

Chart of the Week

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“[From FY2020 onwards] the 5-min dispatch prices now go below 99% of MPF far more often than above 99% of MPC....

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Resizing the bumper car (market price) floor?

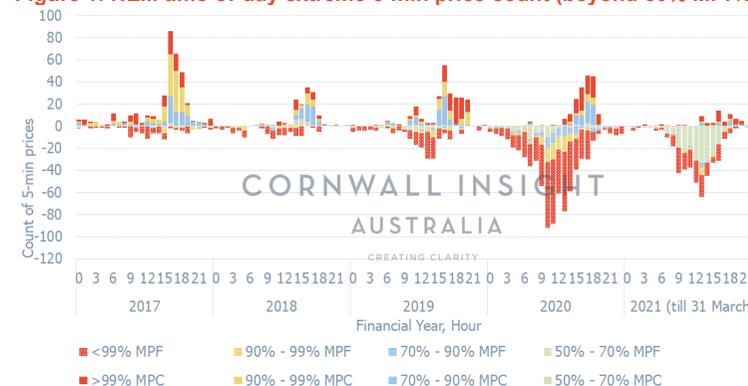
The next two years will be exciting for NEM regulatory aficionados (pronounced “nerds”) as the reliability standard and settings are up for review. The reliability settings, including the market price cap (MPC) and floor (MPF) have not been changed for more than a decade. While the MPC is indexed to CPI, the MPF has stayed flat at -\$1000/MWh nominal. In the 2018 round, the Reliability Panel (RP) concluded the MPF was not even open for review as negative price events were immaterial in the NEM.

The market has moved on fast since then. As Figure 1 shows, less than two years after the RP’s last decision, the 5-min dispatch prices now go below 99% of MPF far more often than above 99% of MPC. (For visualisation, positive and negative prices in the same relative percentage band share the same colour, but negatives are plotted below the x axis). So, is it time to change the MPF now?

The NEM is a real-time market with volatile spot prices. The MPF and the MPC have two purposes: (1) to send sufficiently sharp price signals to enable participants to make the right investment and operational decisions (e.g., investment/retirement and turning on/off) and deliver an efficient level of reliability for customers; (2) to set bounds on the price range to protect participants so that they are not financially ruined in a single stroke of bad luck. In a nutshell, it is like drawing enough floor space for players to enjoy the bumper car ride, but not so much that one unlucky bump sends someone off the tangent.

While Figure 1 probably shows it might be a good time to review the MPF this round, it does not offer conclusive evidence that the floor must be redrawn. This is because players can learn from, and adapt to, new market conditions. As Table 1 shows, in FY21 (up to 31 March) the count of very low prices in Queensland and SA has actually fallen in favour of more modest negative prices, despite a significant increase in total negative price events. Both regions’ below -\$900/MWh price count have dropped to less than half of their FY20 levels.

Figure 1: NEM time-of-day extreme 5-min price count (beyond 50% MPF/MPC)



Source: Cornwall Insight analysis of AEMO data

Table 1: Count of 5-min negative price by band (FY21 up to 31 March)

Region	Between -\$10 and -\$100/MWh		Below -\$900/MWh		Total below -\$10/MWh	
	19/20	20/21	19/20	20/21	19/20	20/21
SA	2,177	5,409	491	131	3,664	7,134
QLD	1,471	2,086	83	38	1,640	2,143
VIC	825	3,645	7	10	882	3,672

Source: Cornwall Insight analysis of AEMO data

So just like bumper car players, NEM participants can adapt to a more crowded place. It appears the price signals have guided them to change their operational and/or pricing strategies, so that they can make room for each other and reduce the likelihood of a head-on collision. (My colleague Lumi’s COTW issue 79 two weeks ago touched on a similar issue. Note his numbers are on calendar year basis and use 30-min prices.) This could leave the RP in an interesting dilemma: The price signals seem to be working as intended, but players still bump into the limits from time to time. All eyes are on the upcoming review now - will the floor be redrawn this time?