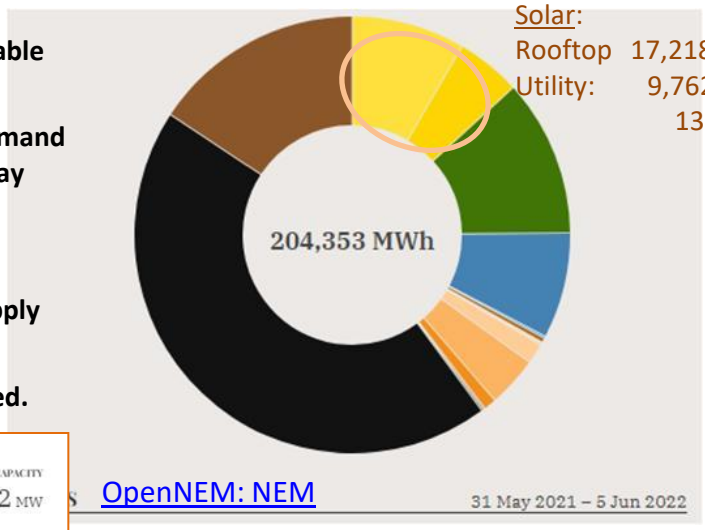
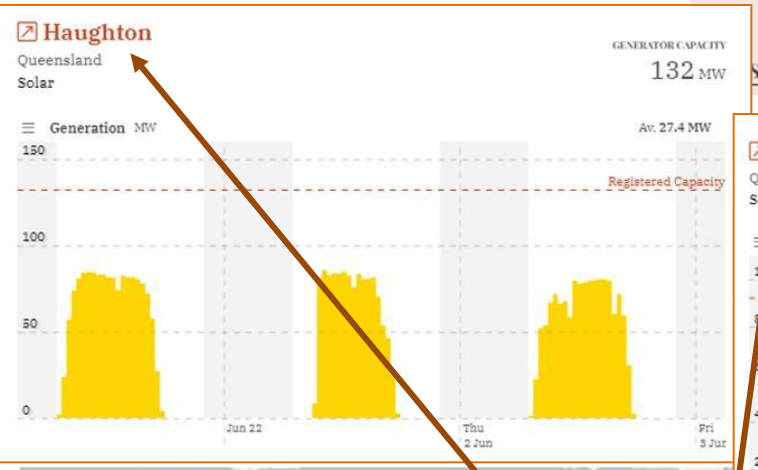
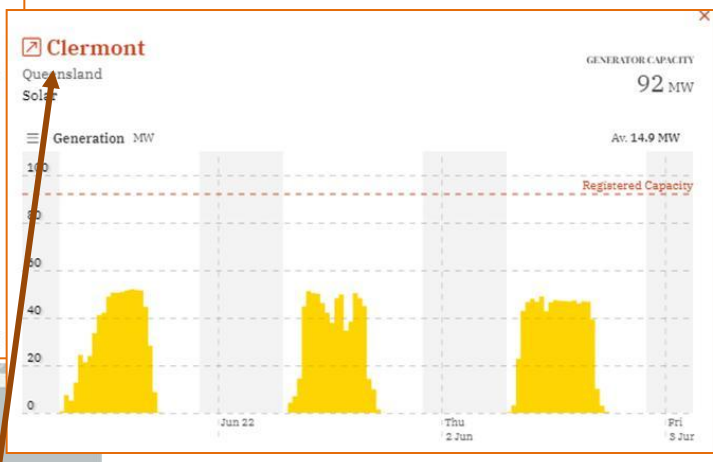
Australia – NEM – Solar Power Contribution - 31May21 thru' 05Jun22

