

Wholesale Demand Response

June 2024

Annual Report

A report on the operation of the arrangements for the provision of wholesale demand response





Important notice

Purpose

AEMO publishes the Wholesale Demand Response Annual Report under clause 3.10.6 (a) of the National Electricity Rules. This publication has been prepared by AEMO using information available at 7 June 2024. Information made available after this date may have been included in this publication where practical.

Disclaimer

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Version control

Version	Release date	Changes
1	27/06/2024	

Executive summary

This report provides information on wholesale demand response (WDR) operations, including on baseline methodologies, WDR performance and WDR trends, as required under the National Electricity Rules (NER) clause 3.10.6 (a) for the period of 1 July 2023 to 7 June 2024.

The report finds that overall, the available baselines methodologies and the eligibility assessment, compliance testing and non-conformance processes are all functioning as expected. AEMO believes that the baseline accuracy and bias thresholds remain appropriate.

In terms of WDR operations, there has been a slow build of WDR capacity registered since the start of the mechanism. Most of the WDR events to date have been in the NSW and VIC regions, concentrated in the May to October periods, with very little WDR over summer seasons. The key operational statistics for WDR are shown in Table 1.

Table 1 WDR operation – key statistics as of 7 June 2024

Key statistic	Value
Baseline methodologies available	4
Baseline methodologies used by participants	2
Total DRSP registered	1
Total WDRUs registered	15
Total NMIs registered	26
Regions in which NMIs are registered	NSW, VIC, SA, QLD
Total capacity registered (MW)	63.0 MW
Number of NMIs not passing compliance testing – July 2023 to June 2024	8 (Summer 2023-24), 2 (Winter 2024)
WDR event days – July 2023 to June 2024	17 days
Region of WDR events	NSW, QLD, SA, VIC
Total WDR dispatched - July 2023 to June 2024 (MWh)	156 MWh
Average Volume Weighted Price for WDR - July 2023 to June 2024 (\$/MWh)	1,312 \$/MWh to 7,949 \$/MWh across the states
Non-conformance frequency - July 2023 to June 2024	None
Non-conformance extent - July 2023 to June 2024	5 MWh

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1 Background

The WDR mechanism commenced on 24 October 2021, implementing the AEMC's WDR Mechanism rule¹ of June 2020. The WDR mechanism allows demand side (or consumer) participation in the wholesale electricity market. 'Demand Response Service Providers' (DRSP) classify and aggregate the demand response capability of large market loads for dispatch through the NEM's standard bidding and scheduling processes. The DRSP receive payment for the dispatched response, against a baseline estimate, at the electricity spot price.

1.1 Rules requirements

Under NER clause 3.10.6 (a), within six months after the end of each calendar year, AEMO is required to publish an annual report including the following information on DRSP-led wholesale demand response (without disclosing any confidential information):

- the number of registered DRSPs
- the number and capacity of loads classified as wholesale demand response units
- the amount of demand response dispatched in the wholesale market under the wholesale demand response mechanism, as well as the frequency of dispatch
- analysis of the spot price levels at which wholesale demand response was dispatched
- analysis of the impact of wholesale demand response on the procurement and use of market ancillary services
- relevant trends, including year-on-year changes over time

1.2 Procedural requirements

Under clause 2.8 of AEMO's WDRM Baseline Eligibility, Metrics and Compliance Policy², AEMO has committed to undertake an annual review of the suitability of the eligibility and compliance methodology as well as the metrics thresholds (See Section 2.7 of the Report).

¹ <https://www.aemc.gov.au/rule-changes/wholesale-demand-response-mechanism>

² https://aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2020/wdrm-becm-policy/first-round/baselines-eligibility-compliance-and-metrics-policy.pdf?la=en

2 Baseline methodologies reporting

Under NER 3.10.6 (b) AEMO is required to report on outcomes relating to the use and accuracy of baseline methodologies, including on the following:

- Baseline methodologies available
- Baseline methodology use
- Proposals for new baseline methodologies
- Baseline methodology assessment
- Baseline non-compliance
- Improvements to WDR provision
- Timing of any improvements

2.1 Baseline methodologies available

The baseline methodologies (and their associated key settings) available for use currently under the wholesale demand response guidelines are shown in Table 2. They are outlined in the Baseline Methodologies Register³.

