

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

Submitted by email to NSWACTelectricity@aer.gov.au

8 August 2014

Dear Mr Anderson,

Submission on NSW distributors' regulatory proposals for 2014-19

EnerNOC is grateful for the opportunity to comment on these regulatory proposals. We see the treatment of these proposals as crucial in establishing the credibility of the new approach to network regulation in the NEM.

EnerNOC is an energy management company, currently managing over 24 GW of load sourced from over 14,000 commercial and industrial sites across markets in North America, Europe, Australia, New Zealand, and Japan. As well as offering much of this load into energy, capacity, and ancillary services markets of varied designs, we also assist customers in improving their efficiency and minimising their spending on energy.

1 Demand management is becoming part of the normal business of DNSPs

We welcome the change in approach evident in some of these regulatory proposals – most notably Ausgrid's. Previously, DNSPs have tended to focus on pilots and trials of demand management, encouraged by the "use-it-or-lose-it" innovation allowance. Some of them seem now, at last, to have recognised that "proven, reliable, cost effective approaches and technologies" exist,¹ leading to a shift towards integrating demand management into their core planning processes,² and, in Ausgrid's case a "step change increase" in demand management activities.³

¹ Ausgrid Regulatory Proposal Attachment 6.12, p.4.

² "The resulting reductions in demand have been incorporated into our peak demand forecast, and our capacity planning models for the distribution (11kV) system" – Ausgrid Regulatory Proposal, p.38; "We have investigated ways to defer augmentation at specific sites of our network when developing our forecasts, and have incorporated the expected reduction in system demand from the implementation of new broad based demand management activities." – Essential Energy Regulatory Proposal, p.85; "We have investigated ways to defer augmentation at specific sites of our network when developing our forecasts and have incorporated the expected reduction in system demand from the implementation of new broad based demand management activities. The savings from demand management initiatives have been incorporated into our capex forecasts." – Endeavour Energy Regulatory Proposal, pp.69-70.

³ Ausgrid Regulatory Proposal Attachment 6.12, p.4.

There are also signs of a more sophisticated understanding of the benefits of demand management:

Across the NEM and in Ausgrid's supply area peak demand growth has slowed in recent years, departing from the previous trend of steady year-on-year growth. This has led to lower forecast growth in augmentation capital expenditures but also increased the uncertainty about the optimal capital investment strategy compared to the last regulatory period. In this more uncertain environment, the "option value" of demand management programs is enhanced for the coming years.⁴

Specifically, demand management can allow DNSPs to delay making irrevocable commitments to major capital works until they are more certain that the works are necessary and will be cost-effective. This increases the likelihood of DNSPs making the right decisions. By pursuing this strategy, DNSPs should end up with fewer stranded assets.

2 Broad-based demand management is welcome

While targeted demand management projects – allowing the short-term deferral of specific planned network augmentations within the current regulatory cycle – tend to provide the greatest cost savings in the short term, there are many further savings opportunities which are not realised under current arrangements. This is for two reasons:

First, as Ausgrid points out:

An advantage of this type of DM program is that benefits (in capital deferral) are near term and can be clearly defined. A disadvantage is that generally there is a relatively short timeframe in which a specific quantity of demand response must be prospected, contracted and commissioned.⁵

A demand management project that has to be up and running quickly will tend to be more expensive than one which can be built up over time, as search costs will be greater. It also will be limited in the amount of capacity it can provide from a given area, because customers who need to carry out significant upgrades (e.g. to control systems) before they can reliably provide curtailment are less likely to be able to participate.

In addition, many such near-term deferral projects, as well as starting soon, will also end after only a year or two, when the amount of demand reduction needed to continue deferral exceeds the capacity that can be sourced from the affected area. This further increases costs and limits capacity, because the costs of acquiring customers and enabling them to participate (through provision of telemetry, etc.) have to be recovered over a shorter time.

⁴ Ausgrid Regulatory Proposal Attachment 6.12, p.5.

⁵ Ausgrid Regulatory Proposal Attachment 6.12, p.9.

Secondly, as Essential Energy explains:

The true cost of providing a given overall network capacity is made up of the sum of many augmentations in separate parts of the network over indefinite lengths of time. Under the current valuation methods the economic deferral of a single network augmentation is both difficult to justify and a false representation of the true value to all stakeholders.⁶

As a result of these issues, very few of the potential targeted demand management projects tend to proceed. Broad-based demand management programmes can avoid all of these issues: they are longer-lived and can be designed to provide benefits across the value chain. They can hence be highly cost-effective.

