of the reports required with not incur any impact.		<u>In relation to Sections 5 to 9 of the IIR – IN011/17</u> AEMO acknowledges Red/Lumo's support
7	9 May 2018	Red/Lumo	<u>In relation to Sections 10 of the IIR – IN011/17</u> Red and Lumo Energy supports AEMO's recommendation to support the procedure changes. We agree that these are minor documentation changes and that these reports outlined in the procedures have either been superseded or no longer required.		<u>In relation to Sections 10 of the IIR – IN011/17</u> AEMO acknowledges Red/Lumo's support

ATTACHMENT B
Proposed changes: Retail Market Procedures – South Australia
~~Red strikeout~~ means delete and
<u>blue underline</u> means insert

2. Definitions

~~"adjusted hourly sub-network profiled forecast"~~ ~~has the meaning given to it in clause 215(3)(c).~~

~~"adjusted hourly user profiled forecast"~~ ~~means a forecast determined under clause 215(3)(b).~~

~~"adjusted recalculated pipeline profiled forecast"~~ ~~means a forecast determined under clause 216(1)(b).~~

~~"corrected pipeline profiled forecast"~~ ~~means the corrected forecast under clause 216(1)(c).~~

~~"corrected sub-network profiled forecast"~~ ~~means the corrected forecast under clause 216(1)(c).~~

~~"estimated consumption amount"~~ ~~is the amount calculated under clause 215(3).~~

~~"hourly IM energy"~~ ~~has the meaning given to it in clause 215(3)(a).~~

~~"hourly sub-network profiled forecast",~~ ~~in clause 215(3)(c) means the component for the hour of the *sub-network profiled forecast*.~~

~~"hourly user profiled forecast"~~ ~~has the meaning given to it in clause 215.~~

~~"remaining energy"~~ ~~is the amount calculated under clause 215(3)(a).~~

~~"remaining energy amount"~~ ~~means the amount calculated under clause 215(3)(d).~~

<u>*Division 5.5.2 – There is no Division 5.5.2*</u>

~~*Division 5.5.2 – During the gas day*~~

213. <u>There is no Clause 213</u>

~~213. Network operator to provide intra-day withdrawal data~~

~~(1) The objective of this clause 213 is to achieve as accurate a *pipeline profiled forecast* for a *sub-network* as is reasonably practicable, having regard to the compliance *costs* associated with this clause 213.~~

~~(2) AEMO must from time to time consult with the *participants* in a *sub-network* as to:~~

(a)   which *interval-metered delivery points* in the *sub-network* should have *meter readings* conducted during a *gas day* from which an *actual value* is calculated; and

(b)   the frequency at which *meter readings* should be conducted for each *delivery point* identified under clause 213(2)(a),

in order to best achieve the objective set out in clause 213(1), then make a determination on the matters in this clause 213(2) and *notify* its determination to each *participant*.

(3)   A determination by AEMO under clause 213(2)(a) is limited to a maximum of forty-five of the largest *interval metered delivery points*.

(4)   The *network operator* of a *delivery point* determined under clause 213(2)(a) must procure the daily flow weighted average *heating value data* for the previous *gas day* (or a reasonable estimate of or substitute for that value determined by the *network operator* as a *reasonable and prudent person*) and *meter reading data* for the *delivery point* in accordance with the schedule determined under clause 213(2)(b), and must calculate the energy quantity of *gas* withdrawn at the *delivery point* in each hour since the start of the *gas day* and then provide each calculated energy quantity to AEMO within 40 minutes after the time specified for the *meter reading* in the schedule determined under clause 213(2).

214.   There is no Clause 214

214.   Pipeline operators to provide hourly data

For each *transmission pipeline* for each *sub-network* for each hour, the *pipeline operator* must give to AEMO within 30 minutes after the end of the hour the *as-retrieved* energy inflow data for the *gate point* for the hour.

215.   There is no Clause 215

215.   AEMO's intra-day reporting

(1)   For each *sub-network* for each hour, AEMO must within 60 minutes after the end of the hour make available to each *user* in the *sub-network* the following:

(a)   the *as-retrieved* energy inflow data for each *gate point* for the hour;

(b)   the *as-retrieved* energy inflow data aggregated across all *gate points*; and

(c)   the *sub-network profiled forecast* published by AEMO before the start of the *gas day* under clause 205, as adjusted from time to time under clause 216.

