

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

15 May 2023

**Final 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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# 1 Introduction

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 45 to 48 in 2022.

## 1.1 Background and direction to participants

During billing weeks 45 to 48 in 2022 AEMO issued directions to maintain the system in a secure operating state and provide frequency control ancillary services (FCAS). Under NER Clause 3.15.7B(c)(1) AEMO must refer claims that exceed \$20,000 to an independent expert. The directions associated with the claims that have been assessed for Claimant 1 are summarised in Table 1 with the information appropriately masked to maintain confidentiality. For each directed unit in an event, the table shows the time and date the direction was issued along with the start and end time for each direction.

**Table 1 Summary of the directions – assessed claims**

Directed unit	Event number	Issued	Effective	Ended	Reason
PS2	200-1	12/11/2022 17:00	13/11/2022 6:00	13/11/2022 16:00	System security
PS4	200-2	12/11/2022 17:00	13/11/2022 2:00	13/11/2022 3:30	System security
PS2	203-2	17/11/2022 16:40	18/11/2022 8:30	19/11/2022 19:00	FCAS

The applicable versions of the NER are version 189 and 191 with respective start and end dates of 27 October 2022 to 14 Nov 2022 and 17 November 2022 to 30 November 2022.

## 1.2 Description of services provided

AEMO issued directions to the participant to maintain power system security and provide FCAS. 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 Clause 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 due to:

- Additional net direct fuel costs (Gas) – per 3.15.7B(a3)(1), plus



- Additional net direct maintenance costs (VOM) – per 3.15.7B(a3)(2), plus
- Additional net direct other costs (FCAS and start-up costs where applicable) – per 3.15.7B(a3)(6), less
- The amount calculated as ‘DCP’ under 3.15.7(c). AEMO calculates the provisional compensation in accordance with 3.15.7(c) and informs the directed participant pursuant to 3.15.7(e).

AEMO has calculated the compensation amount the directed participant is entitled to receive, DCP, in accordance with NER Clause 3.15.7(c).

Where it is considered important for clarity, terms defined in the NER have been italicised in the report. A reference to a clause 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 – Claims for additional compensation – Claimant1, and

Section 3 – 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 (Gas), 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 2. The amounts in the claims submitted by the claimant were all rounded to the nearest dollar. 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 2 Summary of additional compensation claimed – assessed claims**

Directed unit	Event No.	Total Fuel Cost	VOM Cost + Start up Cost	FCAS Recovery	DCP	Additional Compensation Claimed
PS2	200-1	\$78,959.43	\$47,592.46	\$193,798.62	\$133,891.17	\$186,459.34
PS4	200-2	\$13,940.57	\$181.16	\$162,879.97	\$23,602.86	\$153,398.83
PS2	203-2	\$583,456.23	\$14,296.62	\$42,924.86	\$568,870.34	\$71,807.37
Total		\$676,356.23	\$62,070.23	\$399,603.45	\$726,364.37	\$411,665.55



## 2.2 Assessment of the claimed amounts

This Section assesses the claimed amount by examining the method used and correctness of the calculation of each of the components of net additional costs included in the claim.

### 2.2.1 Additional net direct fuel costs (Gas) – per 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.
- 2) 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 and, where applicable, transaction notes for spot purchase.
- 3) Gas transportation costs were not claimed as no additional costs were incurred in connection with the directions.
- 4) Spot purchases with supporting information were included in one claim.

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 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 by 2.5% for each year from the date of the study to the present. This is not a reliable estimate of VOM but the claimant could not furnish other supporting data. In view of this we have compared the estimates in the claim against the VOM \$/MWh rate for these units provided in the 2022 ISP plan supporting material, 'Forecasting Assumptions Update workbook; Variable OPEX tab; Existing, Committed and Anticipated generators table' available on AEMO's website.<sup>1</sup> The workbook expresses the VOM costs in June 2021 terms and the amounts were indexed to terms consistent with the period of the directions using CPI data published by the Australian Bureau of Statistics.<sup>2</sup> Given the period over which the directions occurred fell during the quarter, the CPI index applied to the direction period was calculated by linear interpolation between the index of the quarter the direction occurred in and the quarter immediately preceding it. For the purposes of calculating the index, the directions were taken to have occurred at the midpoint of the direction period. In our view, this is a reasonable estimate of the index. 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 final determination.<sup>3</sup> The VOM estimate based on the indexed ISP data was below the claimed amount for the direction event 200-1. This is the direction event with the smallest MWh under

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<sup>1</sup> <https://aemo.com.au/energy-systems/major-publications/integrated-system-plan-isp/2022-integrated-system-plan-isp/current-inputs-assumptions-and-scenarios>.

<sup>2</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. December 2022. Accessed 24 February 2023. Available at <https://www.abs.gov.au/statistics/economy/price-indexes-and-inflation/consumer-price-index-australia/latest-release#data-download>

<sup>3</sup> See for example the final determination 'Final Assessment of Additional Compensation for Directions in SA Between February 25th and March 26th', 2021 by the consultancy SLC.



direction. We have adjusted downward the VOM amount for this direction by \$174.49 and accepted the VOM as claimed for the remaining directions.

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

Start-up costs, incurred in some events, were based on an engineering report and information provided by the claimant. To assess reasonableness of the start-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 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.

**2.3 Summary of the determination**

The independent expert made what, in our view, is a more reasonable estimate of the VOM costs related to the direction as discussed above. As a result, the determined amount is less than claimed by \$174.49. Table 3 summarises the determination based on the above assessment. Following assessment of the claims, the independent expert’s determination is that the claimant is entitled to an additional compensation amount equal to \$411,491.06.

**Table 3 Summary of determination**

Directed unit	Event No.	Total Fuel Cost	VOM Cost + Start up Cost	FCAS Recovery	DCP	Additional Compensation determination
PS2	200-1	\$78,959.43	\$47,417.97	\$193,798.62	\$133,891.17	\$186,284.85
PS4	200-2	\$13,940.57	\$181.16	\$162,879.97	\$23,602.86	\$153,398.83
PS2	203-2	\$583,456.23	\$14,296.62	\$42,924.86	\$568,870.34	\$71,807.37
<b>Total</b>		\$676,356.23	\$61,895.74	\$399,603.45	\$726,364.37	\$411,491.06





### **3 Submissions on matters in the Draft Determination Report**

No submissions were received on the draft determination report.

