



24 May 2013

Mr John Pierce Chairman Australian Energy Market Commission Level 5, 201 Elizabeth Street Sydney NSW 2000

Dear Mr Pierce

The NSW DNSP's Response to the Consultation Paper - National Electricity Amendment (Publication of zone substation data) Rule 2013

The NSW Distribution Network Service Providers, Ausgrid, Endeavour Energy and Essential Energy (the NSW DNSPs) welcome the opportunity to provide this joint submission in response to the Consultation Paper - National Electricity Amendment (Publication of zone substation data) Rule 2013.

We note that the National Generators Forum (NGF) submitted this rule change request in relation to Chapter 5, Schedule 5.8 of the National Electricity Rules (the Rules). Specifically, the rule change seeks to introduce an additional reporting requirement for DNSPs (within the Distribution Annual Planning Report process) to include the annual publication of 10 years of historical half-hourly load data for all zone substations within a DNSP's supply district.

The NSW DNSPs understand that the NGF believes that this additional level of sub-regional data enables interested parties to undertake their own forecasts of electricity demand and would facilitate comparison with those currently prepared by the Australian Energy Market Operator (AEMO).

As noted by the AEMC in the consultation paper, the Rules currently require DNSPs to undertake annual planning reviews covering a forward planning period of five years. As part of this process, DNSPs are required to publish the outcomes of their planning reviews in the form of a Distribution Annual Planning Report (DAPR). These planning reports must include information on electricity capacity and load forecasts for transmission-distribution connection points, sub-transmission lines and zone substations.

The NSW DNSPs are supportive of accurate and reliable information being available in the National Electricity Market (NEM), provided it benefits all market participants rather than a segment of the market and meets the National Electricity Objective (NEO). The rule change proposal unfortunately does not provide any quantification of potential benefits or likely costs (and who would bear them). We would submit that the publication of historical zone substation load data presents some issues both in terms of the composition, availability and accuracy of the data, as well the ability of it to meet the intent of the rule change proposal, namely the modelling of independent demand forecasts.

In this respect, it is important to note that the accuracy of the measurement systems in place at NSW networks' zone substations varies depending on network requirements (and the size of the substation). Accordingly, accurate historical half-hourly load data may not be captured or required for operational purposes at all zone substations. It is for this reason that the NSW DNSPs use a combination of Supervisory Control and Data Acquisition (SCADA) and metering raw data to operate the network and inform the peak demand forecasts which are published annually in the DAPR (and historically in the Electricity System Development Review).





The data requirements advocated in the rule change proposal would require additional measurement capability across the network going forward. In the absence of an operational requirement and associated benefit for DNSP customers, and an unsubstantiated benefit for market participants, it is difficult to establish how the rule change proposal contributes to the NEO.

While it might be possible to publish raw historical SCADA and metering data, it would be impossible to reconcile the historical data with the forecasts because the data is cleansed to correct for data spikes, abnormal switching, outliers and weather dependent variables. This data cleansing is a necessary component of forecasting as it is crucial for the calculation of meaningful trends. It is also particularly important where the network is subject to significant abnormal switching. Additionally, there are also commercial confidentiality concerns relating to substations which supply a few or single industrial customers which would necessitate further cleansing. The combined effects of this data cleansing process would impact on the relevance of raw historical load data for the purposes of developing independent forecasts.

In addition to data cleansing, and as part of the forecasting process, the results of the base statistical analysis are overlaid with the effects of planned projects and known customer activity, and into the longer term, econometric growth factors are applied on a regional basis. Without these elements, and a significant understanding of the network configuration, any independently derived forecast would not facilitate comparison with AEMO's forecast or provide a suitable basis for econometric studies.

Moreover, while the Energy Networks Association (ENA) and AEMO are working towards harmonisation of forecasting methodologies across the NEM, there is unlikely to be consistency amongst DNSPs in terms of the availability, accuracy and assumptions used in the process, noting, for example, that not all DNSPs weather correct their data. As a result of all these factors, it is questionable whether any market participant, including the proponents would receive any benefit from the publication of zone substation data as specified in the proposal. As such, we cannot support the rule change as proposed and endorse the ENA submission which has raised similar concerns.

As an alternative to this rule change proposal, we would suggest that if the NGF is wanting to establish independent forecasts (at a more granular sub-regional level) then they already have this information available as part of the five year AER DNSP regulatory determination process. DNSPs submit demand forecasts (including peak demand at the zone substation level) for AER review. These forecasts are independently audited both in terms of process and accuracy, and provide context for NSW DNSPs' investment decisions. Moreover, as noted above, zone substation peak demand forecasts will be published annually in the DAPR.

In addition to the required distribution network information reporting, DNSPs also provide records and forecasts to the relevant TNSP for zone substation and customer spot loads supplied through each transmission system connection point. The TNSP, in turn, consolidates this information with their supply point load records and expected variations to produce and publish supply point load forecasts as part of the annual TNSP reporting requirements. This adds to the body of information made available by the DNSPs and further supports questioning the need for, and potential benefits to be gained from, the rule change proposal.







If you would like to discuss this matter further, please contact Mr Mike Martinson, Group Manager Regulation at Networks NSW on (02) 9249-3120 or via email at <a href="michael.martinson@endeavourenergy.com.au">michael.martinson@endeavourenergy.com.au</a>.

Yours sincerely,

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**Group Chief Financial Officer** 

**Networks NSW**