(2)   For each *user* for each *sub-network* for each hour, AEMO must within 60 minutes after the end of the hour, make available to the *user*:

(a)   any data received in the preceding hour from the *network operator* under clause 213 in respect of one or more of the *user's interval-metered delivery points*; and

(b)   the *user's estimated consumption amount* for the hour calculated under clause 215(3).

(3)   The *user's* **"estimated consumption amount"** for an hour is determined as follows:

(a)   first calculate the **"remaining energy"** as follows:

$$RE = \sum EGP - \sum EQ$$

where:

RE	= the *remaining energy* for the *sub-network* for the hour;
EGP	= the *as-retrieved* energy inflow data for each *gate point* in the *sub-network* for the hour received by AEMO under clause 214; and
EQ	= for each *interval-metered delivery point* for which AEMO received data under clause 213, the energy quantity of *gas* withdrawn at the *interval-metered delivery point* for the hour (**"hourly IM energy"**),

(b)   next, for each *user*, where AEMO has received data under clause 213 for the hour for one or more of a *user's interval-metered delivery points*, determine an **"adjusted hourly user profiled forecast"** as follows:

$$AHUPF = HUPF - \sum HIME$$

where:

AHUPF	= the *adjusted hourly user profiled forecast* for the *user* for the *sub-network* for the hour;
HUPF	= the **"hourly user profiled forecast"** for the *user* for the hour, which is the component for the hour of the *user's profiled forecast* calculated under clause 204 for the *sub-network*; and
HIME	= the *hourly IM energy* received under clause 213 for each of the *user's interval-metered delivery points* in the *sub-network*,

(c)   next, determine an **"adjusted hourly sub-network profiled forecast"** as follows:

$$AHSPF = HSPF - \sum HIME$$

where:

AHSPF	= the *adjusted hourly sub-network profiled forecast* for the *sub-network* for the hour;
HSPF	= the **"hourly sub-network profiled forecast"** for the *sub-network* for the hour, which is the component for the hour of

the *sub-network profiled forecast* calculated under clause 205; and

HIME = the *hourly IM energy* received under clause 213 for each *interval-metered delivery point* in the *sub-network*,

(d) next, for each *user*, calculate the *user's* **"remaining energy amount"** as follows:

$$UREA = \frac{AHUPF}{AHSPF} \times RE$$

where:

UREA = the *user's remaining energy amount* for the hour for the *sub-network*;

AHUPF = the *adjusted hourly user profiled forecast* for the *user* for the *sub-network* for the hour calculated under clause 215(3)(b);

AHSPF = the *adjusted hourly sub-network profiled forecast* for the *sub-network* for the hour 215(3)(c); and

RE = the *remaining energy* for the *sub-network* for the hour calculated under clause 215(3)(a),

and

(e) then, determine each *user's estimated consumption amount* as follows:

$$UECA = \sum HIME + UREA$$

where:

UECA = the *user's estimated consumption amount* for the hour for the *sub-network*;

HIME = the *hourly IM energy* received under clause 213 for each of the *user's interval-metered delivery points* in the *sub-network*; and

UREA = the *user's remaining energy amount* for the hour for the *sub-network* calculated under clause 215(3)(d).

216. There is no Clause 216

216. AEMO to recalculate profiled forecasts 30 minutes before the end of the third, sixth, ninth and twelfth hours of the gas day

(1) For each *sub-network* for each *gas day*, AEMO must within 30 minutes before the end of the third, sixth, ninth and twelfth hours of the *gas day*:

(a) first, recalculate the following profiled forecasts, using the inputs most recently received and recorded, or generated and recorded, in the *AEMO information system*:

(i) each *user profiled forecast*;

(ii) the *sub-network profiled forecast*;

(iii) each *shipper profiled forecast*; and

(iv) each *pipeline profiled forecast*,

each of which is a **"recalculated"** profiled forecast; and

(b) next, compare the amount by which the aggregate *gas injections* into the *sub-network* for the *gas day* diverge from the *sub-network profiled forecast*, and determine whether it should adjust, and if so adjust, each *recalculated pipeline profiled forecast* so that it more appropriately corresponds to the apparent actual *gas injections* into the *sub-network* (**"adjusted recalculated pipeline profiled forecast"**); and

