

## IN THE DISPUTE RESOLUTION PANEL AT MELBOURNE

(Constituted for a determination under Rule 8.2 of the National Electricity Rules)

### AGREED STATEMENT OF FACTS

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<b>Origin Energy Electricity Limited</b>	<b>(Origin)</b>
and	
<b>Australian Energy Market Operator Limited</b>	<b>(AEMO)</b>
and	
<b>Lake Bonney Wind Power Pty Ltd</b>	<b>(Infigen)</b>
<b>Pacific Hydro Clements Gap Pty Ltd</b>	<b>(Pacific Hydro)</b>
<b>Snowtown Wind Farm Pty Ltd</b>	<b>(Trustpower)</b>
<b>Waterloo Wind Farm Pty Ltd</b>	<b>(Waterloo)</b>
(Infigen, Pacific Hydro, Trustpower and Waterloo together referred to as the <b>Coalition</b> )	
and	
<b>Alinta Retail Energy Sales Pty Ltd,</b>	<b>(Alinta)</b>
and	
<b>CS Energy Limited</b>	<b>(CS Energy)</b>
and	
<b>Stanwell Corporation Limited</b>	<b>(Stanwell)</b>
and	
<b>The parties listed in Attachment 1</b>	<b>(Other Market Participants)</b>

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#### A. Glossary

- 1 The italicised terms used in this statement of facts are defined in the National Electricity Rules (**Rules**) version 82.<sup>1</sup> 'Rule' followed by a number refers to a provision of the Rules.

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<sup>1</sup> Versions 73, 74 and 75 were applicable during the Disputed Billing Periods, but there have been no changes relevant to the matters in dispute.

## AGREED STATEMENT OF FACTS – FCAS DISPUTE

- 2 Other defined terms and acronyms used in this statement of facts are listed below for reference. Most of them are also defined in bold where first used in this document.

<b>AC</b>	Alternating current
<b>AEMC</b>	Australian Energy Market Commission
<b>Business Specification</b>	AEMO's Efficient Dispatch and Localised Recovery of Regulation Services Business Specification
<b>Disputed Billing Periods</b>	The five consecutive weekly <i>billing periods</i> commencing on 11 October, 18 October, 25 October, 1 November and 8 November 2015 (2015 weeks 42 to 46)
<b>DRP</b>	<i>dispute resolution panel</i>
<b>FCAS</b>	Frequency control <i>ancillary service</i>
<b>FI</b>	Frequency Indicator, a measure of the frequency correction required by the <i>power system</i> to keep it at 50 Hz in any 4-second period.
<b>Global Requirement</b>	A <i>global market ancillary service requirement</i> (Rule 3.8.1(e2))
<b>HVDC</b>	High voltage direct current
<b>Hz</b>	Hertz
<b>Individual MPF</b>	A contribution factor determined for the purposes of Rule 3.15.6A(i)(1) for a relevant <i>Market Generator</i> , <i>Market Customer</i> or <i>Market Small Generation Aggregator</i> with metering sufficient to determine its individual contribution to the aggregate deviation in <i>frequency</i> of the <i>power system</i> .
<b>Local Requirement</b>	A <i>local market ancillary service requirement</i> (Rule 3.8.1(e2))
<b>MPF</b>	An Individual MPF or a Residual MPF.
<b>MW / MWh</b>	megawatt / megawatt hour
<b>NECA</b>	National Electricity Code Administrator, predecessor of the AEMC
<b>NEL</b>	National Electricity Law (the Schedule to the <i>National Electricity (South Australia) Act 1996 (SA)</i> )
<b>NEMDE</b>	National Electricity Market Dispatch Engine
<b>NEMMCO</b>	National Electricity Market Management Company Ltd, former name of AEMO
<b>Procedure</b>	AEMO Procedure for Determining Contribution Factors ("Causer Pays Procedure") required to be prepared by AEMO under Rule 3.15.6A(k)
<b>Residual MPF (RMPF)</b>	A contribution factor determined for the purposes of Rule 3.15.6A(i)(2).
<b>SA</b>	South Australia
<b>SCADA</b>	Supervisory Control and Data Acquisition

