

## Heat rates

Encapsulates the efficiency of thermal generators (as-generated, HHV)

### Existing generators

Generator	Static Heat rate (GJ/MWh) (Note 1)	Variable Heat Rates (Note 2)	
		Heat rate base (GJ/h)	Heat rate incremental (GJ/MWh)
Bayswater	9.45	420.42	8.81
Eraring	9.55	458.64	8.91
Liddell	10.14	318.50	9.50
Mt Piper	9.25	420.42	8.62
Vales Point B	9.68	420.42	9.04
Callide B	9.16	222.95	8.52
Callide C	9.30	286.65	8.67
Gladstone	9.47	178.36	8.84
Kogan Creek	8.80	473.93	8.17
Millmerran	9.21	271.36	8.57
Stanwell	9.07	232.51	8.43
Tarong	9.21	222.95	8.57
Tarong North	8.65	286.65	8.02
Loy Yang A Power Station	12.16	412.84	11.43
Loy Yang B	12.54	368.61	11.81
Yallourn W	13.90	258.03	13.16
Colongra	11.15	492.27	8.43
Smithfield Energy Facility	8.35	113.53	10.78
Tallawarra	6.99	419.70	6.04
Uranquinty	11.15	451.48	8.43
Barcaldine Power Station	12.72	100.63	10.00
Braemar	11.88	456.92	9.16
Braemar 2 Power Station	11.88	470.51	9.16
Condamine A	7.29	132.50	8.93
Darling Downs	7.38	427.67	9.52
Oakey Power Station	10.94	383.48	8.22
Roma	11.88	108.79	9.16
Swanbank E GT	7.44	367.24	6.48
Yabulu PS	7.59	416.03	6.41
Yabulu Steam Turbine	7.59	0.00	15.20
Yarwun Cogen	10.37	171.69	9.42
Somerton	14.88	115.59	12.16
Bairnsdale	10.50	127.83	7.78
Jeeralang A	15.25	144.15	12.54
Jeeralang B	15.25	206.70	12.54
Laverton North	11.50	424.28	8.78
Mortlake	11.15	769.69	8.43
Newport	10.29	357.04	9.57
Valley Power	14.88	135.99	12.16
Hallett GT	14.88	46.24	12.16
Dry Creek GT	13.69	141.43	10.97
Ladbroke Grove	11.88	108.79	9.16
Mintaro GT	12.72	244.78	10.00
Osborne	8.16	299.02	9.92
Pelican Point	7.35	436.33	8.45
Quarantine	10.71	78.87	8.00
Torrens Island A	11.43	92.48	10.66
Torrens Island B	10.71	154.13	9.94
Bell Bay Three	12.04	108.79	9.32
Tamar Valley Combined Cy	7.29	344.21	8.37
Tamar Valley Peaking	12.72	157.75	10.00
Hunter Valley GT	12.72	67.99	10.00
Mackay GT	12.72	92.47	10.00
Mt Stuart	11.88	397.08	9.16
Angaston	12.78	0.00	12.78
Lonsdale	7.89	0.00	7.90
Port Lincoln Gt	12.81	67.99	10.09
Port Stanvac 1	7.89	0.00	7.90
Snuggery	13.43	57.11	10.71

#### Notes:

1. Static heat rates are used for long term modeling.
2. Variable heat rates are used for detailed time sequential phase of the modeling.

### Generic new entrant units

Generator	Static Heat rate (GJ/MWh)	Variable Heat Rates	
		Heat rate base (GJ/h)	Heat rate incremental (GJ/MWh)
New Biomass	13.39	0.00	13.39
New Black Coal	8.98	477.75	8.34
New Brown Coal	11.34	552.91	10.60
New CCGT	7.58	495.05	6.62
New OCGT	11.75	543.95	9.03