30 January 2014

Mr John Pierce
Chairman
Australian Energy Market Commission
PO BOX A2449
SYDNEY SOUTH NSW 1235

Project number: ERC0156

Dear Mr Pierce

Publication of Zone Substation Load Data

The National Generators Forum welcomes the opportunity to comment on the AEMC's Draft Rule Determination, *Publication of zone substation data*, released publicly on 5 December 2013.

The NGF initiated the Rule change proposal requiring distribution network support providers (DNSPs) to publish zone substation load data with the aim of establishing a permanent time series updated annually of load data at the sub-distribution network level. Such a database would enable any interested party the opportunity to investigate and measure usage patterns through time in different parts of the economy. This was driven in large part by some remarkable declines in demand at the regional level in recent years and a desire by generators to understand the factors influencing those changes. Analysis of past trends should provide valuable insights into likely future shifts in demand in different parts of the NEM.

The NGF is of the view that the AEMC's draft rule determination generally satisfies the original intent of the NGF's rule change proposal. While there have been a number of modifications to the NGF's proposal, we accept that draft rule should provide adequate data at the level of granularity requested without imposing substantial costs on DNSPs to collect or process the relevant information.

The following submission discusses some of the detailed issues in the draft determination.

<u>Raw not metered data</u>

Through the course of the first stage of the Rule change process, the NGF developed a better understanding of the quality and type of load data collected by DNSPs at the zone substation level. We accept that DNSPs do not have sophisticated metering equipment installed on many zone substations given the costs involved and that high-quality metering data for billing purposes is collected elsewhere in the transmission and distribution networks.

Provision of single line diagrams

A number of DNSPs provided the NGF with samples of the actual raw data that is currently recorded and stored at the zone substation level. In discussions with the AEMC and the Energy Networks Association (ENA), the NGF accepted that the raw data was likely to be adequate for the purposes we had outlined in the initial Rule change proposal. The NGF was mindful not to pursue a proposal that would impose high costs for the DNSPs, either by mandating new metering equipment or requiring detailed data filtering and processing. At the same time, it became apparent to the NGF that any third party undertaking a thorough analysis of the raw data would require a good overview of the electrical linkages between zone substations within a DNSP supply area, particularly in highly meshed parts of any network.

The AEMC's draft determination sets out the reasons provided by the NGF for requesting access to detailed network diagrams. In particular, we consider that these schematic maps are important in interpreting step changes in data, as was revealed in the sample raw SCADA data that the DNSPs provided to the NGF. For a given zone-substation, a sudden change in load would normally result in a corresponding opposite load change in another zone substation. It would be possible to develop algorithms to interpret these step load changes and to attribute the load to a physical network area. However, the NGF considers that the single line diagrams showing the linkages between zone substations would be a necessary input into developing such modelling tools.

The NGF has reviewed the network maps provided by DNSPs as part of their distribution annual planning reports. The quality of these maps varies very widely between DNSPs. In our view, none of the network maps currently published shows sufficient detail to enable a robust analysis of the raw zone substation data.

The NGF does not question the strongly held view of DNSPs relating to the public release of information on network configuration that may give rise to system security concerns. At the same time we consider that the AEMC's draft determination does offer a practical way to resolve such concerns.

The NGF supports an approach involving the release of single line diagrams of zone substation under confidentiality agreements between DNSPs and reputable third parties through an application process. A DNSP would need to be satisfied that the third party had a legitimate intention to use the schematic network diagrams to assist with processing the zone substation load data. The agreement would set out the restrictions on publishing or disseminating any information contained in the single line diagrams. We would anticipate that there should be no reason why a registered NEM participant or any of the NEM data consultancy businesses should be denied access to this information under such an agreement.

The NGF notes that AEMO has in the past provided connection point load information to market participants to enable them to undertake power system load modelling. Before this data was given over, the market participant had to apply to AEMO and state the purpose of the data and agree to limits on its use. The NGF would hope that DNSPs would negotiate and cooperate in the same way as part of the zone substation data application process.

Confidential and commercial-in-confidence data

The NGF does not challenge the draft rule determination that allows the DNSPs to make an independent assessment of which zone substation data is excluded on the basis of an existing confidentiality agreement or a genuine concern about commercial-in-confidence for an individual customer.

The NGF recognises that the release of data on the load profile of individual users is a contentious issue. We are concerned that any treatment of commercial-in-confidence data will make the time series of zone substation data less useful. This would occur whether the data is aggregated in some way or excluded from the data provided. The key criterion we are looking for the DNSPs to apply is consistency of treatment on a year-to-year basis. While we accept that some loads will appear or disappear from time-to-time as larger users expand or exit operations, the NGF requests that the DNSPs treat all other users on a consistent basis through time.

DNSP fees for providing the zone substation data

The draft rule determination allows any interested party to apply for historical zone substation data in raw form. In most cases this will be SCADA data. The DNSPs are not required to filter or process the raw data, or to validate or guarantee the accuracy of the information provided. The NGF accepts this outcome as it greatly reduces the cost of collecting and providing the raw data through the application process.

The first step in the process requires DNSPs to provide 10 years of historical data, if that information is available. The data is then updated annually and made available upon request.

The draft rule determination provides that the AER may classify the provision of the zone substation data as a direct control service, giving the AER the power to set a fee that the DNSPs may charge for providing the data. The AER would be able to set such a fee in the next regulatory period of each DNSP.

The NGF is of the view that the draft rule change should not impose material costs on DNSPs to comply with the new requirements. The AEMC's draft determination recognises that collecting, storing and providing the raw data in an unprocessed form should minimise the costs involved.

The NGF does hold a concern that the DNSPs may seek to impose a substantial fee for providing the first 10 years of historical data. As such we support the AEMC proposal to establish transitional provisions in the Rules that would allow the AER to set a fee for such data prior to the next regulatory period for each DNSP. The fact that the AER may step in and set a fee for this service should provide a discipline on the DNSPs when they consider their fee proposals for the 10-year data sets. The AER could take advice from generators and other data users when considering whether to determine service fees on an ongoing basis.

Summary

The NGF accepts and supports the AEMC's draft rule determination on the zone substation data proposal. We consider that the draft Rule is capable of ensuring that there is a permanent time-series database showing statistically measureable patterns of energy usage at the sub-distribution network level of the NEM.

The effective implementation of the Rule does require the ongoing cooperation of DNSPs in a number of areas:

- negotiating confidentiality agreements with reputable applicants allowing the release of single line diagrams showing the electrical configuration of zone substations;
- ensuring that only genuinely commercial-in-confidence data is excluded from the zone substation raw data; and
- setting reasonable fees for providing the raw data reflecting actual costs incurred in collecting and distributing the information.

The NGF appreciates the professionalism of AEMC staff involved in the project and the assistance and cooperation of the ENA in developing the basis of a workable outcome taking into account the range of differing industry views on some issues.

The NGF would welcome the opportunity to comment on any material changes to the draft rule that the AEMC may contemplate in the preparation of a final determination.

Yours sincerely

Tim Reardon
Executive Director