Table 2 Baseline methodologies – key settings summary table

	All Days (BM1)	Business Days (BM2)	Non-Business Days (BM3)	Business + Non-Business Days Composite (BM4) ⁴
BM ID	BM1	BM2	BM3	BM4
Framework	CAISO 10 of 10	CAISO 10 of 10	CAISO 4 of 4	CAISO 10 of 10 CAISO 4 of 4
Day type	All days.	Business days only.	Non-business days only.	Business days and non-business days.
Baseline window	50 days	50 days	50 days	50 days
Selected days	Most recent 10 days (minimum 5).	Most recent 10 business days (minimum 5).	Most recent 4 non-business days (minimum 4).	Most recent 10 business days (minimum 5). Most recent 4 non-business days (minimum 4).

³ <https://aemo.com.au/initiatives/trials-and-initiatives/wholesale-demand-response-mechanism/wdr-participant-toolbox/wdr-baseline-methodology-register>

⁴ The Business + Non-Business Days Composite baseline methodology (BM4) will be referred to as 'Composite' in the tables in the report in the interest of brevity.

	All Days (BM1)	Business Days (BM2)	Non-Business Days (BM3)	Business + Non-Business Days Composite (BM4) ⁴
Unadjusted baseline energy for TI	Average metered energy for TI for selected days.	Average metered energy for TI for selected days.	Average metered energy for TI for selected days.	Average metered energy for TI for selected days.
Baseline adjustment	Multiplicative adjustment with $\pm 20\%$ cap.	Multiplicative adjustment with $\pm 20\%$ cap.	Multiplicative adjustment with $\pm 20\%$ cap.	Multiplicative adjustment with $\pm 20\%$ cap.
Baseline adjustment window (settlement)	3 hrs ending 1 hr prior to the first TI of WDR.	3 hrs ending 1 hr prior to the first TI of WDR.	3 hrs ending 1 hr prior to the first TI of WDR.	3 hrs ending 1 hr prior to the first TI of WDR.
Baseline adjustment window (PoL)	3 hrs ending 1 hr prior to TI.	3 hrs ending 1 hr prior to TI.	3 hrs ending 1 hr prior to TI.	3 hrs ending 1 hr prior to TI.
Required number of eligibility days	50	50	20	50
Eligibility TIs window	3pm to 8pm (market time)	3pm to 8pm (market time)	3pm to 8pm (market time)	3pm to 8pm (market time)
Required number of compliance days	50	50	20	50
Compliance TIs window	3pm to 8pm (market time)	3pm to 8pm (market time)	3pm to 8pm (market time)	3pm to 8pm (market time)

2.2 Baseline methodology use

The extent to which each of the baseline methodologies are being used is shown in Table 3. Most of the registered NMI's are using baseline methodology 4 (Business + Non-Business Days Composite). Table 4 shows that correspondingly, most of the WDR capacity is also registered under BM4. There were seven NMI's registered in the past year, the majority of which have been under BM4. There were also four NMI's that changed baseline methodology from BM1 to BM4, and one which changed from BM2 to BM4.

There were 16 NMI's declassified, of which seven were BM1, two were BM2 and seven were BM4.

Table 3 Number of NMI's per baseline methodology

	All Days (BM1)	Business Days (BM2)	Non-Business Days (BM3)	Composite (BM4)	Total number of NMI's
June 2022	-	2	-	23	25

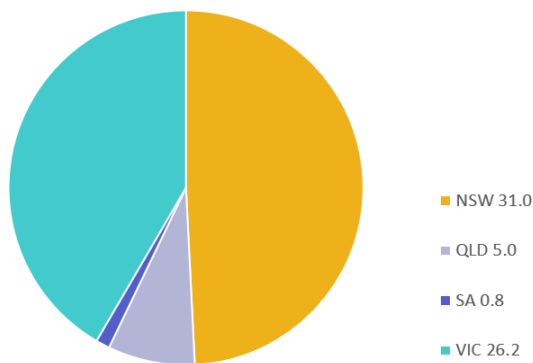
	All Days (BM1)	Business Days (BM2)	Non-Business Days (BM3)	Composite (BM4)	Total number of NMIs
June 2023	14	2	-	18	34
June 2024	5	-	-	21	26

Table 4 Total capacity (MW) per baseline methodology

	All Days (BM1)	Business Days (BM2)	Non-Business Days (BM3)	Composite (BM4)	Total Capacity
June 2022	-	1.0	-	60.6	61.6
June 2023	9.9	1.0	-	54.4	65.3
June 2024	6.0	-	-	57.0	63.0

The breakdown of capacity by region is shown in Figure 1. It is split largely between the NSW and VIC regions, with a small amount of capacity in the SA and QLD regions.

