Hi Team,

Thank you for the draft report. It was much more comprehensive than previous reports with extensive discussions regarding nuclear. My comments relate to nuclear and the actual possibility of achieving zero emissions at a future date.

In relation to nuclear, one possible way for Australia to have a genuine net zero is for the government to build strategically sited large scale nuclear plants. These plants would then form the backbone of the system and run if available (except when unforeseen outages or scheduled maintenance occurs) i.e. they would be truly the base load power suppliers providing both power and resilience ensuring the 50 hz frequency is maintained within the designated tolerance band. By making the nuclear plants the backbone of the system one would ensure they ran at the optimum performance and capacity factors.

All other sources for intermittent renewable power could then bid and supply power to the grid to match the demand.

Whilst I realise the CSIRO / Aurenco / AEMO GenCost Report looks in detail at actual costs it does not take into account environmental factors including land degradation from mining and siting of renewable energy infrastructure, visual and audible pollution, loss of habitat and use of land and environment as these are not in the remit.

Having read the DCCEW Powering Australia I don't feel it provides a pathway to achieving

net zero. One wonders whether CSIRO's, Aurenco's and AEMO's resources would not be better spent producing an even year biennial GenCost report as costs seem to be stabilising. For the odd biennial years maybe the parties could produce a Pathway to Net Zero report. The first report would show what needs to be built and where to power Australia to the end of this century with a net zero target of 2050 and beyond. The next odd biennial year it would update progress on the original report and highlight any problems or changes required going forward. The present system seems totally ad hoc with very much "she will be right" some time in the future.

I just think Australia deserves better and we need to take our energy future away from the political arena and give back to the economists, engineers and constructors to ensure a future with a secure, economic and reliable power supply system with zero emissions into the next century and not the next political cycle.

Ian Kilpatrick