

18 May 2018

Mr Peter Adams
General Manager, Wholesale Markets
Australian Energy Regulator
GPO Box 520
MELBOURNE VIC 3001

Dear Peter

Australian Energy Regulator's Transmission Annual Planning Report Guideline – Consultation Paper (April 2018)

Energy Networks Australia welcomes the opportunity to provide a submission to the Australian Energy Regulator's (AER) Consultation Paper on its Transmission Annual Planning Report (TAPR) Guideline ("the Guideline").

Energy Networks Australia is the national industry body representing businesses operating Australia's electricity transmission and distribution and gas distribution networks. Member businesses provide energy to virtually every household and business in Australia.

Key Positions

1. We consider the annual TAPR's purpose is to:
 - » look forward and provide information useful for network planning, and
 - » provide information, which will be useful for non-network providers and interested stakeholders.
2. In our considered view, fulfilling all of the suggested obligations in the Paper goes beyond the purpose and requirements of the TAPR as defined in clause 5.12 of the National Electricity Rules (NER)¹. Some of the information requested is backward-looking rather than forward-looking, so is not useful for network planning. In addition, some of the forward-looking information is not useful for non-network providers, but would be costly to compile and provide.
3. The information of use to non-network providers is about emerging network constraints. We note much of this information is already provided in the TAPR.
4. An appropriate economic cost/benefit balance needs to be struck between:
 - » The value of the information to non-network providers
 - » The cost of providing this additional information by NSPs in a manner that is appropriate for general publication.

¹ Refer to Appendix 1 (a) for further context.

- » Consideration of ‘reasonableness’ and ‘relevance’ factors in avoiding the provision of unnecessary backward-looking data
 - » Potential overlap of information already provided in other places, such as Regulatory Information Notices (RINs) or the Network Opportunity Map (NOM).
 - » Ensuring network security is not unnecessarily compromised, and
 - » Information and commercial sensitivities around load-forecasting data, and direct connect customers, at certain parts of member networks.
5. We also note that some information requested by the AER can only be provided by TNSPs if they are provided with information by the relevant DNSPs. The Guideline should specify that TNSPs provide this information where they have been provided it by DNSPs on request.
- » This is often the case when the TNSP is not the custodian of some of the requested data, (for e.g. customer number and type connected to a connection point and distribution outages, which is rightfully held by DNSPs.
 - » Furthermore, if relevant data is provided by DNSPs through their DAPRs at a more granular level, it may be inefficient and duplicative, for similar information to be provided by TNSPs. The AER should be cognisant of the material differences between transmission and distribution, which make the potential provision of this information unreasonable and attempt to ascertain the ‘real’ value to stakeholders.
6. If the AER does require the full suite of information suggested in the consultation paper, it will involve a significant amount of additional work by TNSPs, which incurs costs. We anticipate that this increase in cost be treated in a manner consistent with the increase in allowed costs which resulted from the RIN data. We expect the additional cost could be of a similar order of magnitude.
7. **Emerging limitations time-frames** We note that the AER is minded to adopt a similar approach for TAPRs as currently applies to the System Limitations Template, which complements DNSP DAPRs. We also seek clarification from the AER in relation to the treatment of emerging limitations in the templates i.e. is it only for investments in the next five years, which appears more appropriate, rather than over the typical 10 year period.

Additional background and more specific comments on the proposed information sought by the AER, is attached as part of Appendix # 1 to the submission.

Our members will continue to enhance and consolidate the Network Opportunity Mapping initiative and NER TAPR requirements, in an effort to reduce duplication, in time for the next round of annual TAPRs (end June 2019).

Energy Networks Australia would welcome the opportunity to work with the AER on the data template(s) before the AER issue the revised TAPR Guideline for consultation in late June. Ideally the draft templates should streamline the process for inclusion of this TAPR data in the NOM connections mapping and ensure the datasets are manageable by separating the connections and limitations data.

It is important that this key curated information is useable for the NOM connection capacity maps, refer to

<https://nationalmap.gov.au/renewables/#share=s-9VbGAXhIROAB0tHY>

and provides for consistent formats to allow potential non-network providers to readily use the data.

Should you have any additional queries, please feel free to contact me on 0404 098 597 or vwatson@energynetworks.com.au.