**B. Matter in Dispute**

- 3 The matter before the *dispute resolution panel (DRP)* relates to the interpretation and application of the Rules affecting the calculation of *trading amounts* under Rule 3.15.6A(i) for ancillary services

## AGREED STATEMENT OF FACTS – FCAS DISPUTE

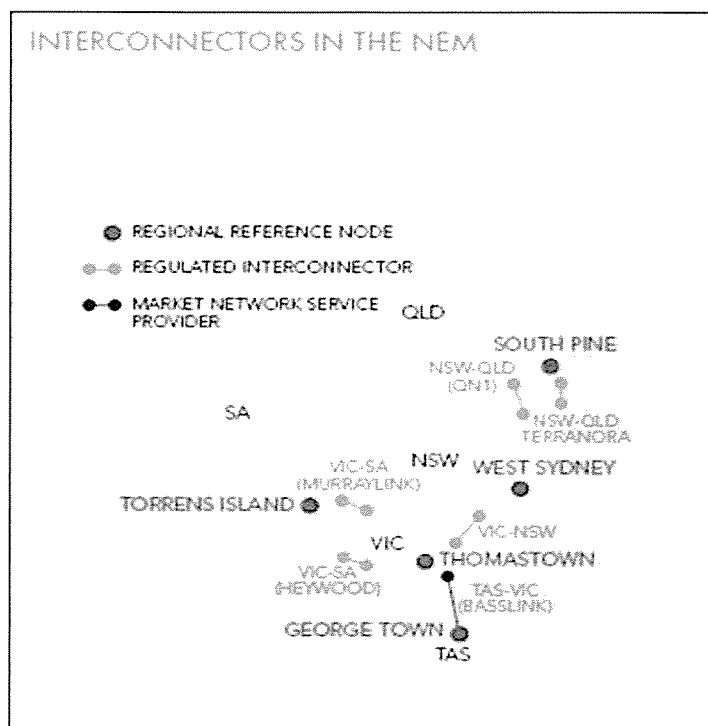
transactions, specifically relating to the recovery of the costs of *regulation services* in the *billing periods* spanning the period 11 October to 10 November 2015 (**Disputed Billing Periods**).

- 4 AEMO issued *final statements* in respect of the Disputed Billing Periods on 11 November, 18 November, 25 November, 2 December and 9 December 2015 respectively.
- 5 AEMO issued *special revised statements* for the first three Disputed Billing Periods on 7, 14 and 21 December 2015 respectively, after correcting an issue in the configuration of AEMO's settlement systems. The *final statements* for the last two Disputed Billing Periods were determined after the reconfiguration occurred.
- 5A *Routine revised statements* for the Disputed Billing Periods were issued on 12, 19 and 26 May, and 2 and 9 June 2016 respectively.
- 6 Rule 3.15.18(b) provides that disputes in respect of *final statements* must be raised within 6 months of the relevant *billing period* and, under Rule 3.15.18(c), are to be raised and resolved under Rule 8.2 unless agreed.
- 7 On 2 February 2016 Origin issued (and AEMO received) a *DMS referral notice* under Rule 8.2.4 in respect of the Disputed Billing Periods.
- 8 Having failed to reach agreement within 60 *business days*, Origin served an *Adviser referral notice* under Rule 8.2.5 on 29 April 2016.
- 9 AEMO requested the *Adviser* to join the Coalition, Alinta, CS Energy, Stanwell and the Other Market Participants to the dispute under Rule 3.15.18(d) on the basis that they could be materially affected by the outcome of the dispute.

