

Appendix A Format for submissions: Integrating hosting capacity into Part 6 on low voltage networks

Submitter	MainPower (New Zealand Limited)
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A.1 Please use the following table to provide your feedback on the questions included in this paper.

Question	Response
Q1. Have we adequately outlined the issues with increasing levels of SSDG, particularly inverter-connected solar PV systems?	The paper adequately addresses the issues associated with inverters however it does not adequately address some of the issues associated with processing applications for distributed generation. Under the present rules there is no requirement for a distributed generator or retailer to advise a distributor when distributed generation is connected and electricity is being exported. Certificates of compliance are not always provided despite the requirement under clause 9B of schedule 6.1. Therefore, the Registry is always not updated in a timely fashion. The absence of information also creates a potential safety issue in that EDB staff may not be aware that electricity is flowing two directions.
Q2. What other factors are relevant to these technical network considerations?	Nil
Q3. Do you agree these options broadly represent the range of actions we could consider at this time? Are there other broad conceptual options we should consider that are not covered by these three approaches?	Agree that the three options broadly represent the range of actions available, subject to provision being made to address our concern at Question 1.
Q4. Do you think the Authority should pursue the types of measures that Option B would require? If not, please outline your alternative preferred approach,	Agree that the Authority should pursue Option B.

including if possible the costs and benefits. If you consider there is a valid Option C-style alternative, please provide details, including your view on how your alternative would meet the Authority's statutory objective.	
Q5. Do you have any comments on the draft EEA guide's stated objectives?	No
Q6. What advanced power quality capabilities do inverters sold into the New Zealand market possess?	No comment
Q7. Is it reasonable to assume that the advanced power quality modes outlined are currently available in the marketplace at no additional cost? If not, what are the likely incremental costs involved to obtain these modes?	No comment
Q8. Would a default requirement to provide volt-var and volt-watt modes for all future inverter installations that use the Part 1A connection process have any unintended adverse consequences (for example, leaving a stock of unsold inverters that are otherwise compliant with the superseded AS4777:2005 standard suite)? Are these adverse consequences surmountable?	No comment
Q9. What comments do you have about the hosting capacity assessment process described in detail in the draft EEA guide?	We support the adoption of the EEA guide
Q10. Do you support the Code amendment request discussed in the draft EEA guide? If not, please explain why and, if possible, suggest an alternative approach.	Yes, subject to our comments at question 1.
Q11. Do you think there is a problem or conflict with	We do not consider that difference causes significant difficulties. We do

<p>the '10 kW total' versus '5 kW per phase' thresholds respectively adopted in the Code and AS/NZS 4777.2:2015? If so, would you support aligning the Code threshold with the inverter standard?</p>	<p>not support aligning the Code with the inverter standard as this may result in undesirable consequences in that larger capacity DG installations will then be eligible for consideration under part 1A of Schedule 6.1 and will not be subject to the more detailed assessment under part 1 of schedule 6.1.</p>
<p>Q12. Do you think there are emerging problems with capacity or power quality from in-home electric vehicle chargers, or is it too early to tell? We are keen to hear industry views and experiences and from parties that supply electric vehicle charging equipment.</p>	<p>We have no comment to make on this issue at the present point in time.</p>