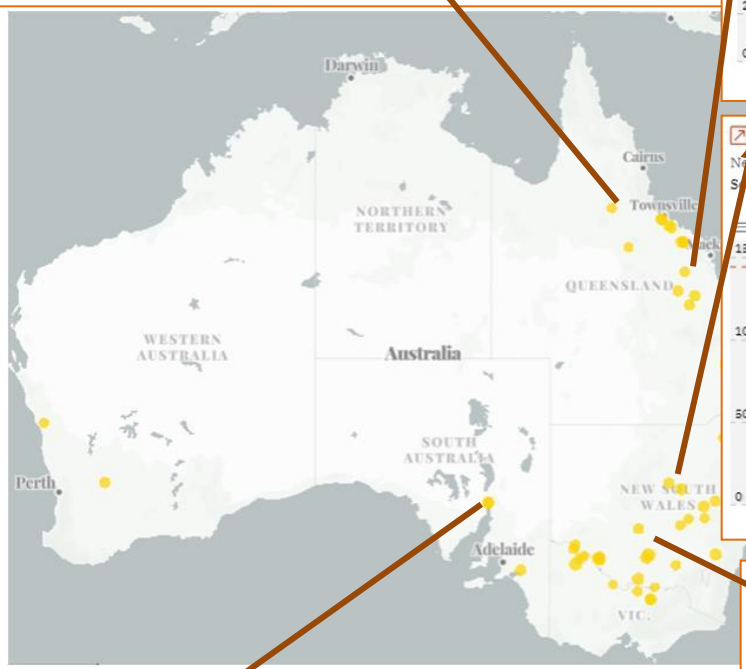
Observations:

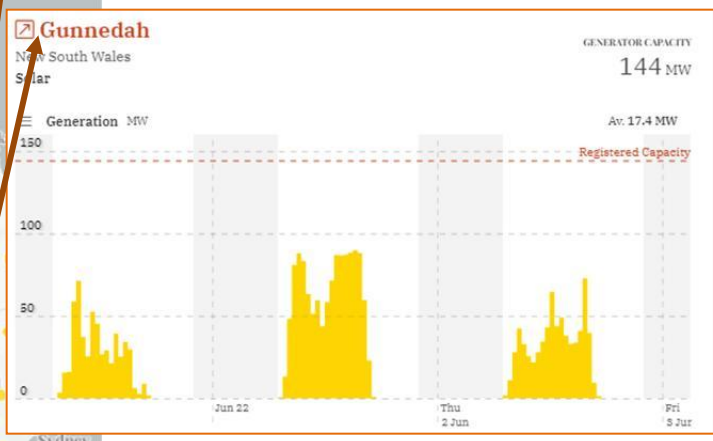
- **13% of total power generation in total but only available for about 8 hours a day depending on cloud cover.**
- **Nothing during the morning or evening maximum demand periods, nor any other of the majority 16 hours per day every day in every location.**
- **Rarely performs at registered generation capacity.**
- **The grid is 100% reliant on other means of power supply outside of those brief bursts of solar energy.**
- **Gaps caused by Earth's rotation – cannot be controlled.**

