# **AEMO Directions to Participants** in South Australia

10 July 2024

**Draft Determination Report** 



### **Disclaimer**

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# Notes to this report

### **Units and dollars**

Unless otherwise specified:

- Dollars refer to Australian dollars.
- The claim determination amounts do not include interest payable to participants.

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#### Introduction 1

IES has been appointed by AEMO as independent expert to assess claims for additional compensation submitted by Directed Participants in relation to directions issued during Billing Weeks 9 to 12 in 2024. Under NER Paragraph 3.15.7B(c)(1) AEMO must refer claims that exceed \$20,000 to an independent expert. This report presents the assessment of the referred claims.

#### 1.1 Background and direction to participants

During billing weeks 9 to 12 in 2024 AEMO issued directions to maintain the system in a secure operating state. The directions associated with the claims that have been assessed for Claimant1 and Claimant2 are summarised in Table 1 and Table 2 respectively. The information in the tables have been appropriately masked to maintain confidentiality. For each directed unit in an event, the table shows the time and date the direction was issued, the start and end time for each direction, and the reason AEMO issued the direction.

Table 1	Sum	mary of the directi	ons – assessed clain	ns – Claimant1	
Directed unit	Event number	Issued	Effective	Cancelled	Reason
PS2	472-1	02/03/2024 14:00	03/03/2024 00:30	04/03/2024 17:30	System security
PS2	473-1	04/03/2024 15:00	05/03/2024 00:00	05/03/2024 14:00	System security
PS4	473-2	04/03/2024 15:00	05/03/2024 08:00	05/03/2024 14:00	System security
PS2	474-1	06/03/2024 17:00	07/03/2024 01:00	07/03/2024 14:30	System security
PS3	474-2	06/03/2024 17:00	07/03/2024 07:30	07/03/2024 09:30	System security
PS3	475-1	13/03/2024 17:00	14/03/2024 09:00	16/03/2024 15:30	System security
PS2	475-3	15/03/2024 16:30	16/03/2024 08:00	16/03/2024 15:30	System security
PS2	476-1	16/03/2024 17:00	17/03/2024 07:30	17/03/2024 15:30	System security
PS3	477-1	18/03/2024 16:00	19/03/2024 00:30	22/03/2024 04:00	System security
PS2	477-3	20/03/2024 13:00	21/03/2024 08:00	21/03/2024 16:00	System security
PS2	478-1	21/03/2024 15:45	22/03/2024 08:30	25/03/2024 14:00	System security
PS3	478-2	21/03/2024 15:45	22/03/2024 08:30	22/03/2024 21:00	System security
PS2	479-2	25/03/2024 15:00	26/03/2024 08:00	27/03/2024 22:00	System security

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Table 2	Summary 6	of the directions – assessed claims – Claimant2

Directed unit	Event number	Issued	Effective	Cancelled	Reason
PS1	472-2	02/03/2024 14:00	03/03/2024 07:00	04/03/2024 15:30	System security
PS1	475-2	14/03/2024 15:00	14/03/2024 21:00	15/03/2024 16:00	System security
PS1	477-2	18/03/2024 17:00	19/03/2024 08:30	20/03/2024 15:30	System security
PS1	478-5	23/03/2024 12:00	23/03/2024 15:00	24/03/2024 17:00	System security
PS1	479-5	26/03/2024 16:30	27/03/2024 22:00	29/03/2024 17:15	System security
PS1	480-1	29/03/2024 17:15	30/03/2024 08:30	30/03/2024 15:00	System security

The NER versions applicable the claims are versions 205 to 208. Version 205 has start and end dates of 1 February 2024 to 7 March 2024 and version 208 with start and end dates of 29 March 2024 to 3 April 2024. Based on the information provided in the cover sheets of the NER versions referenced above, the amendments do not impact the determination of additional costs.<sup>1</sup>

### 1.2 Description of services provided

AEMO issued directions to participants to maintain power system security. A directed participant entitled to compensation under 3.15.7B may submit a claim for additional compensation for the sum of:

- The aggregate loss of revenue and additional net direct costs; less
- The amount notified under 3.15.7(e).

