

Institute for Sustainable Futures

PO Box 123 Broadway

NSW 2007 Australia

T: +61 2 9514 4950

www.isf.uts.edu.au

University of Technology, Sydney

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Mr Warwick Anderson General Manager Australian Energy Regulator GPO Box 3131 Canberra ACT 2601

AER Draft Determinations likely to cost consumers billions, exacerbate carbon emissions & hinder new economy

Dear Mr Anderson,

Thank you for the opportunity to respond to the AER's draft determination for Ausgrid and the other NSW electricity network businesses. I recognize that regulating network businesses is a challenging and complex enterprise. I would like to commend the AER on the very extensive work it has undertaken in preparing the draft determination. In particular, the shift from a price cap to a revenue cap form of regulation is an important reform. However, notwithstanding the many positive aspects of the AER's work, the draft determination is seriously deficient in the area of Demand Management (DM).

The failure of the AER to provide efficient incentives for DM in the past has raised Australian consumers' electricity bills by billions of dollars. If the current approach of the AER is carried through in its final determination for Ausgrid and for other network service providers, it will likely again impose very large unnecessary costs on Australian households and businesses. In addition, the AER's proposed approach will make cutting Australia's carbon emission more costly and reduce Australia's share of jobs and value added in the rapidly developing sectors of energy efficiency, renewable energy and smart technology.

The AER's proposed approach to DM has been tried in the past and failed, such as when the Independent Pricing and Regulatory Tribunal NSW shifted from a price cap to a revenue cap in the 1990's. By contrast, successful regulatory strategies for DM have been applied overseas for decades in places such as California and Ontario. Failure on the part of the AER to learn from this experience is likely to damage Australia's economy and environment and undermine confidence in the AER and the regulatory system.

The AER has a legal obligation and an economic imperative to change its approach to DM in its final determination for the following four key reasons:

- It would reduce costs to consumers (even *excluding* the economic value of reducing carbon emissions);
- It would comply with the National Electricity Objective of "to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity";
- It would reduce costs and risks associated with continue reliance on centralised power at a time when technology and market demand are trending towards decentralised energy;
- It would reduce costs and risks associated with higher carbon emissions at a time when State and Federal Governments are committed to reducing carbon emissions.

Options to improve regulation for DM have long been discussed in detail in other fora. For example, I attach a copy of the ISF report *Restoring Power: Cutting bills & carbon emissions with Demand Management* (Attachment C), which was presented to the AER in November 2013. I also attach a recent article which addresses these issues (Attachment B).

I elaborate on the above issues in Attachment A. I regret that I have not been able to expand on these issues at greater length here or in relation to your other electricity network determinations. However, given the great complexity and extensive documentation of the regulatory process, it is now very resource intensive to engage effectively in the process. This is particularly so for the many stakeholders such as myself who are not funded to do so.

I wish you well in developing your final determinations.

Yours sincerely,

Chris Dunstan Research Director



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## Attachment A: ISF Submission to AER Re: Draft Determination for Ausgrid 2014-19 13 Feb 2015

There are four key elements to the AER's proposed approach to DM in its Draft Determination for Ausgrid. These are:

- 1. The Form of Regulation;
- 2. The Removal of the D-Factor;
- 3. The DM Innovation Allowance (DMIA);
- 4. The DM Incentive Scheme (DMIS) and other possible DM incentives.

These elements are discussed below.

## 1. Form of regulation

The AER has decided to move from a price cap to a revenue cap form of regulation. In principle, by applying a cap on revenue, it means that the network businesses will not automatically lose revenue if they support DM activities that reduce sales volume. However, in practice, in NSW, the benefit of this reform will be muted by the fact that the distribution network businesses were able to claim and recover any such "foregone revenue" via the D-factor. Nevertheless, this is still an important and welcome reform.

## 2. Removing the D-Factor (and DMIA Part B)

The AER states:

"We have determined to continue Part A of the Demand Management Innovation Allowance (DMIA) but will not apply either Part B of the DMIA or the D-factor scheme for Ausgrid in the 2015–19 regulatory control period. This is consistent with our proposed approach in the Stage 2 Framework and Approach. We have also determined that Ausgrid's proposed Demand Management Benefit Sharing Scheme not be introduced at this time."<sup>1</sup>

The AER's proposed approach represents a major step backwards in support for DM from the current inadequate level of support as adopted by the AER in the 2009-14 determination. Given the shift from a price cap to a revenue cap, the removal of Part B of the DMIA (for electricity sales foregone) and the volume related component of the D-factor *would* be appropriate, *if* other balanced incentives were applied. However, no other DM incentives are proposed by the AER. Moreover, the D-factor includes not just a volume related (foregone revenue) component, but a second component for recovery of DM costs incurred up to the value of avoided distribution costs. Abolishing the D-factor in the context of a shift to a revenue cap form of control will therefore constitute a significant *reduction* in the incentives for DM.

