

12 May 2022

This submission is in response to

**First PDRS Rule Consultation**

<https://www.energy.nsw.gov.au/government-and-regulation/energy-security-safeguard/peak-demand-reduction-scheme>

- (1) Questions: Is there an estimate of how many MW of peak demand will be reduced over which period? What will be the other indicators for the success of this scheme? Avoidance of loadshedding? Reduction of peak pricing events?
- (2) The scheme is voluntary. Why not introduce on a mandatory basis PDRS approved end user equipment at the point of sales or by installers?
- (3) EV recharging stations (also in garages) must be included in the PDRS scheme. It was shown under peak demand shifting. This is important as we are in peak oil mode and demand for EVs will increase. From my website:

3 May 2022 Will the world ever reach peak crude production of November 2018 again?

<https://crudeoilpeak.info/will-the-world-ever-reach-peak-crude-production-of-november-2018-again-part-1>

The slide titled "Demand response and shifting" features three graphs illustrating different demand management strategies. The first graph, "Peak Demand Savings," shows a peak demand curve with a vertical line indicating a reduction in peak demand. The second graph, "Peak Demand Response," shows a peak demand curve with a vertical line indicating a shift in the peak. The third graph, "Peak Demand Shifting," shows a peak demand curve with a vertical line indicating a shift in the peak. To the right of the graphs, a man in a white shirt is speaking at a podium.

- (4) Review period should be less than 5 years

The slide titled "Compliance period and reviews" contains the following text: "Compliance period" with bullet points "1 November to 31 March" and "Covers whole summer period"; "Scheme review" with bullet points "Every 5 years" and "Two-sided market reforms, minimum demand"; and two images of reports: "NSW Energy Security Scheme - Final Strategy Review Report 2020" and "Energy Security Target and Safeguard Compliance". To the right of the text, a woman in a purple top is speaking at a podium.

- (5) Periods in which actual load shedding happened should be included apart from the classical peak periods in summer. This would require digital remote control as these events appear so fast

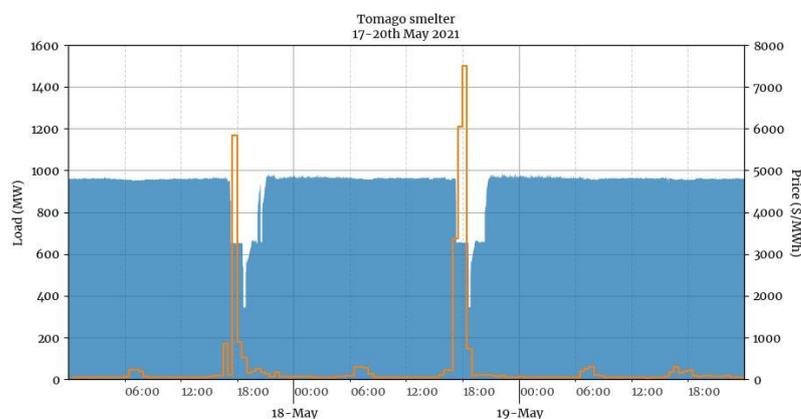
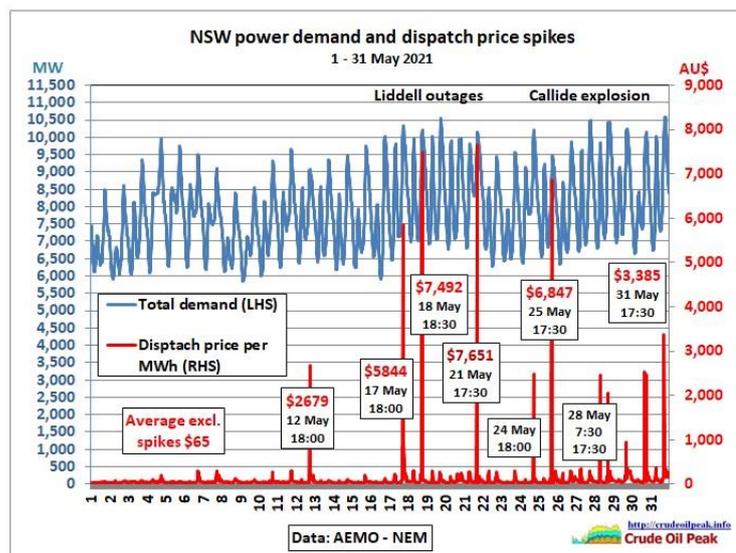
### Target

