

**Submitter – Foresta NZ Ltd**

<p>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.</p>	<p>No Comment</p>
<p>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.</p>	<p>No Comment</p>
<p>Q3. Do you have any feedback on our description of each key driver?</p>	<p>No Comment</p>
<p>Q4. What do you consider will be most helpful to increase coordination in system operation? Please provide reasons for your answer.</p>	<p>No Comment</p>
<p>Q5. Looking at overseas jurisdictions, what developments in future system operation are relevant and useful for New Zealand? Please provide reasons for your answer.</p>	<p>No Comment</p>
<p>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.</p>	<p>No Comment</p>

<p>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.</p>	<p>No Comment</p>
<p>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.</p>	<p>No Comment</p>
<p>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</p>	<p>Yes this is a good time to assess future system operation.</p> <p>We are future suppliers of pine chemicals and biomass energy and are not electrical engineers.</p> <p>Foresta NZ (<a href="https://foresta.nz/">https://foresta.nz/</a>) is constructing a manufacturing plant in Kawerau that will produce black (torrefied) wood pellets, which are a drop in replacement for coal. Within 5 years Foresta will be producing sufficient black wood pellets to replace coal that is consumed in Genesis's Huntly power station. Black wood pellets will reduce Huntly coal GHG emissions by over 90% which will assist NZ achieve its GHG reduction targets (refer Genesis's website - <a href="https://www.genesisenergy.co.nz/about/news/genisis-biomass-trial-successful">https://www.genesisenergy.co.nz/about/news/genisis-biomass-trial-successful</a>)</p> <p>The consultation paper clearly identifies that there are significant issues to be resolved in the operation of the future electricity system, due to higher levels of Distributed Energy Resources (DER) and Inverter Based Resources (IBR), which will not easily replace the inertia or frequency control of the current electricity system.</p> <p>By enabling Huntly's Rankine units to continue to operate on black wood pellets, Huntly will assist in supporting inertia and frequency control and therefore provide stability to the electricity system.</p> <p>In addition, the future system which will have a large amount of solar and wind generation, will still be at risk of blackouts when there are overcast and still days. Again, Huntly running on black pellets would be a good option in these circumstances.</p>