



WEM Quarterly Market Review

Q3 2025

Introduction

What is this report and where did all the data come from?

- This report presents an independent review of Wholesale Electricity Market (WEM) outcomes in Q4 2024 from a neutral perspective (*).
- The material in this report is intended to complement the data and insights published by AEMO and other WEM stakeholders.
- Please note that there is no proprietary data used in this report and all the information is derived from the following publicly available data sources:

Data Source	Link
AEMO WA market data	http://data.wa.aemo.com.au/
WEM market fees	https://aemo.com.au/-/media/files/about_aemo/energy_market_budget_and_fees/2023/wa-budget-and-fees-2023-24.pdf?la=en
LGC spot prices (Demand Manager)	https://www.demandmanager.com.au/certificate-prices/
Perth daily temperatures (Bureau of Meteorology)	http://www.bom.gov.au/climate/dwo/IDCJDW6111.latest.shtml

Highlights from Q3 2025

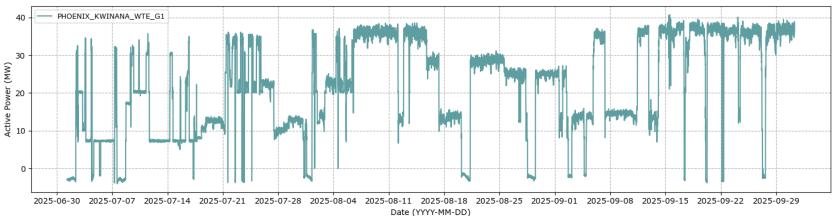
Records and Kwinana Energy Recovery coming online

- There was a new Winter peak operational demand record of 3,977 MW at 6:25pm on Monday 28 July 2025.
 - The record was broken three times within a week, first on 21 July 2025 (3,676 MW) and then on 24 July 2025 (3,758 MW).
 - The previous record was 3,673 MW set at 6pm on 26 June 2023.
- On 27 September 2025 at 12:05pm, <u>AEMO reported that the unscheduled minimum</u>
 demand record was also broken (449 MW), however the minimum operational demand
 of 819 MW remained well above the record low of 523 MW due to charging from the
 utility-scale battery fleet.
- Kwinana Energy Recovery (PHOENIX_KWINANA_WTE_G1) underwent commissioning tests in Q3 2025 and appears to be progressing well:



Source: AEMO

Kwinana Energy Recovery – Q3 2025 SCADA output



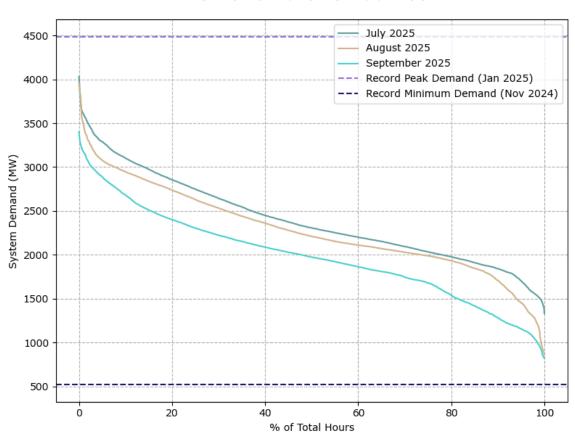
.01 System

Aggregate system level outcomes

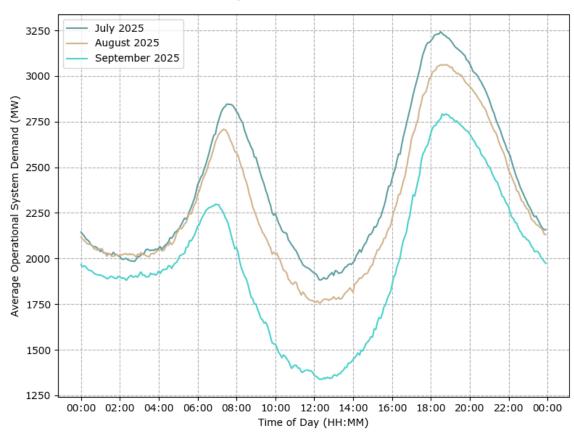
System Operational Demand

System operational demand duration curves and time-of-day averages

Demand Duration Curves



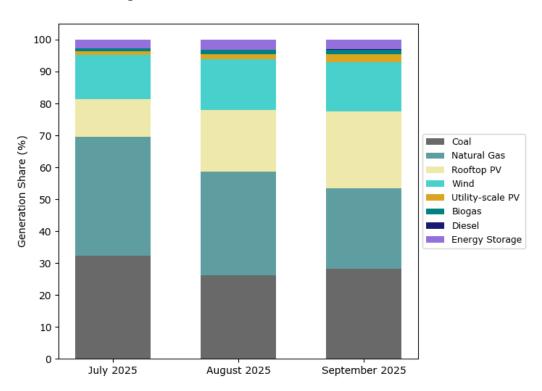
Average Time-of-Day Demand



Generation Mix

Categorised by fuel / technology type

Q3 2025 Generation Mix



Generation Mix Breakdown

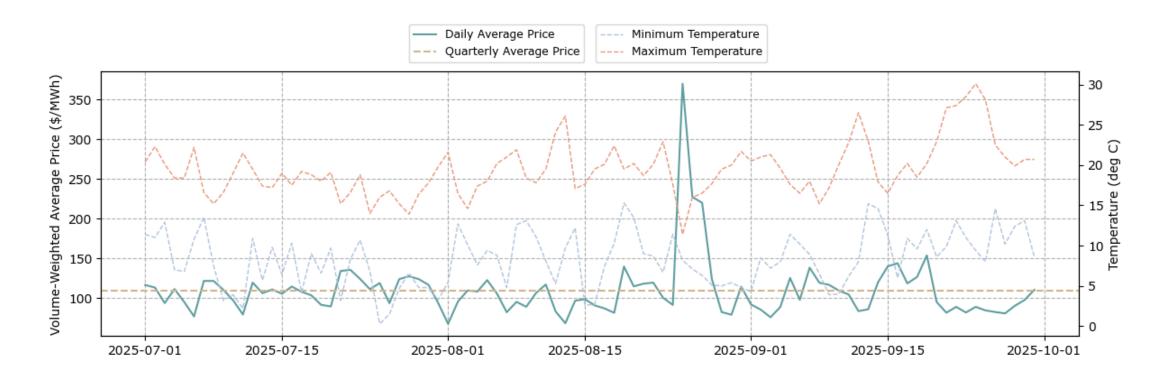
Category	Jul 2025	Aug 2025	Sep 2025
Coal	655 GWh (32.4%)	549 GWh (26.2%)	531 GWh (28.2%)
Natural Gas	752 GWh (37.2%)	680 GWh (32.5%)	472 GWh (25.1%)
Rooftop PV	238 GWh (11.8%)	401 GWh (19.1%)	455 GWh (24.2%)
Wind	280 GWh (13.8%)	335 GWh (16%)	289 GWh (15.3%)
Utility PV	26 GWh (1.3%)	36 GWh (1.7%)	50 GWh (2.7%)
Biogas	17 GWh (0.9%)	25 GWh (1.2%)	26 GWh (1.4%)
Diesel	1 GWh (0%)	1 GWh (0%)	0 GWh (0%)
Storage (*)	55 GWh (2.7%)	68 GWh (3.2%)	58 GWh (3.1%)
TOTAL	2,024 GWh	2,095 GWh	1,881 GWh

^(*) Energy storage is only counted when discharging.

Ampere Labs

Energy Prices

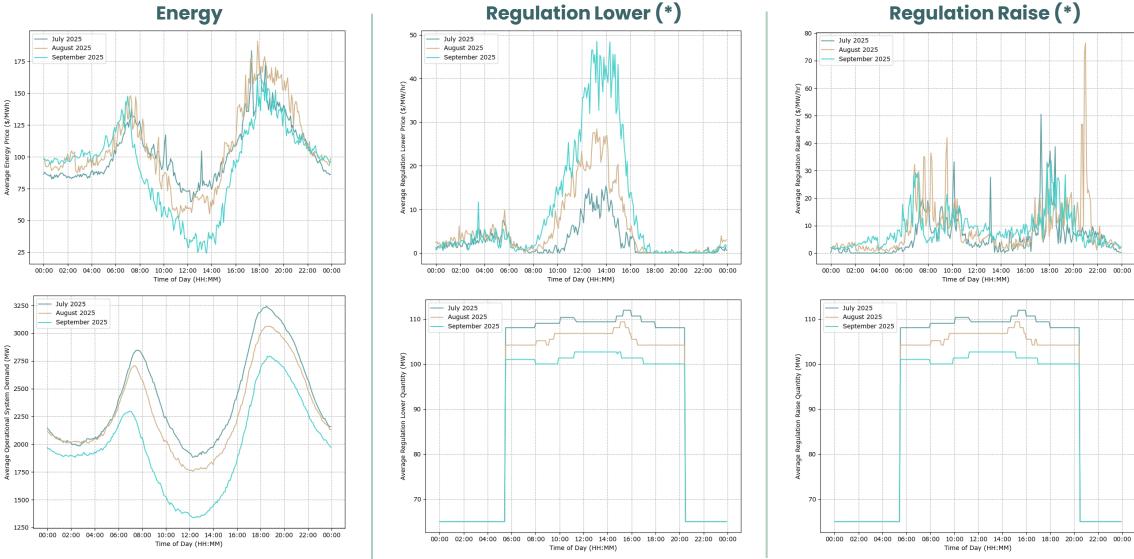
Daily volume-weighted energy prices and daily min/max Perth temperatures (*)



^(*) Daily temperatures are based on BOM observations at the <u>Perth Metro site</u>.

