24 April 2020

Mr Brett Everett

Independent Pricing and Regulatory Tribunal

Level 15, 2-24 Rawson Place

SYDNEY NSW 2000

Dear Mr Everett

Business NSW response to Electricity Distribution Reliability Standards - 2020

Business NSW welcomes the opportunity to comment on the Electricity Distribution Reliability Standards - 2020. Business NSW encourages energy networks to engage with their users, including business users, to get a clearer understanding of their needs, including with respect to reliability. Any changes or updates to reliability standards should be underpinned by more detailed assessment of customers' views.

Our responses to the questions posed by the consultation document are as follows:

1) **Do you agree that SAIDI and SAIFI measures should continue to be used in the reliability standards, defined in line with the AER's Distribution Reliability Measures Guideline?**

Business NSW supports the continued use of System Average Interruption Duration Index (SAIDI) and a System Average Interruption Frequency Index (SAIFI) as measures of reliability. We see no reason for NSW to deviate from the AER's definitions of both measures.

2) **Do you agree that we should convert our estimate of the efficient level of expected unserved energy to allowances for the duration and frequency of interruptions? How could we convert the efficient level of expected unserved energy to allowances for the duration and frequency of interruptions?**

We agree that it is appropriate to convert the estimate of expected unserved energy to allowances for the duration and frequency of supply interruptions.

Complexity arises from the variety of requirements and preferences businesses have. For some types of businesses, the amount of time off-supply is the more significant factor; for others the number of outages is the more relevant consideration.

For some manufacturing and food supply businesses, the loss value of the first minute of any interruption is very high: if a production batch is ruined or a cold chain broken, then all the damage of that outage is done. If the outage is brief or prolonged, the damage is roughly the same.

Some businesses in this group may have backup generation capability or other measures that would protect them from the immediate damage of an interruption, but may be vulnerable to the same effect at the point at which their backup measures no longer hold (e.g. the fuel for a generator runs out, or the built-in insulation of an industrial refrigerator is no longer able to keep the contents within the prescribed temperature range). In these instances, the loss would not happen at the moment of interruption, but at the moment that backup resiliency measures were no longer adequate. Again, this suggests a non-linear experience of power interruptions.

The second grouping, characterised in the main by service and office-based businesses, are much more acutely affected by the total time off supply than the number of instances of interruption. While any unplanned interruption will have some disruptive effects in these cases that might be contained as computers need restarting and maybe some unsaved work in progress is lost. The greater damage to their productivity arises if work cannot resume quickly again afterwards.

When assessing the trade-offs inherent in this question, the first group would prefer one prolonged interruption to multiple short-lived interruptions, even where the total time off supply was longer in the one prolonged interruption than in the multiple shorter interruptions. The second group's preference runs the other way, preferring whatever option leads to the least overall time off supply.

IPART will by necessity have to make simplifying assumptions as it works to translate unserved energy estimates into values for frequency and duration of outages. It will be important that IPART takes account of the 'non-linear' valuations of both frequency and duration of outages for different types of business.

3) **Do you agree that the excluded events in the distributor's licences should be consistent with the AER's Distribution Reliability Measures Guideline and Service Target Performance Incentive Scheme? Are there any additional events that should be excluded by the licence or any events that should not be excluded?**

In principle, we support consistency between the distributor license conditions and the AER's Guideline and performance incentive. It is particularly undesirable to have discrepancies which mean that networks may be encouraged at the state level for taking actions that are discouraged at the national level (or vice versa). Where standards clash or contradict, it is our preference that NSW move in line with AER guidance. Given the long-lived nature of many network assets, we would support an approach that moves incrementally towards harmonization, or which 'grandfathers' assets which have already been installed, but applies AER guidelines to all new installations.

4) **If there is a risk that the frequency of severe weather events will increase, how should the costs of providing a resilient network and the value customers place on this resilience be balanced and what requirements should be placed in the distributors' licences?**

We acknowledge the risk identified by Essential Energy (amongst others) that an increased number of severe weather events could mean that what is now an excludable outlier 'major

event day' could become common enough to no longer be excluded. However, to assess the balance of increased risk and potentially increased cost to consumers to mitigate that risk, we believe that networks should be engaged with their customers to determine those customers' preferences for the risk/cost balance. When assessing networks' spending plans for works that improve resiliency to severe weather events, IPART should expect that networks have carried out reasonable engagement with their customers and can identify how their proposals meet their customers' needs and their willingness to pay.