- Set relative to forecast maximum demand
- Review every five years or if conditions met
- Peak demand reduction period
  - 2.30pm to 8.30pm AEST
  - 1 November to 31 March

AEMO POE10 maximum demand forecast (MW)

The following event did not happen in summer. From my website:

7/6/2021 NSW power spot price spikes May 2021 become regular (part 1)



Loadshedding by Tomago smelter May 2021

<https://crudeoilpeak.info/nsw-power-spot-price-spikes-may-2021-become-regular-part-1>

Load shedding of an aluminium smelter – a strategic asset – is a no-no. Rather the lights and aircons in offices of energy-illiterate politicians should have been turned off. What I mean is discussed in the next 2 items.

- (6) All this hard PDRS work on a case by case basis will be cancelled out by big power hungry projects just announced by the NSW government for Parramatta



<https://www.smh.com.au/national/nsw/completely-transform-skyline-parramatta-plan-approved-after-nine-years-20220509-p5ajox.html>

All the while the Parramatta Council itself had calculated the peak demand for the CBD:

[parramatta.nsw.gov.au/\\_data/assets/pdf\\_file/0004/179878/Appendix\\_13\\_Sustainability\\_and\\_Infrastructure\\_Study.pdf](https://parramatta.nsw.gov.au/_data/assets/pdf_file/0004/179878/Appendix_13_Sustainability_and_Infrastructure_Study.pdf)

### IMPLICATIONS OF PARRAMATTA CBD GROWTH

PEAK DAY ELECTRICITY DEMAND (MW)

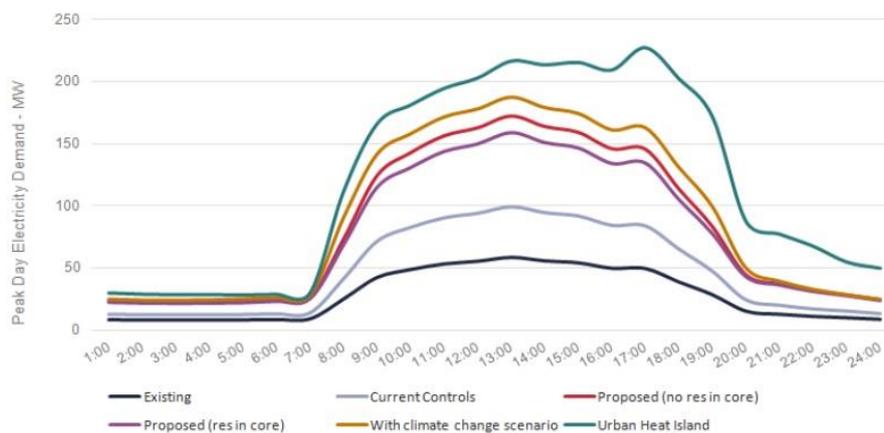


Figure 20: Expected peak day electricity demand profile under each planning scenario as well as under various climate change scenarios.

<https://www.cityofparramatta.nsw.gov.au/sites/council/files/2019-11/16.pdf> (page 15)

**Recommendation:** each DA must include a daily/weekly/seasonal load profile in MW and how to reduce peak demand using the PDRS methodology.

(7) In a public meeting in the RSL in Epping in Sept 2019 I asked then treasurer Perrottet where the power will come from for 100s of apartment towers planned for all over Sydney



Apartment towers along Metro West

His answer was that he is talking to Matt Canavan (i.e. more coal fired power plants) and pursuing the Narrabri CSG project. When I asked how many MW that would be he called me an alarmist.

(8) BASIX is completely out-of-date. Recently, an initiative to ban black roofs was stopped.

Plan to ban dark roofs abandoned as NSW government walks back sustainability measures 9/4/2022

[Plan to ban dark roofs abandoned as NSW government walks back sustainability measures | New South Wales | The Guardian](#)

(9) Example: we have here the case of a black roof and dark bricks (house completed in 2021) which would cancel out reductions of any PDRS appliances. In the meantime, the owner has at last installed PV panels.