### C. National Electricity Market Overview

- 10 The *NEM* is regulated by the National Electricity Law (**NEL**), which is applied in each *participating jurisdiction* through a co-operative legislative scheme. The Rules are made and enforced under the NEL.
- 11 Under the NEL, AEMO has two core functions: power system operator, and wholesale market operator.
- 12 As power system operator, AEMO is concerned primarily with meeting applicable standards of security and reliability. As wholesale market operator, AEMO facilitates the wholesale trading of electricity through centrally co-ordinated *dispatch* and *settlement* processes. Certain *market ancillary services* required to maintain the frequency of the *power system* within defined operating limits are also *enabled* through the central *dispatch* process.
- 13 The *NEM* is divided into five *regions*: Queensland, New South Wales (incorporating the Australian Capital Territory), South Australia, Victoria and Tasmania.
- 14 Each *region* is connected to its adjacent *regions* by *interconnectors - transmission lines* that facilitate the flow of electricity between *regions*. The *NEM interconnectors* are shown below.

## AGREED STATEMENT OF FACTS – FCAS DISPUTE



- 15 The QNI, Vic-NSW and Heywood *interconnectors* provide alternating current (AC) links between *regions*. Murraylink (Vic-SA), Basslink (Vic-Tas) and Terranora (NSW-Qld), are high voltage direct current (HVDC) links. *Transmission systems* connected by an AC link operate at exactly the same frequency and are referred to in electrical engineering terms as synchronous. *Transmission systems* connected by only an HVDC link will operate at different frequencies and are referred to in electrical engineering terms as asynchronous.
- 16 Under Chapter 2 of the Rules, organisations may (or must) be registered to participate in the wholesale market operated under the Rules. These are called *Market Participants*, who buy and sell electricity *scheduled* by AEMO in its *central dispatch* process.
- 17 There are a number of categories of *Market Participant*, but *Market Generators* and *Market Customers* are most relevant to this dispute.
- 18 *Market Customers* must classify one or more *connection points* as a *market load*, for which they purchase energy from the NEM. *Market Customers* may also classify a load as an *ancillary service load*, if it meets the technical criteria necessary to provide *market ancillary services*.
- 19 *Market Generators* must classify one or more *generating units* as a *market generating unit*, whose output is sold to the NEM. *Market Generators* may also classify a unit as an *ancillary service generating unit*, if it meets the technical criteria necessary to provide *market ancillary services*. In respect of each of its *generating units*, a *Market Generator* may be further categorised as (among other things) a:
- a) *Scheduled Generator* – typically where the *nameplate rating* of the *generating unit* (or group of units with a common *connection point*) is greater than 30 MW and is capable of participating in *central dispatch*;

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- b) *Non-Scheduled Generator* – not participating in *central dispatch*, typically with a *nameplate rating* under 30 MW; or
- c) *Semi-Scheduled Generator* - typically where the *nameplate rating* is greater than 30 MW and the output is intermittent (such as wind farms).

