Response to AER Information Request

AER RP 003

Demand Forecasts

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Request (AER RP 003)

To assist the AER with its assessment, the AER requests that ElectraNet provides the following information:

1. A connection point demand forecast that is consistent with the 2012 AEMO state-wide demand forecast.

2. Projections of augmentation and connection point capex that are consistent with the alternative connection point-based forecasts as above.

Response 1

ElectraNet notes first of all that the AEMO 2012 state-wide demand forecasts are currently in draft form and that the details of this forecast have not yet been finalised and published.

The following reiterates how ElectraNet has applied demand forecasts within the context of its regulatory obligations in South Australia.

ElectraNet has applied demand forecasts as follows in developing its capital expenditure forecast, as explained in the Revenue Proposal (Section 5.8.1):

- In determining its capital expenditure forecast, ElectraNet has relied upon demand forecasts independently provided by AEMO, ETSA Utilities and ElectraNet's direct-connect customers in accordance with clause 5.6.1 and Schedule 5.7 of the Rules.

- AEMO publishes state-wide demand forecasts for South Australia on an annual basis. As part of its planning processes, ElectraNet has historically used the AEMO forecasts to plan main grid augmentations, as well as main grid reactive requirements, both of which are driven by total demand levels across the network.

- The AEMO state-wide forecasts are effectively diversified by nature, which means that they are top down forecasts that reflect the fact that peak demand does not occur simultaneously at each connection point on the transmission network at the time of system peak demand. These forecasts are appropriate to be used for main grid planning based on the 10 percent probability of exceedance forecast as the accepted standard for main grid transmission planning.

- Peak demand forecasts at a connection point level are provided each year by ETSA Utilities (the South Australian distribution network service provider) and direct-connect customers. These are aggregated to create undiversified demand forecasts for the various transmission planning regions within South Australia.

- Peak demand forecasts at individual connection points are, by necessity, used for connection point planning and local regional planning. This is due to the minimal diversity at a regional level during peak demand times; i.e. in most cases, heat wave conditions simultaneously affect the entire region in question. This is in line with the ETC requirement (which was developed with direct input from AEMO) that requires project timing to be based on the customer forecast Agreed Maximum Demand (AMD).

- By definition, the sum of the undiversified peak demand forecasts used for connection point and regional development planning will be above the state-wide diversified 10 percent probability of exceedance forecasts.

ElectraNet's licence obligations in this regard are as follows, as explained in the Revenue Proposal (Section 5.3.1):

- ElectraNet holds a licence issued pursuant to section 15 of the *Electricity Act 1996* (SA) (South Australian Electricity Act).

- Licence condition 6.1(a) of ElectraNet's licence provides that ElectraNet must comply with all applicable provisions of the Electricity Transmission Code (ETC) (including any service standards).

- The matters dealt with in the ETC are therefore regulatory obligations or requirements with which ElectraNet must comply.

The applicable requirements of the ETC are as follows, as explained in the Revenue Proposal (Section 5.3.3):

- Clause 2.3.1 of the ETC (which will apply from 1 July 2013) states:

  "A transmission entity must plan and develop its transmission system such that each exit point or group of exit points allocated to a category in accordance with clause 2.4 meets the relevant standards for that category as set out in clauses 2.5 to 2.9."

- Clause 2.11 of the new ETC has strengthened the timing requirements for meeting these standards, with reliability projects now to be delivered within 12 months of the forecast limitation date:

  "…in the event that a change in forecast agreed maximum demand at an exit point or group of exit points will result in a future breach of a standard specified in this clause 2, a transmission entity must ensure that the equivalent capacity at the exit point or group of exit points is sufficient to meet the required standard within 12 months of the identified future breach date."

- The "forecast agreed maximum demand" is defined as:

  "the agreed maximum demand forecast for a given year that is agreed with the customer three years prior to when the agreed maximum demand is contracted."

- Previously a delivery timeframe of 12 months on a best endeavours basis or three years in any event applied, which provided some flexibility in delivery where required. The impact of this change is to reduce timing flexibility and to potentially bring forward the requirement for capital investments to meet ETC standards. This requirement also effectively locks in the reliability driven forecast several years in advance for those projects already committed to meet the prescribed timeframe.

In order to understand the relationship between the 2011 state-wide forecast published by AEMO and connection point forecasts provided by ETSA Utilities and direct-connect customers, ElectraNet undertook a reconciliation study in early 2012 through an independent expert. A copy of this report was provided on 6 June 2012 (document EN068).

ElectraNet intends to update this analysis to compare the 2012 forecasts, once AEMO has provided the final 2012 state-wide forecasts and accompanying inputs and assumptions. At this point in time there is no clear understanding of the relationship between the 2012 state-wide and connection point forecasts, as acknowledged by AEMO and ETSA Utilities in recent discussions with the AER and its consultants. It is expected that this work will be completed by late July.

This comparison will shed light on the relationship between the state-wide forecasts and connection point forecasts. However, this work will not result in a revised set of connection point forecasts, which are the result of a spatial forecasting process applied to individual connection points by ETSA Utilities.

ElectraNet and ETSA Utilities engage closely through the joint network planning process undertaken under section 5.6.2 of the Rules. This involves regular discussions and information sharing on emerging limitations impacting on the distribution and transmission networks, and potential solutions to address or efficiently defer these needs. This enables each network business to meet its obligations in an efficient manner, and promotes minimum cost solutions from a whole of network perspective. The distribution connection point forecasts are a key input into this ongoing process.

In amending the ETC, ESCOSA noted in its Final Decision released in February 2012 that it believes there to be sufficient experience in demand forecasting under the South Australian arrangements for deriving general demand growth for reviewing exit point capacity (page 31), providing confidence in this overall framework, which has been in operation for the last 10 years.

Building on AEMO's specific advice in developing the amended ETC, there is nothing in the Final Decision that would suggest that the AEMO state-wide forecast should override the individual connection point forecasts or in some way modify ElectraNet's obligation in relation to each connection point under the ETC.

Response 2

As outlined above, the augmentation and connection capital expenditure forecasts reflect the reliability requirements of the ETC based on the 2012 connection point forecasts provided by ETSA Utilities and direct-connect customers in accordance with clause 5.6.1 and Schedule 5.7 of the Rules.

As noted above, the obligations imposed upon ElectraNet by clause 2.3.1 of the ETC are specific to each identified connection point and depend upon the forecast agreed maximum demand for that connection point. The forecast agreed maximum demand in turn depends upon the agreed maximum demand forecast for a given year that is agreed with the customer (in most cases ETSA Utilities) three years prior to when the agreed maximum demand is contracted. ElectraNet is required to comply with, and has complied with, this regulatory obligation when determining its forecast capital expenditure for the 2013-2018 regulatory control period.

ElectraNet is not in a position to alter its load driven capital expenditure forecasts in the absence of:

- changes to the connection point specific demand forecasts from ETSA Utilities; or
- a change to ElectraNet's obligations under the ETC in relation to the method it must apply when determining the forecast agreed maximum demand for a nominated connection point.