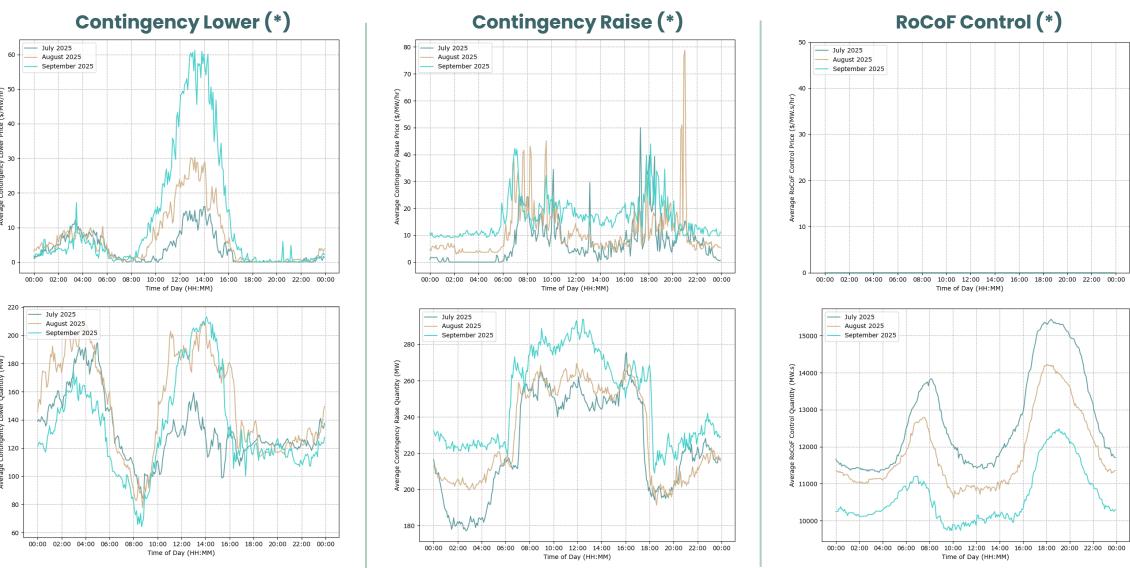
Average time-of-day clearing prices and quantities (1)

Energy, Regulation Lower and Regulation Raise ESS



Average time-of-day clearing prices and quantities (2)

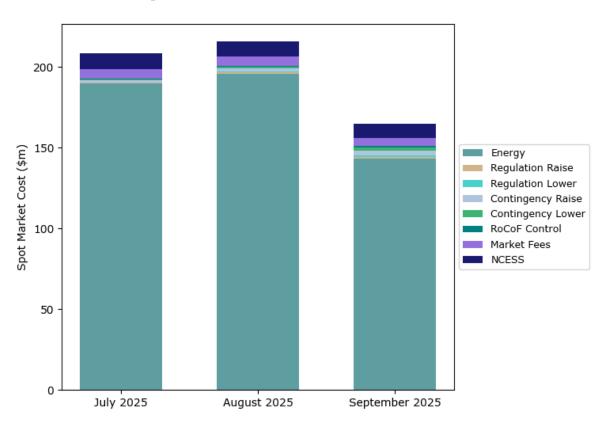
Contingency Lower, Contingency Raise and RoCoF Control ESS



WEM Total Spot Market Costs

Total mark-to-market cost of the WEM (excluding Reserve Capacity)

Q3 2025 Market Costs



Market Cost Breakdown (\$m AUD)

Category	Jul 2025	Aug 2025	Sep 2025
Energy	\$189.72m	\$195.71m	\$143.42m
Regulation Raise (*)	\$0.51m	\$0.77m	\$0.82m
Regulation Lower (*)	\$0.24m	\$0.5m	\$0.79m
Contingency Raise (*)	\$1.31m	\$2.07m	\$3.26m
Contingency Lower (*)	\$0.63m	\$1.18m	\$2.02m
RoCoF Control (**)	\$0.19m	\$0.4m	\$0.68m
Market Fees	\$6.24m	\$5.87m	\$4.93m
NCESS	\$9.54m	\$9.34m	\$8.84m
TOTAL	\$208.38m	\$215.84m	\$164.77m
\$/MWh	\$120.96	\$133.24	\$121.01

^(*) Includes estimated FCESS Uplift Payments (**) Excludes Energy Uplift Payments (not publicly available)

.02 Facilities

Selected facility level outcomes

Facility-Level Metrics

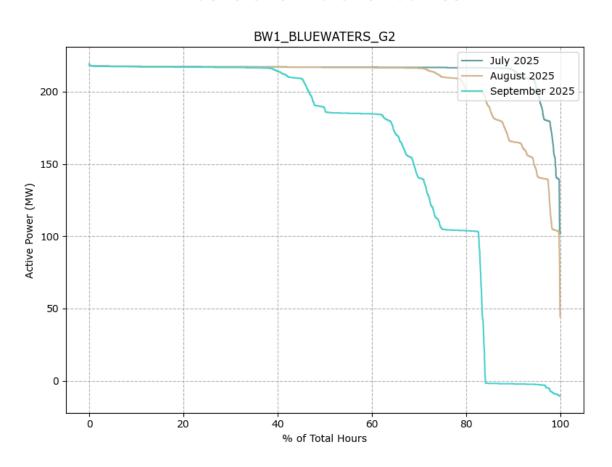
Definitions for the facility-level metrics reported in this section

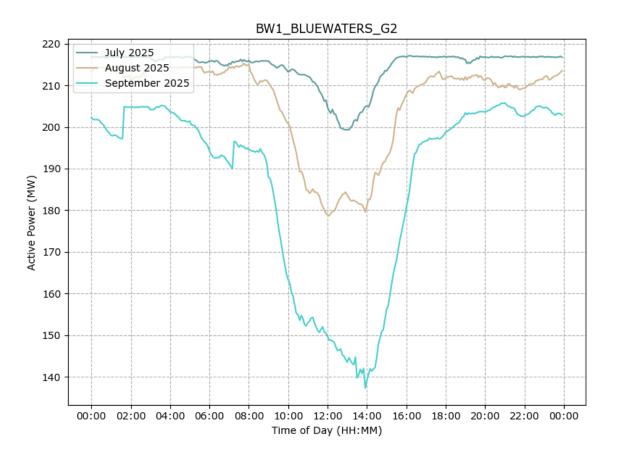
Facility Metric	Description
Monthly Generation Duration Curve	Curve showing the proportion of time in a month that a facility is operating above a specific output.
Average Time of Day Output	Curve showing the mean output from a facility over a month at a 5-min resolution (with no adjustments for a facility being offline).
Facility Merchant Spot Revenue	The implied monthly revenue that a facility would have received from all energy and ESS markets if it were a merchant facility. Where a facility receives Large Generation Certificate (LGC), this revenue is estimated based on publicly available LGC spot prices <u>published on Demand Manager</u> .
Facility Capacity Factor	Daily average capacity factors based on the daily energy generated and the <u>registered facility size</u> . Note that for energy storage facilities, the net energy throughput is used.
Average Energy Capture Price	Daily average volume weighted energy price that the facility receives based on the following calculation: $ \frac{\sum Energy\ Revenue}{\sum Energy\ Generated\ or\ Consumed } $

