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How to Break the Electricity Impasse (in your dreams)

Hugh Bannister, CEO, IES

As everyone else has been offering free advice on what should be done with the East coast Australian electricity market, I thought I'd have a go, too.

Fix the gas supply problem

This isn't original, but it's important. Six export LNG trains at Gladstone have squeezed local gas supply and all dependent industries, including electricity supply. And miners trampling uninvited over thousands of farmer properties causing such a backlash? Who'd have thunk it?

I know, the LNG export industry is great for the country and one day it will start paying taxes, but the immediate supply problem for locals needs to be fixed. Policy brains that devised this gas industry strategy will know how.

Look to asset ownership

If I have a market alternative market for my gas under a gas contract or a boiler leak or some other annoyance in my plant that needs fixing at some point, my enthusiasm to work to minimise market disruption will influenced by whether I own other assets that can cash in.

Whose generators were out of action when the last heat wave was on, and why? It's not easy to sort out motivation, but motivation counts. As in retailing, banking and elsewhere, we have been extremely careless to allow electricity industry ownership develop the way it has. If we can't fix this now, we can surely improve it over time.

Forget clean coal & other fantasies

Where did this clean coal idea come from? Who would ever build such a thing in this era of low load growth and energy policy uncertainty?

More interconnection can make sense in some situations but it doesn't come cheap. Does South Australia need more interconnection? Only if you want to shut down its remaining base load plant – hardly a great idea.

Apart from dealing with some operational issues, the simple response to South Australia's challenges with wind is more gas turbines, preferably not owned by existing large players in the South Australian market, which is already too concentrated.

The simple way to kill off such investment in that state is to talk clean coal, nuclear and interconnection underwritten by government or regulation, and to persist with the current policy impasse in the sector.

Scrap new "hard" RE targets

This is one for Bill and his colleagues to ponder. The federal Labor "aspiration" for a 50% renewable target has been sharpened by state Labor governments aiming to implement ambitious "hard" targets.

The RET has been highly successful in demonstrating and nurturing renewables to current targets (perhaps pushed too much in South Australia).

But hard targets cannot be pushed too far. Why? I know it's not news, but high levels of intermittent power needs a fast, flexible backup such as gas turbines (with or without dual fuel capability) or large scale storage.

A certain minimum level of inertia is also required for secure operation. Right now this can only come from traditional synchronous plant.

If one wants to push renewables, the push should be on to fix the gas problem, and to keep the gate open for new storage technology. More on that later. And there are better ways to achieve emission targets in the sector which, as the song goes, "Everybody Knows…"

Revive an emissions price

Let's face it, bashing the carbon tax and any other reincarnation of a carbon price (a recent example being the dumped baseline and credit scheme) has been a wonderfully effective strategy for the conservative side of politics. That's life and good luck to them.

Despite its whipping boy status, an emissions price remains the best way to reduce emissions. It favours low emission options such as gas and, importantly, renewables only up to their point of economic and environmental viability. It's also a basis for scrapping new hard targets for renewable energy – a Very Good Thing.

A carbon price is readily implemented. Martin Parkinson probably has one sitting in his bottom drawer, ready to go. Forget emissions trading including baseline and credit schemes; they are games for financial speculators and the big boys; they make life complicated for the distributed energy sector which is the growth sector in the industry.

But what of the cost imposition on customers? Use the cash generated by a carbon price to underwrite the fixed elements of network costs, which in any case have become overblown in many if not most jurisdictions. Wholesale and retail prices could then be far more cost reflective and sympathetic to emissions policy.

Promote Storage

If one wanted a single headline scheme that would do most for a low emissions future it would be something that promoted storage. Cost reductions in renewable generation technologies over time would do the rest.

Before one dreams up another government scheme, one should look to the regulatory environment around behind-the-meter storage and how it could be improved.

One policy implicitly supported by regulators is to load more distribution network charges into fixed costs and demand or capacity charges. Fairness arguments are often advanced in support of this, but one might reasonably suspect that an auxiliary aim is to kill off or discourage new PV and battery storage behind the meter.

If income from an emissions price is used to underwrite some, most or all of these fixed costs, a time of use charge coupled with a dynamic load management option should be the norm, with no fixed charges permitted. Fixed charges are unfair. Demand and capacity charges are also not truly representative of costs – they are mechanisms for cost recovery that would become redundant if fixed costs were to underwritten in other, more efficient ways.

Fix market design shortcomings

There are many elements of the current market machinery that could be made more sympathetic to the changing nature of the electricity sector. For my bucket list of technical fixes, see "Related Documents" at the end.

The AEMC seems to focus on regulation rather than dirtying its hands with market machinery. AEMO seems to be under pressure from market participants to cut costs rather than take initiatives, except where matters of urgency emerge such as the current security challenges. Even then, the instinct is to go the centralised, regulated route, through lack of homework on market alternatives. There is huge a gap here that needs fixing. Maybe the Finkel review will have an answer.

Where to now?

Given the current shortcomings evident in the electricity sector, there must be some kudos available to a political leader who can offer something to break the impasse. Re-nationalisation is not the answer. Rather, a mostly sound sector reform, corrupted by abject policy failure over the last decade, needs to be put back on the rails.

CONTACT

Hugh Bannister

+61 (0)2 8622 2210 +61 (0)411 408 086

hbannister@iesys.com www.iesys.com

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