# 3. Demand Management Innovation Allowance (DMIA)

The AER proposes that:

"The current innovation allowance amount of \$1 million (\$2014-15) per annum will continue in the 2015–19 regulatory period."<sup>2</sup>

This is a very small allocation for DM representing less than one tenth of 1 percent of Ausgrid's annual allowable

<sup>&</sup>lt;sup>1</sup> AER, Draft decision, Ausgrid 2015-19, Overview , p. 95

<sup>&</sup>lt;sup>2</sup> AER, Draft decision, Ausgrid 2015-19, Overview , p. 95

revenue of between \$1,500 million to \$2,000 million per annum. If it were intended simply as a small fund to support research and development in DM, the DMIA could potentially play a useful role. However, in practice, the DMIA may do more harm than good, as it creates the illusion of having an DM incentive in place, without delivering DM projects, programs or benefits at a meaningful scale. Furthermore, the AER has set no performance benchmarks or guidelines for the outcomes, impact or cost effectiveness of the DM activities funded under the DMIA. This means that if the DMIA reports small impacts or poor cost effectiveness of these DM activities, it can be cited as evidence that DM is not worthwhile. This perverse outcome has actually occurred in the current determination period, in the case of Transgrid.<sup>3</sup>

# 4. The DMIS and other possible DM incentives

Ausgrid have proposed a significant program of DM activity in the 2015-19 period, with an operation expenditure of \$37.3 million (including \$5 million for the DMIA), *"such that a positive NPV is returned in 6.5 years and the total NPV through to 2024 is \$31 million"*. Furthermore, Ausgrid estimates that for the broad based DM component of their plans alone, *"net market benefits from the program are \$38 million NPV (10 year) with a minimum benefit cost ratio of 2.0 when using the whole of network average cost of extra capacity"*<sup>4</sup>.

While I am not in a position to test the merit of Ausgrid's proposed DM plans, it is concerning that the AER has apparently not sought to assess the merit of these plans either. Instead, the AER has decided not to include *any* allowance for DM operating expenditure in Ausgrid's allowable revenue, apart from the DMIA. Instead, the AER has indicated that Ausgrid should fund DM out of savings in capital expenditure. However, Ausgrid points out in its submission that it has *already* made allowance for savings of capital expenditure associated with DM. If AER wishes to apply this capital expenditure offset approach, then it should increase the capex allowance for Ausgrid commensurate with the disallowed DM opex.

Ausgrid's proposals for DM expenditure are very similar in approach, although smaller in scale, to that approved by the AER for Energex and Ergon Energy in the current regulatory period. It is noteworthy that both Energex and Ergon Energy currently operate under a revenue cap. It introduces another arbitrary regulatory bias against network DM if the AER precludes DM as a legitimate planned operating expenditure.

In addition, Ausgrid has proposed a Demand Management Benefit Sharing Scheme (DMBSS) in order to incentivise the network businesses to adopt DM and thereby create additional upstream benefits for consumers. In principle, this seems to be a sensible approach to unlocking DM benefits that would otherwise not be realised at all. The AER has recognised the merit of such an approach, stating: *"We acknowledge the need to reform the existing demand management incentive arrangements and the importance of demand management in deferring the need for network augmentation by alleviating network utilisation during peak usage periods."* 

However, despite this acknowledged urgency, the AER has chosen to reject the Ausgrid DMBSS proposal without offering any alternative in its place. The AER states,

<sup>&</sup>lt;sup>3</sup> Hugh Grant, AER Consumer Challenge Panel(CCP6 Sub Panel) Advice On TransGrid's Proposed Demand Management Innovation Allowance

<sup>&</sup>lt;sup>4</sup> <u>https://www.aer.gov.au/sites/default/files/Ausgrid%20-%206.12%20-</u> %20Demand%20Management%20opex%20expenditure%20-%202014.pdf

<sup>&</sup>lt;sup>5</sup> Draft Decision, Ausgrid distribution determination, 2015–16 to 2018–19, Attachment 12: Demand management incentive scheme

"A benefit sharing scheme, such as that proposed by Ausgrid, could well be effective in strengthening incentives in this regard. However, we consider that such proposals deserve the full scrutiny of a consultative rule change process by the AEMC and a subsequent scheme development process by the AER to ensure a robust outcome. For these reasons, we have determined to not introduce Ausgrid's proposed DMBSS at this time and adopted the position proposed in the Stage 2 F&A to approve DMIA allowances consistent with their current scale.

