LOCAL GENERATION NETWORK CREDIT RULE CHANGE

DRAFT DETERMINATION

NOVEMBER 2016

TEC is making this submission as one of the rule change proponents. It is relatively short, partly because we concur with the City of Sydney's and Institute for Sustainable Futures' analyses of the MJA and AECOM modelling in their submissions, so we are focusing on higher level and process issues.

When we read statements such as the following, from AEMC Chairman John Pierce, "The original request would have achieved little but higher prices for all consumers", we have to conclude that the AEMC has fundamentally misunderstood and misrepresented our rule change request, which we made clear should result in credits only where there are identifiable economic benefits to the network, and which ISF modelling showed would produce substantial benefits to the system, and to all consumers according to how the benefits were distributed, over the medium to long term – that is, **consistent with the NEO.**

Context

The rule change request, as prepared by OakleyGreenwood, summarised the intent of the introduction of a local generation network credit (LGNC) as follows:

> This paper proposes a change in the National Electricity Rules (NER) to require electricity distribution businesses to establish posted tariffs that reflect the economic benefits that local electricity generation delivers to or imposes on the distribution system.

To this end, we proposed a credit that would reflect

> …the long-term economic benefits (in the form of capacity support and avoided energy transportation costs) that the export of energy from a local generator provides to a distribution business, including reduced or avoided transmission costs that would otherwise be passed through to end users.

At the time, and after spending two years on preparatory work with ISF and the City of Sydney, we thought that a network credit to reflect network benefits – effectively a generation equivalent of cost reflective network tariffs – was the best way to recognise the benefits of embedded generation to the entire electricity system. As the decentralised energy system grows, it makes sense that we should incentivise generators to locate close to consumers, since this will result in lower infrastructure needs and line losses (not to mention other benefits such as encouraging the uptake of low emissions energy – something the AEMC has no interest in, thanks to its narrow interpretation of the long term interest of consumers).

However, in retrospect there were two problems with this approach:

1. We did not differentiate clearly enough between the end we were trying to achieve (incentivising local use of the system), the impediment in the current rules to this end (the imposition of full network tariffs even for the carriage of electricity between adjoining properties) and the potential solution we proposed (paying local generators a credit where they helped distribution networks to reduce future augmentation or replacement investment).
2. We did not foresee that the AEMC would focus solely on the third of these elements and, having according to its modelling found that our proposed methodology would not produce the desired

results, and would in fact result in net costs to consumers (a conclusion we strenuously reject), on this basis refuse to engage with the first two elements and reject the entire reform out of hand.

Outcome

The net result is a DD that adopts a very narrow view of the problem (in effect, "Are local generators adequately incentivised under the current rules?") rather than a broader but still essentially economic question such as "How should local use of the system be incentivised to reduce whole of system costs?". Even by its own narrow measure, the DD's conclusions are hard to fathom. For instance, when the AEMC states that "total network support payments and avoided TUoS currently paid to providers of non-network solutions by all DNSPs in the NEM is in the range of $11-13 million", we need to remember that this is in a market with annual transactions of some $11 billion, and with capex spending over the prior regulatory period of some $45 billion. Network support payments, the only incentive the AEMC has chosen supposedly to strengthen in its DD, are so small as to be meaningless. In our view this is evidence of the need for a broader incentive for local generation.

Instead, the DD recommends a tokenistic change to reporting requirements which adds nothing to the data already available (via ISF's network opportunity maps) and still keeps the whole process under the control of networks and subject to individual contracts between generators and networks – something we regard as anathema to the incentivisation of decentralised generation more broadly, and the AEMC's frequent lauding of the benefits of competition.

Again, the outcome might have been different had we framed our proposed solution differently. Aside from generation equivalent of cost reflective consumption tariffs, we might have proposed, say,

- Based on a similar premise, paying local generators and consumers all avoided transmission costs (not just TUOS).
- Or, based on a broader reading of our objective and the problem, proposing other methodologies such as the cost of private wires or the value to networks of maintaining high grid utilisation (rather than have local generators be tied to loads behind the meter or on microgrids).
- The other value streams attributable to local generation eg, greater power system security[1] – could have prompted an even broader review.