(c) then, further adjust each *adjusted recalculated pipeline profiled forecast* (**"corrected pipeline profiled forecast"**) for the balance of the *gas day* to correct for the amount by which:

(i) the amount of *gas injected* into the *sub-network* from the *transmission pipeline* in the *gas day* so far;

is more or less than:

(ii) what that amount would have been had the *adjusted recalculated pipeline profiled forecast* been used from the beginning of the *gas day*,

and correct the *recalculated sub-network profiled forecast* accordingly (**"corrected sub-network profiled forecast"**); and

(d) then, make available:

(i) to each *user*, the *user's recalculated user profiled forecast*, the *recalculated forecast heating degree day* used in the *user's recalculated user profiled forecast* and the *corrected sub-network profiled forecast*;

(ii) to the *network operator* for the *sub-network*, the *corrected sub-network profiled forecast* and the *recalculated forecast heating degree day* used in the *recalculated user profiled forecasts* for the *sub-network*

(iii) to each *shipper*, its *recalculated shipper profiled forecast*; and

(iv) to each *pipeline operator*, its *corrected pipeline profiled forecast* and the *recalculated shipper profiled forecast* for each *shipper* on the *pipeline*.

217. There is no Clause 217

~~**217. If no hourly data provided**~~

~~If, for a *sub-network* for an hour, AEMO does not receive the data referred to in clause 214 from a *pipeline operator* in sufficient time for AEMO to comply with clauses 215 and 216, then for that hour, AEMO must use the data most recently provided under clause 214 for a previous hour in performing its obligations under clauses 215 and clause 216.~~

9.3.6 Gate Point Energy Inflow (GPENG)

9.3.6.1 Data flow Definition

The pipeline operator to provide the data estimation entity with hourly gate point energy inflow for each sub-network.

9.3.6.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
GATE_POINT_ID	1
GAS_DAY	1
ENERGY_INFLOW_HR01	0-1
ENERGY_INFLOW_HR02	0-1
ENERGY_INFLOW_HR03	0-1
ENERGY_INFLOW_HR04	0-1
ENERGY_INFLOW_HR05	0-1
ENERGY_INFLOW_HR06	0-1
ENERGY_INFLOW_HR07	0-1
ENERGY_INFLOW_HR08	0-1
ENERGY_INFLOW_HR09	0-1
ENERGY_INFLOW_HR10	0-1
ENERGY_INFLOW_HR11	0-1
ENERGY_INFLOW_HR12	0-1
ENERGY_INFLOW_HR13	0-1
ENERGY_INFLOW_HR14	0-1
ENERGY_INFLOW_HR15	0-1
ENERGY_INFLOW_HR16	0-1
ENERGY_INFLOW_HR17	0-1
ENERGY_INFLOW_HR18	0-1
ENERGY_INFLOW_HR19	0-1
ENERGY_INFLOW_HR20	0-1
ENERGY_INFLOW_HR21	0-1
ENERGY_INFLOW_HR22	0-1
ENERGY_INFLOW_HR23	0-1
ENERGY_INFLOW_HR24	0-1

9.3.6.3 Event Codes

Event Code Number

5200, 5202, 5403, 5601, 5603, 5608

9.3.6.4   Example

GATE_POINT_ID,GAS_DAY,ENERGY_INFLOW_HR01,ENERGY_INFLOW_HR02,ENERGY_I
NFLOW_HR03,ENERGY_INFLOW_HR04,ENERGY_INFLOW_HR05,ENERGY_INFLO
W_HR06,ENERGY_INFLOW_HR07,ENERGY_INFLOW_HR08,ENERGY_INFLOW_HR0
9,ENERGY_INFLOW_HR10,ENERGY_INFLOW_HR11,ENERGY_INFLOW_HR12,ENE
RGY_INFLOW_HR13,ENERGY_INFLOW_HR14,ENERGY_INFLOW_HR15,ENERGY_I
NFLOW_HR16,ENERGY_INFLOW_HR17,ENERGY_INFLOW_HR18,ENERGY_INFLO
W_HR19,ENERGY_INFLOW_HR20,ENERGY_INFLOW_HR21,ENERGY_INFLOW_HR2
2,ENERGY_INFLOW_HR23,ENERGY_INFLOW_HR24

