Dear Mr Pierce,

**RE: Generator technical performance standards (ref ERC0222)**

ENGIE in Australia (ENGIE) appreciates the opportunity to comment on the Australian Energy Market Commission (AEMC) generator technical performance standards consultation paper (consultation paper).

ENGIE notes that this rule change proposal has been applied for by the Australian Energy Market Operator (AEMO) following the decision in August of this year by Essential Services Commission of South Australia (ESCOSA) to introduce more stringent technical obligations on generators seeking a generator license in South Australia. The ESCOSA changes were in large part based on technical advice from AEMO, which ENGIE understands now forms the basis for this rule change proposal.

ENGIE is cognisant of the various issues arising out of the transitioning nature of the electricity industry towards inverter based renewable energy sources and battery storage, and that these issues need to be managed in order to continue to ensure the safe and secure operation of the interconnected power system.

ENGIE accepts that there are some issues for which the most appropriate mechanism to maintain standards is likely to be regulations applied to industry participants. In deciding how best to overcome the challenges arising from the energy transition however, ENGIE believes that it is important to remain open to the potential for market based solutions, rather than falling back on regulated solutions. Carrots are in general, preferable to sticks.

Whilst ENGIE agrees that some of the matters that are currently under consideration within this proposed change to the generator technical performance standards are likely to be most readily managed through regulation, ENGIE is somewhat concerned that AEMO are proposing regulated solutions with apparently little or no consideration to whether a market solution might be available.
As well as a general concern that options for competitive solutions seem not to be coming into consideration, ENGIE is also concerned that not only are more onerous technical standards being proposed in a number of areas, but the existing framework for negotiated outcomes is under threat, with AEMO seeking to force all outcomes towards the more onerous automatic access level.

Engie notes that section 2.2.6 of the consultation paper identifies that the current arrangements in the National Electricity Rules (NER) require that a negotiated access standard, among other things, must not adversely affect power system security, must not adversely affect the quality of supply for other network users, and must meet specific requirements set out in the NER. This provides a number of safeguards that would appear to provide AEMO and the network service providers’ with sufficient means to ensure that a negotiated access standard does not have a detrimental impact on the power system.

The rule change proposal from AEMO notes that although there are overarching principles in the NER to guide negotiation, some of the specific technical provisions in chapter 5 of the NER have introduced specific guidance criteria that AEMO claim, have led to inconsistencies and ambiguity. Rather than address the specific issues in the relevant clauses however, AEMO have proposed to effectively throw away the negotiating framework and drive all outcomes to the more onerous automatic standard.

The option of simply driving all negotiations to the most stringent ‘gold plating’ level will introduce more costs without carrying out an assessment of whether this additional expenditure is justified in the specific circumstances. This will inevitably lead to higher customer costs which could be avoided through more targeted and nuanced negotiation.

Rather than throw away the negotiation framework in order to deal with a few specific issues created in particular clauses, ENGIE suggests that the specific issues themselves should be resolved to address any ambiguity. To do as AEMO have proposed would effectively render the negotiated framework redundant, and this is something that ENGIE would strongly oppose.

In regard to the specific technical changes proposed, ENGIE is concerned that in general, the proposed standards are onerous and will impose high cost on generating systems which in many cases, may not be necessary. Two particular examples are included below.

**Voltage control**

The proposal to require all generators to have facilities to regulate voltage regardless of connection point voltage issues is, in ENGIE’s view, unnecessarily onerous. Given that voltage control is a very locational issue, and that AEMO should be able to forecast potential issues with voltage control at certain locations, ENGIE would prefer to see provision of reactive power capability remain as an outworking of the negotiation process. In other words, where there are specific locational requirements, either current or forecast, AEMO would then have the opportunity to negotiate to have any generators at that location include reactive power capability.

ENGIE further suggests that voltage control is a technical requirement that may be well suited to a market approach, which could be incorporated into the ancillary service framework.

**Multiple low voltage disturbance ride-through**
AEMO proposes amendments to increase the length of time a generator is required to be capable of continuous operation at voltages below 90 per cent of normal, and to add a new requirement for generators to maintain continuous operation for up to 15 voltage disturbances in any 5-minute period for a defined length of time.

ENGIE is concerned that some generating plant will not be able to withstand 15 disturbances without suffering damage, and therefore, the number of disturbances should be open to some negotiation range. Furthermore, ENGIE suggests that following a 5-minute period during which a number of voltage disturbances have been successfully managed, there should be a 30-minute grace period allowed for the generator to prepare for any subsequent 5-minute period of multiple voltage disturbances.

ENGIE trusts that the comments provided in this response are of assistance to the AEMC in its deliberations. Should you wish to discuss any aspects of this submission, please do not hesitate to contact me on, telephone, 03 9617 8331.

Yours sincerely,

Chris Deague
Wholesale Regulations Manager