Figure 1 Capacity by region (MW)



2.3 Proposals for new baseline methodologies

Under NER clause 3.10.6 (b) (1) (ii) AEMO is required to outline any proposals for new baseline methodology received by AEMO and new baseline methodologies being developed.

AEMO has received one official submission for three new baseline methodologies during the reporting period. The proposed baseline methodologies are:

1. Proposed BM 1 - 10 of 10 (all days)
 - o Baseline lookback window of 20 days for baseline eligibility and compliance

- A new setting allowing a DRSP to specify the “end of period” date for compliance assessment
 - Uncapped negative day-of adjustments
2. Proposed BM 2 – High 3 of 10 (all days)
- High 3 of 10 baseline for all days
 - Baseline lookback window of 20 days for baseline eligibility and compliance
 - A new setting allowing a DRSP to specify the “end of period” date for compliance assessment
 - Uncapped negative day-of adjustments
3. Proposed BM 3 – High 3 of 10 (business days)
- High 3 of 10 baseline for business days only
 - Baseline lookback window of 20 days for baseline eligibility and compliance
 - A new setting allowing a DRSP to specify the “end of period” date for compliance assessment
 - Uncapped negative day-of adjustments

AEMO is currently assessing these proposed baseline methodologies according to the process outline in the WDR Guidelines⁵.

2.4 Baseline methodology assessment

NER clause 3.10.6 (b) (2) outlines that for each baseline methodology, an assessment against the baseline methodology metrics as measured during the wholesale demand response unit classification process and baseline compliance testing must be completed for this Report.

To participate in WDR, the DRSP must demonstrate that the baseline methodology, when applied to the load and using the proposed baseline settings and historical metering data for the load produces a baseline that satisfies the baseline methodology metrics. The two baseline methodology metrics used to assess a baseline’s eligibility for WDR (baseline eligibility assessment) and continued compliance (baseline compliance testing) are accuracy and bias.

- Accuracy is the measure of deviation between the actual load and its baseline.
- Bias is the systematic tendency of a baseline method to over- or under-predict actual loads.

Table 5 to Table 6 outline the minimum, maximum and average accuracy and bias scores for the baseline methodologies currently in use (BM1, BM2 and BM4), both under baseline eligibility assessment and baseline compliance testing. Baseline compliance testing was conducted as outlined in the WDRM Baseline Eligibility, Metrics and Compliance Policy on the 29th and 30th of November 2023, and then again on the 30th and 31st of May 2024. The compliance testing results shown below are for the May 2024 compliance test, as they are the most recent/relevant.

⁵ Please see at: <https://aemo.com.au/-/media/files/initiatives/wdr/wdr-guidelines.pdf?la=en>

Any NMI which failed compliance testing have been excluded from the compliance testing statistics shown in this section. More details about the NMIs that failed compliance testing can be found in Section 2.5.

The results for BM1 can be seen in Table 5. Only one new NMI registering under this methodology between July 2023 and 7 June 2024 and consequently, due to confidentiality issues, there is no data available for eligibility assessment in this report for BM1.

The average accuracy score was well below the 20% accuracy threshold at 11% for compliance testing. There is also a wide range of accuracy scores across eligibility/compliance testing, ranging from 3.8% to close to the threshold at 18.3%. This suggests that there are different types of loads participating in WDR with different load profiles and hence accuracy scores.

The average bias scores were also significantly lower than the 4% threshold for compliance testing at 0.2%. The bias scores were closely grouped with a range of from 0% to 0.3%.

Table 5 All Days (BM1) – Eligibility assessment and compliance testing results

	Eligibility Assessment		Compliance Testing ⁶	
	Accuracy	Bias ⁷	Accuracy	Bias
Minimum			3.8	0.0
Maximum			18.3	0.3
Average			11.0	0.2

There are currently no NMIs registered under BM2, with one new NMI registering and then declassifying under this methodology between July 2023 and 7 June 2024. Consequently, due to confidentiality issues, there is no data available for this report for BM2.

