

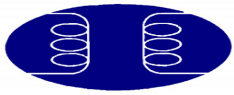
Electric Power Consulting Pty Ltd

Power System Generation Mix Model Output

Scenario: Case 4 - AEMO Neutral case Fig. 9 - 2040 approximation - ISP 2018 (updated 10/10/2019)

Version 2.1 Run Number 270

Generation Type	Model Inputs			Model Outputs							
	Net Available MW	Storage Days	Avail-ability	Installed MW	Capacity Factor	% of Load Energy Supplied	Levelised Cost of Energy (LCOE) \$/MWh	Contribution to System Levelised Cost of Energy (SLCOE) \$/MWh	Carbon Intensity T/MWh	Contribution to System Carbon Intensity T/MWh	
Battery Storage	3,000	1.00	100.0%	3,000		0.0%		\$29.50			
Pump Storage	18,000	1.04	100.0%	18,000		-0.7%		\$10.16			
Solar PV	48,000		100.0%	48,000	18.6%	41.2%	\$171.95	\$70.88	0.03	0.01	
Wind	14,000		100.0%	14,000	22.0%	14.2%	\$128.05	\$18.20	0.01	0.00	
Open Cycle Gas	3,000		98.5%	3,046	38.6%	5.4%	\$130.28	\$7.06	0.61	0.03	
Hydro	4,000		100.0%	4,000	50.3%	9.3%	\$67.95	\$6.30	0.02	0.00	
Combined Cycle Gas	2,500		94.5%	2,646	55.5%	6.8%	\$97.41	\$6.60	0.42	0.03	
Black Coal Supercritical	5,000		94.5%	5,291	60.0%	14.6%	\$67.90	\$9.93	0.96	0.14	
Brown Coal Supercritical	3,000		94.5%	3,175	62.8%	9.2%	\$80.79	\$7.42	1.23	0.11	
Total	100,500	Total	101,157								
	System Wide Generation Capacity Factor.... 21.4%										
			Energy storage decrease			0.0%					
			Total.....			100.0%					
	** see note on next page for an explanation of costs										
	Subtotal Generation.....							\$166.05 /MWh	Total.....	0.33	
	** Extra Transmission and Related Costs							\$81.39 /MWh	CO2 Emission Abatement Analysis		
	System Levelised Cost of Energy							\$247.44 /MWh	Reference Base level....	\$69.20/MWh 0.82 T/MWh	
	** Base Transmission and Related Costs							\$42.25 /MWh	Cost of Abatement \$365.70 /Tonne		
	Delivered Cost of Energy for Large Industrial Customers							\$289.69 /MWh			
	Distribution and Retail...							\$100.00 /MWh			
	Delivered Cost of Energy for small LV Customers							\$389.69 /MWh			



Electric Power Consulting Pty Ltd

Power System Generation Mix Model Output

Scenario: Case 4 - AEMO Neutral case Fig. 9 - 2040 approximation - ISP 2018 (updated 10/10/2019)

Version 2.1 Run Number 270

Base Load Generation Analysis

Base load generation mix not suited to load profile

NPV Discount Rate

6.0%

10,500 MW Maximum

6,636 MW Average

0 MW Minimum

LoadSelection Full NEM Load (2017)

System Load

Peak 34,342 MW

190,051,953 MWhs

Renewables

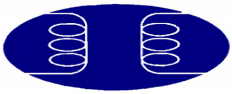
9.0% Wind and Solar PV MWhs spilled

91.0% Wind and Solar PV MWhs utilised

64.7% Load MWhs supplied by renewables
(Wind, Solar PV and Hydro)

