

Submitter

Measurement Standards Laboratory

The Measurement Standards Laboratory of New Zealand (MSL) plays a key role in the operation of part 10 of the code supporting Approved Test Houses (ATH) but is not a participant in the EIPC.

We note that different ways of operating the market will be enabled by new technologies. There is considerable international research activity on relevant technologies and developing standards for them. New Zealand participation in these activities will be possible if they are of relevance to future local operations. The adoption of new technologies will require infrastructural support from ATHs and so planning is required to understand the scale of investment in people and equipment that will be required to meet the new needs.

The consultation paper does not specifically discuss Part 10 of the code but two of the questions in the standard response format seem relevant to the issues summarised above.

Questions	Comments
Q1. Do you consider section 3 to be an accurate summary of the existing arrangements for power system operation in New Zealand? Please give reasons if you do not agree.	-
Q2. Do you agree that we have captured the key drivers of change in New Zealand's power system operation? Please give reasons if you do not agree.	-
Q3. Do you have any feedback on our description of each key driver?	Key driver 4 (digitisation and digitalisation) appropriately recognises that increased IoT functionality offers new ways of operating. The EA should review relevant sections of part 10 that might inhibit the new ways of operating. More than ever before, power system operation will require reliable, timely and accurate data. This presents a challenge to part 10 of the code which, while it was forward-looking at its inception, remains tied to international standards that have been slow to adapt to new technologies.
Q4. What do you consider will be most helpful to increase coordination in system operation? Please provide reasons for your answer.	-
Q5. Looking at overseas jurisdictions, what developments in future system operation are relevant and useful for New Zealand? Please provide reasons for your answer.	European jurisdictions have had the benefit of a strong research programme coordinated by the European Association of National Metrology Institutes (EURAMET). The programme has had a recent strategic refresh https://www.euramet.org/smart-electricity-grids/strategy/strategic-research-agenda . The EA should be proactive with the parts of the code that will be impacted by developments in revenue metering, power quality, digital substations, instrument transformers and sensors, DC grids and applications, and grid integration.

Questions	Comments
Q6. Do you consider existing power system obligations are compatible with the uptake of DER and IBR-based generation? Please provide reasons for your answer.	-
Q7. Do you consider we need an increased level of coordination of network planning, investment, and operations across the New Zealand power system? Please provide reasons for your answer.	-
Q8. Do you think there are significant conflicts of interests for industry participants with concurrent roles in network ownership, network operation and network planning? Please provide reasons for your answer.	-
Q9. Do you have any further views on whether this is a good time for the Authority to assess future system operation in New Zealand, and whether there are other challenges or opportunities that we have not covered adequately in this paper? Please provide reasons for your answer.	-