



06th April, 2021

Ms Anna Collyer
Chairwoman
Australian Energy Market Commission

Level 15
60 Castlereagh Street
Sydney NSW 2000

Dear Ms Collyer,

Re: Stakeholder submission to the review of the reliability standard and settings guidelines (REL0080 - Question 9)

Wärtsilä is a global leader in advanced technologies and complete lifecycle solutions for the marine and energy markets. Wärtsilä's net sales totalled EUR 4.6 billion in 2020. The company has operations in over 200 locations in more than 70 countries around the world.

We are pleased to comment on Question 9, on whether we see the value in:

1) Removing the section on modelling approach from the updated guidelines?

We at Wärtsilä advocate fair modelling that is appropriately advanced for the complexity of the system. Given the pace of advancement in the energy industry, we believe that it can be beneficial to allow the review process to adjust its modelling approach.

2) Including broad statements on the objectives, transparency of assumptions and use of sensitivity analysis for the modelling?

Because modelling results are grounded on the inputs and assumptions, we thus believe that there is value for AEMC's Reliability Panel to be transparent with these inputs and at the same time review these inputs to accurately reflect the state of the different technologies. To promote the acceptability and interpretation of results, we also advocate conducting sensitivity analyses where there is significant uncertainty in the inputs.



We further comment on the **technology-neutral** approach as described in the 2018 Reliability standard and settings review. Appendix B (B.4.1.1) explicitly listed the candidate technologies while omitting Internal Combustion Engine (ICE) power plants, which had been included in the 2020 Integrated System Plan. Technology-neutral modeling should give fair representation of all candidates, which includes their efficiency (including part-load) as well as flexibility parameters (startup time, ramp rates, minimum stable load, minimum up and down times, and so on).

Wärtsilä Energy offers a portfolio of ultra-flexible ICE power plants of up to 600 MW and utility-scale battery energy storage system (BESS). Our ICE power plants can run on gas, liquid fuels, and hydrogen blends and includes models optimized for baseload to peaking and reserve provision. This makes Wärtsilä's ICE plants future-proofed, as they can change their operational regime and fuel, depending on the evolving system conditions. Currently, rising renewables in Australia increases the need for flexibility, which we strongly believe can best be provided by the ICE, amongst gas technologies. AGL's 211-MW Barker Inlet power station in SA, with Wärtsilä 50DF internal combustion engines, is already demonstrating this.

We thank the Reliability Panel for their openness for stakeholder feedback.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Suraj Narayan', written over a horizontal line.

Suraj Narayan

Sales Director - Australia & Oceania
Wärtsilä Energy