**D. Market Ancillary Services**

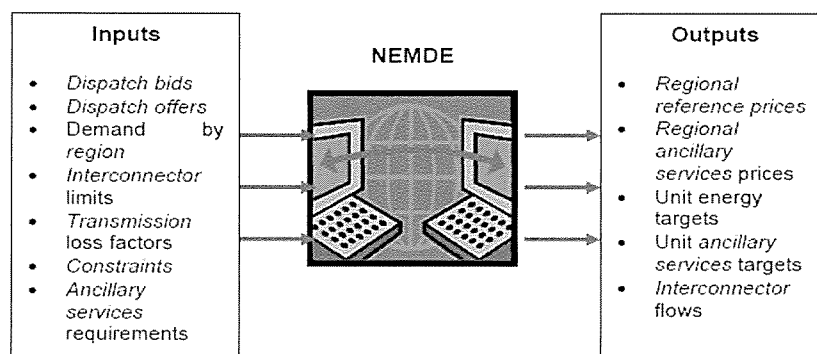
- 20 AEMO acquires a number of types of *ancillary service* that may be used to keep the *power system* in a secure state, or to restore *power system security* after a disruption.
- 21 Before October 2001, all types of *ancillary service* were acquired by NEMMCO (as AEMO was then called) under contractual arrangements.
- 22 In 2001, the National Electricity Code (predecessor of the Rules) was amended to introduce a market mechanism for AEMO to acquire certain *ancillary services*, now referred to as *market ancillary services*. Under the current Rules there are two remaining non-market services (*system restart ancillary services* and *network support and control ancillary services*) that are still acquired under contract.
- 23 All eight *market ancillary services* under Rule 3.11.2(a) are frequency control ancillary services (**FCAS**), being either:
- a) contingency services, comprising six distinct categories of frequency response (defined by response time and direction of correction), which can be *enabled* to automatically correct a large deviation in frequency by adjusting generation or load, usually following a *contingency event* such as the loss of a significant *generating unit* or *transmission element*, including an *interconnector*, and
  - b) *regulation services*, comprising two categories - *regulating raise* and *regulating lower*, which can be *enabled* to automatically correct the generation/demand balance in response to minor deviations in load or generation. AEMO continually monitors system frequency and sends control signals to *enabled* facilities through an *automatic generation control system* (AGC), so that frequency is maintained within the *normal frequency operating band*.
- 24 FCAS may be provided by *Market Generators* or *Market Customers*, in each case using facilities that AEMO has pre-approved as meeting the technical specification for providing the relevant service (*Ancillary Service Providers*).
- 25 *Ancillary Service Providers* can submit *market ancillary service offers* to provide FCAS under Rule 3.8.7A. The requirements for FCAS in the NEM and the *enabling* of FCAS pursuant to those offers are managed by AEMO in *central dispatch* using the National Electricity Market Dispatch Engine (**NEMDE**).
- 26 NEMDE is based on a constrained optimisation program that uses linear programming techniques to represent the *power system*. The optimisation process is performed for every 5-minute *dispatch interval* to determine targets for the *dispatch* of scheduled generation and load, as well as requirements for *market ancillary services*.
- 27 Rule 3.8.11 requires AEMO to determine the type and quantity of FCAS to be managed in conjunction with *dispatch*, and to impose constraints on the *dispatch algorithm* to determine the MW quantity of each FCAS requirement for every *dispatch interval*. The constraints reflect whether, and the extent to which, AEMO has determined that a requirement may be sourced from any *region* in the NEM (**Global Requirement**) or must only be sourced from one or more nominated *regions* (**Local Requirement**) - see Rule 3.8.1(e2).

## AGREED STATEMENT OF FACTS – FCAS DISPUTE

27A. When all *regions* of the NEM are interconnected via *interconnectors* that are capable of conveying FCAS, *regulation services* can be provided from anywhere in the *NEM* to correct small deviations across the entire *power system*.

28. A simplified form of the NEMDE optimisation process, at a general level, is illustrated below.

Figure 4 – NEMDE Optimisation Process



29. NEMDE attempts to maximise the value of electricity and FCAS traded subject to applicable constraints. In relation to FCAS, NEMDE will *enable* MW *ancillary service* offers in merit order of cost. The highest cost *ancillary service* offer to be *enabled* for a service will set the marginal price for that service.

30. *Ancillary service prices* are determined in every *dispatch interval* for each type of FCAS for each *region* under Rule 3.9.2A. For each service (for example *regulating raise* or *regulating lower*), the regional *ancillary service price* is the sum of (1) the marginal price of meeting a Global Requirement for that service and (2) the marginal price of meeting each Local Requirement for that service in that *region*.

### E. Acquisition of SA Regulation Services in Disputed Billing Periods

31. Between 11 October and 10 November 2015, there were three successive planned outages of one of the two Heywood *interconnector* lines. During these planned outages, loss of the remaining in service line was a *credible contingency event*. If this occurred, SA would cease to be connected to the rest of the *NEM* via an AC link. The Murraylink HVDC *interconnector* does not have capability to transfer FCAS between *regions*.

32. Having assessed the available *regulation services* capability in SA should loss of the Heywood *interconnector* occur, for the purposes of Rule 3.8.11 AEMO determined that 35MW of regulating FCAS capacity had to be *enabled* from within SA during the planned outages. Global Requirements also applied during the outage periods.