Yours sincerely,

Verity Watson
Head of Transmission

APPENDIX 1

Additional Background

Energy Networks Australia refers the AER to the Australian Energy Market Commission's (AEMC) 23 May 2017 [Final Determination](#) on the COAG Energy Council's Transmission Connection and Planning Arrangements (TCAPA) rule change proposal. In particular, we note the AEMC's conclusions and inferred intent on the 'journey' to improving the consistency across jurisdictional Transmission Networks Service Providers (TNSPs) TAPRs.

Energy Networks Australia highlights the following AEMC positions and perspectives included in its 2017 TCAPA Final Determination.

- » *“The final rule is also compatible with the approach taken by the AER in its recent work to improve TNSP annual planning reports. The Commission noted that, since the AER work to improve annual planning reports has begun, the structure and content of annual planning reports are changing and TNSPs are becoming more responsive to stakeholder feedback regarding their annual planning report documents” (p.108)*
- » *“We note that [the National Electricity Rules (NER)] requirements for distribution annual planning reports are more prescriptive than the current requirements for transmission annual planning reports. However, the Commission has not introduced the level of prescription that is in the NER with respect to distribution annual planning reports for transmission. The Commission considered that the final rule is more appropriate than prescriptive NER requirements for the following reasons.*

In summary, the AEMC's reasoning for its approach on page 109, include:

- Additional information specified by the AEMC in the final rule filled the perceived information gap and “largely address stakeholder concerns”.
- It considered the rules should not be overly prescriptive nor impede an industry led process of improvement to TAPRs.
- Stakeholders cautioned against imposing TAPR format requirements that may become obsolete, and therefore should be more flexible, and
- It is likely that the providers of non-network options for transmission networks require less detailed information compared to distribution networks.

(a) Responses to Section 4 Proposed Guideline Information

Information requested by AER	Consolidated Member Position on Information Provision	Comments
<u>Transmission connection point:</u>		In general, this appears to be a significant impost compared to the existing requirements under National Electricity Rules sub-clause 5.12.2(c)(2).
Connection point ID	Yes	Members provide this in TAPRs, and some have progressed to include in the Network Opportunity Map (NOM) initiative.
Location - latitude and longitude	Yes, if essential	<p>The AER must take into account the trade-off between the goal of consistent and consolidated information to non-network providers with the heightened risks of security concerns (sabotage).</p> <p>We are aware that similar information is publically available in the Network Opportunity Maps (NOM).</p>
Customer number and type	No	<p>Energy Networks Australia considers this is of limited value. TNSPs must rely on DNSPs to provide this information, with DNSPs not obligated to do so. This would require a Rule change to obligate DNSPs to provide this information.</p> <p>DNSPs may have sector information in residential, commercial and industrial at a zone substation and distribution feeder level more readily. To task TNSPs with combining these data will be very time consuming, especially in meshed networks.</p> <p>It is also our understanding that a customer class breakdown was originally proposed for the DAPR System limitations template. However, it was not pursued.</p>

Information requested by AER	Consolidated Member Position on Information Provision	Comments
Load forecast: <ul style="list-style-type: none"> • 10% POE • 50% POE • Forecast daily demand profile 	Yes, if in MWs	<p>Similar information is provided in TAPRs in MW. Members have identified that this is similar to requirements as part of meeting Schedule 5.7, but going beyond, in seeking multiple POEs and MVA information.</p> <p>There also appears to be a need for willing collaboration between TNSPs and DNSPs in obtaining some of this information.</p> <p>To create forecast daily demand profiles appropriate for publication would involve significant work. These profiles would need to include Summer and Winter air-conditioning load, non-weather dependant load growth (which could be positive or negative), roof-top PV, batteries, EV's and customer behavioural changes on a half hourly basis.</p> <p>Sample historical traces could be a simpler option.</p>
Historic load trace	Not ideal	<p>This is not likely to be that useful. It is generally backward looking, and we understand that it is already publicly available through AEMO.</p> <p>If it is pursued, there will be an express need for significant qualifications, (e.g. connection/retirement of generators can radically change annual flows) and should the data be deemed non-confidential, such data may not be outage corrected, which to undertake properly would be a significant labour intensive burden.</p>
Historic primary plant ratings	No	<p>Energy Networks Australia fully understands that such information could be useful to non-network providers. However, there are legitimate concerns over the amount of effort involved in, and eventual benefit from, providing more detail.</p> <p>AEMO already publishes current ratings (unlike the current situation for DNSPs) for both (operational) transmission line and transformers, and this information provides up to date network ratings.</p>