Bluewaters Power Station BW1-G2

Coal-fired Scheduled Facility, 217 MW, Summit Southern Cross Power

Generation Duration Curves

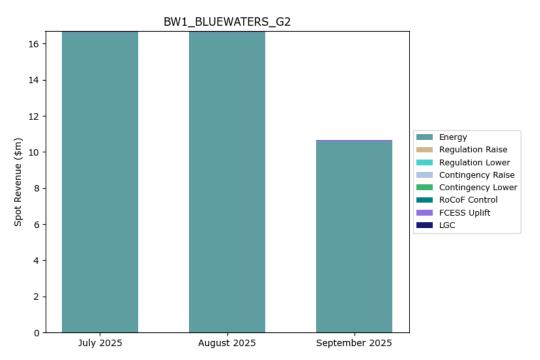


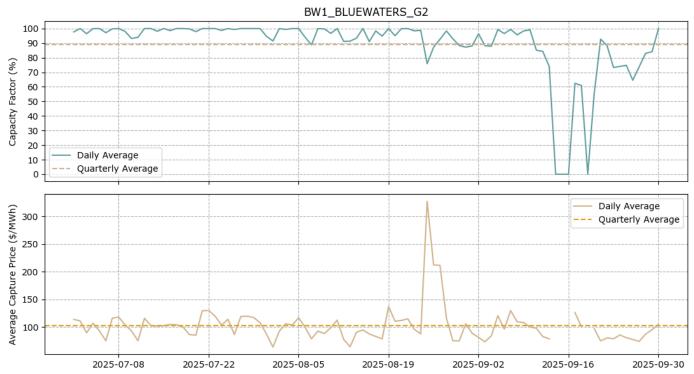


Bluewaters Power Station BW1-G2

Coal-fired Scheduled Facility, 217 MW, Summit Southern Cross Power

Facility Merchant Spot Revenue





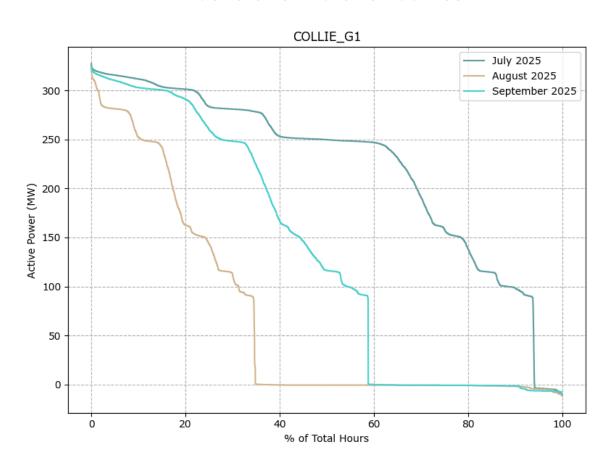
	Jul 2025	Aug 2025	Sep 2025
Energy Generated (GWh)	159.51	153.35	113.55
Total Spot Revenue (\$m)	16.65	16.70	10.68
\$/MWh	\$104.37	\$108.91	\$94.06

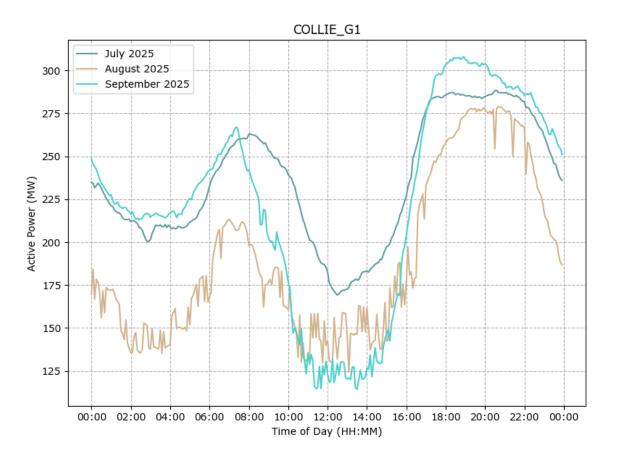


Collie Power Station G1

Coal-fired Scheduled Facility, 318.3 MW, Synergy

Generation Duration Curves

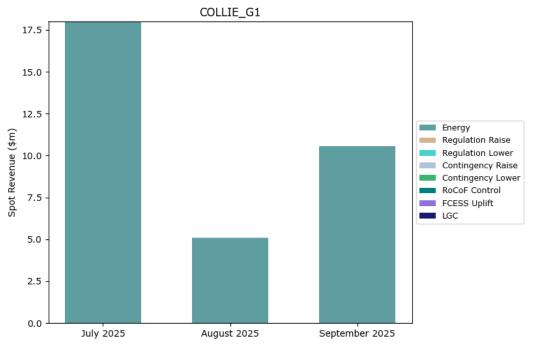


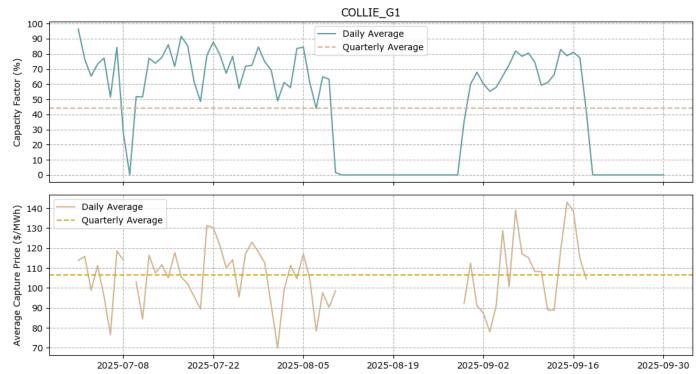


Collie Power Station G1

Coal-fired Scheduled Facility, 318.3 MW, Synergy

Facility Merchant Spot Revenue





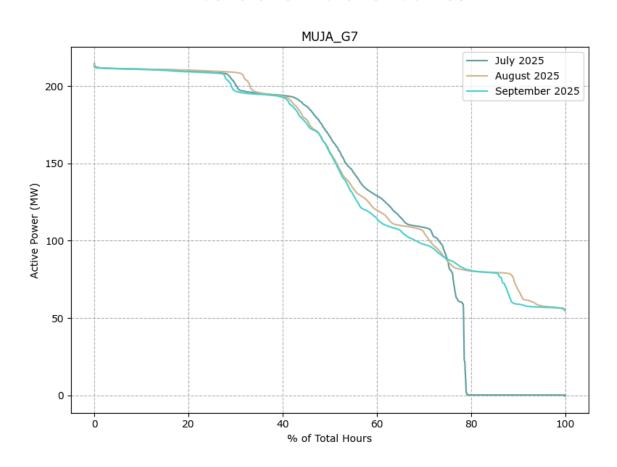
	Jul 2025	Aug 2025	Sep 2025
Energy Generated (GWh)	164.34	50.91	95.00
Total Spot Revenue (\$m)	18.00	5.10	10.57
\$/MWh	\$109.56	\$100.12	\$111.30

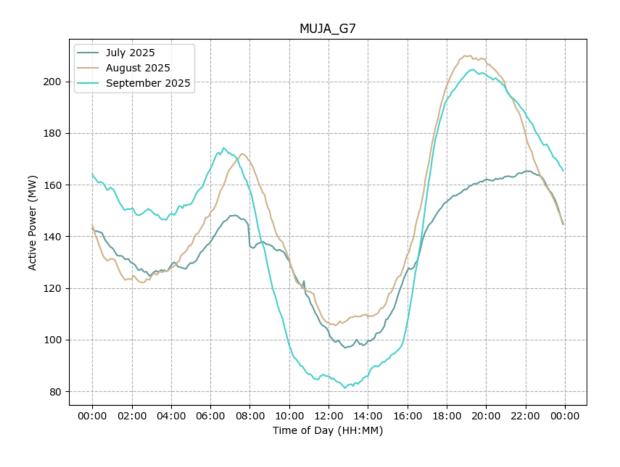


Muja Power Station G7

Coal-fired Scheduled Facility, 212.6 MW, Synergy

Generation Duration Curves

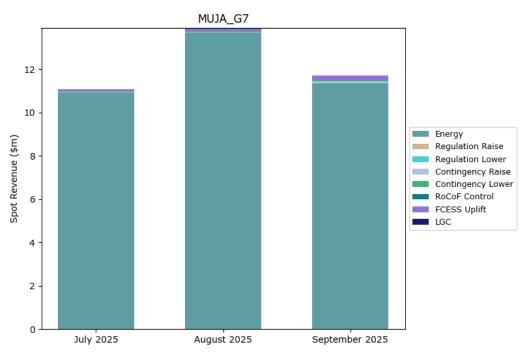


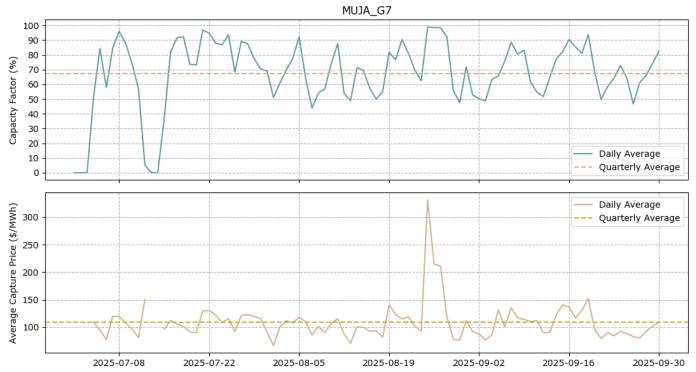


Muja Power Station G7

Coal-fired Scheduled Facility, 212.6 MW, Synergy

Facility Merchant Spot Revenue





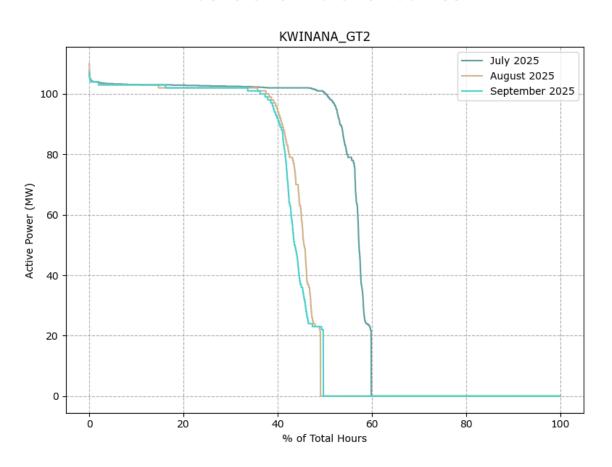
	Jul 2025	Aug 2025	Sep 2025
Energy Generated (GWh)	100.52	110.40	105.08
Total Spot Revenue (\$m)	11.09	13.90	11.71
\$/MWh	\$110.28	\$125.94	\$111.42