As shown in Table 6 for BM4, the average accuracy score was below the 20% accuracy threshold at under 16%, for both eligibility assessment and compliance testing. There is also a wide range of accuracy scores across eligibility/compliance testing, ranging from as low as 0.5% to almost hitting the threshold at 19.8%. This suggests that there are different types of loads participating in WDR with different load profiles and hence accuracy scores.

The average bias scores were also significantly lower than the 4% threshold for both eligibility and compliance testing and a wide range of bias scores from 0% to the very close to the top of the limit at 3.9%.

⁶ Only NMIs that passed the compliance test were included in the accuracy and bias statistics.

⁷ Minimum, maximum and average values calculated from absolute bias scores.

Table 6 Composite (BM4) – Eligibility assessment and compliance testing results

	Eligibility Assessment		Compliance Testing ⁸	
	Accuracy	Bias ⁹	Accuracy	Bias
Minimum	10.0	0.1	0.5	0.0
Maximum	19.8	0.7	13.9	3.9
Average	15.2	0.4	8.0	0.7

2.4.1 Trends in accuracy and bias

The average accuracy and bias scores for eligibility assessment over the past three years for each BM are shown in Table 7 and Table 8. As shown, there has been an increase in the average accuracy scores for BM4 over the past 3 years. There are no trends evident for the other baseline methodologies due to lack of data at this time.

Table 7 Eligibility assessment – average accuracy score over time

	All Days (BM1)	Business Days (BM2)	Non-Business Days (BM3)	Composite (BM4)
Nov 21 - Jun 2022	-	14.7%	-	8.8%
Jul 2022 – Jun 2023	9.7%	-	-	10.0%
Jul 2023 – Jun 2024	-	-	-	15.2%

Table 8 Eligibility assessment – average bias score over time

	All Days (BM1)	Business Days (BM2)	Non-Business Days (BM3)	Composite (BM4)
Nov 21 - Jun 2022	-	3.0%	-	0.4%
Jul 2022 – Jun 2023	0.4%	-	-	1.4%
Jul 2023 – Jun 2024	-	-	-	0.4%

The average accuracy and bias scores for compliance testing over the past two years (compliance testing completed in June 22, May 2023 and May 2024) for each BM are shown in Table 9 and Table 10. There are no trends evident for any of the baseline methodologies.

⁸ Only NMLs that passed the compliance test were included in the accuracy and bias statistics.

⁹ Minimum, maximum and average values calculated from absolute bias scores.

Table 9 Compliance assessment – average accuracy score over time

	All Days (BM1)	Business Days (BM2)	Non-Business Days (BM3)	Composite (BM4)
June 2022	-	14.7%	-	8.9%
May 2023	10.8%	16.1%	-	6.9%
May 2024	11.0%	-	-	8.0%

Table 10 Compliance assessment – average bias score over time

	All Days (BM1)	Business Days (BM2)	Non-Business Days (BM3)	Composite (BM4)
June 2022	-	0.9%	-	0.3%
May 2023	0.4%	1.3%	-	0.2%
May 2024	0.2%	-	-	0.7%

2.5 Baseline non-compliance

When AEMO conducted baseline compliance testing, a number of NMI's (see Table 11 and Table 12) failed to pass the baseline compliance test. This means that these NMI's baselines no longer meet the required accuracy and/or bias thresholds. This can occur for a number of reasons, such as a significant change in plant operations or business model or a seasonal characteristic of the particular load. Such NMI's are set as non-compliant in AEMO's systems and are unable to partake in WDR until they pass baseline compliance testing at a future date. A DRSP may also re-submit an amended application for compliance testing if appropriate, using 'exclusion days' to remove any abnormal loads from the baseline compliance testing calculation.

All NMI's that were found to be baseline non-compliant have provided an available capacity of zero for the WDRU. There have been no periods in which a baseline non-compliant WDRU has bid in, or was dispatched.

For Summer 2023/24 compliance testing, there were originally eight NMI's that failed the compliance test, seven of which were BM1 and the other BM2. The DRSP re-submitted amended applications for three of these NMI's within days of the compliance testing and each of these subsequently passed. Of the other five, three have since been declassified, the other two are currently still non-compliant awaiting other applications.

