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Market Operator
Power and Water Corporation
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Dear Market Operator

Submission on the proposed System Control Technical Code, System Event Reporting, requirements and guidelines

Thank you for the opportunity to make a submission to the Market Operator (MO) consultation process for the proposed revision of the System Control Technical Code (the Code) requirements for the reporting of power system events.

This submission is provided by the Power Services business unit of Power and Water Corporation, in its role as the Network Operator. While Power Services outsources some Network Operator functions to the System Control business unit, this submission is provided in the context of all network operator functions, regardless of whether this function is performed by Power Services or System Control.

Submission Overview

Response to Specific Questions

Power Services as the Network operator agrees with the rationale for change that aligns with good industry practice and is fit for purpose in the context of the NT. The key areas of feedback that Power Services have identified fall into the categories below:

- **Minor Events:** Minor events are network reliability related and do not impact system security. Reporting on minor events duplicates the function of other technical regulation instruments such as the Utilities Commission (UC) Electricity Industry Performance Code (EIP Code) and the Australian Energy Regulator (AER) Annual Regulatory Information Notices (RIN). Power Services have proposed an alternative approach that will reduce the reporting burden for distribution network reliability events, but enables system control to still investigate events that are statistical outliers that could be considered as having an impact on overall Power System reliability.
- **Recommendation Definition and Management:** Power Services supports the development of a guideline that enables more considered approach to the creation of recommendations in consultation with system participants. It is essential to create value for customers and ensure recommendations are specific and achievable within the regulatory frameworks of the NT.
- **Event Triggers:** The historical frequency of events in the Tennant Creek system has created a significant reporting burden on Power Services. The majority of these events are repetitive in nature due to underlying instability in such a small network. While it is likely outside of the scope of the proposed changes, more efficient outcomes could be achieved through a tailored reporting approach for the

unique circumstances in Tennant Creek to improve the efficiency of services, while still providing transparency on actions undertaken to improve the reliability of supply and the network.

- **Timeframes:** Clearer timeframes and review points for reporting and delivery of recommendations is essential to successfully delivering value from event investigations, reporting and improvement recommendations. Power Services supports the development of guidelines to provide greater clarity on accountabilities and formalise mechanisms to manage timeframes. Power Services would like to highlight the challenges of meeting the proposed timeframes in the isolated system of Tennant Creek, given it is often necessary to mobilise resources from Darwin to complete investigations.

Minor Events

The Code's purpose and scope is primarily related to the achievement of a *secure system* and ensuring system participants meet requirements of operation of equipment connected to a power system in the NT. Typical distribution network outages are not a risk to *System Security* or overall *Power System Reliability*. A clearer distinction should be made between a Power System's reliability in relation to generating plant, system stability and compliance, and distribution network reliability which is primarily a measure of a customer's experience based on how and where they are connected to the network. Network reliability targets are set by the UC in consultation with Power Services, and performance is reported through the EIP Code.

Based on the above, PS view is that minor event reporting in its current form provides limited value in consideration of other existing regulatory instruments. Power Services acknowledges that the UC or other system participants may see value in the reporting. However there may be other mechanisms for providing this information that may be more efficient.

As part of the definition of Major Events, the System Operator has the ability to declare significant events a Major Event. Power Services would support the definition of triggers for significant network reliability events that could then be declared as Major Events by the System Operator. This could align in a similar way to Major Events and Major Event Days in the AER's Reliability STIPS scheme, where a statistical method is applied to identify outlier events for performance measures. Power and Water would support further engagement on this as part of development of the reporting guidelines using historical outage data.

Event Triggers

Minor Events

Power Services view is that if there is a need for reporting of events within distribution networks, the reporting threshold should be based on events that are of statistically significant nature, or based on a likely breach of a requirement of the Code. Events that meet this threshold should then be treated as a major event and investigated thoroughly.

The proposed threshold of 50,000 customer minutes is not supported by Power Services and will result in ongoing reporting for 'typical' network events, requiring a high volume of reports to be produced, with little or no benefit to the system or customers.