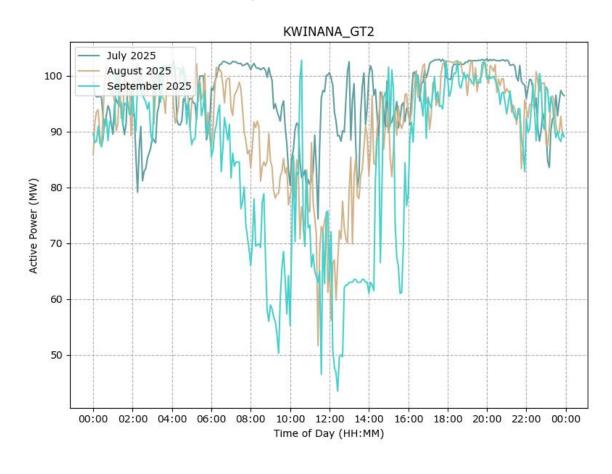


Kwinana Power Station GT2

Gas-fired Scheduled Facility, 103.94 MW, Synergy

Generation Duration Curves

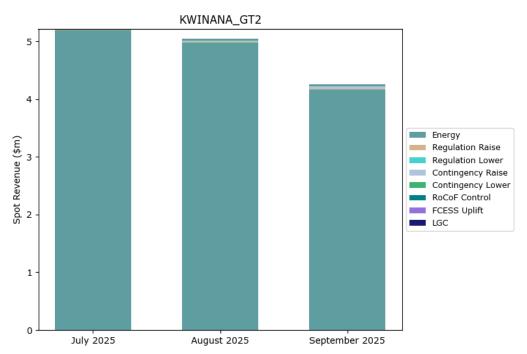


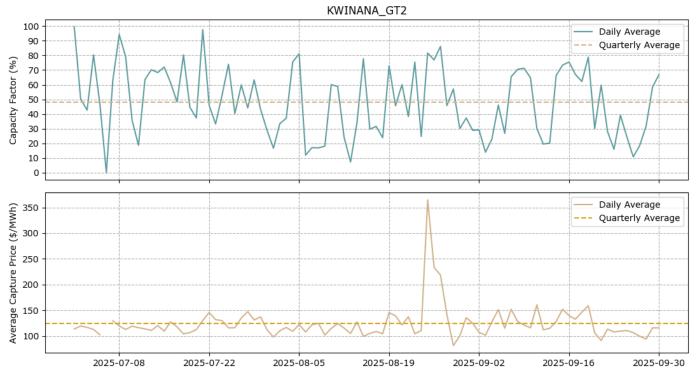


Kwinana Power Station GT2

Gas-fired Scheduled Facility, 103.94 MW, Synergy

Facility Merchant Spot Revenue



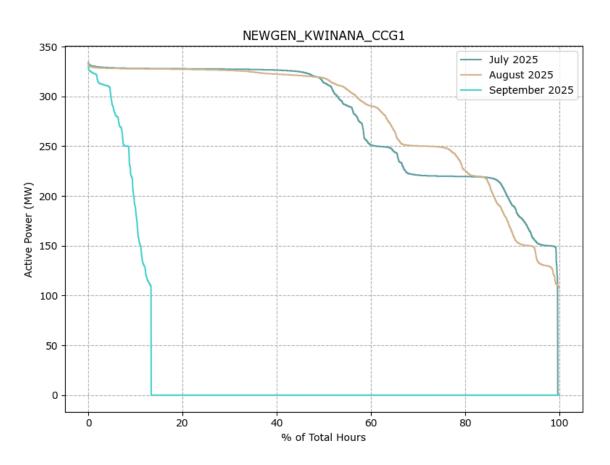


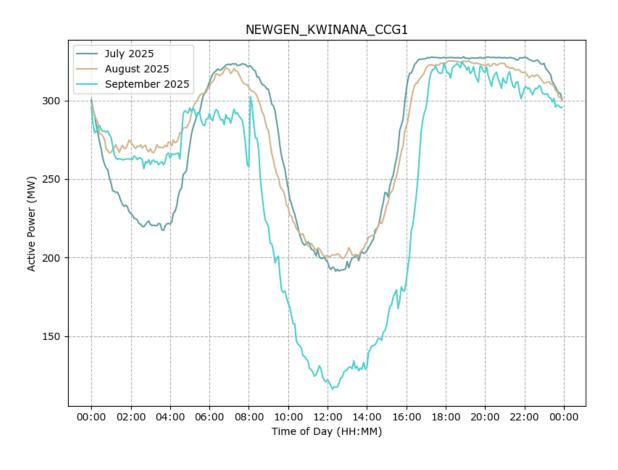
	Jul 2025	Aug 2025	Sep 2025
Energy Generated (GWh)	43.39	34.60	32.85
Total Spot Revenue (\$m)	5.22	5.06	4.26
\$/MWh	\$120.32	\$146.09	\$129.62

Newgen Kwinana Power Station

Gas-fired Scheduled Facility, 334.8 MW, Summit Southern Cross Power

Generation Duration Curves

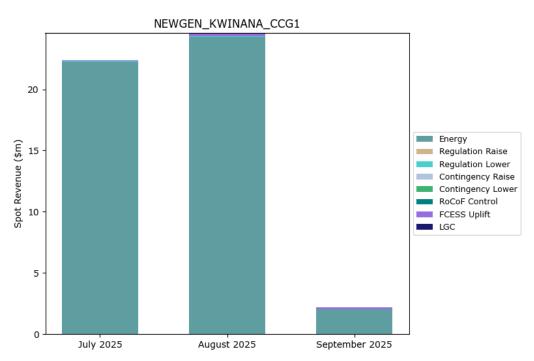


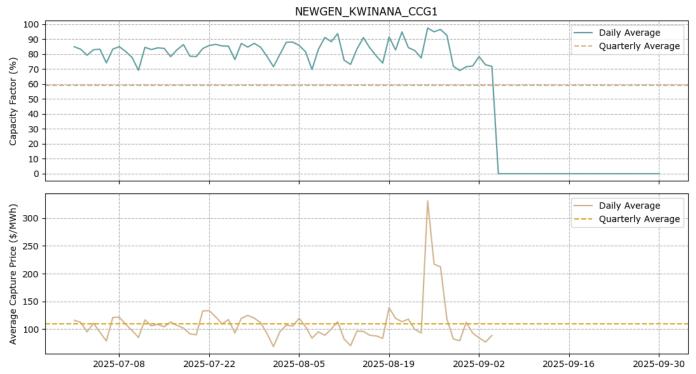


Newgen Kwinana Power Station

Gas-fired Scheduled Facility, 334.8 MW, Summit Southern Cross Power

Facility Merchant Spot Revenue



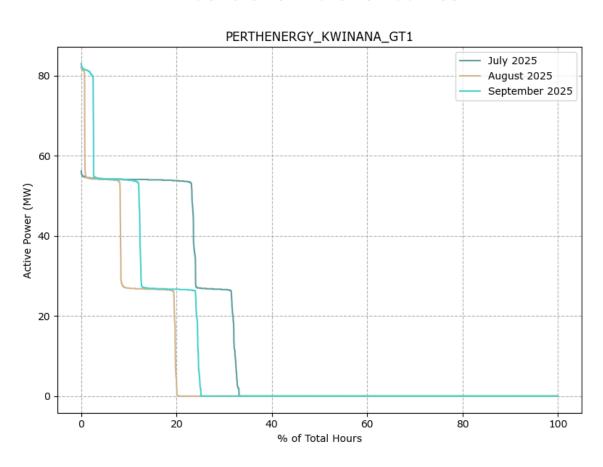


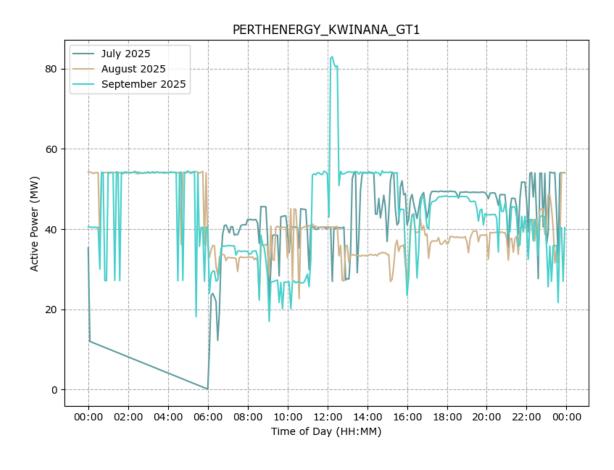
	Jul 2025	Aug 2025	Sep 2025
Energy Generated (GWh)	205.02	208.09	23.72
Total Spot Revenue (\$m)	22.39	24.61	2.20
\$/MWh	\$109.19	\$118.25	\$92.58

