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To - AEMC - ERC0191 -

Subject -Submittal - Local Generation Network Credit rule change

This submittal is about different kinds of projects which could have happened in my backyard but haven't because of obstructive rules and high cost, now understood to subject to serious examination in this enquiry.

- A collection of buildings, Adult Learning, old Kinder, Centrelink and Portacabins, multiple session buildings, 4 electricity meters(no mains gas on Island), many split systems, need energy savings, draught sealing, insulation, shading etc, restricted budget consumed by electricity bill, working on behind meter = defection, perfect E-W roof lines for solar PV
- 2. Church Hall with adjacent Church and manse, 3 separate meters, big E-W roof for solar PV, prominent in centre of town, other building efficiency upgrades to reduce demand, why pay for 3 meters? change to behind meter = defection(other churches possible in this Anglican diocese and others)
- 3. Not so many places in this tourist destination for big wide turbines but working on one site belongs to water authority, sewage treatment plant, A class treatment to treated water mains, currently just golf course and footy ground, in summer only, so 80% discharged to Bass Strait, working on wind turbine and pumped hydro for use on site, but always ashamed to have to say that backward rules in Australia mean there are no instances of localised community energy, as in Germany, Denmark etc.
- 4. Much other scope with apartment blocks, town house developments, aged care facilities
- 5. Proposed solar PV panels to shade car park(s) with power to Civic Centre and each of 2 supermarkets. Also mentioned in notes attached, it was no doubt short term heat wave which caused power pole transformer failure, with Auslec insisting for 2 days(at Christmas time) no fault in their system, occupiers of prestige accommodation, whether owners or tenants without power for 4 days. Ultimate apology in local paper advised "no worries, we're spending \$12M for 2 new 66kV

transmission lines so it can't happen again" Not impressive for visitors and frustrating for business operators. This is surely overkill compared with how much solar PV you can buy for \$12M.

- 6. Most of Cowes was without power, for a whole day, this last winter. While walking the dog, happened across Auslec crew fixing problem, wires into isolator switches for 6kV into aged care facility, not restrained properly, blew around in breeze, causing explosive separation, wiring into underground supply needing to be replaced. Nearest main isolator was so far away that most of town was shut down. Supermarkets withdrew fresh food supply followed by delay for re-stocking. Baseload power, from far distant generators, can be generally of not so good quality and, in regional areas, less reliable than many would expect.
- 7. Meanwhile, a town like Wildpoldsried in Germany, population 2,600 has a big enough mix of renewable energy sources that it generates 50% more electricity than it needs, worth EUR7.5M in 2014, having started, from nothing, as recently as 1999. We can but dream, unless rules get changed.
- 8. In Victoria, it's particularly exasperating that Jeff Kennet privatised SEC, with Hazelwood going to Gdf-SUEZ for \$2.5B, when it had no debt and significant component to State revenue. It's been their most profitable asset on the planet, with net revenue more than \$400M per year, repatriated, no doubt to tax haven. Hazelwood was installed in late 1960's, at end of 20 year manufacturing cycle, so design comes from 1940's. Will it get telegram from Queen in 2040? This dirtiest dinosaur gets more market share than any other power station because Kennet gifted Gdf the mine, so they don't even pay for coal and certainly don't pay for pollution or health liability. Why are your rules so much in favour of big, foreign owned, extortionists like Gdf SUEZ, Auslec and others.
- 9. In Victoria, it's even more disappointing that well known business cartel got together to buy majority ownership in main manufacturer of smart meters, negotiating supply price 40% more than same meter supplied to any other country, then selling off their interest to Toshiba for huge profit. Smart means fewer meter readers and low cost disconnection for people unable to pay their bills. Our smart meters are dumbed down so that they don't even offer the kind of DRM(Demand Response Management, which was operational with Ripple control back in 1960's). With comms by wireless broadband, especially in place like Phillip Island, where wireless broadband is overloaded, during summer peak, wireless is flaky so will never be able to deliver anything like real time DRM to help clip peaks. If only smart meters had been delivered with NBN!!
- 10. Meanwhile no result CCS, renewables highly automated, so low labour cost, little advantage in China, success because of Manufacturing Policy. Despite poor solar irradiation, they wanted it, protected it against imports, compulsory installation on

govt buildings and residential, while Australia opened up the borders to free trade Our solar PV installation success is despite government.