33. To reflect this Local Requirement for *regulation services* in NEMDE, constraint sets (F-S\_LREG\_0035 and F-S\_RREG\_0035) were invoked for all *dispatch intervals* during each planned outage. The outage periods (Australian Eastern Standard Time) were:

- South East – Heywood line 2: 1045 hrs 11 October 2015 to 1739 hrs 13 October 2015
- South East – Heywood line 1: 0730 hrs 15 October 2015 to 1039 hrs 26 October 2015
- South East – Heywood line 2: 0705 hrs 29 October 2015 to 1730 hrs 10 November 2015

- 33A. AEMO determined that it was unnecessary to *enable* contingency raise FCAS from within SA, because under-frequency *load shedding* would be used to maintain local network frequency above the SA separation event minimum frequency in the event of a drop in frequency immediately following the loss of the Heywood *interconnector*. During each planned outage, AEMO invoked a constraint set that required contingency lower services to be provided by *Market Participants* in SA.
34. On 1 November 2015 at 2151 hrs, while Heywood *interconnector* line 2 was out of service, line 1 tripped resulting in loss of the AC link between SA and the rest of the *NEM*. Heywood line 1 was reconnected at 2226 hrs. At all other times during the planned outages the in-service Heywood *interconnector* line remained connected.
35. The sum of all the *trading amounts* paid to the relevant *Ancillary Service Providers* for this Local Requirement under Rule 3.15.6A(a) over the Disputed Billing Periods was about \$26.6 million. This represents the total cost of *enabling SA ancillary service generating units* in response to the Local Requirement over the Disputed Billing Periods.

#### F. Recovery of Regulation Services Costs

36. Rule 3.15.6A deals with the payment and recovery of the costs of each type of *ancillary service* in each 30-minute *trading interval* (each made up of six 5-minute *dispatch intervals*). Each ancillary services transaction arising from the application of the relevant cost recovery calculation to a *Market Participant* results in a *trading amount* payable by that *Market Participant* to AEMO.
37. Rules 3.15.6A(h) to (nb) apply to the recovery of costs specifically for *regulation services*.

##### Cost Recovery of Localised Regulation Services Rule

- 37A. Prior to the commencement on 1 January 2009 of the *National Electricity Amendment (Cost Recovery of Localised Regulation Services Rule) 2007*, the costs of regulation services were recovered on a NEM-wide basis (subject to a derogation made by NECA for the Tasmanian region when that jurisdiction joined the NEM in 2005, under which the costs of Local Requirements in respect of Tasmania were recovered solely from Tasmanian participants).

##### Current Cost Recovery Process for Regulation Services

- 37B. Rule 3.15.6A(i) sets out the formulae to be applied in calculating the trading amounts payable by each *Market Participant* for regulation services in each trading interval. For the purposes of applying these formulae, AEMO must determine 'contribution factors' (MPFs).
38. Rule 3.15.6A(j) states that AEMO must determine for the purpose of paragraph (i):
- a) a contribution factor for each *Market Participant*; and
  - b) notwithstanding the estimate provided in paragraph (nb), if a *region* has, or *regions* have, operated asynchronously during the relevant *trading interval*, the contribution factors relevant to the allocation of *regulation raise service* or *regulating lower service* to that *region* or *regions*, in accordance with the procedure prepared under paragraph (k).
39. Rule 3.15.6A(k) requires AEMO to prepare a procedure for determining MPFs, taking into account the principles set out in that Rule. Pursuant to Rule 3.15.6A(m), AEMO must comply with the *Rules consultation procedures*<sup>2</sup> when making or amending that procedure.