Kwinana Swift Power Station

Gas-fired Scheduled Facility, 109 MW, AGL (Perth Energy)

Generation Duration Curves

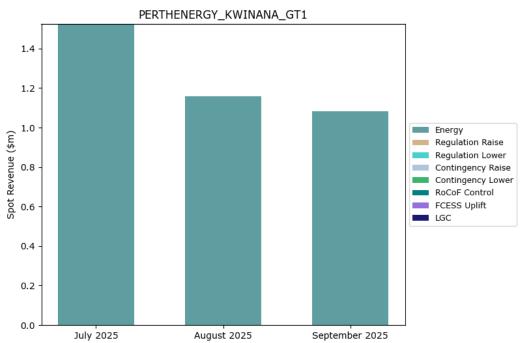


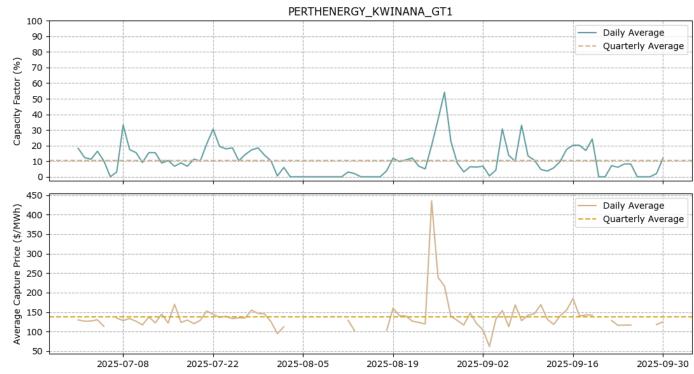


Kwinana Swift Power Station

Gas-fired Scheduled Facility, 109 MW, AGL (Perth Energy)

Facility Merchant Spot Revenue





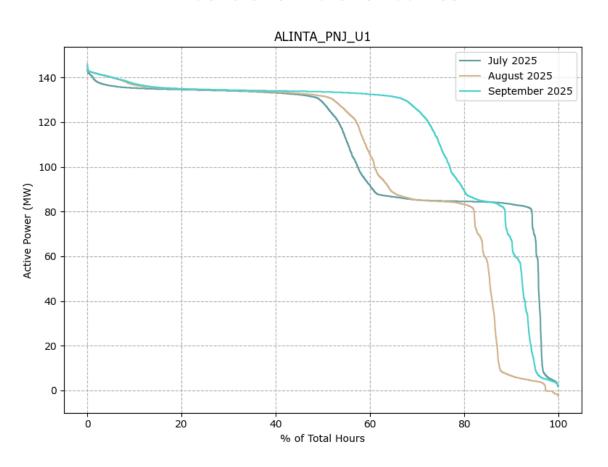
	Jul 2025	Aug 2025	Sep 2025
Energy Generated (GWh)	11.32	5.85	7.73
Total Spot Revenue (\$m)	1.52	1.16	1.08
\$/MWh	\$134.77	\$198.17	\$140.11

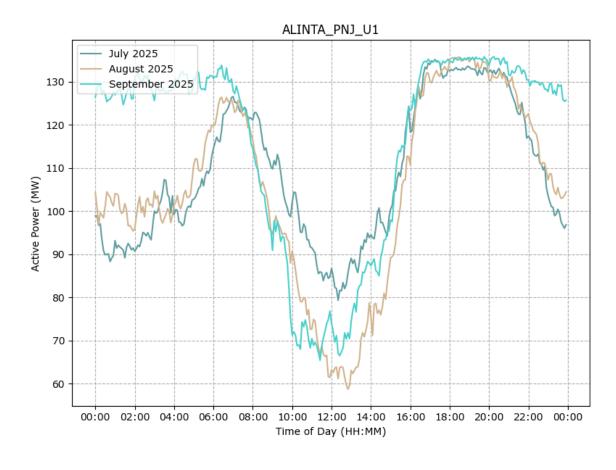


Pinjarra Power Station U1

Gas-fired Scheduled Facility, 143 MW, Alinta Energy

Generation Duration Curves

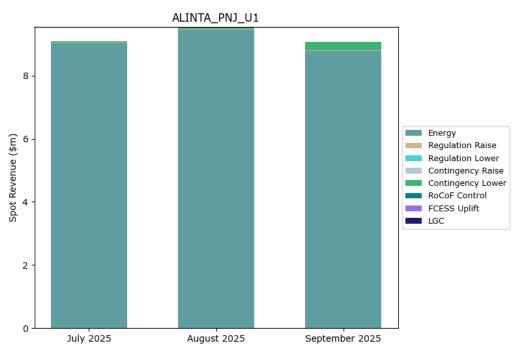


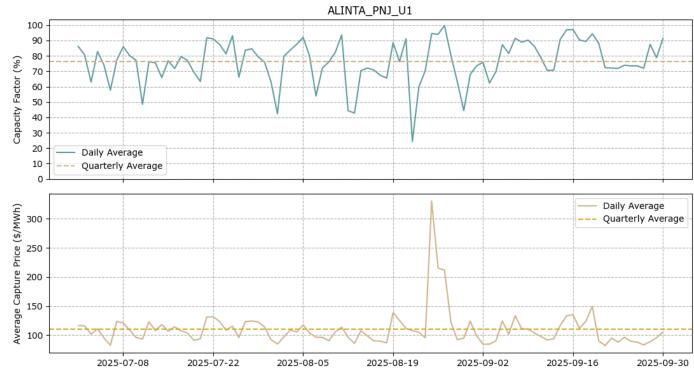


Pinjarra Power Station U1

Gas-fired Scheduled Facility, 143 MW, Alinta Energy

Facility Merchant Spot Revenue



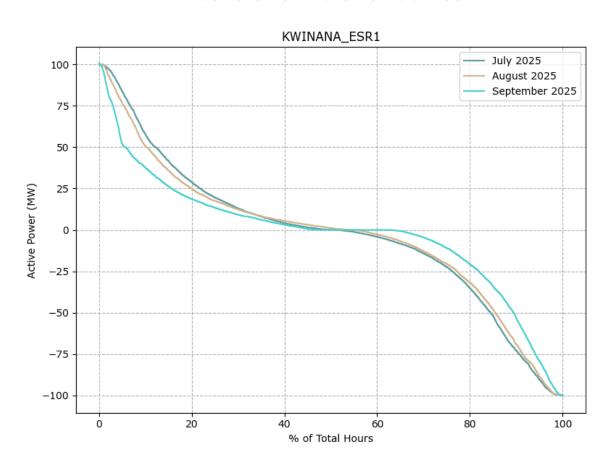


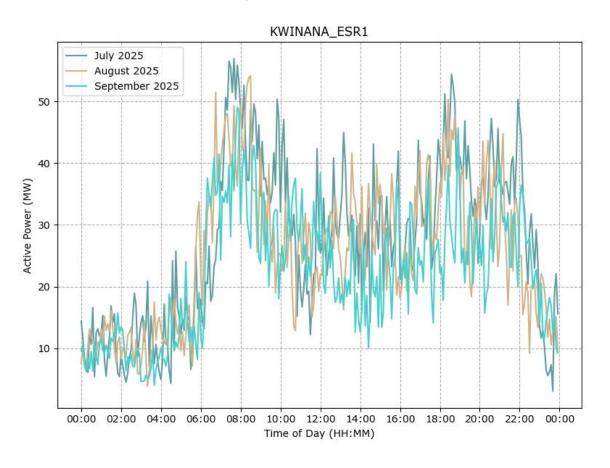
	Jul 2025	Aug 2025	Sep 2025
Energy Generated (GWh)	81.21	76.56	83.77
Total Spot Revenue (\$m)	9.09	9.54	9.06
\$/MWh	\$111.97	\$124.66	\$108.14



