

Worksheet: ACIL Allen PowerMark NEM summary results

Scenario: Guarantee

Weighted average wholesale price (Real 2018\$)*Fin year data*

		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
NEM	Time-weighted FY	85.25	76.66	58.19	42.60	41.60	45.00	36.79	39.42	40.98	43.64	44.91	45.36	55.76

Time-weighted wholesale prices (Real 2018 \$/MWh)*Fin year data*

Region		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
NSW	Time-weighted RRP	83.88	81.26	59.84	44.65	41.61	49.62	37.39	38.85	39.81	41.95	44.36	45.38	51.94
QLD	Time-weighted RRP	73.66	64.12	50.04	40.76	38.74	42.07	37.25	40.13	44.05	46.03	44.49	44.62	66.74
SA	Time-weighted RRP	101.15	83.34	69.06	50.26	53.02	51.46	45.60	49.41	50.07	54.31	56.95	57.51	60.93
TAS	Time-weighted RRP	92.59	84.22	63.97	39.24	39.72	37.27	32.69	36.42	36.87	40.90	42.90	43.05	47.26
VIC	Time-weighted RRP	95.93	81.29	61.38	40.40	42.59	41.51	33.94	37.56	37.51	41.16	43.74	43.77	48.41

Generation mix (TWh sent-out)*Fin year data*

Region	Fuel source	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
NSW	Black coal	54.4	56.3	51.7	44.9	45.1	44.2	44.8	44.6	46.1	46.6	46.0	45.7	47.3
NSW	Brown coal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NSW	Natural gas	2.0	0.7	0.5	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
NSW	Liquid Fuel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NSW	Hydro	2.3	2.2	2.2	3.0	2.3	2.2	2.2	2.3	2.2	2.3	2.4	2.2	2.7
NSW	Wind	1.6	3.4	3.9	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
NSW	Solar	0.6	1.1	2.2	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
NSW	Rooftop solar PV	2.0	2.4	2.8	3.3	3.7	4.2	4.7	5.1	5.6	6.0	6.4	6.8	7.2
NSW	Total	62.9	66.0	63.3	58.7	58.6	58.2	59.1	59.5	61.4	62.4	62.3	62.3	64.8
NSW	Renewable share	10.4%	13.8%	17.5%	23.5%	23.1%	23.9%	24.3%	25.0%	24.9%	25.3%	26.1%	26.6%	26.9%
QLD	Black coal	49.4	46.6	44.5	43.6	43.3	43.9	43.5	43.8	44.3	44.3	44.4	44.7	40.7
QLD	Brown coal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
QLD	Natural gas	5.8	2.9	2.1	1.6	1.5	1.7	1.6	1.6	1.5	1.6	1.6	1.6	2.7
QLD	Liquid Fuel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
QLD	Hydro	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7
QLD	Wind	0.0	1.1	2.7	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
QLD	Solar	0.1	3.1	4.5	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
QLD	Rooftop solar PV	2.7	2.9	3.3	3.6	3.9	4.2	4.5	4.7	5.0	5.3	5.6	5.8	6.0
QLD	Total	58.6	57.3	57.6	57.9	57.7	58.7	58.6	59.1	59.8	60.1	60.5	61.0	58.5
QLD	Renewable share	5.8%	13.5%	19.1%	21.8%	22.3%	22.4%	22.9%	23.2%	23.4%	23.7%	24.0%	24.1%	25.8%
SA	Black coal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SA	Brown coal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SA	Natural gas	6.9	3.7	2.5	1.9	1.9	2.0	1.8	1.8	1.8	1.8	1.8	1.7	1.7
SA	Liquid Fuel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SA	Hydro	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SA	Wind	4.5	4.9	5.5	5.4	5.4	5.4	5.5	5.5	5.5	5.5	5.4	5.4	5.4
SA	Solar	0.0	0.5	0.9	1.1	1.1	1.1	1.2	1.2	1.2	1.1	1.1	1.1	1.1
SA	Rooftop solar PV	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	1.9	2.0	2.1	2.2
SA	Total	12.6	10.3	10.1	9.8	9.9	10.1	10.1	10.2	10.2	10.3	10.4	10.4	10.5