<sup>2</sup> Rule 8.9 describes the *Rules consultation procedures*

## AGREED STATEMENT OF FACTS – FCAS DISPUTE

**Causer Pays Procedure**

- 40 AEMO first published the 'Causer Pays' procedure (**Procedure**) in 2001. The Procedure was revised on 30 July 2008 (with effect from 21 December 2008) to take account of the *National Electricity Amendment (Cost Recovery of Localised Regulation Services) Rule 2007*.<sup>3</sup>
- 41 Under the Procedure, AEMO determines Individual MPFs for *Market Participants* whose *market generating units* or *loads* have 4-second SCADA metering.
- 42 The 4-second metering data is captured in AEMO systems and used to determine the MW deviation of each relevant facility from a reference trajectory over a *dispatch interval*. For a *generating unit*, the reference trajectory depends on the type of unit:
- a) for a *scheduled generating unit*, the reference trajectory is the straight line between the *dispatch target* at the beginning of the relevant *dispatch interval* and the *dispatch target* at the beginning of the next *dispatch interval*;
  - b) for a *semi-scheduled generating unit*, the reference trajectory is the straight line between the lesser of the forecast generation and the dispatch limit calculated by NEMDE at the beginning of the relevant *dispatch interval* and the lesser of the forecast generation and the dispatch limit calculated by NEMDE at the beginning of the next *dispatch interval*.
  - c) for a *non-scheduled generating unit*, the reference trajectory is a straight line equal to the unit's actual generation at the beginning of the relevant *dispatch interval*.
- 43 The deviations above and below the reference trajectory are multiplied by a frequency indicator (FI) to determine regulating FCAS performance measures for the unit or load, relative to the *power system's* requirement for frequency correction every 4 seconds.
- 44 Different values of FI are determined for the mainland *regions* on the one hand, and Tasmania on the other. Tasmania is not connected to the other *regions* by an AC *interconnector*, therefore it has a different frequency with different correction requirements. Section 7 of the Procedure states that the current methodology does not calculate factors that reflect separated *regions* (other than as between Tasmania and the mainland). Data collected for the duration of a *regional* separation that occurs within a 28-day sample period (see paragraph 46) is disregarded in the calculation of contribution factors over that sample period.
- 45 A performance measure for a unit or load is:
- a) positive when the deviation is above the reference trajectory and FI is indicating a requirement for *regulating raise service*, or below the reference trajectory and FI is indicating a requirement for *regulating lower service* (i.e. the deviation is reducing the need for correction); and
  - b) negative when the deviation is below the reference trajectory and FI is indicating a requirement for *regulating raise service*, or above the reference trajectory and FI is indicating a requirement for *regulating lower service* (i.e. the deviation is contributing to the need for correction).
- Separate performance measure calculations are performed for periods when the FI correction requires a *regulating raise service* or a *regulating lower service*.
- 46 The 4-second performance measures for each deviation category are averaged over a *dispatch interval* and the resulting '5-minute factors' are allocated to a category (raise/lower; enabled/not enabled). The five minute factors in each category for all applicable *dispatch intervals* within a measurement period of

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<sup>3</sup> There have been other amendments to the Procedure, but they are not material to this dispute



28 days<sup>4</sup> are then summed for each appropriately metered generating unit or load. AEMO then calculates a single net aggregate Individual MPF for each *Market Participant* across its portfolio using the methodology described in the Procedure.

- 47 The Procedure provides for each Individual MPF to be normalised according to demand as between Tasmania and the mainland *regions* to produce a single set of factors for the *NEM*.
- 48 Only those *Market Participants* with a net negative Individual MPF in the 28-day measurement period are taken to have contributed to the need for *regulation services*. Positive Individual MPFs are set to zero.
- 49 The Residual MPF represents the proportion of the requirement for *regulation raise* or *regulation lower* that cannot be attributed to *Market Participants* having facilities with 4 second SCADA metering, and is therefore to be recovered from *Market Customers* with *customer energy* in the regions relevant to each *regulation service*.
- 50 To calculate the Residual MPF (over the same time intervals as the Individual MPFs), AEMO determines a measure of system performance at a *regional* level. The performance measure has two components – one relating to the deviation of the regional demand from the regional demand forecast (SDF); the other relating to the regional demand forecast error (SFF). The system performance deviation is then aggregated to separate mainland and Tasmania values. AEMO then determines what proportion of the deviation is attributable to facilities with 4-second SCADA metering, and the remainder determines the Residual MPF.
- 51 The Residual MPF is applied to each relevant *Market Customer*, in proportion to the *customer energy* for which that *Market Customer* is *financially responsible* in the relevant *region(s)*.
- 52 Rule 3.15.6A(n) provides that AEMO must publish the historical data used in determining MPFs for the purposes of Rule 3.15.6A(h) and (i).
- 52A Rule 3.15.6A(na) provides that AEMO must publish the factors determined in accordance with clause 3.15.6A(j)(1) at least 10 business days prior to the application of those factors.
- 52B Rule 3.15.6A(nb) provides that, when a *region* is or *regions* are operating asynchronously, AEMO must publish (where appropriate in accordance with the procedure developed under paragraph (k)) an estimate of the contribution factors referred to in Rule 3.15.6A(j)(2) to be applied for information purposes only by *Market Participants* for the duration of the separation.