1101D,2003-10-
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,,,,,,

1102D,2003-10-01,300,300,300,300,300,300,300,300,300,300,300,300,300,300,300,300,,,,,,,,,

1101A,2003-10-
01,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,,,
,,,,,,

1103D,2003-10-
01,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,,,
,,,,,,

10.7.1 Gate Point Energy and Profile (GPENGPROF)

10.7.1.1   Data flow Definition

The data estimation entity to provide gate point energy and sub-network profile to the user for each sub-network in which they operate.

10.7.1.2   Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
SUB_NETWORK_ID	1
GAS_DAY	1
ENERGY_INFLOW_HR01	1
ENERGY_INFLOW_HR02	0-1
ENERGY_INFLOW_HR03	0-1
ENERGY_INFLOW_HR04	0-1
ENERGY_INFLOW_HR05	0-1
ENERGY_INFLOW_HR06	0-1
ENERGY_INFLOW_HR07	0-1
ENERGY_INFLOW_HR08	0-1
ENERGY_INFLOW_HR09	0-1

Physical Name	Optionality
ENERGY_INFLOW_HR10	0-1
ENERGY_INFLOW_HR11	0-1
ENERGY_INFLOW_HR12	0-1
ENERGY_INFLOW_HR13	0-1
ENERGY_INFLOW_HR14	0-1
ENERGY_INFLOW_HR15	0-1
ENERGY_INFLOW_HR16	0-1
ENERGY_INFLOW_HR17	0-1
ENERGY_INFLOW_HR18	0-1
ENERGY_INFLOW_HR19	0-1
ENERGY_INFLOW_HR20	0-1
ENERGY_INFLOW_HR21	0-1
ENERGY_INFLOW_HR22	0-1
ENERGY_INFLOW_HR23	0-1
ENERGY_INFLOW_HR24	0-1
PROFILED_NOMINATION_HR01	1
PROFILED_NOMINATION_HR02	1
PROFILED_NOMINATION_HR03	1
PROFILED_NOMINATION_HR04	1
PROFILED_NOMINATION_HR05	1
PROFILED_NOMINATION_HR06	1
PROFILED_NOMINATION_HR07	1
PROFILED_NOMINATION_HR08	1
PROFILED_NOMINATION_HR09	1
PROFILED_NOMINATION_HR10	1
PROFILED_NOMINATION_HR11	1
PROFILED_NOMINATION_HR12	1
PROFILED_NOMINATION_HR13	1
PROFILED_NOMINATION_HR14	1
PROFILED_NOMINATION_HR15	1
PROFILED_NOMINATION_HR16	1
PROFILED_NOMINATION_HR17	1
PROFILED_NOMINATION_HR18	1
PROFILED_NOMINATION_HR19	1
PROFILED_NOMINATION_HR20	1
PROFILED_NOMINATION_HR21	1
PROFILED_NOMINATION_HR22	1
PROFILED_NOMINATION_HR23	1
PROFILED_NOMINATION_HR24	1

10.7.1.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.7.1.4 Example

SUB_NETWORK_ID,GAS_DAY,ENERGY_INFLOW_HR01,ENERGY_INFLOW_HR02,ENERGY_INFLOW_HR03,ENERGY_INFLOW_HR04,ENERGY_INFLOW_HR05,ENERGY_INFLOW_HR06,ENERGY_INFLOW_HR07,ENERGY_INFLOW_HR08,ENERGY_INFLOW_HR09,ENERGY_INFLOW_HR10,ENERGY_INFLOW_HR11,ENERGY_INFLOW_HR12,ENERGY_INFLOW_HR13,ENERGY_INFLOW_HR14,ENERGY_INFLOW_HR15,ENERGY_INFLOW_HR16,ENERGY_INFLOW_HR17,ENERGY_INFLOW_HR18,ENERGY_INFLOW_HR19,ENERGY_INFLOW_HR20,ENERGY_INFLOW_HR21,ENERGY_INFLOW_HR22,ENERGY_INFLOW_HR23,ENERGY_INFLOW_HR24,PROFILED_NOMINATION_HR01,PROFILED_NOMINATION_HR02,PROFILED_NOMINATION_HR03,PROFILED_NOMINATION_HR04,PROFILED_NOMINATION_HR05,PROFILED_NOMINATION_HR06,PROFILED_NOMINATION_HR07,PROFILED_NOMINATION_HR08,PROFILED_NOMINATION_HR09,PROFILED_NOMINATION_HR10,PROFILED_NOMINATION_HR11,PROFILED_NOMINATION_HR12,PROFILED_NOMINATION_HR13,PROFILED_NOMINATION_HR14,PROFILED_NOMINATION_HR15,PROFILED_NOMINATION_HR16,PROFILED_NOMINATION_HR17,PROFILED_NOMINATION_HR18,PROFILED_NOMINATION_HR19,PROFILED_NOMINATION_HR20,PROFILED_NOMINATION_HR21,PROFILED_NOMINATION_HR22,PROFILED_NOMINATION_HR23,PROFILED_NOMINATION_HR24