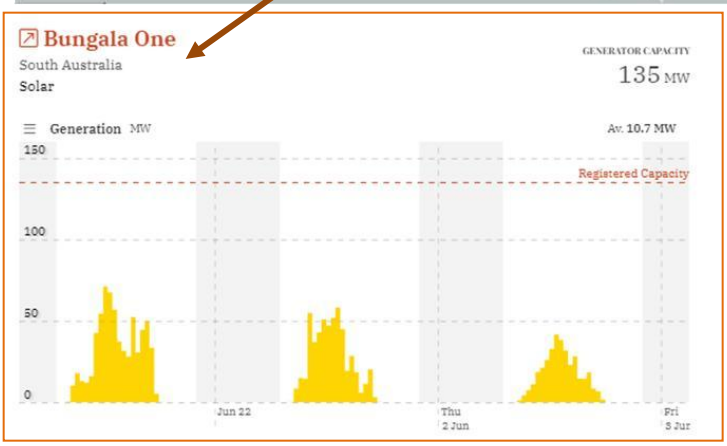


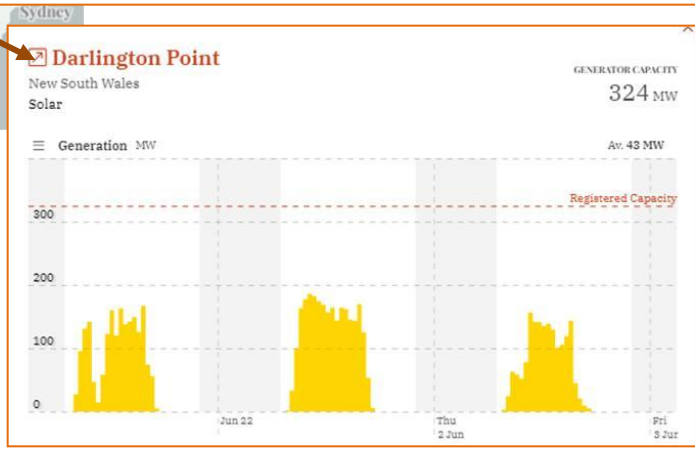










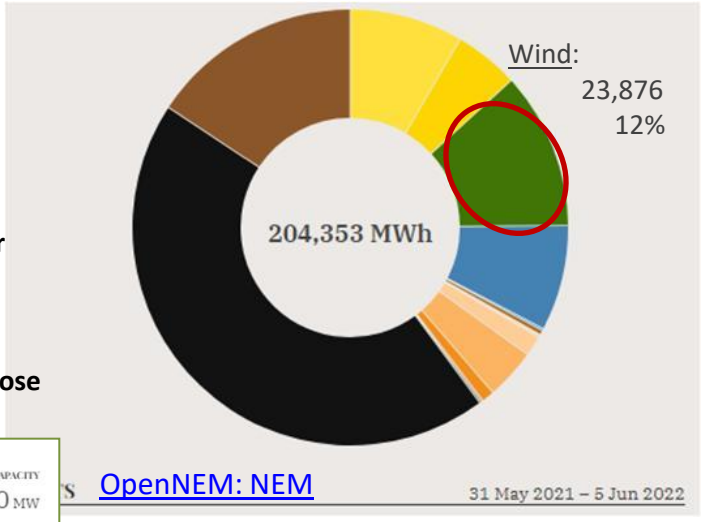


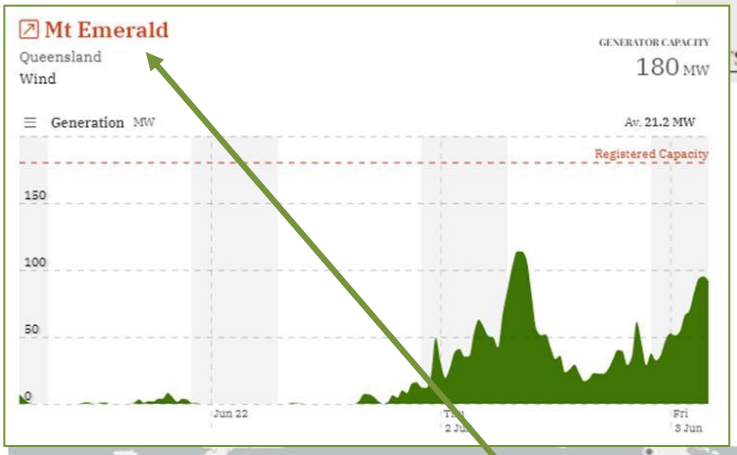
Seems there is no way to cover the huge gaps in solar output other than massive battery storage facilities or to keep 'hot spinning' fossil fuels generators on constant stand-by – both major cost additions that must be accounted for.