Table 11 NMI compliance testing - November 2023

	All Days (BM1)	Business Days (BM2)	Non-Business Days (BM3)	Composite (BM4)	Total
Total number of NMI's	9	1	-	28	38

	All Days (BM1)	Business Days (BM2)	Non-Business Days (BM3)	Composite (BM4)	Total
Number of NMIs that failed compliance testing	7	1	-	0	8
% of NMIs failing compliance testing	78%	100%	-	0%	21%

For Winter 2024, two NMIs failed the compliance testing. Both failed to meet the accuracy and bias thresholds.

Table 12 NMI compliance testing - May 2024

	All Days (BM1)	Business Days (BM2)	Non-Business Days (BM3)	Composite (BM4)	Total
Total number of NMIs	5	-	-	21	26
Number of NMIs that failed compliance testing	0	-	-	2	2
% of NMIs failing compliance testing	0%	-	-	10%	8%

2.6 Improvements to WDR provision

Under NER clause 3.10.6 (b) (4) any potential improvements to the provision of WDR under the Rules, together with the associated timing and process for making any improvements (NER 3.10.6 (b) (5)) needs to be included in this Report.

AEMO published two new documents in the reporting time frame to assist participants:

1. New Baseline Methodology Proposal – Required Information¹⁰

Document outlines the information to be provided to AEMO in an application by a Market Participant proposing a new baseline methodology for WDRM.

2. WDRM – Exclusion days¹¹

Document provides additional clarity around the use of eligibility and compliance exclusion days under WDRM.

There have been no changes to the Portfolio Management System (PMS) used by DRSPs in the 2023/24 financial year.

¹⁰ Please see at: <https://aemo.com.au/-/media/files/initiatives/wdr/new-baseline-methodology-proposal-required-information.pdf?la=en>

¹¹ Please see at: <https://aemo.com.au/-/media/files/initiatives/wdr/wdrm-exclusion-days.pdf?la=en>

2.7 Suitability of eligibility and compliance methodology

Under clause 2.8 of AEMO's WDRM Baseline Eligibility, Metrics and Compliance Policy¹², AEMO committed to undertaking an annual review of the suitability of the eligibility and compliance methodology as well as the metrics thresholds.

2.7.1 Eligibility assessment

With 26 NEMs registered and 17 event days of WDR in the past year (a total of 68 event days since November 2021), it is still difficult to draw firm conclusions regarding the long-term efficacy of eligibility and compliance methodology or the accuracy and bias thresholds. However, as shown in Section 2.4, the NEMs registered for WDR, when tested for eligibility, have a wide variety of accuracy and bias characteristics, with an average accuracy and bias values well below the 20% and $\pm 4\%$ thresholds respectively. This suggests that WDR and baseline methodologies employed, together with the eligibility assessment methodology is suitable for a variety of load types.

AEMO has not encountered a large number of NEMs brought forward by market participants that have failed to pass eligibility assessments, or encountered loads which should be suitable for WDR but have been excluded due to the eligibility assessment criteria or the thresholds. There is no indication that the supply of NEMs suitable to participate in WDR have been exhausted, particularly in regions other than VIC and NSW, or that further participation in WDR is limited by the eligibility assessment methodology or the accuracy and bias thresholds.

2.7.2 Compliance testing

With regards to the compliance testing methodology, the fourth and fifth bi-annual compliance test for all NEMs was undertaken at the end of November 2023 and at the end of May 2024, respectively. The compliance testing ran smoothly and did not encounter any issues. Most NEMs tested had very similar accuracy and bias statistics in the compliance test as seen in the eligibility assessment, suggesting that their loads are largely predictable in a way suitable to participate in WDR.

As discussed in Section 2.5, a number of NEMs did not pass the compliance test due to exceeding the accuracy and/or bias thresholds. The reason for not passing the compliance test was not due to any issues with the methodology, but simply a result of changing load patterns or seasonality of load. Some of the non-compliant NEMs may again become baseline compliant, due to changing circumstances and/or seasonality changes in the future, other may choose to declassify.

2.7.3 Accuracy and bias thresholds

Based on the data to date, AEMO believes that the baseline eligibility and compliance methodologies, together with the accuracy and bias metrics result in loads that have accurate and unbiased baselines participating in WDR and that the demand response provided under the WDRM is real and additional.

¹² https://aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2020/wdrm-becm-policy/first-round/baselines-eligibility-compliance-and-metrics-policy.pdf?la=en



As such, AEMO currently sees no evidence for changing the eligibility assessment or compliance testing methodologies or raise or lower the accuracy and bias thresholds.