SUBNET1,2003-10-01,100,100,150,500,500,750,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,,,,,,100,200,200,200,500,500,500,500,1500,1500,1500,1500,1500,1500,1500,500,500,500,500,300,300,200,200

SUBNET2,2003-10-01,   100,100,150,500,500,750,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,,,,,,100,200,200,200,500,500,500,500,1500,1500,1500,1500,1500,1500,1500,500,500,500,500,300,300,200,200

10.8.1 Estimated Consumption Amount (ECA)

10.8.1.1 Data flow Definition

The data estimation entity to provide the user's hourly estimated consumption amount to the user for each sub-network.

10.8.1.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
USER_GBO_ID	1
SUB_NETWORK_ID	1
GAS_DAY	1
ESTIMATED_CONSUMPTION_AMOUNT_HR01	1

Physical Name	Optionality
ESTIMATED_CONSUMPTION_AMOUNT_HR02	0-1
ESTIMATED_CONSUMPTION_AMOUNT_HR03	0-1
ESTIMATED_CONSUMPTION_AMOUNT_HR04	0-1
ESTIMATED_CONSUMPTION_AMOUNT_HR05	0-1
ESTIMATED_CONSUMPTION_AMOUNT_HR06	0-1
ESTIMATED_CONSUMPTION_AMOUNT_HR07	0-1
ESTIMATED_CONSUMPTION_AMOUNT_HR08	0-1
ESTIMATED_CONSUMPTION_AMOUNT_HR09	0-1
ESTIMATED_CONSUMPTION_AMOUNT_HR10	0-1
ESTIMATED_CONSUMPTION_AMOUNT_HR11	0-1
ESTIMATED_CONSUMPTION_AMOUNT_HR12	0-1
ESTIMATED_CONSUMPTION_AMOUNT_HR13	0-1
ESTIMATED_CONSUMPTION_AMOUNT_HR14	0-1
ESTIMATED_CONSUMPTION_AMOUNT_HR15	0-1
ESTIMATED_CONSUMPTION_AMOUNT_HR16	0-1
ESTIMATED_CONSUMPTION_AMOUNT_HR17	0-1
ESTIMATED_CONSUMPTION_AMOUNT_HR18	0-1
ESTIMATED_CONSUMPTION_AMOUNT_HR19	0-1
ESTIMATED_CONSUMPTION_AMOUNT_HR20	0-1
ESTIMATED_CONSUMPTION_AMOUNT_HR21	0-1
ESTIMATED_CONSUMPTION_AMOUNT_HR22	0-1
ESTIMATED_CONSUMPTION_AMOUNT_HR23	0-1
ESTIMATED_CONSUMPTION_AMOUNT_HR24	0-1

