

-----Original Message-----

From: Molly Melhuish [<mailto:melhuish@xtra.co.nz>]

Sent: Thursday, 4 February 2016 4:59 p.m.

To: Nick Russ

Cc: Smart Grid Forum; gareth wilson

Subject: Comcom emerging technology forum

Nick, also John and Gareth

I was disappointed to learn only yesterday of ComCom's continuing Emerging Technology consultation; I cannot monitor Comcom's extensive website regularly.

In previous submissions on Input Methodology, I referred to RMI's several documents on integrating emerging technologies into the grid. My submission on the Electricity Authority's consultation on emerging technologies applies RMI's principles and recommendations as far as possible to the New Zealand context.

Competition from evolving technologies threatens to strand some assets of most distributors. The EA describes investors in rooftop solar and consumer-owned batteries as "cross-subsidising", because the resulting power bill will be reduced requiring the bills of others to increase. But that is perhaps only true if Input Methodologies allow recovery of their own investment costs for assets that may become less used and useful.

In skim-reading your consultation document I find little reference to "used and useful", nor does an even briefer perusal of the transcript of the December workshop suggest this as an important consideration in regulation. Perhaps it is, and is disguised by the rather arcane descriptions of regulatory initiatives.

As argued in this attached submission, I believe "emerging technology" should include household energy retrofits (carefully tailored to each house, through a vibrant home energy advisory system). Today home insulation and double glazing are probably the most important in reducing both kWh and kW demands. Rooftop solar cuts summer kWh demand, and adding batteries where appropriate cuts summer evening peaks. But in New Zealand, critical peaks are still in winter, and emerging technology in wood burning promises major opportunities to reduce peaks especially at critical times. This however requires a change to National Environmental Standards for Air Quality - which may or may not happen.

New Zealand keeps its regulation in silos; this must change. The Smart Grid Forum seems the proper place for a continuing discussion of these issues, but that would require its transformation to a Smart Energy Forum and include genuine representation from consumers and sustainable energy providers.

Regards

Molly