NER Paragraph 3.15.7B(a3) lists, without limitation, components included in the calculation of additional net direct costs. 3.15.7B(b) states that submissions made must:

- (1) "itemise each component of a claim;
- (2) contain sufficient data and information to substantiate each component of a claim...; and
- (3) be signed by an authorised officer of the applicant certifying that the written submission is true and correct."

The claims for additional compensation include amounts connected with the *directed resource* due to:

- Additional net direct fuel costs per 3.15.7B(a3)(1), plus
- Additional net direct maintenance costs per 3.15.7B(a3)(2), plus
- Additional net direct other costs per 3.15.7B(a3)(6), less

<sup>&</sup>lt;sup>1</sup> AEMC website <a href="https://energy-rules.aemc.gov.au/ner/historic">https://energy-rules.aemc.gov.au/ner/historic</a>



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• The amount calculated as 'DCP' under 3.15.7(c). AEMO calculated the provisional compensation in accordance with 3.15.7(c) and informed the directed participant pursuant to 3.15.7(e).

Where it is considered important for clarity, terms defined in the NER have been italicised in the report. A reference to a section, subsection or paragraph in this report is a reference to the clause in the NER unless stated otherwise.

The remainder of this report is organised as follows:

- Section 2 of this report Claims for additional compensation Claimant1,
- Section 3 of this report Claims for additional compensation Claimant2, and
- Section 4 of this report Submissions on matters in the Draft Determination Report.

### 2 Claims for additional compensation – Claimant1

### 2.1 Summary of claims

The assessed claims submitted by Claimant1 comprised direct cost components of fuel cost, variable operations and maintenance cost (VOM), start-up costs for some events and recovery of contingency FCAS charges incurred while the units operated in compliance with the directions. The additional compensation claimed is equal to the sum of these components less 'DCP'. The assessed claims submitted by the claimant are summarised in Table 3. The amounts shown in Table 3 are given in dollars and cents based on the supporting information and calculations provided by the claimant in support of the claim.

Table 3	Summary of additional compensation claimed – assessed claims – Claimant1				
Directed unit	Event No.	Total Fuel Cost + VOM Cost + Start up Cost	FCAS Recovery	DCP	Additional Compensation Claimed
PS2	472-1	\$401,832.51	\$40.63	\$269,222.92	\$132,650.23
PS2	473-1	\$125,848.40	\$15.60	\$94,155.23	\$31,708.77
PS4	473-2	\$78,239.21	\$2.92	\$36,622.20	\$41,619.93
PS2	474-1	\$127,356.85	\$13.35	\$92,181.49	\$35,188.72
PS3	474-2	\$46,751.08	\$0.96	\$7,269.65	\$39,482.39
PS3	475-1	\$489,156.70	\$59.47	\$359,138.99	\$130,077.19
PS2	475-3	\$91,666.81	\$4.29	\$47,674.96	\$43,996.13
PS2	476-1	\$75,069.72	\$1.40	\$54,080.65	\$20,990.47
PS3	477-1	\$678,467.14	\$125.44	\$493,426.73	\$185,165.84
PS2	477-3	\$96,614.89	\$5.17	\$50,959.59	\$45,660.47



Directed unit	Event No.	Total Fuel Cost + VOM Cost + Start up Cost	FCAS Recovery	DCP	Additional Compensation Claimed
PS2	478-1	\$734,150.73	\$102.32	\$519,286.99	\$214,966.06
PS3	478-2	\$113,012.03	\$12.73	\$82,316.53	\$30,708.24
PS2	479-2	\$369,451.15	\$70.54	\$257,324.30	\$112,197.40
Total		\$3,427,617.23	\$454.81	\$2,363,660.21	\$1,064,411.83

### 2.2 Assessment of the claimed amounts

This section assesses the claims for adherence with the relevant version of the NER, examines the method applied and correctness of the calculations of each of the components of net additional costs included in the claims.