Alternately, we might have fared better had we adopted a similar approach to the COAG Energy Council in its pending Contestability of energy services - demand response and network support rule change request, in which it effectively highlighted the relevant issues but left the AEMC to come up with regulatory solutions.

Irrespective, we told AEMC staff that we were open to changes to our proposed methodology in respect of a locational credit, minimum and/or maximum capacities, time-based credits and restricting the application of the credits to new generators. So, for instance, when the AEMC contends that "the proposal is likely to result in higher prices for electricity consumers as payments would be made to an embedded generator whether it is located where a system limitation exists or not", the obvious response is, "Why not consider the value of a locational credit?"

The AEMC's power to make a "more preferable rule" could easily have been invoked to this end, rather than it being applied to a supposed information gap that does not address the problems with network support payments, let alone the intent of the rule change request. In our view, consumers will be the ultimate victims of this narrow response, as prosumers and small- to mid-scale embedded generation proponents limit their use of the network due to high network tariffs on exported energy, reducing network utilisation and likely increasing the prices payable by legacy grid-connected customers for lumpy, underutilised aging assets.

Why did the AEMC refuse to respond to the objective of our request and instead focus exclusively on the methodology as proposed? We take some responsibility for not having articulated our objective clearly

[1] See, eg, Giles Parkinson, "AGL says local renewables would offer more security than current grid", *RenewEconomy*, 4 October 2016.

enough at the outset. But in TEC's view this refusal may also be the product of the AEMC's very narrow interpretation of what constitutes the long term interest of consumers under the NEO. The DD quotes the NEO in discussing the rule-making test, but in our view the AEMC has neglected to factor the costs of climate change mitigation into its assessment framework. Incentivising local renewable energy generation will help to reduce the long term cost of electricity to consumers, but the assessment framework does not internalise the real costs of decarbonisation in determining "lowest total system cost" (or, it appears, the cost savings incurred by encouraging consumer-side generation) and the resultant long term price of electricity to consumers.[2]

The AEMC must consider increasing the uptake of local renewable generation to be part of its mandate, especially given the strong economic arguments for overcoming obstacles in the way of early carbon abatement action. ISF produced evidence that incentivising local renewable generation is economically efficient as well as environmentally responsible: evidence that has been reinforced by more recent research from Energeia for the ENA/CSIRO Network Transformation Roadmap, which forecasts much higher economic benefits from networks buying services from prosumers. According to Energeia, "If Networks buy grid services from DER Customers, this 'orchestration' could replace the need for $16.2 billion in network investment, avoid cross subsidies, and lower average network bills by around 30% compared to today."[3] More specifically, according to Energeia,

> The ability of the network to optimise the flow of energy across the grid at times of over or under capacity, both dynamically and at specific locations, at least cost, will become increasingly important with the introduction of new technologies and the changing mix of centralised and decentralised energy evolves.[4]

The Energeia report also canvasses a "SAPS tariff" to encourage consumers to stay grid connected,

> …to be able to sell their excess PV, save money on their SAPS solution, and enjoy higher combined reliability. Energeia estimates that the introduction of a SAPS tariff would save all customers over $1.2 billion in present value terms over the period to 2050 by avoiding uneconomic investment in off-grid SAPS…. Savings to connected customers is estimated at $1 billion per year by 2050.[5]

This represents a valid alternative approach to valuing local generation: paying local generators to stay grid connected to avoid increasing bills for residual costs for legacy grid-connected customers, and/or paying them not to consume by islanding during critical peaks.

Likewise, the Victorian Government's current inquiry into the true value of distributed generation has recognised that "private investment in distributed generation can produce economic value by reducing the cost of building, maintaining and operating Victoria's electricity network." While its recent work is still confidential, we understand that the ESC is well advanced in considering whether "the current regulatory framework allows private investors of distributed generation to receive compensation for some or all of the value created", and if not, "whether there are any changes that should be made to the regulatory framework."[6]

We accept that incentivising local generation through a "negative load" tariff like the LGNC is only one potential option, and that other drivers and solutions like consumption tariff reform and battery storage uptake will – along with local energy trading – help to reduce the need for network augmentation and increase the uptake of local generation.