Information requested by AER	Consolidated Member Position on Information Provision	Comments
		<p>Further, such a request will actually yield a mass of data as the applied rating can change dynamically depending on operating conditions (e.g. weather, current loading).</p> <p>Powerlink has identified that it is different to other TNSPs in that it does not own all the step-down transformers. It could be possible to use the connection point ratings used for the Regulatory Information Notices, however this would likely be of little or no value for potential non-network providers.</p> <p>An alternative option may allow for the NSP to ultimately determine the provision of information on a case-by-case basis.</p>
Value of customer reliability (VCR)	No	<p>It only appears relevant to areas of potential network constraints. Members rely on VCR estimates from other organisations, e.g. AEMO and IPART. It is not apparent that such information would be in a NSP's tool-kit.</p> <p>We note a pending Rule change proposal submitted by the COAG Energy Council to the AEMC for the AER to establish VCRs.</p>
Outages	Yes	<p>Note that this information is already provided to the AER in relation to STPIS requirements.</p> <p>TNSPs should only be required to include outages on their transmission network, as TNSPs do not have information on all the distribution outages. TNSPs may only be informed of distribution planned outages, when the impact is expected to have an effect on their transmission network.</p>
Primary plant asset age	No	<p>Not useful of itself. Age is one of a number of indicators of asset condition/serviceability. It is not as important as the estimated remaining</p>

Information requested by AER	Consolidated Member Position on Information Provision	Comments
		<p>life (noting that this would be a significant undertaking itself). For most TNSP's asset age alone does not form the basis for investment decisions.</p> <p>The AER's own RIT-T for Repex rule change proposal and inclusion of Repex in the TAPR will provide information to Non-Network Service Providers and other stakeholders on upcoming asset replacements.</p>
Primary plant fault rating	Not beyond minimum requirements	Not clear why this would be useful at this stage for Non-Network service providers. A number of members provide either the lowest fault minimum primary plant rating at a substation level or the lowest fault rating of circuit breakers at each existing connection point in their TAPRs.
Primary plant reactive capability	No	Not clear why this would be useful at this stage for Non-Network Service Providers.
<u>Transmission line:</u>		
Line ID	Yes	This is currently provided in the network map in either the NOM or TAPRs.
Location - latitude and longitude	No	Mindful of security concerns, the NOM provides sufficient approximate information.
Conductor type, rating, year of installation	No	<p>We are not clear how useful this is. The conductor type is only one factor in the rating of a feeder, and ratings information is already published via AEMO's operational data portal.</p> <p>Potentially, the overall rating of the transmission circuit is sufficient.</p>

Information requested by AER	Consolidated Member Position on Information Provision	Comments
		The provision of ratings under certain nominated conditions would come with qualifications that the actual applied rating can change dynamically depending on operating conditions (e.g. weather, current loading, etc.)
Historic load trace	No	<p>This is not considered very useful, noting that this will show power flows, not load. In addition, AEMO already provides this data.</p> <p>It could be possible to extend provision of NOM data to cover line flows (not load), however such information would need to be heavily caveated (e.g. connection or retirement of generators can radically change flows from one year to the next). If the data is not confidential, data could be provided, however it would be at a significant resource cost particularly if the data needed to be outage corrected.</p> <p>Historical data on transmission lines would be dependent on the historical generation (energy) market, which is currently transitioning.</p>
Outages	No	Not apparent how this is useful TAPR information.
<u>Emerging limitations:</u>		<p>This information is already available in the body of the TAPR under the relevant sections. In the DAPR this is provided as a table due to the number of limitations.</p> <p>The below information is considered as part of the investment assessment process and is either provided already, or can be incorporated into the TAPR relatively easily.</p> <p>It should also be noted that investments are also driven by factors other than reliability, e.g. safety and environmental factors; market benefits, etc.</p>
Limitation location	Yes	Already provided.

Information requested by AER	Consolidated Member Position on Information Provision	Comments
Maximum load at risk per year	Yes	Already provided, <i>where relevant</i> . However, it would be beneficial for the AER to clarify what time-period this is required to cover? Is it assumed over the typical planning period (minimum 10 years) or not?
Hours of load at risk per annum and on peak day	Yes	Already provided to some degree as part of Schedule 5.7.
Expected unserved energy	Yes	Already provided, <i>where relevant</i> as part of Schedule 5.7.
Economic cost of constraint	Yes	Note that investments are also driven by other factors e.g. safety and environmental factors. Can the AER clarify whether it is seeking NSPs to quantify all drivers as costs?
Preferred network solution	Yes	Already provided, but will not necessarily have in all cases.
Proposed timing	Yes	Already provided, but will not necessarily have in all cases.