In delivering the Network Operator functions related to reporting of network outages, System Control already has an obligation to enter details of outages into Power and Water's outage management system. Significant resources are already applied in the delivery of this obligation. A summary of this information is provided as part of Power and Water meeting its reporting obligations under the EIP Code.

In summary it is Power Services view that minor incident reports do not provide value to the extent that other regulatory reporting already provides this information to key stakeholders, and that communication of outage information is not within the scope of the Code. Redirecting these resources to ensure continuous improvement of the accuracy of outage information will be more beneficial to customers, the UC and other stakeholders.

Major Events

The triggers for major events are wide ranging and can be open to interpretation. Power Services supports the implementation of guidelines to provide greater clarity on how these triggers will be applied in practice. The opportunity to engage further on the development of guidelines is also supported. Power Services believes there are opportunities for more efficient reporting and/or action management related to repetitive events that relate to inherent design issues or for small power systems such as Tennant Creek.

Ongoing improvements in technology and control systems are changing the operation of the smaller power systems of Tennant Creek and Alice Springs, and these changes may also address specific issues that drive repetitive reporting of events that meet technical triggers, but have limited customer impacts. In the current context, there is repetitive reporting related to specific known issues with long term solutions. Reproducing reports for repeat events is not an efficient use of specialised resources, such as Protection Engineers, Protection Testing Specialists and Power System Engineers. Repetitive reporting also creates additional cost burdens such as travel and accommodation, while also having a significant impact on planned work programs. Diversion of specialised resources into the investigation of these repetitive events leads to increased costs and delays to other programs of work that are often directed at improvements in the power system.

These concerns related to repetitive events are limited to specific issues and changes to how this is managed should not impact the overall effectiveness of the reporting requirements and outcomes of the Code.

Timeliness

Power Services supports the proposed approach to provide greater clarity around reporting timelines and stages of the investigation process. Further consultation on the timeframes in the draft guidelines is also supported to ensure the guidelines consider the challenges in meeting the proposed timeframes due to the remote nature of many parts of the power system.

Managing Actions

Power Services supports a defined and consultative process for development of actions that is underpinned by direct engagement with participants. Investigations performed by Power Services are often limited in their scope due to the time available to process other sources of information from other system participants or the System Controllers response to events. The development of recommendations after the full investigation is completed by the System Controller will enable more considered actions to be developed with all available information.

It is Power Services view that a more consultative process will result in more achievable actions that will produce more tangible benefits to the power system and customers. It will also enable participants to more clearly demonstrate their commitment to improvement by avoiding delayed delivery of actions that were not able to be adequately scrutinised or assessed at the time of report submission.

To support the improvement to recommendation and action management, Power Services proposes that the guidelines provide the ability to appropriately categorise actions for the purposes of reporting and enabling greater focus on the actions that have the most immediate benefit to avoidance of system events. In Power

Services view, recommendations could be categorised based on the principles below. Power Services acknowledges that there may be challenges in the classification of actions in this way, however the implementation of the proposed guidelines should enable this to be considered and further refined with additional stakeholder input.

1. Structural or inherent design issues associated with the NT's power systems which require significant studies, options analysis and investment decisions. These are often not achievable or trigger regulatory processes that can take several years to implement. These types of recommendations should be addressed through broader power system review or integrated system plan mechanisms. Setting specific and tracked timeframes for these types of actions is not practical due to the factors outside of any single participant's control.
2. Routine or other findings identified that did not directly contribute to an event or response, but are noted through the course of an investigation. A typical example may be an incorrect SCADA tag or defect with a recording device. These types of issues should be recorded in reports, but be managed within the defect management processes within each participant's processes and practices. Recording them still enables the identification of recurring issues that are not resolved and could be escalated as a compliance issue if required.
3. Improvement actions that will directly contribute to the reduced probability or consequences of the major event, and are achievable within a defined timeframe. These actions should be the focus of the System Controller in terms of reporting and compliance management, and also enable clearer prioritisation of actions by participants for the purpose of improving or restoring system security.

We look forward to further consultation on the development of the reporting requirements and guidelines and are available for further questions or clarifications on our response.

Yours sincerely



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19 August 2021