### 2.2.1 Additional net direct fuel costs (Gas) – per paragraph 3.15.7B(a3)(1)

The claimant calculated gas costs as follows:

- 1) Calculated the gas volume consumed by the units as the product of the heat rate and energy dispatched while under direction. The heat rate relationship was based on a technical report and the energy quantities was taken from the dispatch data.
- Calculated a volume weighted average price of gas based on the volumes and prices of the gas supplied to the units while generating under direction. Gas prices were supported by invoices.
- 3) Gas transportation costs were not claimed as no additional costs were incurred in connection with the directions.

The costs and method in the view of IES provides a reasonable reflection of the gas costs incurred in relation to carrying out the *direction*.

# 2.2.2 Additional net direct maintenance costs (VOM) – per paragraph 3.15.7B(a3)(2)

The claimant used a VOM rate per hour of operation based on data from a very old study and indexed that cost using an index value based on CPI. The supporting information provided by the claimant applied CPI index data published by the Australian Bureau of Statistics (ABS). Most VOM amounts included in the claim have been indexed to Dec 2022 and some to Dec 2024. The latter is likely due to the fact that the claim, for services rendered in March 2024, was submitted prior to the release of the March quarter data by the ABS. The indexation to Dec 2022 could be due to not updating the index value from an earlier version of the claim spreadsheet model. The amount claimed for VOM was compared to the VOM \$/MWh rate for these units provided in AEMO's input data for 2023-24 market modelling studies '2023 IASR Assumptions Workbook; Variable OPEX tab; Existing, Committed and Anticipated generators table' available on AEMO's



website.<sup>2</sup> AEMO's workbook expresses the VOM costs in 30 June 2023 terms. For the purposes of the determination, AEMO's VOM costs were indexed to terms consistent with the period of the directions using CPI data published by the Australian Bureau of Statistics.<sup>3</sup> The direction occurred during the March 2024 quarter and the CPI index applied to the direction claim amounts was calculated by linear interpolation between the index of the quarter the direction occurred in and the quarter immediately preceding it. The indexation date relating to the direction event was selected by applying the following rule. For direction events that ran over more than two days, a day as close as possible to the middle day was selected as the indexation date. For events that ran over two days the date of the last day of the event was selected. We believe the above approximation is a reasonable rule for determining the claim amount.<sup>4</sup> The VOM estimate based on the indexed ISP data was slightly lower than the claimed amount. We have adjusted downward the VOM amount for this direction by \$6,723.95

### 2.2.3 Additional net direct other costs (FCAS) – per paragraph 3.15.7B(a3)(6)

The claimant included in its claim for additional compensation an amount to recover the FCAS charges it incurred due to carrying out the *direction*. The claimant calculated the dispatched energy from the directed units as a percentage of the total energy and applied that factor to the contingency raise costs incurred during the direction period. The energy quantities were taken from dispatch data. Raise contingency costs are charged to generators on the basis of the energy they produce in each interval. In our view this is a reasonable method of attributing these costs to the direction.

# 2.2.4 Additional net direct other costs (Start-up costs) – per paragraph 3.15.7B(a3)(6)

Start-up costs were based on an engineering report and information provided by the claimant. To assess reasonableness of the stat-up costs included in the claim, the claimed costs were benchmarked against independent information in the public domain for the units concerned. IES has allowed the start-up costs included in the claims.

### 2.2.5 The amount calculated as DCP

The method of calculating the provisional compensation to which a directed participant is entitled (DCP) in the case of a direction for the provision of energy is specified in paragraph 3.15.7(c). The price used in determining the DCP is the 90<sup>th</sup> percentile of prices for energy in the

<sup>&</sup>lt;sup>4</sup> It is noted that estimating VOM with reference to the ISP data indexed by the CPI index data is essentially the same approach adopted in a number of previous determinations. See for example the final determination 'Final Assessment of Additional Compensation for Directions in SA Between February 25th and March 26<sup>th</sup>', 2021 by the consultancy SLC.