Energy Storage Scheduled Facility, 100 MW, Synergy

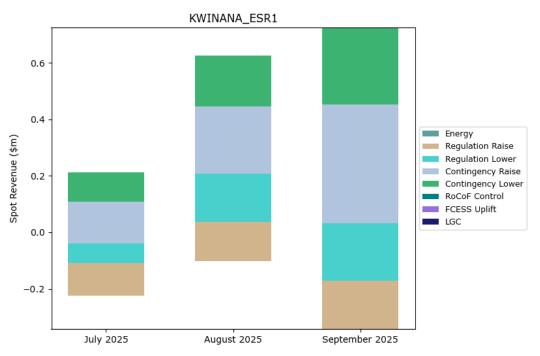
Generation Duration Curves

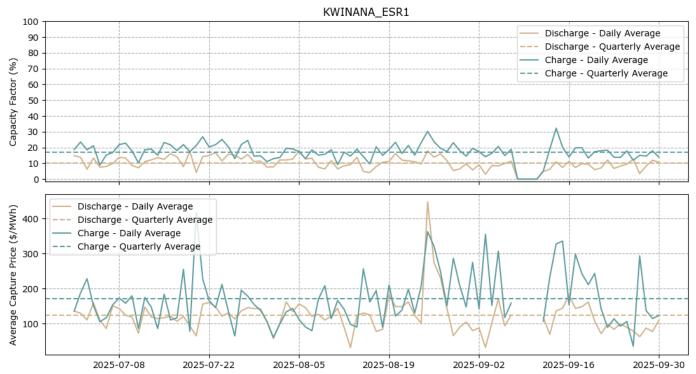




Energy Storage Scheduled Facility, 100 MW, Synergy

Facility Merchant Spot Revenue

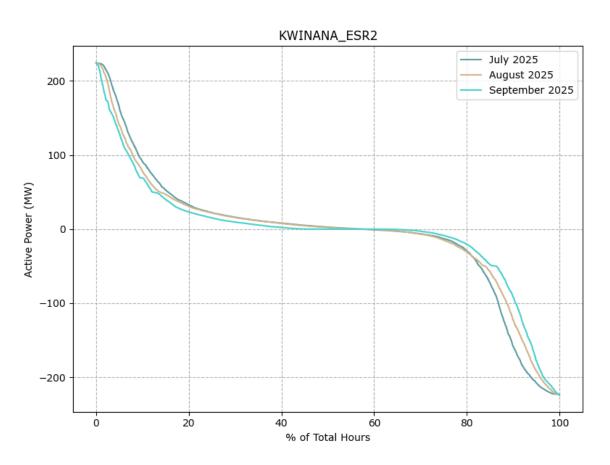


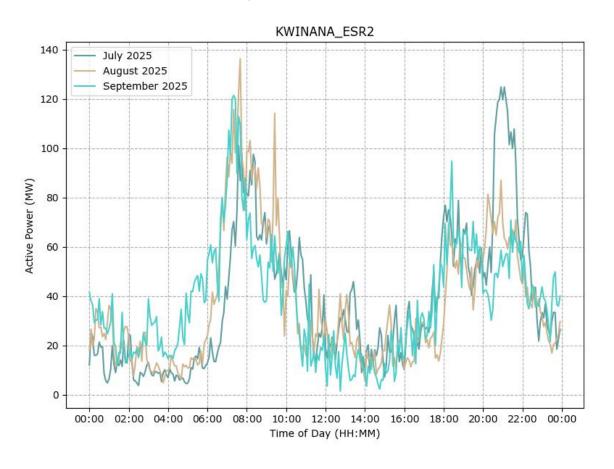


	Jul 2025	Aug 2025	Sep 2025
Total Spot Revenue (\$m)	0.21	0.63	0.72

Energy Storage Scheduled Facility, 225 MW, Synergy

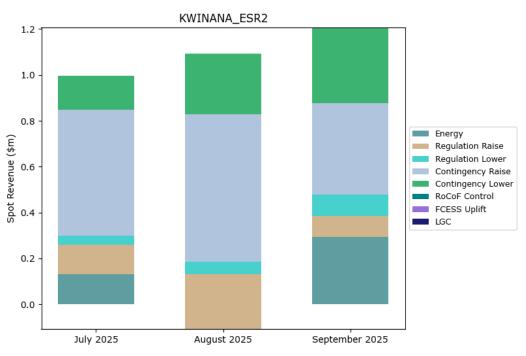
Generation Duration Curves

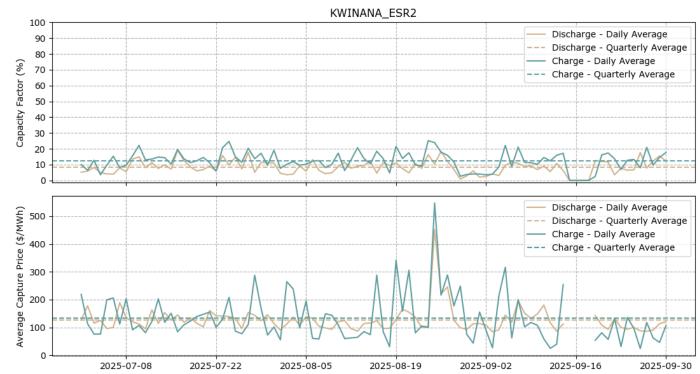




Energy Storage Scheduled Facility, 225 MW, Synergy

Facility Merchant Spot Revenue

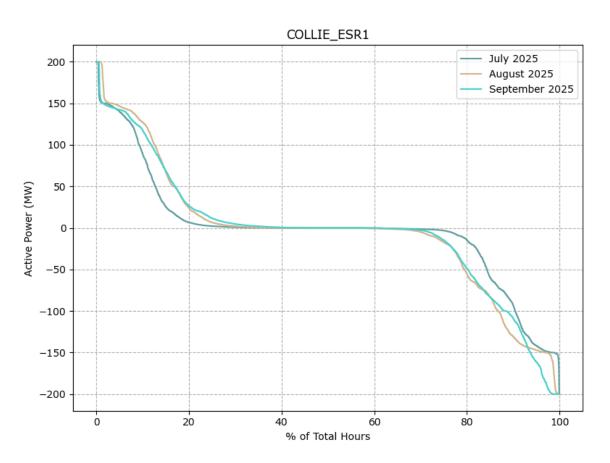


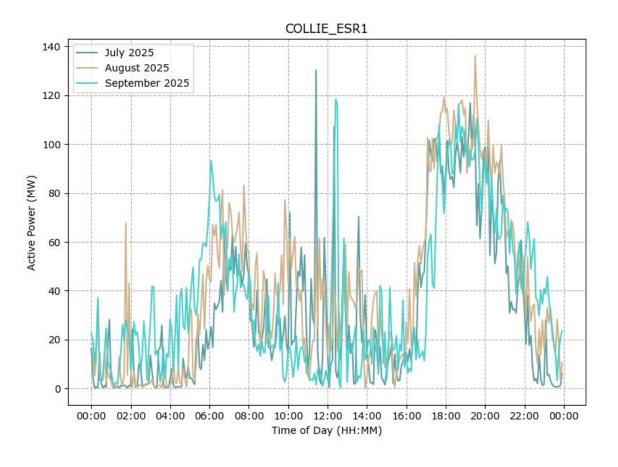


	Jul 2025	Aug 2025	Sep 2025
Total Spot Revenue (\$m)	1.00	1.09	1.21

Energy Storage Scheduled Facility, 200 MW, Neoen

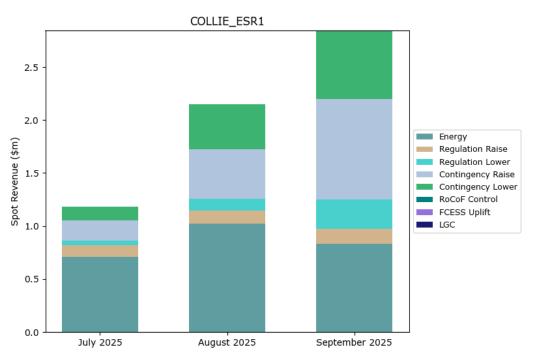
Generation Duration Curves

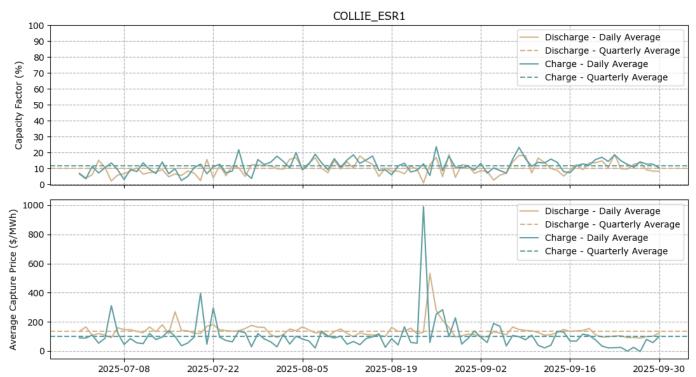




Energy Storage Scheduled Facility, 200 MW, Neoen

Facility Merchant Spot Revenue