The outcome of this proposed approach by the AER is perverse. Because there has been a 14 month delay in the AEMC considering the Council of Australian Governments Energy Council's proposed DMIS Rule Change to *strengthen* the incentives for DM, the AER will now *weaken* the incentives for DM with a view to, *possibly*, strengthening them again later.

This is not an orderly or efficient approach to regulation and is certainly no way to tap the market for demand management which has the potential to save consumers millions of dollars (as noted in Attachment C).

#### **Attachment B:**



The electricity industry is undergoing its greatest change in living memory. Photo: Glenn Campbell

"Electricity network regulation". Sure, not the sexiest words in the English language but ignore them and bad things happen.

Few Australians paid attention back in April 2009 when the Australian Energy Regulator (AER) announced its NSW electricity network pricing decision. But this decision and the AER's following decisions for the other states, led to electricity prices doubling over seven years, pressure on household budgets, a spike in power disconnections, the carbon tax furore and ultimately, the federal Labor government's climate policy implosion and the demise of the Rudd and Gillard governments.

Back then, the AER fatefully signed off on more than \$17 billion in network capital spending in NSW and more than \$40 billion across the National Electricity Market. This was billions of dollars more than necessary. Power prices spiralled and energy consumption slumped.

Six years later on, it's decision time again and the regulator is keen to cut electricity prices. But a narrow, short-term focus on prices could also set up Australia for an even bigger energy crunch in a few years' time.

The danger is because the electricity industry is undergoing its greatest change in living memory. Just as information technology and telecommunications were transformed by personal computers, mobile phones and wireless technology, so too the "small is beautiful" wave is now sweeping the power sector.

"Decentralised energy" in the form of solar panels, batteries, energy management and smarter, more efficient equipment is trashing the old paradigm of big power stations and power lines feeding an ever-growing appetite for energy. Our big centralised power stations are expected to be producing less power in 2024 than they were in 2010, while solar power and energy efficiency grows apace.

The decentralised energy revolution will not stop with solar panels and LED lights. Battery energy storage is expected to boom, both in stand-alone units and in the swelling fleet of electric cars. But perhaps the biggest game changer is the simmering upheaval in energy demand management via smart homes, smart buildings and the "internet of things". Technology juggernauts such as Google, Apple and Samsung are investing billions in products like <u>Nest</u>, <u>Homekit</u> and <u>SmartThings</u> to give consumers unprecedented control over appliances and energy consumption.

Thankfully, after decades of focusing on building network infrastructure, Australia's network businesses are recognising that the future of electricity is about clean, decentralised, small scale energy and helping customers save and manage it. Businesses like Ausgrid and Transgrid in NSW and Ergon Energy and Energex in Queensland have proposed to the AER "demand management" plans to work with customers to reduce energy bills and facilitate decentralised energy.

Unfortunately, the AER seems more focused on "punishing" the network businesses for the past, than on rewarding them for embracing a cleaner, less costly future. The AER has flagged its intention to disallow millions of dollars of funding for the networks' energy savings plans, while still allowing tens of billions of dollars in network investment. This perpetuates the old model of networks making money out of building infrastructure and maximising electricity sales.

This would mean not just yet more unnecessary infrastructure spending, but also higher power prices if demand for centralised energy falls as expected. A preview of these impacts was offered in a <u>report</u> released by Uniting Care this week. The report highlighted not just high and increasing electricity charges, but a shift from consumption-based tariffs towards fixed charges that cannot be avoided by saving energy or generating your own solar power.

The cost of such perverse regulation will also be borne by their public and private owners. And privatisation would not necessarily prevent the problem for state governments as prospective purchasers are likely to mark down their purchase price to reflect this now quite predictable risk. More important in the long run, discouraging demand management and decentralised energy means higher carbon emissions and a delay in Australia adopting the cleaner, smarter technologies that tomorrow's economy will depend on.

Happily, this is not such a difficult problem to fix. The <u>2013 Restoring Power report</u>, by the Institute for Sustainable Futures, summarised the key solutions as: asking network businesses to set specific targets for cutting energy bills and saving energy; requiring network businesses to report progress towards meeting these targets; and providing incentives to network business to ensure that helping customers to reduce demand is at least as profitable as building new infrastructure.

There are numerous precedents for this approach, such as in New York, California and Ontario.

Various stakeholders have tried to push the AER towards such reform. The current <u>senate</u> <u>inquiry</u> is canvassing the issue. Both the <u>Council of Australian Governments' Energy Council</u> and the <u>Total Environment Centre</u> have requested changes to the National Electricity Rules to require the AER to adopt an effective demand management incentive scheme. After languishing for more than a year, these proposals may soon at least be considered.

The recent electricity crisis was as predictable back in 2009 as the next one is now. If we grit our teeth and take an interest in network regulation now, we may just be able to stop history repeating.