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Mr John Pierce
Chairman
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Submitted via www.aemc.gov.au

24 May 2013

Dear Mr Pierce,

Submission on the publication of zone substation data (ERC0156)

EnerNOC is grateful for the opportunity to comment on this rule change request.

EnerNOC is an independent aggregator of demand response (DR), currently managing over 24 GW of peak load at more than 14,000 commercial and industrial sites across markets in North America, the UK, Australia, and New Zealand. Over 30% of this peak load provides DR.

1   General comments

By making more detailed load data routinely available, this proposed rule change would significantly increase transparency. As well as providing the advantages identified by the proponent, this change should aid demand-side aggregators in assessing the potential for demand-side solutions to network issues.

Although the Distribution Network Planning and Expansion Framework should lead to the disclosure of similar information in areas where Distribution Network Service Providers (DNSPs) consider that augmentation work may be necessary, publishing this information routinely, in a standardised format, should allow for more systematic analysis, and much lower handling costs.

It is difficult to think of any downside to this change. So long as an automated approach is taken, the implementation costs for DNSPs should be modest – they already need to collect and collate the data for their own purposes – and the ongoing costs should be insignificant. The usefulness of the data could be improved, at little incremental cost, by publishing more frequently: a daily process should be simple to implement.

2   Responses to consultation questions

Our answers to the relevant questions in the consultation paper are below:

1.(g)   Does the data need to be published in a standardised format (for example, in a spreadsheet) for ease of access? If so, what is the preferred format?

Yes, it should be published in a simple format amenable to automated processing, such as loading into databases. Proprietary spreadsheet formats would not be a good choice. A simple CSV-based format would be the most obvious choice for ease of processing. To avoid defining a new format, and facilitate the reuse of existing toolchains, it may make sense to use NEM12, even though only a small subset of the format's capabilities would be needed.

3.   Are there likely to be issues of confidentiality surrounding the publication of zone substation data? Will aggregation of the data up to a certain number of customers avoid issues of confidentiality? Will aggregation reduce the usefulness of the data for demand forecasting and econometric studies? If so, what level of aggregation should be applied to avoid the issue of confidentiality while still retaining some degree of usefulness of the data?

Confidentiality is most likely to be an issue for zone substations which supply a single customer, or perhaps a small number customers. Unless they form part of a zone subject to a wider-area constraint, such substations are generally not of interest to DR aggregators.

Where such issues arise, aggregation of multiple zone substations should resolve them. Aggregation does make the data less useful, so the minimum necessary should be performed. Care should be taken, where possible, to form aggregations in a way which is consistent with the network topology, such that the constituent substations will generally all lie on the same side of any likely constraint.

4.(a)   What is the materiality of the benefits identified by the proponent?

It is difficult to quantify the benefits, but we would expect them to be material.

4.(b)   What are your views on the value of historical and forward looking electricity demand information?

Forward-looking demand information underpins all planning activities. It cannot be obtained without scrutiny of historical demand information.

4.(c)   What other benefits of the proposed rule change can be expected that have not been identified by the proponent?

The proponent mentioned the benefit of parties being able to scrutinise the basis for AEMO's demand forecasts. For DR proponents, it is more important to be able

to scrutinise DNSPs' demand forecasts, and develop forecasts which provide more detail on the issues relevant to DR, such as the timing, length, and shape of extreme peaks in demand, and their correlations with externalities, such as temperature.

4.(d)   Are these other benefits likely to be significant?

The details of the demand profile, mentioned above, can make a significant difference to the viability of DR programmes. However, they are typically not handled well by conventional forecasting tools. Allowing DR proponents to assess such factors themselves, working from raw data, should significantly improve their ability to propose workable and efficient DR programmes to DNSPs.

4.(e)   Who are likely to be the recipients of these benefits?

Ultimately, customers are the main recipients. Better data should allow better DR programmes to be designed, allowing efficient deferral or avoidance of network augmentation projects to be achieved more often, reducing necessary DNSP revenues, and hence costs borne by customers.

Those customers that provide DR capacity would further benefit by receiving payments for making the DR available. DR aggregators would also benefit through the fees they would receive for facilitating that participation.

5.   Should there be a consistency of approach in publishing zone substation and connection point electricity demand data? Please provide reasons as to why there should/or should not be a consistent approach.

It would be better to be consistent than to attempt to solve the same problems twice.

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

Yours sincerely,

Dr Paul Troughton
Manager of Regulatory Affairs