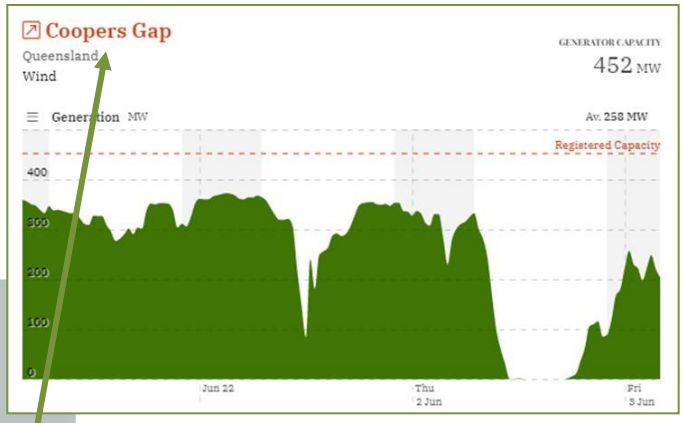
Australia – NEM – Wind Power Contribution - 31May21 thru' 05Jun22

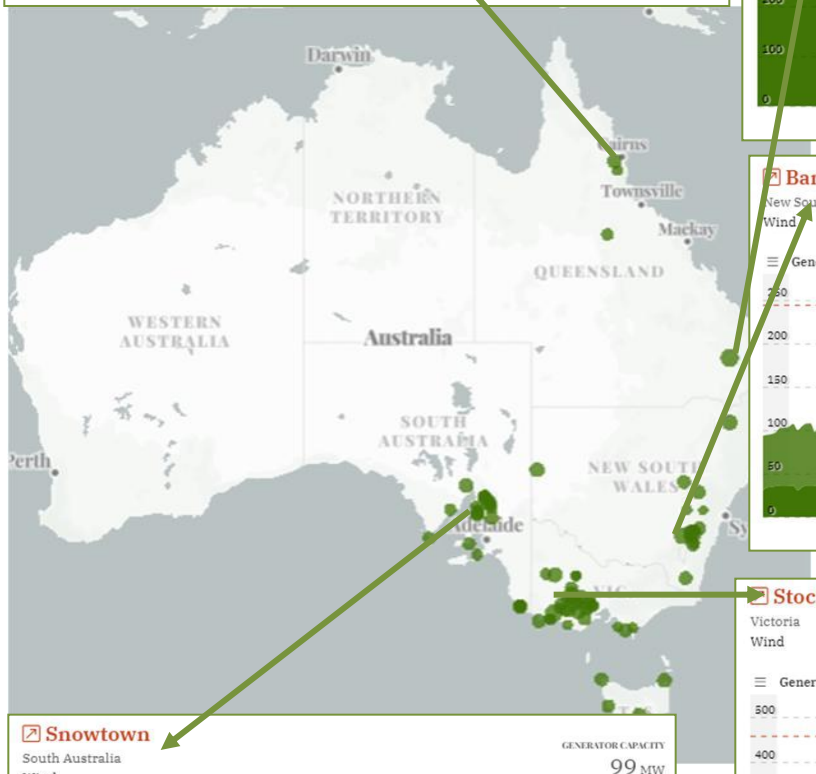
Observations:

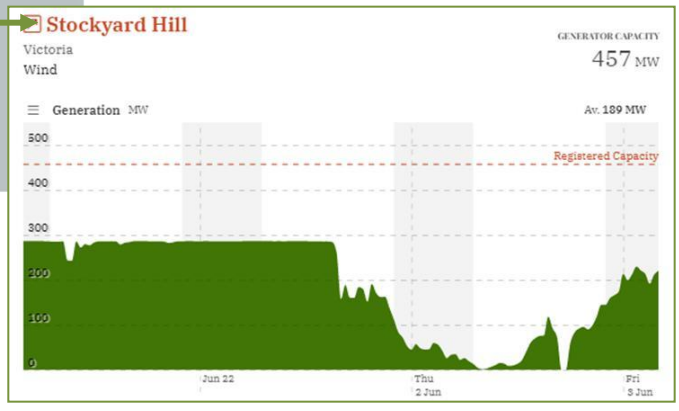
- **12% of total power generation overall but constantly variable and unpredictable in every location.**
- **Yes it 'can' operate 24/7 but it doesn't – it is 100% dependent on local / variable weather conditions.**
- **Frequently low or zero output - 100% reliant on other modes of generation to fill the unpredictable gaps.**
- **Rarely performs at registered generation capacity.**
- **Impossible to synchronise with solar because both those sources are completely uncontrollable.**









