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AEMO
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Hydro Tasmania's response to changes proposed to the AEMO standard for Power System Data Communications.

Hydro Tasmania appreciates the opportunity to provide comment in this consultation on the NEM Power System Data Communications Standard and looks forward to further engagement on this important issue in light of the rapidly changing nature of the NEM.

Generally, Hydro Tasmania, as an established generator, finds the existing standards appropriate, noting that much of the impetus for change is to deal with the increased number of distributed energy resource participants within the industry. Hydro Tasmania understands the need to enable these new participants, and is supportive for the main part of these changes, with the provisions noted below and in Appendix A.

Our major concern is that, for existing participants with large and well-established data and communications systems, any changes introduced into the standards do not force unnecessary changes to current effective systems, nor do any changes proposed reduce the current security, quality or standards of data transmission.

With existing major infrastructure, this would create both additional expense to the participant and (hence to the market) and potentially unnecessary disruption to existing operations.

Hydro Tasmania has considered the issues raised in the *Review of NEM Power System Data Communications Standard: Issues Paper* published in February 2022. Our responses to the key issues that we have identified are listed in **Appendix A** to this submission.

We welcome the opportunity for further consultation with AEMO on the proposed changes. If you wish to discuss any aspect of this submission, please contact Kevin Hilder, Kevin.Hilder@hydro.com.au.

Yours sincerely,



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Appendix A - Hydro Tasmania Response

3.1.1 Scope and Application to the Standard

As an existing and established generator, Hydro Tasmania supports the aim of ensuring that the standards maintain a high quality, safe, reliable, and secure data transmission system.

3.1.2 General Issues

Hydro Tasmania currently treats all data with the same level of criticality. Whilst we do not oppose changes to data prioritisation, any changes should be considered in the light of ensuring minimal disturbance to the existing system. In the future we can see value in prioritising high frequency data to save bandwidth.

We are of the opinion that standards relevant to the Market Ancillary Service Specification should make reference to the existing standards and documentation, to avoid overlap and discrepancies that can occur across multiple standards, and thus reduce any current inconsistencies.

In response to the proposition of including resilience-through-design to design security into future systems, Hydro Tasmania would recommend a Standard, as opposed to a generic design. We believe that this would create less disturbance to current participants, as well reducing the potential of a singular security breach to eliminate the entire communication system.

Regarding consequences to breaches of the standards, Hydro Tasmania would encourage a multi-stage response. This would allow a participant to correct any initial breaches to the standard, rather than being immediately deemed non-compliant. We would, however, support consequences to continual, prolonged, or intentional breaches to the standard, to ensure a reliable, safe, and secure data communication system.

3.1.3 Architectural Requirements

As an existing and established generator, Hydro Tasmania supports the aim of ensuring standards maintain a high quality, safe, reliable, and secure data transmission system.

3.1.4 Data Protocols

Hydro Tasmania notes that it's main data connection with AEMO is made via the TNSP (Transmission Network Services Provider). In AEMO's consideration of any future changes recognising data transmission between other participants as well as with AEMO should be factored in.

3.1.5 Interfacing

Regarding the issue of detailing clear connections to both AEMO control rooms, Hydro Tasmania believes it would be beneficial for the standards to clarify both in words and visually, the requirement to communicate with multiple AEMO control room sites.

3.1.6 Data Quality, 3.1.7 Data Accuracy

Hydro Tasmania suggests that as well as the use of data quality flags, a clear definition is required on what *good* data quality entails. More specifically (noting that our data is sent to AEMO via the TNSP), at what point in the data stream, would measuring data quality and the use of data quality flags apply to. This would determine the cost of implementation, and the time frame that would be required to implement any changes necessary to meet the standard. For example, not all remote monitoring equipment sends quality flags, and this would be a considerable expense to implement.

Hydro Tasmania requests a clear specification on the data quality standard intended to be set, to allow considered analysis of any proposed changes and consequent costs that this may incur.

3.1.8 Data Latency

Hydro Tasmania recommends that, for consistency any changes that the standard sets regarding data latency be applied to all participants in the communication system.

3.1.9 Control Commands

Hydro Tasmania currently has an 8 second response time to control commands that is specific to Tasmania. We request clarification on how any proposed changes to the standard with regards to response time would be specifically applied to Tasmania, noting the current arrangement. We would invite further communication regarding this proposal and its relevance for Hydro Tasmania more specifically, as any change would have a substantial cost and take considerable time to implement.

3.1.10 Security

Hydro Tasmania is of the belief that in terms of security the Standard should specifically refer to the 'Security of Critical Infrastructure Rules' (SOCI), to prevent overlap or confusion that can be caused by having multiple standards. Noting the detail in these rules and that many organisations are already investing significant effort in addressing these, it would be undesirable to have requirements in the Standard that may potentially confuse or differ from SOCI.

Hydro Tasmania supports the onus on participants to advise on cyber security incidents and suggests that there needs to be a clear path of communication in which to provide notifications on cyber security risks. With regards to all changes to the security standards, Hydro Tasmania supports the setting of standards by AEMO, that maintain the quality of existing security systems.

3.1.11 Reliability, 3.1.12 Maintenance

As an existing and established generator, Hydro Tasmania supports the aim of ensuring standards maintain a high quality, safe, reliable, and secure data transmission system.

3.1.13 Response to failures, 3.1.14 Testing, 3.1.15 Transitional Arrangements

Hydro Tasmania awaits further information on these matters as part of this consultation to allow a more considered response.

3.2 Emerging Issues

Hydro Tasmania will consider and respond to any proposed changes.

Issues that Hydro Tasmania would like to raise regarding the current standards

Due to the rapid change of the electrical power industry, we feel that it may be necessary to introduce a more responsive consideration of the *Power System Data Communication Standards*, six-monthly forums, for example, might be useful to convene to identify the state of play of this issue.

This would allow for a faster response to changes within the industry, with input for existing participants to consider any changes. The main concern is to avoid the likelihood of having to implement multiple large changes in short time frames, to maintain compliance with any new standards which would have significant impacts in terms of future capital planning and expenditure.