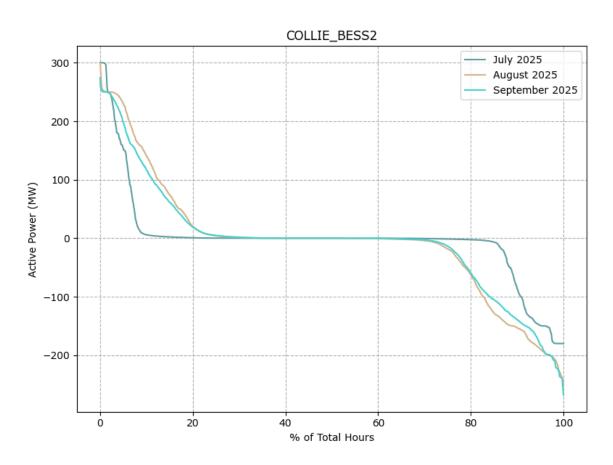


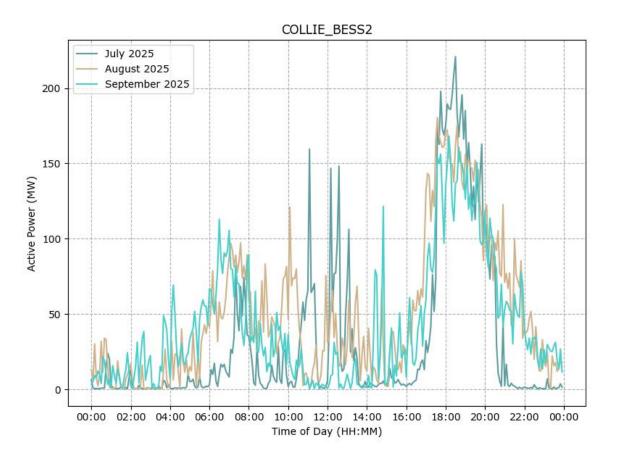


	Jul 2025	Aug 2025	Sep 2025
Total Spot Revenue (\$m)	1.18	2.15	2.85

Energy Storage Scheduled Facility, 341 MW, Neoen

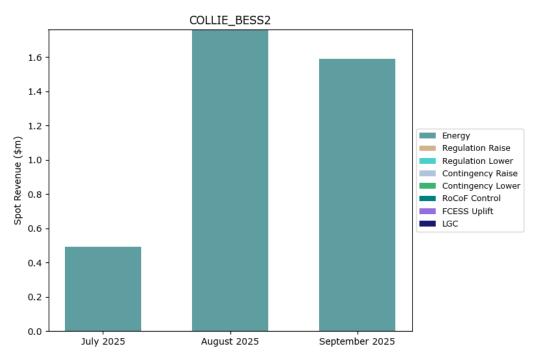
Generation Duration Curves

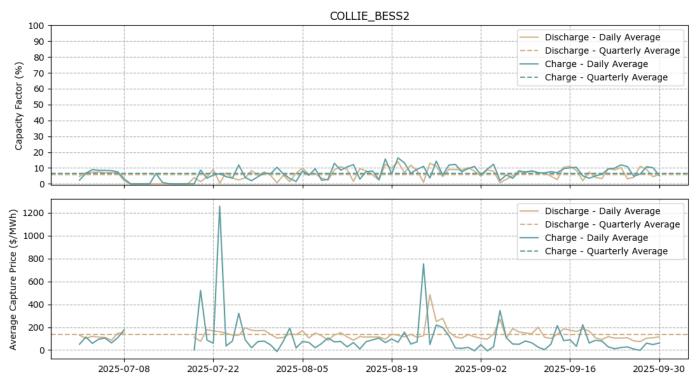




Energy Storage Scheduled Facility, 341 MW, Neoen

Facility Merchant Spot Revenue



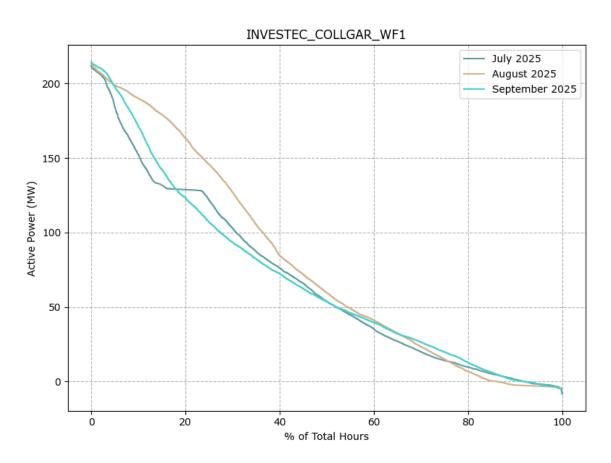


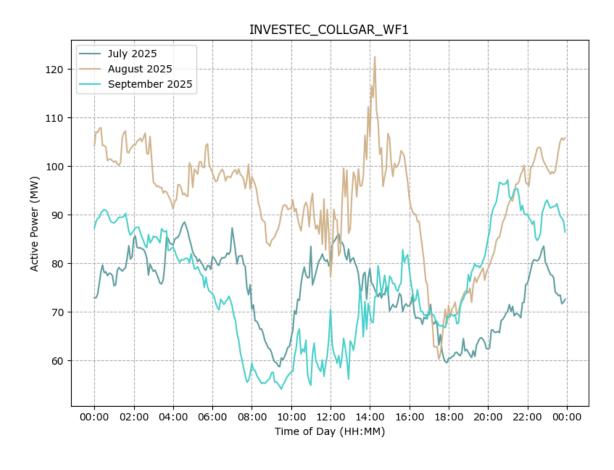
	Jul 2025	Aug 2025	Sep 2025
Total Spot Revenue (\$m)	0.49	1.76	1.59

Collgar Wind Farm

Wind Semi-Scheduled Facility, 218.5 MW, Collgar Renewables

Generation Duration Curves

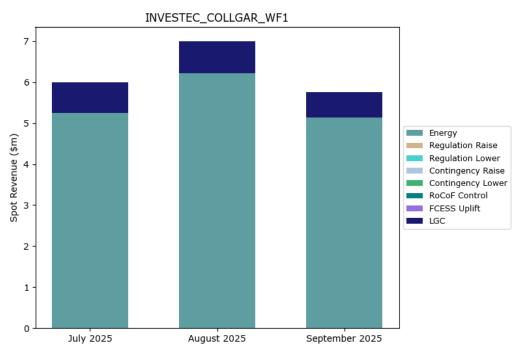


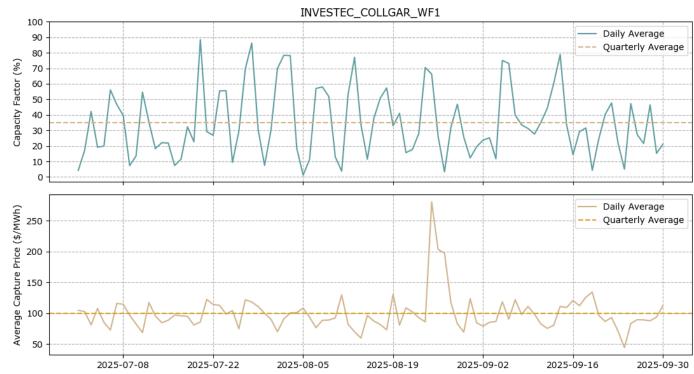


Collgar Wind Farm

Wind Semi-Scheduled Facility, 218.5 MW, Collgar Renewables

Facility Merchant Spot Revenue





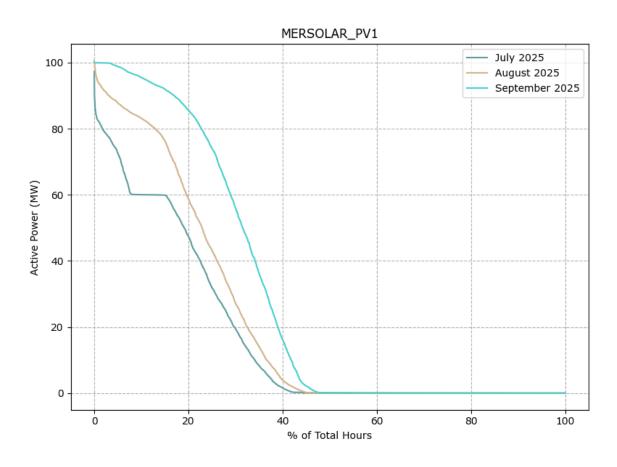
	Jul 2025	Aug 2025	Sep 2025
Energy Generated (GWh)	52.98	61.91	52.98
Total Spot Revenue (\$m)	5.99	7.00	5.75
\$/MWh	\$113.09	\$113.04	\$108.56