We are pleased to see that Ausgrid has detailed plans for its broad-based demand management initiatives, and we recommend that the AER encourage such initiatives.

3 Scale of demand management initiatives

We note that Ausgrid expects the benefits of its broad-based demand management initiatives to be three to five times their costs.⁷ While these proposed projects are admirably cost-effective, it suggests that there must be a much larger number of potential projects for which the benefits would exceed the costs, but which Ausgrid is not proposing to pursue. This means that net consumer benefits are not being maximised.

We recommend that the AER request that Ausgrid revise its demand management proposals to be more ambitious: to provide greater consumer benefit by lowering their threshold ratio of benefits to costs.

Endeavour Energy and Essential Energy have not developed their demand management proposals as thoroughly as Ausgrid. We recommend that the AER request that they submit more extensive and fully developed plans for demand management in their revised regulatory proposals – similar to Ausgrid’s – along with the corresponding downward revisions to their peak demand forecasts to reflect the results of these programmes.

⁶ Essential Energy CEOP1121 Demand Management Strategy, p.20.

⁷ Ausgrid Regulatory Proposal Attachment 6.12, pp.4 & 35.

4 Incentives are key

The Regulatory Investment Test for Distribution (RIT-D) obliges DNSPs to pursue a non-network option if it provides greater net benefits than a network augmentation. However, as previously noted, where this obligation conflicts with a DNSP's commercial incentives, there is sufficient wiggle room in the subjective aspects of the RIT-D to make it likely that the latter will prevail.⁸

NSW DNSPs have undertaken a great many more augmentation-deferral-driven demand management projects than DNSPs in the other NEM regions. It seems likely that this is because they were subject to the D-factor scheme, which provided a positive incentive for demand management projects, whereas DNSPs in other regions have only been subject to the Demand Management Incentive Scheme (DMIS), which, despite its name, provides no positive incentive for demand management.⁹

Since the AER proposes to discontinue the D-factor, it is important that a new, effective incentive scheme be in place for this regulatory cycle. Otherwise, without any positive incentives, DNSPs are likely to carry out an inefficiently small amount of demand management, leading to needlessly high costs for customers in the long run.

In 2012, the AEMC recommended the introduction of a reformed incentive scheme which would provide a genuine positive incentive for cost-effective demand management.¹⁰ In 2013, the Standing Council on Energy and Resources and the Total Environment Centre both submitted rule change proposals to create incentive schemes along the lines proposed by the AEMC.¹¹ The AEMC has not yet started its formal evaluation process for these rule changes. This means that any resulting rules, and associated AER guidelines, are unlikely to be in place before the AER reaches its final determination for these DNSPs.

Having identified the need for an effective demand management incentive scheme in 2012, it would be completely unacceptable to leave DNSPs without one until the next regulatory cycle starts in 2019.

It might be possible to use transitional provisions to introduce the new scheme mid-cycle, as soon as it is finalised. However, it is greatly preferable to have a scheme in place from the start: if the details of an incentive scheme are not known at the time that a DNSP must make an investment decision, it cannot have the intended influence on the DNSP's decision.

⁸ See, for example, EnerNOC's submission to the AER's RIT-D Issues Paper, 25 February 2013, and AEMC, Power of Choice Review Supplementary Paper, *Demand Side Participation and Profit Incentives for Distribution Network Businesses*, 23 March 2012.

⁹ See AEMC, Power of Choice Review, *Final Report*, 30 November 2012, pp.205-206.

¹⁰ *Ibid.*, pp.207-213.

¹¹ The rule change proposals are available from <http://www.scer.gov.au/workstreams/energy-market-reform/demand-side-participation/dmegcis/> and <http://www.tec.org.au/green-energy-action/national-electricity-market/reports-and-submissions/393-reports-and-submissions.html> respectively.

Ausgrid has recognised this problem and proposed a straightforward Demand Management Benefit Sharing Scheme.¹² EnerNOC believes this is a sensible approach, and that the proposed scheme should be applied both to Ausgrid and to the other NSW DNSPs.

I would be happy to provide further details on these comments, if that would be helpful.

Yours sincerely,



Dr Paul Troughton
Director of Regulatory Affairs

¹² Ausgrid Regulatory Proposal Attachment 3.03.