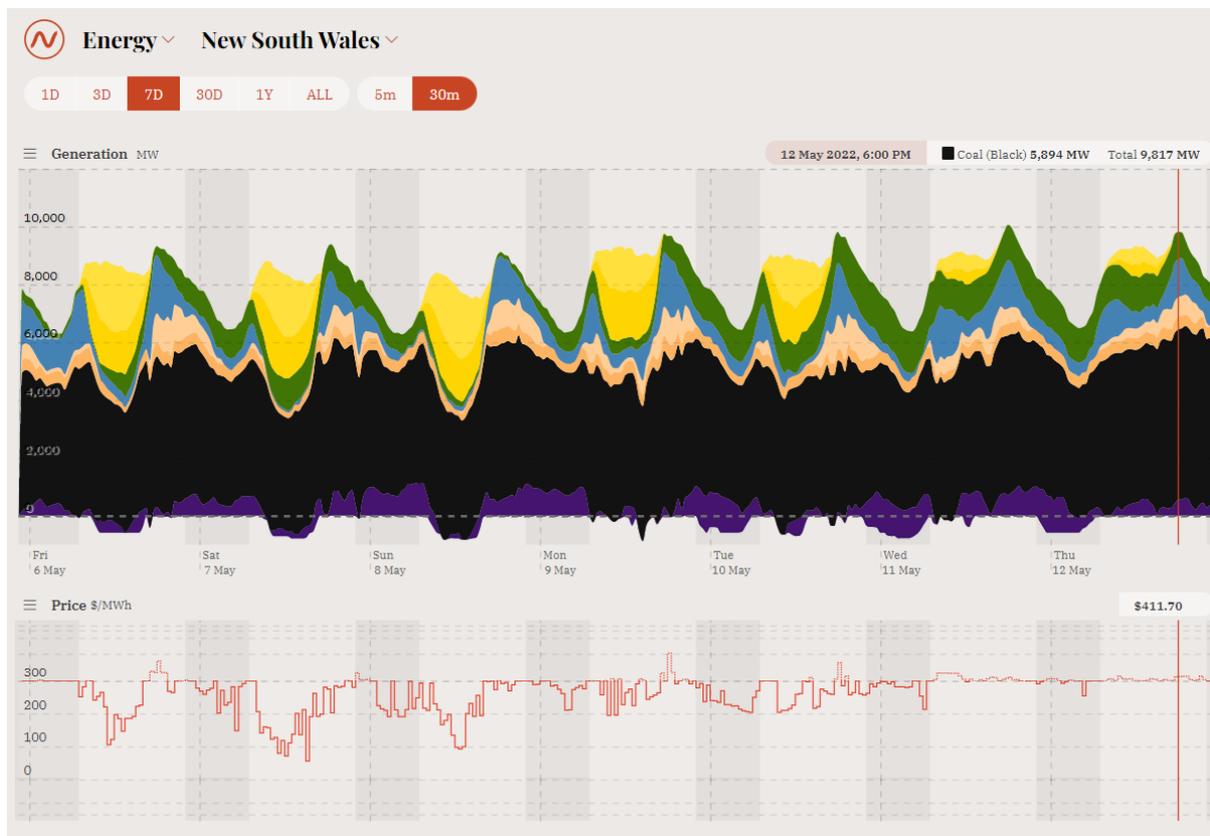
**Recommendation:** when assessing PDRS eligibility, a whole of house approach should be followed

(10) Wattclarity is a good website to follow the detailed mechanics of grid problems:

Josh Stabler discusses the 'timeline of energy scarcity' at the EUAA conference this morning

<https://wattclarity.com.au/articles/2022/05/josh-stabler-discusses-the-timeline-of-energy-scarcity-at-the-euaa-conference-this-morning/>

**Summary:** The efforts of the PDRS team are to be commended. However, a dramatic shift in government policies, strategies and the portfolios of projects actually promoted and implemented is to occur in order to achieve net zero.



Prices are now hitting the \$300/MWh mark regularly

<https://opennem.org.au/energy/nsw1/?range=7d&interval=30m>

Prepared by Matt Mushalik (MEng)

12/5/2022

[mushalik@tpg.com.au](mailto:mushalik@tpg.com.au)