Notes

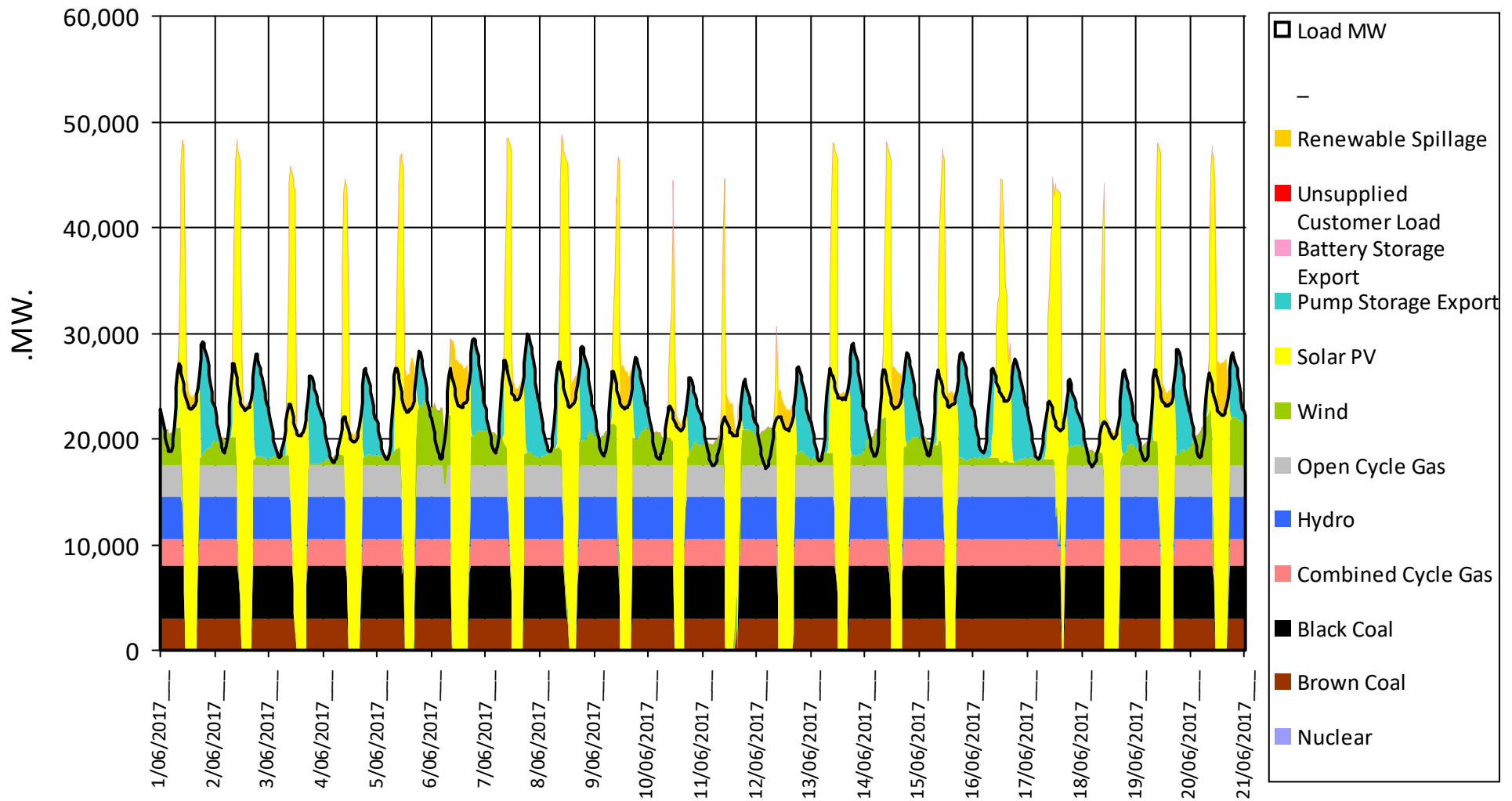
Transmission and related costs include transmission, subtransmission, generator connection, system strength provision, voltage control, congestion costs and a component of network losses.

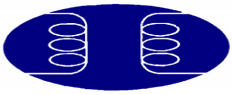


Electric Power Consulting Pty Ltd Power System Generation Mix Model Output

Scenario: Case 4 - AEMO Neutral case Fig. 9 - 2040 approximation - ISP 2018 (updated 10/10/2019)

Version 2.1 Run Number 270





Electric Power Consulting Pty Ltd Power System Generation Mix Model Output

Scenario: Case 4 - AEMO Neutral case Fig. 9 - 2040 approximation - ISP 2018 (updated 10/10/2019)

Version 2.1 Run Number 270