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<sup>&</sup>lt;sup>2</sup> AEMO website <a href="https://aemo.com.au/energy-systems/major-publications/integrated-system-plan-isp/2024-integrated-system-plan-isp/current-inputs-assumptions-and-scenarios">https://aemo.com.au/energy-systems/major-publications/integrated-system-plan-isp/2024-integrated-system-plan-isp/current-inputs-assumptions-and-scenarios</a>.

<sup>&</sup>lt;sup>3</sup> Australian Bureau of Statistics, time series workbook. 6401.0 Consumer Price Index, Australia; 'TABLE 5. CPI: Groups, Index Numbers by Capital City', 'Data1', Index Numbers; All groups CPI; Adelaide, Series ID A2325821J. March 2024. Available at <a href="https://www.abs.gov.au/statistics/economy/price-indexes-and-inflation/consumer-price-index-australia/latest-release#data-download">https://www.abs.gov.au/statistics/economy/price-indexes-and-inflation/consumer-price-index-australia/latest-release#data-download</a>

year immediately preceding the trading day of the *direction*. This amount was calculated by AEMO.

### 2.3 Summary of the determination

Following assessment of the claims, the independent expert made, what in our view is, a reasonable adjustment of the claimed amount as discussed above. As a result, the determined amount is lower than claimed by \$6,723.95. Table 4 summarises the determination based on the above assessment. The independent expert's determination is that the claimant is entitled to an additional compensation amount equal to \$1,057,687.88.

Table 4 Summary of determination – Claimant1

Directed unit	Event No.	Total Fuel Cost + VOM Cost + Start up Cost	FCAS Recovery	DCP	Additional Compensation Determination
PS2	472-1	\$401,205.27	\$40.63	\$269,222.92	\$132,022.98
PS2	473-1	\$125,670.42	\$15.60	\$94,155.23	\$31,530.79
PS4	473-2	\$78,103.00	\$2.92	\$36,622.20	\$41,483.72
PS2	474-1	\$127,205.96	\$13.35	\$92,181.49	\$35,037.82
PS3	474-2	\$46,626.22	\$0.96	\$7,269.65	\$39,357.52
PS3	475-1	\$488,310.68	\$59.47	\$359,138.99	\$129,231.17
PS2	475-3	\$91,523.17	\$4.29	\$47,674.96	\$43,852.49
PS2	476-1	\$74,968.94	\$1.40	\$54,080.65	\$20,889.69
PS3	477-1	\$677,285.74	\$125.44	\$493,426.73	\$183,984.44
PS2	477-3	\$96,468.41	\$5.17	\$50,959.59	\$45,513.99
PS2	478-1	\$732,264.29	\$102.32	\$519,286.99	\$213,079.63
PS3	478-2	\$112,684.40	\$12.73	\$82,316.53	\$30,380.60
PS2	479-2	\$368,576.78	\$70.54	\$257,324.30	\$111,323.03
Total		\$3,420,893.28	\$454.81	\$2,363,660.21	\$1,057,687.88

### 3 Claims for additional compensation – Claimant2

### 3.1 Summary of claims

The assessed claims submitted by Claimant2 comprised direct cost components of fuel cost including variable transportation cost, operations and maintenance cost, start-up costs and recovery of contingency FCAS charges incurred while the units operated in compliance with the



directions. The additional compensation claimed is equal to the sum of these components less 'DCP'. The assessed claims submitted by the claimant are summarised in Table 5. Supporting information and calculations were provided by the claimant.

