Appendix D Format for submissions

Submitter	Bryan Leyland MSc, DistFEngNZ, FIMechE, FIEE(rtd).

Questions	Comments
Q1. Do you agree with our approach of focusing on industrial demand flexibility as an early initiative to enable demand flexibility more broadly? Why/Why not? Do you have any information to indicate that demand response from other consumer types may be more readily accessed?	No, not at all. You are giving priority to demand side management rather than a reliable and economic supply of electricity. Electricity is the lifeblood of the economy rather than an economist's and marketers plaything. Demand side management should only be considered when it is invisible to the user. This can be achieved easily by controlling or heaters at represents about 3 MWH of storage using the smart thermostat that my team have designed and will be in use in the isolated Haast network. Smart thermoststs on water heaters can make a valuable contribution to managing system demand and frequency excursions. The Electricity Authority refuses to consider this option.
Q2. Do you agree with our estimates of the potential industrial demand flexibility capacity available in New Zealand currently and into the future? Why/why not? Do you have any evidence to support a materially different estimate?	Have you evaluated how much disruption this would cause to industry and commerce and how much it would cost industry and the economy. If not, why not?
Q3. Do you agree with our focus on intra-day demand flexibility for this initiative? Why/why not? What other approach would you suggest?	No we can get wind droughts lasting five days or more and, often, we get cloudy days in succession with so that does not generate much. You should concentrate on demand management that does not inconvenience the consumer and on providing sufficient generating capacity to meet the demand. This includes providing sufficient gas and coal storage for fuelling the generation needed during what otherwise would be
Q4. Are there any other ways that currently enable industrial demand flexibility in New Zealand?	Our smart hot water thermostat is one example. Another is to raise the price of electricity during Pete demand period and leave it to everyone to manage that as they see fit fit.
Q5. Do you agree with our description of the barriers affecting the provision of industrial demand flexibility? Why/why not? Are any other barriers relevant to the provision of demand	The biggest barrier is the damaging affect on the economy and industry. What it will lead to is a proliferation of emergency diesel generators and New Zealand will become a Third World country like Nigeria which has plenty of gas and 30% of the power is generated by emergency generators because of frequent power failures. The cost to the economy is enormous

	flexibility from other consumer types?	Yes is the Electricity Authority recognised that smart thermostats benefit every consumer and paid for the installation from a national levy, we would get at least 500 MW of flexible demand
Q6.	Do you agree that existing incentives and contracts for demand flexibility are resulting in inefficiently low levels of demand flexibility?	I don't know what you mean by "inefficiently" does it just look at it from the point of the market or from the point of view of the economy?
Q7.	Are you aware of any additional barriers to enabling more industrial demand flexibility?	The inevitable damage to the economy.
Q8.	Do you agree with our vision for industrial demand flexibility? Why/why not?	Not at all. It is simply an admission of failure tto provide a reliable and economic supply
Q9.	Do you believe that this vision is applicable to other forms of demand flexibility, or to flexibility more generally?	No, not at all.
Q10.	Do you agree with our view that demand flexibility providers should be able to receive payment for providing flexibility services that exceeds avoided energy costs, provided the demand response is efficient (as defined)? Why/why not?	If they do, it will increase the cost of electricity and conflicts with the obligation to provide a reliable and economic supply.
Q11.	Do you believe that a different level of payment would be appropriate? Why/why not?	Why pay lots of money shutting down industry and commerce rather than going back to basics and providing sufficient low cost generation. It does exist!
Q12.	Do you agree with our proposed guiding principles? Why/why not? Are other specific considerations which you believe should be included in the evaluation framework?	Didn't have time to read them.

Q13. Do you agree with our view that there is currently insufficient potential industrial demand flexibility to justify the establishment of new market mechanisms or platforms other than the proposed ERS and standardised demand flexibility product?	Yes
Q14. Do you consider there are other cost-effective measures that can be implemented urgently to enable industrial demand flexibility to support reliability and efficient in the wholesale market?	Other than controlling hot water and, maybe heat pumps, no.
Q15. Do you agree with our proposal to establish an ERS? Why/why not?	No. It would increase costs to the consumer compared to providing adequate generation.
Q16. For demand flexibility providers – do you consider it likely that you could make demand flexibility capacity available for an ERS in time for Winter 2026?	I am part owner of a hydropower Station that could make some contribution. When we looked at it the cost of using the storage for chasing unpredictable spot prices that could occur at any time and last anything from a few minutes to a few hours it was simply not worth the effort.
Q17. Do you agree with our proposal to investigate a standardised demand flexibility product? Why/why not?	No. Waste of money and effort better put into providing a reliable and economic supply. Start off with, as suggested by industry leaders, looking at the flawed electricity market.
Q18. Do you support our other proposed roadmap actions? Why/why not?	No, see above.
Q19. Do you believe there are other actions that we should consider in the roadmap? If so, please outline the actions and rationale.	Concentrate on providing an economic and reliable supply. Funding gas and coal storage would be a good start.
Q20. Do you support the proposed sequence and timing of actions in our	No. Aiming at a reliable and economic supply what you should be doing

proposed roadmap? Why/why not?	
Q21. Is there anything else relevant to this issue that the Authority should consider? If so, please provide any relevant information to support the Authority's consideration.	The overall objective of the Electricity Authority should be to provide a reliable and economic supply. It should be doing whatever is needed to ensure that this is what we get. Start off by questioning the assumption that nothing is wrong with the existing market. It has provided us with shortages and high prices and it will get worse as time goes on.

Thank you for the acknowledgement: if possible I would like you to add the following to my submission.

"In the text I noticed that the consultant claims that data centres can vary their load. This is seriously not true they require a reliable supply for every hour of the year. I regard this as a serious era of fact and indicates that the consultant may not have been conscientious about checking his information."

Kind regards,

Bryan Leyland