2.7.4 Other settings

AEMO believes that all other baseline settings relevant to the eligibility and compliance methodology, including the baseline adjustment cap, selected days, baseline window, baseline adjustment window, required number of eligibility days and required number of compliance days are working as intended and require no adjustment at this time.

3 WDR performance

Under NER clause 3.10.6 (c), the Report must include, for the period under review the following:

- the number of registered DRSPs and the number and WDRUs
- the amount of dispatched WDR, the frequency of dispatch and the spot market price levels at which wholesale demand response was dispatched
- the frequency and extent of WDRU declared to be non-conforming
- analysis of the impact of dispatched WDR on the procurement and use of each market ancillary service
- analysis of trends, including year-on-year changes

3.1 DRSPs and WDRUs

The number of registered DRSPs and the number and capacity of WDRUs over the past 2 years is shown in Table 13 below. As shown, there has been a small increase in WDRUs and decrease in WDRU capacity over the past year, with one DRSP continuing to be active in WDR.

Table 13 DRSPs, WDRUs and total capacity

Date	Registered DRSPs	WDRUs	Total WDRU capacity
June 2022	1	12	61.6MW
June 2023	1	13	65.3MW
June 2024	1	15	63.0MW

3.2 Wholesale demand response dispatch and pricing

To 7 June 2024, there has been a total of 156¹³ MWh of WDR dispatched since the start of July 2023, and a total of 749¹⁴ MWh since the mechanism began in October 2021. The WDR dispatch occurred in the NSW, QLD, SA and VIC regions.

Table 14 WDR dispatched over time

Date	WDR dispatched	Number of days with WDR events
Oct 2021 – Jun 2022	348 MWh	21
July 2022 – Jun 2023	245 MWh	30

¹³ WDR calculated from metered energy minus baseline energy

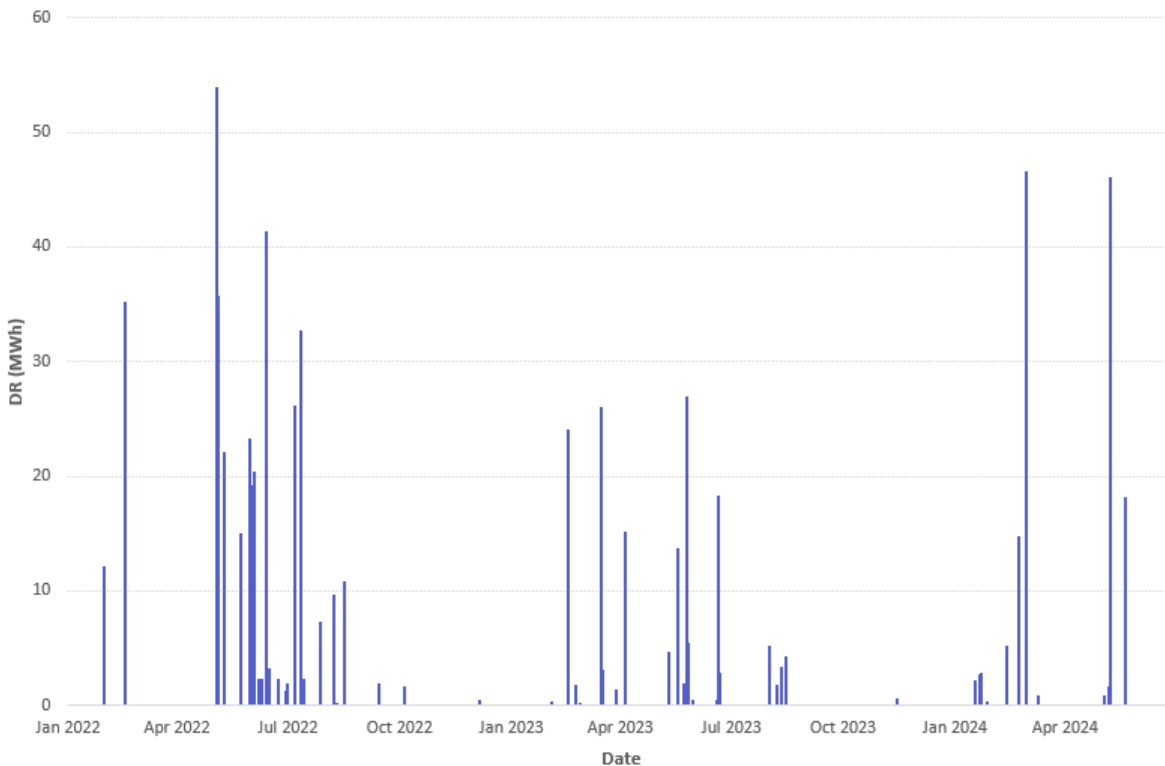
¹⁴ WDR calculated from metered energy minus baseline energy