Given the uncertainty over when and how an increase in extreme weather events will materialize, and the extent to which this will affect different networks' assets and plans, we do not see the licence as the primary means for responding to this risk. Rather it should be factored into Regulatory Proposals and assessed by the AER as part of the wider price control and revenue determination process. To the extent that a license condition amendment is appropriate, it should require that networks give consideration to the impact of potential changes in climate and address those potential changes in their plans in consultation with their customers, rather than expressing specific targets or mandating defined spending commitments.

5) **Do you agree that payments under customer service standards should reflect the cost to a customer of an outage? How would this best be measured or estimated?**

Business NSW supports updating the payment valuations under customer service standards. The most straightforward approach would be to bring these payments in line with the AER's Value of Customer Reliability (VCR) assessment, to be released later this year. However, if individual networks were to assess their users' VCR in a credible manner, we would not object to them being able to propose their own VCR valuations that reflect customer preferences.

6) **Should payments under customer service standards increase as the duration (or frequency) of an outage (or outages) increases? Should payments be automatic or continue to require application by a customer? If payments become automatic, should exclusions be based on the major event day measurement that currently applies to the other reliability standards or continue to be defined causally (ie, with reference to extreme or severe weather as defined by the Bureau of Meteorology).**

See also response to Question 2

Business NSW supports moving to automatic payments under customer service standards. Requiring customers to apply for compensation serves only to suppress compensation payments. When users do not receive the standard of service that their network fee payments are based on, they should not just become eligible to receive compensation, but to actually receive compensation. Users do not have the right to choose to opt out of network payments; they should not be required to opt in for compensation payments.

7) **How should reliability standards cater for new technologies such as Stand-alone Power Systems**

No response

8) **Should network reliability standards take account of two-way energy flows and the ability of the network to allow customers to both buy and sell electricity? If yes, should reliability standards take into account the value to customers of being able to export or sell power to the grid? What might this look like in practice?**

Increasing numbers of businesses have acquired energy generating technologies, and revenues from energy sales in some cases represent a significant proportion of their revenues. However, we do not think it is appropriate at present to include two-way energy flows in reliability standards. We do not think that protecting flows from users to the grid are “essential” in the same way as flows from the grid to users are.

Nevertheless, additional reliability for users looking to sell electricity may be an attractive service that could be opted into on a user-pays contractual basis, rather than being underpinned by standards that allocate those costs to all network users.

9) **Do you agree with our proposed approach to estimating the efficient level of reliability and basing the standard on the level that delivers the lowest social cost?**

We support the approach as proposed.

10) **How should we estimate expected unserved energy across distributors’ networks (for example by area, substation and/or feeders)?**

No response

11) **Do you agree with our proposed approach to estimating the following inputs:**
    a) **the cost of expected unserved energy, which is a result of:**
        i) **the value customers place on reliability (VCR)**
        ii) **the probability of asset failures**
        iii) **the duration of outages and restoration profile 41 o profile of demand at each location**
        iv) **number and capacity of transformers and feeders and/or non-network options**
    b) **the direct costs (operating and capital costs) of providing different levels of reliability, and**
    c) **a discount rate and asset lives to convert capital costs to an annuity.**

We support the approach as outlined, and await further detail on how these inputs will be estimated.

12) **What role does including reliability standards in licences play and do you agree that the standards should minimise any duplication of incentives between the NSW distributor licences and national regulatory framework?**

Where possible we support alignment of standards between the NSW and national regulation. For incentives (i.e. those which feature any form of additional payment to the distribution network) we see no value in duplication. If the positive behaviour is incentivized by the first payment, it is not likely to be meaningfully additionally incentivized by a second, duplicate payment. Business NSW sees an increasingly useful role for incentives – particularly those which assess network operators against the performance of their peer networks rather than against a fixed standard. However, the design of these incentives must be carefully considered to avoid rewarding companies for actions which would have been taken anyway.

13) **What is the appropriate compliance framework for monitoring performance against distribution network reliability standards? Should IPART have the flexibility to determine the frequency of reporting, in response to performance?**

Business NSW does not have a strong view on this matter. A move to annual reporting would increase the likelihood that we would engage with reliability performance monitoring than with quarterly reports.

If you have any questions about this submission or would like to discuss in more detail, please feel free to contact me at Simon.Moore@businessnsw.com.

Yours sincerely,

Simon Moore

Policy Manager, Infrastructure