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[2] This is not an argument we have pursued to date, due to the AEMC's aversion to considering the costs of decarbonisation in its interpretation of the NEO, but here we are taking a broader approach in view of our failure while playing by the AEMC's current rules.

[3] Energeia, Unlocking value for consumers, October 2016, 1. That report goes on to state (at 3; our emphasis) that

> Energeia's preferred scenario is for an additional layer of *direct, targeted incentive signals* to integrate new technologies at a locational level, to complement more efficient broad-based tariff structures. Under its preferred scenario, Energeia predicts a third of customers will participate in some type of additional incentive, either directly or through an intermediary.

[4] Energeia, Network Transformation Roadmap: Work Package 5 – Pricing and Behavioural Enablers: Network Pricing and Incentives Reform, October 2016, 29.

[5] Ibid., 4.

[6] Essential Services Commission 2016, The Network Value of Distributed Generation, Distributed Generation Inquiry Stage 2 Discussion Paper, June 2016, xi.

Process

The DD claims that "This draft determination follows extensive engagement with stakeholders in order to thoroughly assess the proposal and alternative solutions." We agree that the process started well, with a consultation paper and a series of workshops up to March 2016. But after that the only consultations consisted of several meetings between AEMC staff and the proponents and ISF, at none of which were we given any indication of the AEMC's thinking. It was not until 18 July that we were briefed on the MJA modelling on which the AEMC has relied, and even then we were not given access to the MJA report itself. The proponents were not given access to the AECOM modelling which the AEMC also commissioned very late in the process, which we consider to be unfair. While the DD was deferred for the AEMC to consider the results of ISF's economic modelling, those results appear to have been disregarded. AEMC staff did not appear to seriously consider our proposals for more targeted credits, in spite of the AEMC itself raising the prospect in its second workshop of a spectrum of potential responses to the problem identified by the proponents. Overall, the process lacked transparency and a genuine spirit of collaboration.

Conclusion

There have been no less than 210 rule changes completed by the AEMC since 2005. Of these, not a single one proposed substantially by small consumer groups[7] has been successful. Admittedly, only three have been proposed (two of them by TEC), but this says much about how open the rule change process is to small consumer advocates rather than the incumbent industry.

The DD will have counter-productive consequences. There will be increasing focus on reform of the NEO and energy market governance, or on subverting the grid by going completely offgrid or creating microgrids not subject to the NER. Overall, the AEMC will begin to lose its social licence from the community.

In closing, we can only concur with the following statement made in relation to the previous rule change request initiated by our consumer advocacy colleagues:

> CUAC and Consumer Action reject the AEMC's conclusions and consider the Draft Determination and proposed rule a manifestly inadequate response to the issues raised in the Rule Change Application and subsequent submissions.[8]

We therefore support CUAC and CALC's recommendations to reform the rule change process,[9] and would add two of our own:

> That prior to a rule change request being submitted, the AEMC clarifies (to a greater extent than at present) the extent of evidence of the problem and the level of detail in relation to specific changes to the NER that proponents are expected to provide in order for the request to be properly considered.
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> That prior to a rule change process being formally initiated by the AEMC, it cooperates with proponents to clarify in writing the exact nature of the issue which the rule change request seeks to remedy.

Meanwhile, we support ISF's call for the DD to be withdrawn and replaced by an options paper, and/or the City of Sydney's call for the AEMC to adopt a revised rule change based on the options outlined in its submission. TEC, meanwhile, will pursue a campaign either to change the NEO or otherwise to mandate that the AEMC's interpretation thereof should include decarbonisation impacts.

[7] Here we exclude TEC's 2013 DMIS rule change request, since it substantially followed the AEMC's own draft specifications.

[8] Submission to National Energy Retail Amendment (Retailer price variations in market retail contracts) Rule 2014 Draft Determination, Consumer Action Law Centre and Consumer Utilities Advocacy Centre, September 2014, 2.

[9] Fix It!? How to fix the energy market rule making process to improve competition and consumer outcomes, CUAC and CALC, undated, 4.

Yours sincerely,

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