

Submission – Electricity Pricing Inquiry – In Response to the Draft Report

By - Bruce Cooke – 11 Mar 2016

My submission provides some comments and questions on the projections for renewable energy in the Electricity Pricing Inquiry Draft Report. The first two points are making the case that the QRET cost estimate seems to be too high, firstly because the assumed renewables base is too low and secondly because the unrealistic, high cost small scale option is used. The third point is looking at the issue of where the wind power counted in the 50% renewables target would be built. The fourth point is a minor one, that the estimate for solar in Queensland from the LRET seems low.

1. The modelling in section 1.4 has a base case “in which government policies are assumed not to change, including expansions to renewable energy targets or introduction of carbon pricing”. As a result in 1.4.4 the modelling shows “From 2024–25 gas is projected to provide most of the increased capacity in the NEM”. And by 2034-35 “Renewables are projected to account for 45 per cent of additional generation” which is 16,157 GWh of wind. Given that 5,100 MW will have been installed per 2022 this seems to imply no wind will be installed after 2022 in the NEM. And in Queensland up to 2034-35 “Large scale renewables are projected to make an insignificant contribution, of less than 500 MW”. Given the projection of 500MW by 2021-22 (sec 3.2) this means no new renewables in Queensland during the subsequent 13 years and a probably none in Australia. On the emissions side Australia’s total emissions will slightly increase from 152 Mt in 2014-15 (41 Mt Qld + 111 Mt rest of Aust) to 155 Mt in 2034 (sec 1.4.4).

So the base case is where Australia’s emissions slightly increase over the next 20 years, a huge fail in terms of our climate change obligations, and where Queensland and Australia don’t install any large scale renewables in the 13 year period from 2022 until 2035. Surely this is an unrealistic scenario, and one which therefore gives a false base from which to calculate the costs of the QRET. This is assumed even though the Coalition has a Paris target of reducing emissions by 26-28% by 2030 and Labor has even stronger environmental policies. Using this low renewables base means that the QRET costs are overestimated.

2. On the topic of QRET costs, the small scale solar component is estimated at \$2.2 billion to provide the “additional 300MW expected to come forward in the QRET case”, from 2,800MW to 3,100MW (sec 3.7.3). To provide this amount with large scale renewables would have a capital cost of less than \$600 million in the 2020s and presumably a lower QRET cost and so would be a much more effective use of funds. While this topic is discussed in the 4th paragraph of sec 3.7.3 I suggest that the lower figure of around \$9 billion with large scale renewables providing the 300 MW should be the one first mentioned in paragraphs 1 and 2, and then the discussion be around what it would cost to move to small scale solar (ie the \$10.8 billion figure) in the 4th paragraph. It is the unrealistic figure of \$10.8 billion that will be generally used and once again the QRET figure will have been overestimated.

3. A lot of ACT’s wind power seems to come from South Australia and Victoria. Would the same be the case for Queensland? This is a topic that it would be interesting to see discussed. Most of “Queensland's contribution to the LRET” that equals almost 10,000 GWh and that contributes to reaching the QRET target (sec 3.7.4 and fig 30) has been built down south. Only 500 MW of the LRET is projected to be built in Qld (sec 3.2) and only 250 MW is wind.

With the statement “The modelling projected that the target would be met through 6,300 MW of additional wind and 3,100 MW of rooftop solar PV in Queensland” it’s not entirely clear if this wind comes from Queensland or not. What are the characteristics of Queensland wind – night and/or day? Which areas have suitable wind? Either way a lot of the total wind power allocated to Queensland’s renewable energy total will have been built in the southern states and presumably that means we’ll be limited in reducing our own gas/coal generation correspondingly?

4. In section 3.2 towards the end there is the statement “the LRET is projected to facilitate around 250 MW of additional wind capacity into the Queensland region of the NEM by 2021–22. About 250 MW of additional large scale solar capacity is projected to be introduced in response to various forms of assistance from the Australian Renewables Energy Agency, Clean Energy Finance Corporation and state government policies.” I wasn’t sure if the solar projection referred to the NEM or to Queensland but then decided that it was the latter. With the state government setting up a 60 MW trial and Ergon intending to install 150 MW I can see where this figure has come from. However with the ARENA and CEFC incentives and with Queensland having almost half of the 22 projects in the most recent stage of the ARENA competitive round it seems likely that there will be more than 250 MW by 2022 (<http://arena.gov.au/media/arena-selects-22-large-scale-solar-projects-to-take-next-step/>). The coalition government being more keen on solar than wind is also a factor.