

NEM Event 10 to 23 June 2022 Supplementary Directions Report

July 2023





Important notice

Purpose

Where the Australian Energy Market Operator (AEMO) intervenes in the National Electricity Market (NEM) through the use of directions, AEMO must publish details relating to the recovery of compensation for directions as specified in National Electricity Rules (NER) clause 3.13.6A(b). This report provides those details in relation to a series of reliability directions issued between 10 and 23 June 2022, and is based on information available to AEMO as at 26 July 2023.

Unless otherwise indicated, terms in this report have the same meanings as those defined in the NER.

All references to time in this report are Australian Eastern Standard Time (AEST).

Disclaimer

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Abbreviations

Abbreviation	Expanded name
APC	administered price cap
APP	administered price period
CPT	cumulative price threshold
CRA	compensation recovery amount
IE	Independent Expert
LOR	Lack of reserve
MN	Market Notice
MNSP	market service network provider
MW	megawatt/megawatts
MSPS	market suspension pricing schedule
NEM	National Electricity Market
NER	National Electricity Rules
TI	Trading Interval

1 Summary

During June 2022, a confluence of high commodity prices, domestic market price caps, planned and unplanned outages of scheduled generating plant, low output from semi-scheduled generation, and high winter demand conditions led to unprecedented challenges operating the National Electricity Market (NEM).

AEMO issued a large number of directions (reliability and other compensable services) between 10 and 23 June 2022 to manage actual and forecast lack of reserve (LOR) conditions:

- On 10 June 2022, there were noticeable changes in generator bidding as the rolling sum of spot prices for the previous seven days in some NEM regions approached the cumulative price threshold (CPT), which would trigger an administered price cap (APC). A significant reduction in generation volumes offered to the market on 10 June 2022 saw the first actual LOR level 2 conditions in this series of events. This necessitated the first reliability directions associated with this series of events.
- On 12 June 2022, CPT was reached in Queensland at 1850 hrs. This was followed by the CPT being reached in New South Wales, South Australia and Victoria on 13 June. Commencement of the Administered Price Period (APP) coincided with reductions in the amount of generation offered into the market, resulting in forecast and actual LOR conditions requiring AEMO to intervene by directing generators to make capacity available for system reliability.
- Over the following days, AEMO continued to intervene and direct market participants. The large number of constraints necessary to manage directions and supply limitations created issues for AEMO's automated systems and processes that become impossible to manage, ultimately resulting in AEMO suspending the market on at 1400 hrs on 15 June 2022.
- AEMO continued to issue directions under market suspension, however the volumes and number of directions required progressively declined after 18 June 2022, with all directions cancelled by 23 June 2022.

Clause 4.8.9 of the National Electricity Rules (NER) allows AEMO to intervene in the market by issuing directions or clause 4.8.9 instructions, if AEMO is satisfied that it is necessary to maintain or re-establish the power system to a secure, satisfactory, or reliable operating state. Section 116 of the National Electricity Law allows AEMO to issue directions to take certain action if AEMO considers that it is necessary to maintain power system security or for reasons of public safety.

After it issues a direction, AEMO is required to report on the matters specified in clause 3.13.6A of the NER. AEMO published a report in August 2022¹ that addressed clause 3.13.6A(a) relating to the circumstances and the system and market consequences of these directions. This is a supplementary report covering the compensation reporting requirements specified in NER 3.13.6A(b).

Note that this report only includes details about the recovery of compensation paid for directions under NER 3.15.7, 3.15.7A and 3.15.7B. It does not cover market suspension pricing schedule (MSPS) compensation and APC compensation. AEMO is reporting separately on compensation relating to MSPS periods (NER 3.14.5A and additional compensation under NER 3.15.7B)². APC compensation is determined by the Australian Energy Market

¹ AEMO 2022, *NEM market suspension and operational challenges in June 2022*, Section 5.3: https://aemo.com.au/-/media/files/electricity/nem/market_notices_and_events/market_event_reports/2022/nem-market-suspension-and-operational-challenges-in-june-2022.pdf?la=en.

² When published, the market suspension compensation report will be available at <https://aemo.com.au/energy-systems/electricity/national-electricity-market-nem/nem-events-and-reports/market-event-reports>.

Commission (AEMC) and AEMO is not required to report on it. AEMO has, however, issued a series of market updates³ on the amount of all forms of compensation recoverable from market participants in relation to the June 2022 events.

2 Directions costs and recovery

Between 10 and 23 June 2022, AEMO issued a series of directions across the NEM to maintain the power system in a reliable operating state. In accordance with NER 3.15.8(a) and (g), the total compensation recovery amount⁴ (CRA) for the provision of energy and other compensable services directed by AEMO during this period was \$18,368,835 (Table 1). This amount includes claims for additional compensation by Directed Participants assessed by an independent expert (IE) and fees payable to the IE pursuant to NER 3.12.3.

Table 1 Reliability directions CRA between 10 and 23 June 2022 – energy and other compensable services

	Total compensation recovery amount (CRA)
Reliability directions (energy) – see Table 2	\$8,719,592
Reliability directions (other compensable services) – see Table 3	\$9,649,243
Total	\$18,368,835

Reliability directions (energy)

The total CRA for reliability directions (energy) during this reporting period was \$8,719,592. The component breakdown is calculated in accordance with NER 3.15.8(a) and is detailed in Table 2.