No chance of more new coal power stations. LNG is oversold, big price rises imminent, to make cost prohibitive gas fired peaker power.

Why prolong the agony? When corporations as big as Peabody Coal have lost more than 90% of share value in last 12 months, not only is continuity of power supply in doubt but cost of mine rehab is more than likely to be offloaded onto tax payers, along with termination benefits for workforce. Contract bonds for such liabilities are no more than small change.

No new large solar or wind project approvals since 2013: recent project startups all thanks to ARENA and CEFC, targeted for cancellation by Turnbull & Co.

Chaos with government policy in recent times, has led to so much uncertainty that there's no new investment in large scale renewables or any means of reducing demand to match reduced supply. Larger picture is about risk. It's quite likely that effects of climate change will call for international response, with command for instant, big emission reductions. For 2020 promise, even for reduced RET, we need 4,400MW/ year of renewable energy. Continuing uncertainty means no finance for projects.

Minister Hunt keeps saying we don't need to do anything, leave emissions at current 100%, then divide by increasing population, so (per capita) Emissions Reduction by Population Growth. How crazy is that!

In the absence of any other leadership, surely AEMC needs to recognise it's own responsibility to, without delay, trial different ways and means for community energy to be enabled, to make most effective contribution, to ensure security of essential electricity supply? Can AEMC be encouraged by current moves for Clean Air Act and others, as enacted in USA in 1970's by Richard Nixon? P{M Turnbull even asks for innovation, so how about we do it?

BERNIE

NOTES jotted while investigating LGNC rule change possibilities:

- 11. Resentment rip off FiT 5 cents sell v 33cents grid buy
- 12. Resentment rip off \$45B gold plating poles and wires
- 13. Policy ineptitude cause of no new approvals for renewables since 2013 and no progress beyond toy level trials for CCS, dangerous, so no future integrity of supply
- 14. Resentment grid power, \$0 cost for brown coal(not 0, actually \$1.20/tonne), no regs to limit emissions, no start to site rehab, Hazelwood not pay \$100M cost of extinguish mine fire, not even pay health cost firefighters Gdf-SUEZ and parent fragile, big profits exported, Network lack of maintenance ignited fires Black Saturday
- 15. Distributed Gen provides resilience from grid power failures, especially extreme weather bush fires, floods etc
- 16. Phillip Island, at end of long skinny transmission line, poor quality power, over voltage to 270VAC, brown outs, transient caused solar inverter trip outs, also appliance failure(claims rejected by insurance, while Auslec reject as Act of God) tourist destination 10k people off peak v 60k peak, supply from batteries to clip peak(can results of taxpayer funded trial of GESS by Auslec be made public?), why no progress DRM(previously done by Ripple in 1960's!)
- 17. ABC TV Catalyst Reposit battery location, home(s) or community substation, share excess solar power and use grid as battery?
- 18. Resentment big, foreign corporates to cause behind meter/private wire defection
- 19. Auslec, power pole transformer failed, diesel at substation, tripped in and out, arrival new Coles and Woolies must have caused big increase in demand, especially considering no double glazing for huge windows and head office environmental people too complacent for NABERS Commercial energy audit. On phone and in local paper "outage didn't happen" then confession from CEO with "don't worry \$12M for 2x 66kV" (for locals to pay for)
- 20. asked Auslec attitude to sell off as "island grid", definitely, more trouble than it's worth
- 21. All Energy Expo presentation asked how DisGen causes grid instability, answer, it doesn't, especially in experience of SA, Met Office forecasts plenty good enough to prepare suitable mix of dispatch able generators
- 22. Campaign Idea Bass Coast Health offer at risk people battery backed solar, for emergency devices, when grid fails
- 23. Campaign Idea battery backed solar for all emergency services, for when grid fails.
- 24. Every hour, sun bathes Earth with enough energy to supply our needs for more than a year. There's no reason we can't harness more of it to cut back on polluting, climate-altering fossil fuels.