10.8.1.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.8.1.4 Example

USET_GBO_ID,SUB_NETWORK_ID,GAS_DAY,ESTIMATED_CONSUMPTION_AMOUNT_HR01,ESTIMATED_CONSUMPTION_AMOUNT_HR02,ESTIMATED_CONSUMPTION_AMOUNT_HR03,ESTIMATED_CONSUMPTION_AMOUNT_HR04,ESTIMATED_CONSUMPTION_AMOUNT_HR05,ESTIMATED_CONSUMPTION_AMOUNT_HR06,ESTIMATED_CONSUMPTION_AMOUNT_HR07,ESTIMATED_CONSUMPTION_AMOUNT_HR08,ESTIMATED_CONSUMPTION_AMOUNT_HR09,ESTIMATED_CONSUMPTION_AMOUNT_HR10,ESTIMATED_CONSUMPTION_AMOUNT_HR11,ESTIMATED_CONSUMPTION_AMOUNT_HR12,ESTIMATED_CONSUMPTION_AMOUNT_HR13,ESTIMATED_CONSUMPTION_AMOUNT_HR14,ESTIMATED_CONSUMPTION_AMOUNT_HR15,ESTIMATED_CONSUMPTION_AMOUNT_HR16,ESTIMATED_CONSUMPTION_AMOUNT_HR17,ESTIMATED_CONSUMPTION_AMOUNT_HR18,ESTIMATED_CONSUMPTION_AMOUNT_HR19,ESTIMATED_CONSUMPTION_AMOUNT_HR20,ESTIMATED_CONSUMPTION_AMOUNT_HR21,ESTIMATED_CONSUMPTION_AMOUNT_HR22,ESTIMATED_CONSUMPTION_AMOUNT_HR23,ESTIMATED_CONSUMPTION_AMOUNT_HR24

USR1,SUBNET1,2003-10-01,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000, 1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000

USR1,SUBNET2,2003-10-01,500,500,500,500,500,500,500,500,500,500,500,500,500,500,500,500,500,500,500,500,500,500, 500,500,500

USR5,SUBNET5,2003-10-01,500,500,,,,,,,,,,,,,,,,,,,,,,

10.6.4 Sub-network Profiled Forecast (NPF)

10.6.4.1 Data flow Definition

The data estimation entity to provide the profiled forecast for the sub-network which is the forecasted amount of gas used by the sub-network for the gas day.

10.6.4.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
SUB_NETWORK_ID	1
GAS_DAY	1
PROFILE_FORECAST_HR01	1
PROFILE_FORECAST_HR02	1
PROFILE_FORECAST_HR03	1
PROFILE_FORECAST_HR04	1
PROFILE_FORECAST_HR05	1
PROFILE_FORECAST_HR06	1
PROFILE_FORECAST_HR07	1
PROFILE_FORECAST_HR08	1
PROFILE_FORECAST_HR09	1
PROFILE_FORECAST_HR10	1
PROFILE_FORECAST_HR11	1
PROFILE_FORECAST_HR12	1
PROFILE_FORECAST_HR13	1
PROFILE_FORECAST_HR14	1
PROFILE_FORECAST_HR15	1
PROFILE_FORECAST_HR16	1
PROFILE_FORECAST_HR17	1
PROFILE_FORECAST_HR18	1
PROFILE_FORECAST_HR19	1
PROFILE_FORECAST_HR20	1
PROFILE_FORECAST_HR21	1
PROFILE_FORECAST_HR22	1
PROFILE_FORECAST_HR23	1
PROFILE_FORECAST_HR24	1

10.6.4.3 Event Codes

Event Code Number

There are no event codes as the flow is outgoing flow.

10.6.4.4 Example

SUB_NETWORK_ID,GAS_DAY,PROFILE_FORECAST_HR01,PROFILE_FORECAST_HR02,PROFILE_FORECAST_HR03,PROFILE_FORECAST_HR04,PROFILE_FORECAST_HR05,PROFILE_FORECAST_HR06,PROFILE_FORECAST_HR07,PROFILE_FORECAST_HR08,PROFILE_FORECAST_HR09,PROFILE_FORECAST_HR10,PROFILE_FORECAST_HR11,PROFILE_FORECAST_HR12,PROFILE_FORECAST_HR13,PROFILE_FORECAST_HR14,PROFILE_FORECAST_HR15,PROFILE_FORECAST_HR16,PROFILE_FORECAST_HR17,PROFILE_FORECAST_HR18,PROFILE_FORECAST_HR19,PROFILE_FORECAST_HR20,PROFILE_FORECAST_HR21,PROFILE_FORECAST_HR22,PROFILE_FORECAST_HR23,PROFILE_FORECAST_HR24

1101,2003-10-01,150,150,200,250,250,300,550,550,700,750,1250,1300,1150,1150,1200,1250,750,300,150,150,200,250,250,300