Date	WDR dispatched	Number of days with WDR events
July 2023 – June 2024	156MWh	17
Total since start of WDR	749MWh	68

The amount of WDR dispatched over time is shown in Figure 2 below. There were relatively few events over all three of the summer periods, likely due to relatively low prices. In 2022, WDR dispatch activity increased significantly from May onwards. While for 2023, WDR events have happened sporadically since February, increasing in frequency over the May to June timeframe. In 2024, there are two significant spikes, one at the end of February and the other at the start of May.

Figure 2 WDR dispatched over time (MWh)



The average volume weighted price for WDR per region is shown in Table 15. NSW had the highest number of WDR events and the highest dispatch volumes. Both NSW and VIC had WDR dispatched at a higher average volume weighted price than the previous year (close to \$8000 per MWh). As QLD and SA had very small amounts of WDR dispatched, there are no particular conclusions drawn from the average volume weighed price for those regions.

Table 15 Average Volume Weighted Price for WDR per region ¹⁵

	Average Volume Weighted Price (\$/MWh) (Jul 22 – Jun 23)	Average Volume Weighted Price (\$/MWh) (Jul 23 – 7 Jun 24)
NSW	\$2,084	\$7,671
QLD	\$832	\$1,312
SA	\$284	\$5,778
VIC	\$732	\$7,949

3.3 Non-conformance

Dispatch conformance is assessed at an interval (MW) and settlement day (MWh) level as outlined in Section 3 of the Post-Event Dispatch Conformance Policy¹⁶. Due to the small size of most WDRUs (i.e. 9 out of 15 being under 6MW in size) and the interval MW error non-conformance threshold being 6MW, the interval assessment shows no intervals have been deemed as non-conforming (i.e. demand response is not within 6MW of the dispatch target) over the past year.

From a settlement day perspective, 5 out of 38 dispatch events have been deemed non-confirming (per Dispatchable Unit Identifier (DUID) Settlement Day) over the past year. At the Settlement Day level, there was a total of 5MWh of non-conformance for the reporting period.

There have been a small number of DUIDs with non-conformance occurrences, with only one DUID reaching the rules prescribed three event limit over the past year. This DUID reached the limit through sequential non-conformance events, and was set to non-compliant. It was determined that one of the NMs within this DUID was not compatible with WDR, and has since been declassified. This WDRU has since been returned to compliant, and has not had further non-conformance.

The frequency and extent of WDRUs declared to be non-conforming under NER clause 3.8.23(a) since the start of WDR is shown in Table 16 below. As shown, non-conformance has been minor over both the 2023 and 2024 reporting periods.

Table 16 Non-conformance over time

Non-conformance measure	Jul 22 – Jun 23	Jul 23 – Jun 24
Non-conformance frequency (Trading Intervals)	None	None
Extent of non-conformance – Interval (MW)	0 MW	0 MW

¹⁵ The average volume weighted price is calculated based on dispatch volume and not trade volume.

¹⁶ <https://aemo.com.au/-/media/files/initiatives/wdr/2021/post-event-dispatch-conformance-policy.pdf?la=en>

Non-conformance measure	Jul 22 – Jun 23	Jul 23 – Jun 24
Non-conformance frequency	16 out of 81 dispatch events	5 out of 38 dispatch events
Extent of non-conformance Settlement Day (MWh)	9 MWh	5 MWh

3.4 WDR effect on market ancillary services

Due the low volume/size of WDR dispatch to date, there is no perceivable effect of WDR in the procurement and use of market ancillary services.

Glossary

This document uses many terms that have meanings defined in the National Electricity Rules (NER). The NER meanings are adopted unless otherwise specified.

Term	Definition
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator Limited
AER	Australian Energy Regulator
BL	Baseline
DRSP	Demand Response Service Provider
WDRU	Wholesale Demand Response Unit
NER	National Electricity Rules
WDR	Wholesale Demand Response
WDRM	Wholesale Demand Response Mechanism
NMI	National Metering Identifier