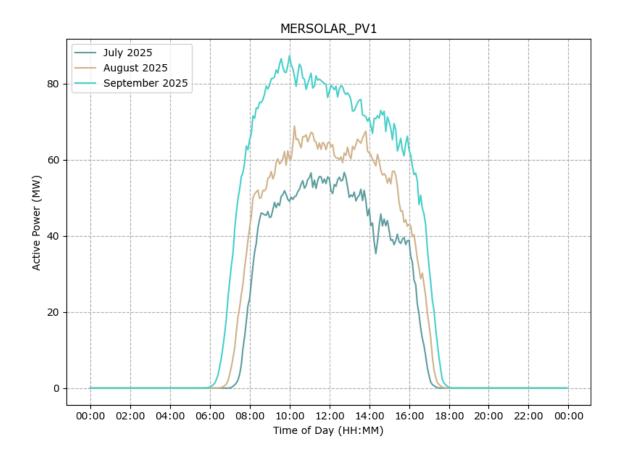


Merredin Solar Farm

Solar PV Semi-Scheduled Facility, 100 MW, SUN Energy

Generation Duration Curves

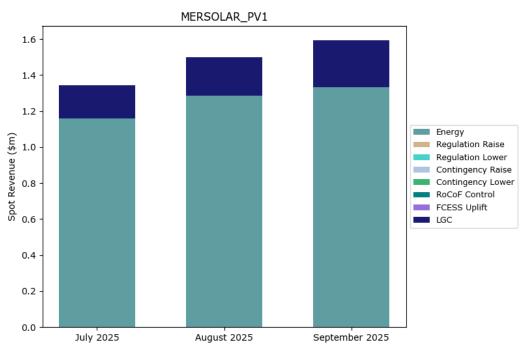


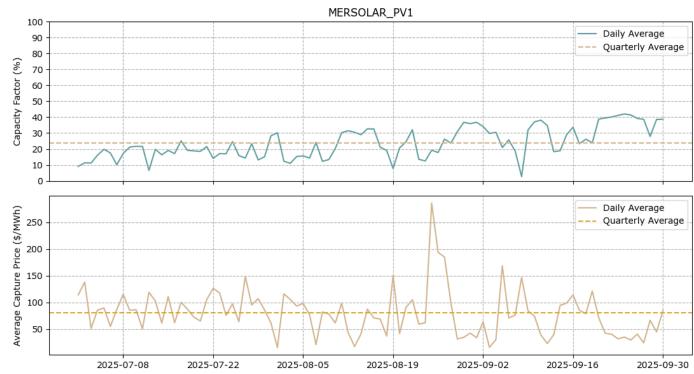


Merredin Solar Farm

Solar PV Semi-Scheduled Facility, 100 MW, SUN Energy

Facility Merchant Spot Revenue





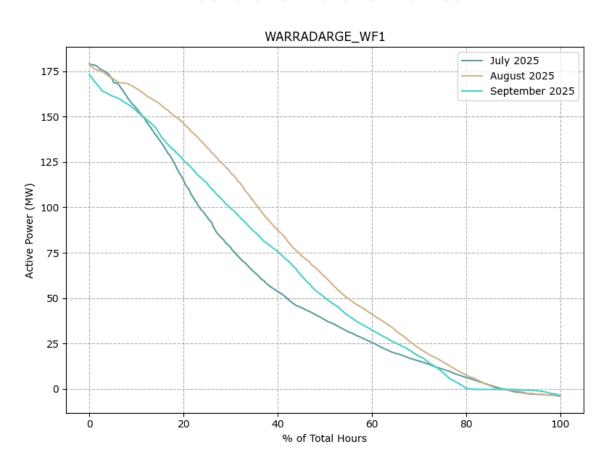
	Jul 2025	Aug 2025	Sep 2025
Energy Generated (GWh)	13.01	16.74	22.58
Total Spot Revenue (\$m)	1.34	1.50	1.59
\$/MWh	\$103.33	\$89.63	\$70.54

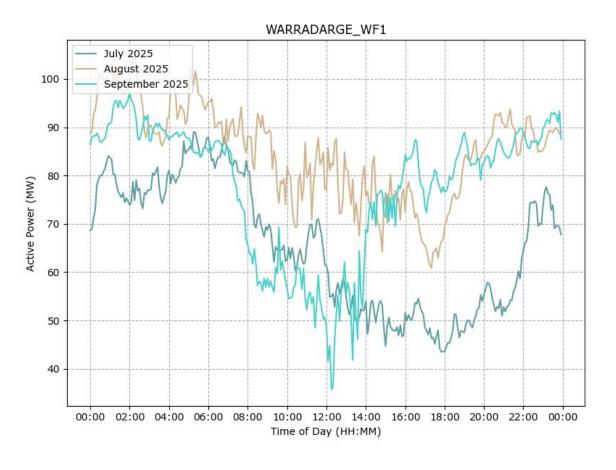


Warradarge Wind Farm

Wind Semi-Scheduled Facility, 180 MW, Bright Energy Investments

Generation Duration Curves

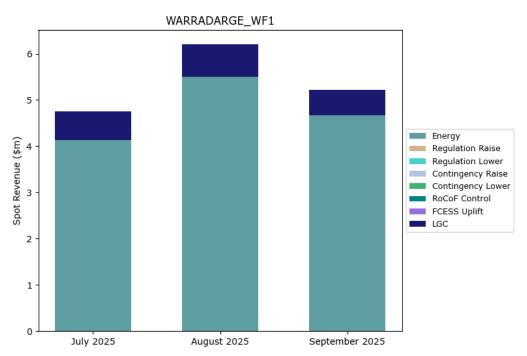


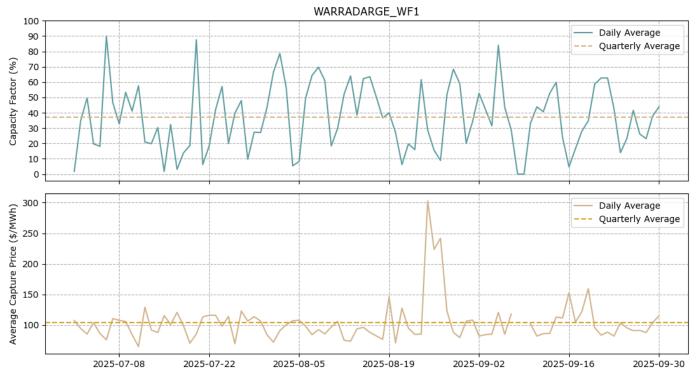


Warradarge Wind Farm

Wind Semi-Scheduled Facility, 180 MW, Bright Energy Investments

Facility Merchant Spot Revenue





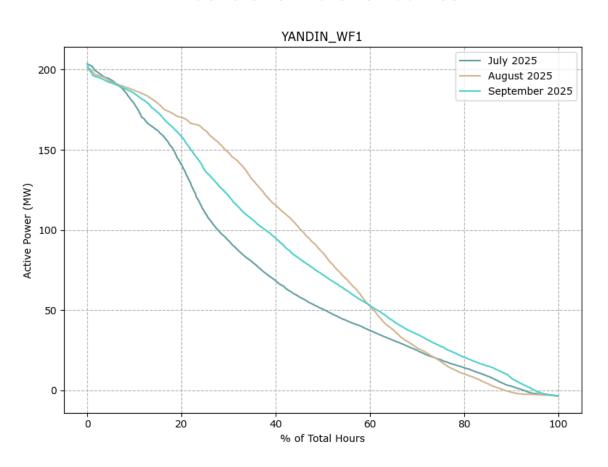
	Jul 2025	Aug 2025	Sep 2025
Energy Generated (GWh)	43.75	56.07	47.13
Total Spot Revenue (\$m)	4.76	6.21	5.21
\$/MWh	\$108.76	\$110.67	\$110.57

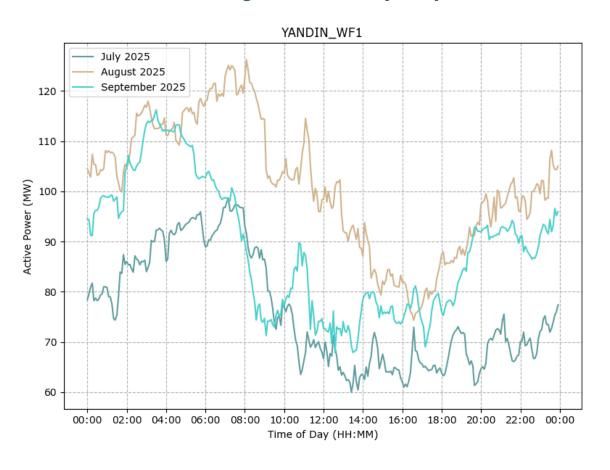


Yandin Wind Farm

Wind Semi-Scheduled Facility, 214.2 MW, Alinta Energy

Generation Duration Curves

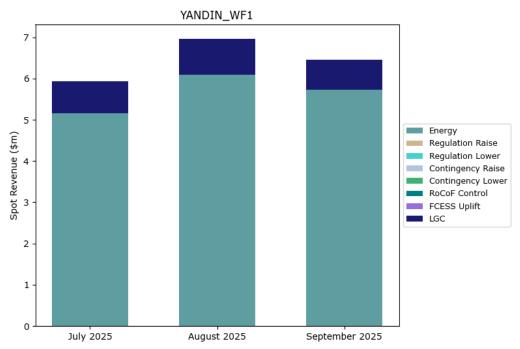


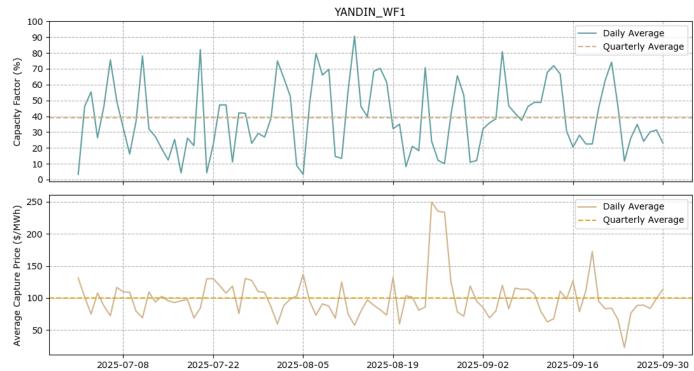


Yandin Wind Farm

Wind Semi-Scheduled Facility, 214.2 MW, Alinta Energy

Facility Merchant Spot Revenue





	Jul 2025	Aug 2025	Sep 2025
Energy Generated (GWh)	54.00	68.39	62.14
Total Spot Revenue (\$m)	5.94	6.97	6.46
\$/MWh	\$110.00	\$101.85	\$104.00





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