1102,2003-10-01,150,150,200,250,250,300,550,750,900,1750,2250,2300,1550,1650,1200,1250,750,300,150,150,200,250,150,100

1103,2003-10-01,150,150,200,250,250,400,550,550,900,950,1250,1300,1150,1150,1200,1250,750,500,500,450,300,250,350,200

10.6.5 User Profile Forecast (UPF)

10.6.5.1 Data flow Definition

The data estimation entity to provide to the user the user's profile forecast and the components used to calculate the user's profile forecast which are the user's basic-meter profile forecast, the user's interval-meter profile forecast, the user's reconciliation profile forecast, the user's swing profile forecast, and the user's unaccounted for gas profile forecast.

10.6.5.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
USER_GBO_ID	1
SUB_NETWORK_ID	1
GAS_DAY	1
USER_PROFILE_TYPE	1
PROFILE_FORECAST_HR01	1
PROFILE_FORECAST_HR02	1
PROFILE_FORECAST_HR03	1
PROFILE_FORECAST_HR04	1
PROFILE_FORECAST_HR05	1
PROFILE_FORECAST_HR06	1
PROFILE_FORECAST_HR07	1
PROFILE_FORECAST_HR08	1
PROFILE_FORECAST_HR09	1
PROFILE_FORECAST_HR10	1
PROFILE_FORECAST_HR11	1
PROFILE_FORECAST_HR12	1
PROFILE_FORECAST_HR13	1

PROFILE_FORECAST_HR14	1
PROFILE_FORECAST_HR15	1
PROFILE_FORECAST_HR16	1
PROFILE_FORECAST_HR17	1
PROFILE_FORECAST_HR18	1
PROFILE_FORECAST_HR19	1
PROFILE_FORECAST_HR20	1
PROFILE_FORECAST_HR21	1
PROFILE_FORECAST_HR22	1
PROFILE_FORECAST_HR23	1
PROFILE_FORECAST_HR24	1

10.6.5.3   Event Codes

Event Code Number

There are no event codes as the flow is outgoing flow.

10.6.5.4   Example

USER_GBO_ID,SUB_NETWORK_ID,GAS_DAY,USER_PROFILE_TYPE,PROFILE_FOREC AST_HR01,PROFILE_FORECAST_HR02,PROFILE_FORECAST_HR03,PROFILE_FOREC AST_HR04,PROFILE_FORECAST_HR05,PROFILE_FORECAST_HR06,PROFILE_FOREC AST_HR07,PROFILE_FORECAST_HR08,PROFILE_FORECAST_HR09,PROFILE_FOREC AST_HR10,PROFILE_FORECAST_HR11,PROFILE_FORECAST_HR12,PROFILE_FOREC AST_HR13,PROFILE_FORECAST_HR14,PROFILE_FORECAST_HR15,PROFILE_FOREC AST_HR16,PROFILE_FORECAST_HR17,PROFILE_FORECAST_HR18,PROFILE_FOREC AST_HR19,PROFILE_FORECAST_HR20,PROFILE_FORECAST_HR21,PROFILE_FOREC AST_HR22,PROFILE_FORECAST_HR23,PROFILE_FORECAST_HR24

USR1,1101,2003-10-01,UPF,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000, 1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000

USR1,1101,2003-10-01,UBPF,500,500,500,500,500,500,500,500,500,500,500,500,500,500,500,500,500,500,500, 500,500,500,500,500

USR1,1101,2003-10-01,UiPF,300,300,300,300,300,300,300,300,300,300,300,300,300,300,300,300,300,300,300,3 00,300,300,300,300

USR1,1101,2003-10-01,SPF,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50

USR1,1101,2003-10-01,RPF,100,100,100,100,100,100,100,100,100,100,100,100,100,100,100,100,100,100,100,1 00,100,100,100,100

USR1,1101,2003-10-01,UUAFGPF,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50

10.6.6 Participant Profile Forecast (PPF)

10.6.6.1 Data flow Definition

The data estimation entity to provide the profile forecast for the user, shipper and pipeline to the relevant participant which is the participant's expected amount of gas for the gas day.

