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Definition of Temporary Over-Voltage Limits ERC 0120

The generators as listed appreciate the opportunity to comment on the proposed Rule change in relation to the definition of temporary over-voltage limits.

Over-voltages occurring in transmission networks have the capacity to damage any plant connected to the network, including plant associated with electricity generation. We understand that over-voltage limits represent the limiting values to which Transmission Network Service Providers will define their operational practices in order to comply. Hence as generators we have an interest in there being appropriate rules to ensure that the risks of damage to our plant are appropriately managed.

We have concerns that fall into two groups.

Firstly, we are concerned by a number of deficiencies in the Rule change application. We suggest that the proponent be invited by the Commission to rectify these deficiencies before giving detailed consideration to the proposal. In particular we suggest that –

- Either the description of the proposal or the drafting of the proposed rule be changed so that these two become consistent, and
- A technical justification of the proposed rule change be added to the proposal so that the Commission and market participants are able to form a judgement as to how this Rule change might alter the risks faced by parties connected to a transmission network.

Secondly, we believe that this Rule change proposal has revealed an aspect of the current Rules that should be reviewed by the Commission as part of its consideration of the proposed change. This aspect is the process by which an important parameter can be changed. This concern relates to both the “normal voltage” at a connection point, as currently defined under the rules, and to the proposed new parameter “TOV reference level”.

As noted above, these parameters potentially affect risks imposed on connected parties by the transmission network.

The current process, as brought to light by this application, and the proposed process under the Rule change both require only agreement between a TNSP and AEMO. We contend that this process does not constitute good regulatory practice.

We suggest that in either case –

- The proponent of a changed value and AEMO should be required by the Rules to consider the effect on parties connected to the network,
- When a change is contemplated, all potentially affected parties must be consulted,
- If a change is made, all potentially affected parties must be informed, and
- If a change is made, and any connected party incurs costs in adapting to that that change, then that party should be paid compensation equal to the cost incurred.

The concerns raised above are discussed in more detail below.

Concerns about inaccurate and misleading description of the rule change

In describing the implications of the proposed Rule change, the proponents have included the statement that the change provides -

"• Capping the maximum TOV at a magnitude corresponding to a reference voltage of 10% [sic] of nominal voltage"

We note in passing that the reference to **10%** appears from the context to be intended as a reference to **110%.**

The significant issue here is that the claimed limitation of the reference level does **not** appear in the actual proposed Rule change. The only requirement actually applied in the Rule change is that the value must be agreed between the Network Service Provider and AEMO. Neither of these parties is required under the proposed Rule change to consider the changed risk that may be imposed on other market participants as a result of such a change to the TOV reference level.

The glossary entry in the proposal document, but not the corresponding entry in the proposed Rule change itself, confirms this erroneous description.

On the basis that the description of the rule change does not accurately reflect the proposed rule, we suggest that the AEMC either recommences the consultation process with this deficiency corrected, or at a minimum makes it very clear in the next stage of consultation that this error has occurred so that parties are clear on exactly what the rule change would achieve.

Failure of the proponent to make a technical case in support of the change

The proponent has **not** attempted to make the case that there is a technical justification for the proposed change.

In particular, we note that the statement in the application that "In practice there is no strong relationship between normal voltage and TOV …" is not supported by either argument or evidence.

We understand that Network Service Providers, through their operational practices, seek to limit the overvoltages imposed on connected participant's plant in accordance with both the limit to sustained overvoltage and the limit to temporary overvoltage.

Under the current Rules, both these limits are related by their common reference point of the defined term *normal voltage*. Since the same insulation systems within the participant's plant have to withstand any overvoltage whether sustained or temporary, it is natural to expect that these values would be closely related to each other, as the Rules now require.

If it is the case that appropriate risk management against damage to participant's plant through overvoltage can be provided without this current close relationship between temporary and sustained limits, then this technical case should be demonstrated.

In the absence of such demonstration, the possibility of risk to participant's plant to an extent contrary to the National Electricity Objective cannot be eliminated. We therefore contend that the Commission should not make the proposed Rule, or any variant of it, unless and until it is satisfied that this technical case has been made.

Deficiency in good regulatory practice in current Rules and proposed Rule

The description by the proponent of the circumstances leading to the proposal raises a wider issue of regulatory practice which we suggest the Commission should consider before contemplating a Rule change of this nature.

We note that the range of overvoltages to which a NSP should knowingly allow a participant to be subjected, is determined by reference to the defined value "*normal voltage*" which is applicable to a particular connection point.

Our concern comes from the revelation that the *normal voltage* applicable to a connection point has been changed materially, without any formal requirement to consider the change in risk thus imposed on a participant, or to consult with affected participants in relation to such changes in risk.

We submit that this outcome points to a deficiency of good regulatory practice in the relevant parts of the Rules. In addition we believe the rule change proposal should be amended to include a requirement that any costs incurred on a connected party resulting from a change in voltage limits (for example if the party needs to upgrade equipment ratings or protection systems), should be required to be funded by the NSP that has proposed or approved the rating change.

The only limitations now imposed on the determination of *normal voltage* for a connection point are that it must be within 10% of the *nominal voltage*, and that it must be agreed between the Network Service Provider and AEMO.

We suggest that these legacy provisions remaining in the Rules fail to provide satisfactory regulatory practice.

We suggest that the Commission should review the question of what consideration and consultation should occur before such a change in externally imposed risk is applied to a market participant. We consider that such a review would shed light on the process that should be required in changing a "TOV reference value", should the proposal to apply such a value be implemented.

Our suggestion on the minimal inclusions to be added to this process is given in the list above.

If you have any questions please contact Ken Secomb (0419319081) or David Hoch (0417343537).