SA	Renewable share	44.9%	64.1%	75.5%	80.8%	81.2%	80.5%	82.0%	82.1%	82.5%	82.7%	82.8%	83.7%	83.6%
TAS	Black coal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TAS	Brown coal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TAS	Natural gas	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TAS	Liquid Fuel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TAS	Hydro	8.5	8.6	8.3	8.2	8.3	8.2	8.5	8.3	8.0	7.8	8.2	8.3	8.3
TAS	Wind	0.6	0.5	1.1	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
TAS	Solar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TAS	Rooftop solar PV	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
TAS	Total	10.1	9.3	9.5	10.2	10.3	10.3	10.6	10.4	10.1	9.9	10.3	10.4	10.4
TAS	Renewable share	91.9%	99.9%	99.9%	100.0%	100.0%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
VIC	Black coal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
VIC	Brown coal	33.0	34.3	33.9	33.2	32.9	32.9	34.0	34.1	34.2	34.2	34.2	34.1	34.1
VIC	Natural gas	2.7	0.5	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
VIC	Liquid Fuel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
VIC	Hydro	2.5	3.5	3.0	3.0	2.8	2.9	2.6	2.7	2.6	2.5	2.8	2.7	2.9
VIC	Wind	2.6	4.0	7.4	10.6	10.6	10.6	10.7	10.7	10.7	10.7	10.7	10.7	10.7
VIC	Solar	0.0	0.8	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
VIC	Rooftop solar PV	1.5	1.8	2.0	2.3	2.6	2.8	3.1	3.3	3.5	3.7	3.9	4.1	4.3
VIC	Total	42.5	44.9	48.5	51.3	51.0	51.3	52.4	52.8	53.1	53.3	53.7	53.7	54.1
VIC	Renewable share	15.8%	22.6%	29.5%	35.0%	35.3%	35.7%	35.0%	35.4%	35.5%	35.6%	36.2%	36.4%	36.8%
NEM	Black coal	103.8	102.9	96.2	88.5	88.4	88.1	88.3	88.4	90.3	90.8	90.4	90.4	88.1
NEM	Brown coal	33.0	34.3	33.9	33.2	32.9	32.9	34.0	34.1	34.2	34.2	34.2	34.1	34.1
NEM	Natural gas	18.2	7.8	5.4	3.6	3.4	3.8	3.5	3.5	3.4	3.5	3.5	3.4	4.6
NEM	Liquid Fuel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEM	Hydro	14.0	14.9	14.1	14.9	14.0	13.9	13.9	13.8	13.5	13.3	14.0	13.9	14.6
NEM	Wind	9.4	13.9	20.4	26.8	26.8	26.8	26.9	26.9	26.9	26.9	26.9	26.9	26.9
NEM	Solar	0.7	5.6	9.5	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
NEM	Rooftop solar PV	7.4	8.4	9.6	10.7	11.9	13.0	14.1	15.2	16.2	17.2	18.2	19.1	20.0
NEM	Total	186.7	187.8	188.9	187.8	187.4	188.5	190.8	192.0	194.6	196.1	197.3	197.9	198.4
NEM	Renewable share	16.9%	22.8%	28.3%	33.3%	33.5%	33.8%	34.1%	34.4%	34.3%	34.4%	35.1%	35.4%	36.1%

*Scheduled and semi-scheduled generation plus rooftop PV (i.e. excludes non-scheduled and embedded generation)

Generation capacity (GW)

Fin year data

		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
NSW	Black coal	10.4	10.4	10.4	10.4	10.4	8.5	8.4	8.4	8.4	8.4	8.4	8.4	8.4
NSW	Brown coal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NSW	Natural gas	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1
NSW	Liquid Fuel	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NSW	Hydro	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
NSW	Wind	0.6	1.1	1.2	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
NSW	Solar	0.3	0.4	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
NSW	Battery / pumped hydro storage	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
NSW	Rooftop solar PV	1.5	1.8	2.2	2.5	2.9	3.2	3.6	3.9	4.3	4.6	4.9	5.3	5.6
NSW	Total	17.6	18.4	19.3	20.2	20.6	19.2	21.5	21.8	22.2	22.5	22.8	23.2	23.5

NEM	Battery / pumped hydro storage	0.0	0.1	0.1	0.2	0.2	0.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3
NEM	Rooftop solar PV	5.9	6.7	7.6	8.5	9.4	10.3	11.2	12.0	12.9	13.7	14.5	15.3	16.0
NEM	Total	51.8	55.7	60.1	63.2	64.0	63.1	66.0	66.8	67.6	68.4	69.3	70.0	69.2

*Scheduled and semi-scheduled generation plus rooftop PV (i.e. excludes non-scheduled and embedded generation)

Wholesale energy value (Real 2018 \$b)

Fin year data

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
NSW	5.98	6.45	4.62	3.44	3.22	3.96	2.72	2.84	2.90	3.07	3.26	3.33	3.81
QLD	4.08	3.66	2.83	2.37	2.26	2.50	2.17	2.36	2.68	2.80	2.66	2.67	4.05
SA	1.31	1.09	0.96	0.69	0.77	0.73	0.57	0.64	0.63	0.70	0.74	0.73	0.76
TAS	0.93	0.87	0.67	0.41	0.41	0.38	0.33	0.36	0.37	0.41	0.44	0.44	0.49
VIC	4.53	4.13	3.13	2.11	2.35	2.24	1.63	1.90	1.84	2.08	2.24	2.20	2.38
NEM	16.83	16.19	12.21	9.02	9.01	9.81	7.42	8.09	8.42	9.07	9.33	9.37	11.49