AEMO determined direction compensation payments for each Directed Participant for the provision of energy in accordance with NER 3.15.7(c). For Directed Participants who were also Market Suspension Compensation Claimants between 1400 hrs on 15 June 2022 and 0400 hrs on 23 June 2022⁵, any formula-based compensation entitlements were calculated in accordance with the MSPS compensation provisions, and are therefore not included in the directions CRA⁶. For convenience, AEMO's separate MSPS compensation report will include these amounts, together with additional compensation payable under NER 3.15.7B to Directed Participants who were also Market Suspension Compensation Claimants. The additional compensation amount shown in Table 2 represents payments under NER 3.15.7B to Directed Participants outside the MSPS period, or who were not also Market Suspension Compensation Claimants.

Table 2 Reliability directions CRA between 10 and 23 June 2022 – energy

	Direction compensation payment	Retained trading amount ^A	Settlement compensation	Additional compensation	IE fee	Compensation recovery amount
Reliability directions (energy)	\$24,782,966	\$22,672,018	\$2,110,948	\$6,561,706	\$46,937	\$8,719,592

Note: Excludes system security directions to South Australian generators during this reporting period.

A. Current design of the settlements system involves calculation and payment of trading amounts to directed generators during the period of direction, that is, trading amounts are calculated and paid as normal using spot or ancillary service prices, as though there was no direction.

³ AEMO NEM events and reports: <https://aemo.com.au/en/energy-systems/electricity/national-electricity-market-nem/nem-events-and-reports>

⁴ Compensation recovery amounts are calculated in accordance with NER 3.15.8(a).

⁵ AEMO declared the spot market suspended in all NEM regions with market suspension pricing schedules in place for all trading intervals in this period.

⁶ See NER 3.15.7(d1).

Reliability directions (other compensable services)

In addition to the directions for the provision of energy, AEMO also issued a number of directions to pumped hydro storage systems during this period in New South Wales and Queensland to maintain the power system in a reliable operating state (Market Notice (MN) 97215 and MN 97068). AEMO determined that the directions for pumped hydro storage were to provide 'other compensable services' under NER 3.15.7A (being a service that is neither the provision of energy or market ancillary services, nor a direct substitute for them). Directed participants for other compensable services were entitled to claim fair payment compensation under NER 3.15.7A. Total CRA for the provision of these services was \$9,649,243, which includes the fees payable to the IE to assess these claims (Table 3).

Table 3 Reliability directions CRA between 10 and 23 June 2022 – other compensable services (pumped hydro)

	Fair payment compensation	IE fee	Compensation recovery amount (CRA)
Other compensable services	\$9,637,243	\$12,000	\$9,649,243

Regional benefit factors and CRA allocation by region and participant type

Compensation cost recovery arising from directions is allocated to NEM regions using a regional benefit calculation determined by AEMO in accordance with NER 3.15.8(b1). This is then recovered from Registered Participants in proportion to the energy purchased in each relevant region. The regional benefit factors determined by AEMO for these reliability directions are detailed in Table 4, and apply to the CRA for both energy and other services directions.

Table 4 Directions CRA regional benefit factors

Region	During Queensland APC only ^A	Reliability directions ^B
South Australia	0%	7%
New South Wales	0%	40%
Queensland	100%	27%
Victoria	0%	26%
Tasmania	0%	0%

A. Between Trading Interval (TI) ending 1855 hrs on 12 June 2022 (when APP commenced in Queensland) and 1835 hrs on 13 June 2022 (when APP commenced in New South Wales).

B. Between 1835 hrs on 13 June 2022 and 0400 hrs on 23 June 2022. During this period Tasmania did not benefit from market suspension compensation and is therefore excluded from the regional benefit determination.

As shown in Table 5 and Table 6, compensation for energy directions was recovered from Market Customers (NER 3.15.8(a)), while the recovery of fair payment compensation for other compensable services directions (pumped hydro) was shared between Market Customers, Market Generators and Small Generation Aggregators in accordance with NER 3.15.8(g).

Table 5 Directions CRA breakdown by Registered Participant and region – energy

Region	New South Wales	Queensland	South Australia	Tasmania	Victoria	Total
Market Customer	\$1,229,179	\$6,476,339	\$215,106	\$0	\$798,967	\$8,719,592

Table 6 Directions CRA breakdown by Registered Participant and region – other compensable services

Region	New South Wales	Queensland	South Australia	Tasmania	Victoria	Total
Market Customer	\$2,061,993	\$1,186,859	\$319,203	\$0	\$1,176,517	\$4,744,572
Market Generator	\$1,795,087	\$1,415,828	\$353,582	\$0	\$1,327,966	\$4,892,462
Market Small Generation Aggregator	\$2,617	\$2,609	\$2,662	\$0	\$4,320	\$12,209
Total	\$3,859,697	\$2,605,296	\$675,447	\$0	\$2,508,803	\$9,649,243

Direction compensation recovery data can also be found on the AEMO website⁷.

⁷ AEMO, Direction Compensation Recovery: <https://aemo.com.au/en/energy-systems/electricity/national-electricity-market-nem/data-nem/settlements-data/direction-compensation-recovery>.