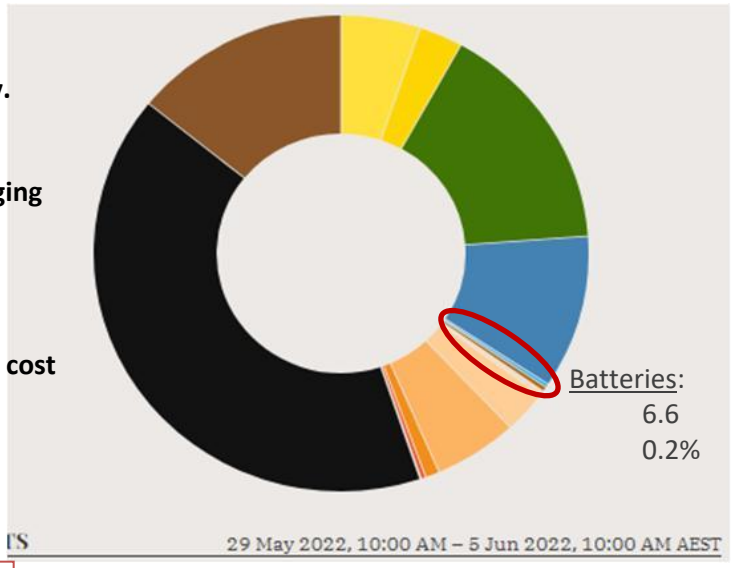


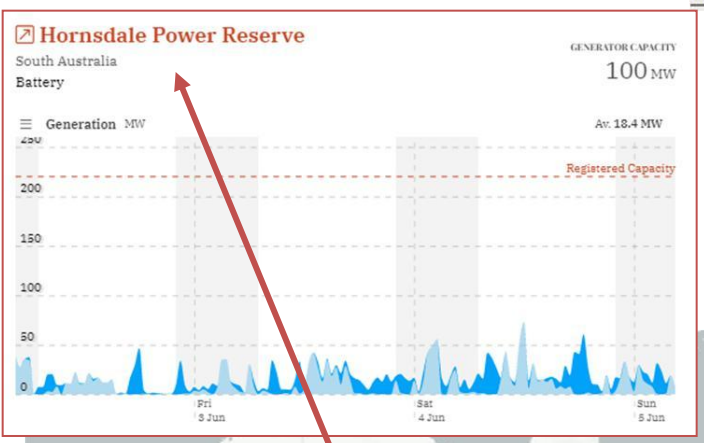
Even with widespread geographic distribution of wind-power facilities, there can still be large and uncontrollable variations in overall generation.

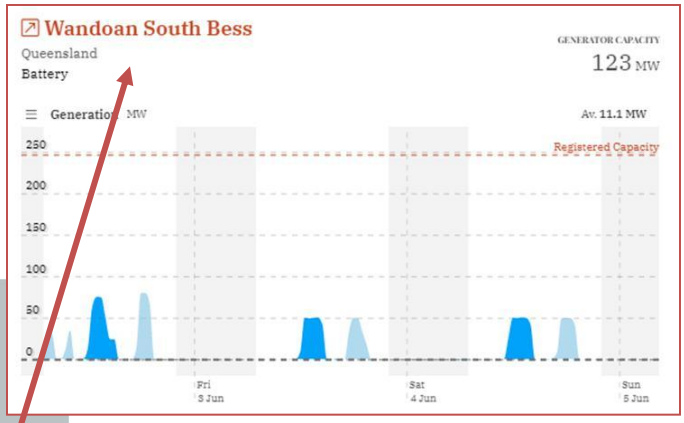
Australia – NEM – Battery Installations - 31May21 thru' 05Jun22