#### **G. AEMO Calculation of Trading Amounts to Recover Costs of SA Local Requirement in Disputed Billing Periods**

- 53 The MPFs applicable to the first four Disputed Billing Periods ('FCAS Causer Pays Settlement Factors 11 October 2015 to 7 November 2015') were determined over the 28-day period from 23 August to 19 September 2015 inclusive and published by AEMO on 25 September 2015. Revision 1 of that document was published on 25 November 2015. The MPFs applicable to the final Disputed Billing Period ('FCAS Causer Pays Settlement Factors 8 November 2015 to 5 December 2015') were determined over the 28-day period from 20 September to 17 October 2015 inclusive and published by AEMO on 23 October 2015. Revision 1 of that document was also published on 25 November 2015.<sup>5</sup>

<sup>4</sup> 28 days is the period determined for the purposes of Rule 3.15.6A(k)(4). Under the Procedure, data for an individual *dispatch interval* is discarded in some circumstances, e.g. where frequency is outside the normal operating band or where a mainland *region* is electrically islanded.

<sup>5</sup> All documents are published on AEMO's website at <http://www.aemo.com.au/Electricity/Market-Operations/Ancillary-Services/Process-Documentation/Ancillary-Services-Causer-Pays-Contribution-Factors>

## AGREED STATEMENT OF FACTS – FCAS DISPUTE

- 54 AEMO's market management system (MMS) is configured to publish real time requirements for FCAS, updated with every 5 minute dispatch cycle. For every Local Requirement (any regional FCAS constraint, for both contingency and *regulation services*), data is made available to all *Market Participants* through the MMS, including the cost of the constraint for each of the FCAS services per *region*, the estimated constraint MPF (CMPF) and the constraint residual MPF (CRMPF) and an estimated recovery factor that permits *Market Participants* to estimate their proportion of costs for the constraint.
- 55 For each constraint, the estimated CMFP available through MMS is the sum of the Individual MPFs for *Market Participants* that are relevant to the *region(s)* affected by the constraint, and the estimated CRMPF is the associated proportion of the global Residual MPF for the affected *region(s)*. These estimates were available to *Market Participants* for every *dispatch interval* in the Disputed Billing Periods, including during the 35-minute period of asynchronous operation of SA on 1 November 2015.
- 55A. The method set out in paragraphs 54 and 55 is documented by AEMO in the Business Specification.
- 56 After the correction referred to in paragraph 5, AEMO recovered the \$26.6M cost of the SA Local Requirement (see paragraph 35) by allocating that cost as follows:
- a) First, an allocation was made to each *Market Generator* with published non-zero Individual MPFs and who has one or more *market generating units* in SA,<sup>6</sup> in the proportion that its Individual MPF bears to the aggregate of Individual MPFs for all *Market Generators* in SA and the Residual MPF.
  - b) Second, the residual (that part of the costs not allocated to *Market Generators* in SA under the Individual MPF calculation above) was allocated to each *Market Customer* with load in SA, in the proportion that its *customer energy* in SA bears to the total *customer energy* in SA.
- 57 The allocation was performed in the same way as described in paragraph 56 for the two *trading intervals* in which SA was not connected to the rest of the *NEM* via the Heywood *interconnector* on 1 November 2015.