Table 5 Summary of additional compensation claimed – assessed claims – Claimant2

Directed unit	Event No.	Total Fuel Cost + VOM Cost + Start up Cost	FCAS Recovery	DCP	Additional Compensation Claimed
PS1	472-2	\$375,605.30	\$4.15	\$171,493.71	\$204,115.74
PS1	475-2	\$250,188.62	\$109.95	\$101,222.81	\$149,075.76
PS1	477-2	\$397,573.38	\$8.25	\$163,744.68	\$233,836.94
PS1	478-5	\$317,206.03	\$8.33	\$137,101.04	\$180,113.32
PS1	479-5	\$515,607.60	\$14.58	\$227,998.93	\$287,623.25
PS1	480-1	\$102,859.67	\$1.55	\$34,272.21	\$68,589.01
Total		\$1,959,040.59	\$146.81	\$835,833.38	\$1,123,354.02

### 3.2 Assessment of the claimed amounts

This section assesses the claims for adherence with the relevant version of the NER, examines the method applied and correctness of the calculations of each of the components of net additional costs included in the claims.

### 3.2.1 Additional net direct fuel costs (Gas) – per paragraph 3.15.7B(a3)(1)

The claimant calculated gas costs as follows:

- 1) Calculated the gas volume consumed by the directed units based on the deliveries.
- 2) Gas volumes and prices are supported by information contained in invoices. Gas volumes were also reconciled against another reporting source.
- 3) Gas transportation costs were supported by invoices.

The costs and method in the view of IES provides a reasonable reflection of the gas costs incurred in carrying out the *direction*.

# 3.2.2 Additional net direct maintenance costs and start costs) – per paragraphs 3.15.7B(a3)(2) and 3.15.7B(a3)(6)

The claimant included costs for O&M and start-up costs attributed to the direction. These are based on actual costs incurred reviewed on a regular basis.



### 3.2.3 Additional net direct other costs (FCAS) – per paragraph 3.15.7B(a3)(6)

The claimant included in its claim for additional compensation an amount to recover the FCAS charges it incurred due to carrying out the *direction*.

#### 3.2.4 The amount calculated as DCP

The method of calculating the provisional compensation to which a directed participant is entitled (DCP) in the case of a direction for the provision of energy is specified in paragraph 3.15.7(c). The price used in determining the DCP is the 90<sup>th</sup> percentile of prices for energy in the year immediately preceding the trading day of the *direction*. This amount was calculated by AEMO. The claimant rounded DCP amounts for each five-minute interval to the nearest cent and summed the rounded amounts. AEMO provided DCP amounts for each direction event based on the sum of amounts per interval before rounding, with the rounding applied to the aggregate DCP amount of each direction event. Rounding of the sum of each direction is a more reasonable practice than summing rounded amounts for each interval. In arriving at the determined claim amount we have adjusted the claimed amount by using the amounts provided by AEMO. We consider this to be a reasonable adjustment. The adjustment resulted in a small reduction of the claimed amount (\$0.23).

### 3.3 Summary of the determination

Following assessment of the claims, the independent expert made, what in our view is, a reasonable adjustment of the claimed amount as discussed above. As a result, the determined amount is lower than claimed by \$0.23. Table 6 summarises the determination based on the above assessment. The independent expert's determination is that the claimant is entitled to an additional compensation amount equal to \$1,123,353.79.

Table 6	Summa	ry of determinatio	n – Claimant2		
Directed unit	Event No.	Total Fuel Cost + VOM Cost + Start up Cost	FCAS Recovery	DCP	Additional Compensation Determination
PS1	472-2	\$375,605.30	\$4.15	\$171,493.82	\$204,115.63
PS1	475-2	\$250,188.62	\$109.95	\$101,222.78	\$149,075.79
PS1	477-2	\$397,573.38	\$8.25	\$163,744.76	\$233,836.86
PS1	478-5	\$317,206.03	\$8.33	\$137,101.11	\$180,113.25
PS1	479-5	\$515,607.60	\$14.58	\$227,998.93	\$287,623.25
PS1	480-1	\$102,859.67	\$1.55	\$34,272.21	\$68,589.01
Total		\$1,959,040.59	\$146.81	\$835,833.60	\$1,123,353.79

### 4 Submissions on matters in the Draft Determination Report

Interested parties are invited to make submissions on the matters contained in the draft determination report in accordance with the intervention settlement timetable. Details of the closing time to receive submissions are set out in said timetable. This invitation is in fulfilment of the requirements of the NER.