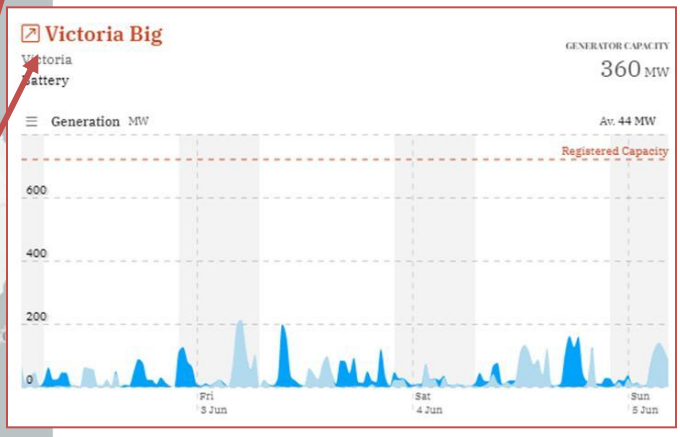
Observations:

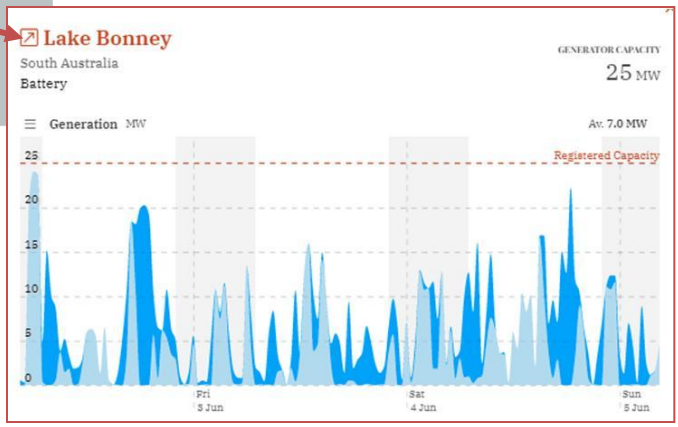
- **Not many in place yet and covers only 0.2% of supply.**
- **A net consumer of power.**
- **Colour change on graphs denotes charging / discharging mode.**
- **Unnecessary other than to cover for unpredictable variability in wind/solar performance.**
- **Not enough information to make valid judgement on cost / performance benefit.**

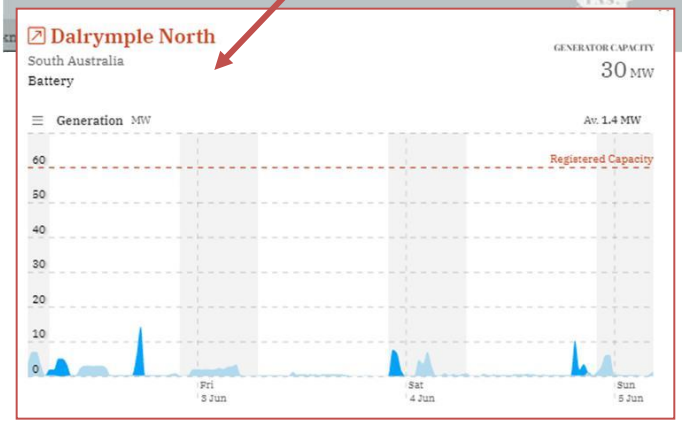












No definitive pattern of usage apparent from these graphs and no apparent correlation with fluctuations in wind/solar generation output.