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<sup>6</sup> There are no *Market Small Generation Aggregators* or *Market Customers* associated with SA who have Individual MPFs based on 4-second SCADA metered *small generation units* or *loads*

## ATTACHMENT 1 – LIST OF OTHER MARKET PARTICIPANTS

Other Market Participants comprise all *Market Participants* (other than those specifically identified in the list of parties on page 1) for which AEMO could be required to issue a *revised statement* for any positive or negative adjustment amount under Rule 3.15.19 resulting from the determination of this dispute.

AETV Pty Ltd  
AGL Hydro Partnership  
AGL Loy Yang Marketing Pty Ltd  
AGL Macquarie Pty Limited  
AGL SA Generation Pty Limited  
AGL Sales (Queensland Electricity) Pty Limited  
AGL Sales Pty Limited  
AGL South Australia Pty Ltd  
Adelaide Brighton Cement Ltd  
Alcoa Of Australia Limited  
Arrow Southern Generation Pty Ltd And Arrow Braemar 2 Pty Ltd  
Aurora Energy Pty Ltd  
Blue NRG Pty Ltd  
Boco Rock Wind Farm Pty Ltd  
Braemar Power Project Pty Ltd  
COzero Energy Retail Pty Ltd  
Canunda Power Pty Ltd  
Cathedral Rocks Wind Farm Pty Ltd  
Click Energy Pty Ltd  
Covau Pty Limited  
Delta Electricity  
Diamond Energy Pty Ltd  
ERM Power Retail Pty Ltd  
Ecogen Energy Pty Ltd  
EnergyAustralia Pty Ltd  
EnergyAustralia Yallourn Pty Ltd  
Energy Pacific (Vic) Pty Ltd  
Ergon Energy Queensland Pty Ltd  
Essential Energy  
Flinders Operating Services Pty Ltd  
GSP Energy Pty Ltd  
Globird Energy Pty Ltd  
GoEnergy Pty Ltd  
Gunning Wind Energy Developments Pty Ltd  
Hazelwood Power  
Infigen Energy Markets Pty Ltd  
Lumo Energy (NSW) Pty Ltd  
Lumo Energy (QLD) Pty Ltd  
Lumo Energy (SA) Pty Ltd  
Lumo Energy Australia Pty Ltd  
Lumo Generation SA Pty Ltd

## AGREED STATEMENT OF FACTS – FCAS DISPUTE

M2 Energy Pty Ltd (T/As Commander Power & Gas)  
M2 Energy Pty Ltd (T/As Dodo Power & Gas)  
Macquarie Bank Ltd  
Millmerran Energy Trader Pty Ltd  
Momentum Energy Pty Limited  
Mortons Lane Windfarm Pty Limited  
Mt Mercer Windfarm Pty Ltd  
Mt Millar Wind Farm Pty Ltd  
New Gullen Range Wind Farm Pty Ltd  
Next Business Energy Pty Ltd  
OZGen Retail Pty Ltd  
Online Power And Gas Pty Ltd  
Origin Energy Uranquinty Power Pty Ltd  
Pacific Hydro Retail Pty Ltd  
Pelican Point Power Limited  
People Energy Pty Ltd  
Pooled Energy Pty Limited  
Powerdirect Pty Ltd  
Powershop Australia Pty Limited  
Progressive Green Pty Ltd  
Pyrenees Wind Energy Development Pty Ltd  
QGC Sales Qld Pty Ltd  
Qenergy Pty Ltd  
RTA Yarwun Pty Ltd  
Red Energy Pty Limited  
Rio Tinto Aluminium (Bell Bay) Limited  
Sanctuary Energy Pty Ltd  
Simply Energy  
Snowtown Wind Farm Stage 2 Pty Ltd  
SparQ Pty Ltd  
Starfish Hill Wind Farm Pty Ltd  
State Electricity Commission (Vic)  
Sun Metals Corporation Pty Ltd  
Sun Retail Pty Ltd  
Synergen Power Pty Limited  
Taralga Wind Farm Nominees No 2 Pty Ltd (ATF Taralga Wind Farm Operating Trust)  
Tomago Aluminium Company Pty Ltd  
WINenergy Pty Ltd  
Woodlawn Wind Pty Ltd