10.6.6.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
PARTICIPANT_GBO_ID	1
SUB_NETWORK_ID	1
PIPELINE_ID	1
GAS_DAY	1
PROFILE_FORECAST_HR01	1
PROFILE_FORECAST_HR02	1
PROFILE_FORECAST_HR03	1
PROFILE_FORECAST_HR04	1
PROFILE_FORECAST_HR05	1
PROFILE_FORECAST_HR06	1
PROFILE_FORECAST_HR07	1
PROFILE_FORECAST_HR08	1
PROFILE_FORECAST_HR09	1
PROFILE_FORECAST_HR10	1
PROFILE_FORECAST_HR11	1
PROFILE_FORECAST_HR12	1
PROFILE_FORECAST_HR13	1
PROFILE_FORECAST_HR14	1
PROFILE_FORECAST_HR15	1
PROFILE_FORECAST_HR16	1
PROFILE_FORECAST_HR17	1
PROFILE_FORECAST_HR18	1
PROFILE_FORECAST_HR19	1
PROFILE_FORECAST_HR20	1
PROFILE_FORECAST_HR21	1
PROFILE_FORECAST_HR22	1
PROFILE_FORECAST_HR23	1
PROFILE_FORECAST_HR24	1

10.6.6.3 Event Codes

Event Code Number

There are no event codes as the flow is outgoing flow.

10.6.6.4 Example

PARTICIPANT_GBO_ID,SUB_NETWORK_ID,PIPELINE_ID,GAS_DAY,PROFILE_FORECA
ST_HR01,PROFILE_FORECAST_HR02,PROFILE_FORECAST_HR03,PROFILE_FORECA
ST_HR04,PROFILE_FORECAST_HR05,PROFILE_FORECAST_HR06,PROFILE_FORECA
ST_HR07,PROFILE_FORECAST_HR08,PROFILE_FORECAST_HR09,PROFILE_FORECA
ST_HR10,PROFILE_FORECAST_HR11,PROFILE_FORECAST_HR12,PROFILE_FORECA
ST_HR13,PROFILE_FORECAST_HR14,PROFILE_FORECAST_HR15,PROFILE_FORECA
ST_HR16,PROFILE_FORECAST_HR17,PROFILE_FORECAST_HR18,PROFILE_FORECA

ST_HR19,PROFILE_FORECAST_HR20,PROFILE_FORECAST_HR21,PROFILE_FORECAST_HR22,PROFILE_FORECAST_HR23,PROFILE_FORECAST_HR24

SHP1,1101,P,2003-10-01,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000, 1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000

SHP1,1102,P,2003-10-01,500,500,500,500,500,500,500,500,500,500,500,500,500,500,500,500,500,500,500,500,50 0,500,500,500

SHP1,1101,D,2003-10-01,300,300,300,300,300,300,300,300,300,300,300,300,300,300,300,300,300,300,300,300,30 0,300,300,300

SHP1,1102,D,2003-10-01,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50

ATTACHMENT D – DOCUMENTATION CHANGES
Proposed changes: Specification Pack Usage Guidelines – SAWA
Blue represents additions Red and strikeout represents deletions – Marked up changes

2. OVERVIEW OF THE AEMO SPECIFICATION PACK

The following table provides an overview of the AEMO Specification Pack. The documents are provided in a directory structure as follows:

Main Directory	Sub-Directory	Documents	Version
Specification Pack	1. Usage Guidelines	Specification Pack Usage Guidelines	6.~~6~~8
	2. Interface Control Document (ICD)	Interface Control Document	4.~~7~~8
	3. B2B System Interface Definitions	FRC B2B System Interface Definitions	4.3
	4. Transport Layer	FRC B2M-B2B Hub System Specifications FRC B2M-B2B Hub System Architecture	3.8 3.6
	5. CSV File Format	FRC CSV Data Format Specification	3.3
	6. Connectivity and Technical Certification	Connectivity Testing and Technical Certification	3.6
	7. Readiness Criteria	Readiness Criteria	2.2
	8. Service Order Specifications	B2B Service Order Specifications, Part 1 and Part 2,	2. 33.3
	9. aseXML Schemas	The complete set of aseXML schemas and examples which participants have subscribed to for SA / WA Gas is available from www.aemo.com.au/asexml	SA – R29 WA – R13

Figure 1 Contents of AEMO Specification Pack