



Mr Con Carellas
Essential Services Commission South Australia
GPO Box 26050
Adelaide SA 5001

Submitted to escosa@escosa.sa.gov.au

Friday, 9 June 2017

Dear Mr Carellas,

RE: Inquiry into the licensing arrangements for generators in South Australia

ENGIE appreciates the opportunity to comment on the inquiry into the licensing arrangements for generators in South Australia (the Inquiry). The Inquiry is focusing on the technical licensing requirements for electricity generators to determine whether or not additional requirements continue to be required for South Australia and, if so, what form they should take and to whom they should apply.

As a part of this Inquiry, the Essential Services Commission of South Australia (ESCOSA) has sought advice from AEMO on the appropriate technical standards for electricity generators. In addition to this Inquiry, several other related reviews are under way or recently completed including:

- AEMC System Security Market Framework Review
- AEMO's Future Power System Security program
- Independent Review into the Future Security of the National Electricity Market by the Chief Scientist of Australia (Finkel Review), and
- AEMO's investigations into recent power system events (including the black system event).

In addition to these current or completed inquiries, ENGIE understands that in this coming July, AEMO intend to lodge proposed changes to the national electricity rules (rules). These rule changes would inter alia, amend and strengthen the generator performance standards (GPS) provisions of the rules to include the new standards which ESCOSA are now considering to include in the South Australia generator license.





The relatively high number of concurrent reviews and activities relating to power system security is evidence of the changing nature of the power system which in large part is being driven by a decrease in the amount of power system stabilising services traditionally provided by synchronous generators.

ENGIE understands ESCOSA's desire to act promptly with the objective of securing electricity supplies in South Australia for the 2017/18 summer and beyond. ENGIE is also mindful of the various measures that the South Australia government has outlined in its Energy Plan¹ which also seek to ensure secure electricity supplies this summer.

ENGIE is also eager to ensure that electricity supplies to South Australian consumers are secure and to that end, recognises that interim measures may need to be considered where there is insufficient time available to implement longer term, NEM wide solutions.

In considering the specific technical conditions ENGIE notes that the AEMO recommendation to ESCOSA include a number of new conditions as summarised below:

- **Static and dynamic reactive power requirements** - new set of licence conditions defined in terms of a generator's performance during, and subsequent to, contingency events and system disturbances.
- **Voltage control capability** - retention of the current model licence conditions and extension to systems below 100 kV.
- **Performance during, and subsequent to, contingency events** - prescribe greater clarity of the performance of generators during and subsequent to, contingency events.
- **Active power control facilities** - capable of providing automatic response to frequency, AGC, capability to limit the rate of change and remote monitoring.
- **The ability to assist with system restart** - certain capabilities from all new-entrant generators.
- **The provision of simulation models** – including pre-validation against actual response.
- **Regular updates to the commission's framework** - technical standards that apply to generator licence conditions are reviewed periodically.
- **Application of proposed conditions to existing licensees** - considering applying some additional licensing conditions to existing generation licensees with consideration of costs and benefits.

With the exception of the last two items on the above list, ENGIE is broadly supportive of these recommendations being considered as potential obligations on new generators in the NEM, as it is believed that these are reasonable measures that are likely to contribute towards improved power system security.

ENGIE does not support the last two items on the above list for the reasons set out below.

ENGIE believes that it should become unnecessary for ESCOSA to consider regular updates to its technical standards that apply to generator licence applications as consideration of such matters should be the responsibility of AEMO under the national GPS framework. This key point is discussed further later in this submission.

¹ South Australia 'Our Energy Plan' available at <http://ourenergyplan.sa.gov.au/>



The application of proposed conditions to existing licensees is also not supported by ENGIE since retrospective regulatory or contractual changes contribute to policy uncertainty and are likely to introduce new barriers to entry for potential new investors. This point is also discussed in more detail below.

Need for the proposed changes

A number of submission to ESCOSA's December 2016 Issues Paper noted that the appropriate mechanism for technical standards to be imposed on generators is through the national electricity rules and specifically the generator performance standards (GPS) as set out in chapter five of the rules. This point was acknowledged by ESCOSA in the Draft Report and it was further noted that AEMO are intending to commence a rule change process in July 2017 to further strengthen the existing GPS framework to capture the same issues that are now being considered by ESCOSA for inclusion into the South Australia generator licence conditions.

Although ESCOSA have acknowledged that the appropriate mechanism for generator technical standards is the NEM wide GPS, it has also indicated that "until amendments are made to the NER it is appropriate for the Commission to include special licence conditions to account for the specific characteristics of the South Australian power system."

Whilst ENGIE understands and supports the application of transitional measures to ensure that the secure supply of electricity to South Australia consumers is maintained, the continued application of South Australia specific standards via the generator licence creates a number of issues and inefficiencies. For example, imposing different standards in South Australia compared to other states in Australia creates an uneven playing field for investors which may lead to less efficient investment decisions. Furthermore, since the technical matters identified in the Draft Report are mostly power system issues that potentially impact on the entire NEM, it seems unreasonable that they should be tackled via a South Australia specific mechanism.

Another problem that is created by imposing the conditions via South Australia generator licence conditions is that it creates a complex and potentially inconsistent set of obligations on generators in South Australia. For example, since the ESCOSA obligations changed in 2005 and 2010, and now there are new obligations proposed from 2017, then depending on when a generator was granted their licence, it will have different obligations imposed. These are separate to, and potentially different from the obligations imposed on all generators through the GPS agreement with AEMO.

It seems that all key stakeholders, including ESCOSA, agree that the most appropriate framework to impose technical obligations on generators is through the GPS, and the only reason for persisting with the ESCOSA generator licence conditions is that the current GPS provisions are considered to be inadequate, whilst noting that AEMO are intending to seek changes to the GPS later this year.

ENGIE suggests that there are likely to be better ways to achieve the need to maintain secure electricity supplies in South Australia, whilst retaining the NEM wide approach through the AEMO GPS agreements. For example, rather than putting specific technical conditions into the licence agreement, it may be better to simply include a clause in the generator licence that stipulates that the generator must enter into a transitional agreement with AEMO to



ensure that it meets the necessary technical requirements. This transitional agreement would only be needed to remain in place until the new GPS changes have been implemented. Once the new GPS rules have been introduced, the generator that has a transitional agreement would be required to amend their GPS agreement to include the new conditions. Once this is done, the transitional agreement and the relevant clause in the ESCOSA licence agreement could fall away.

Retrospective changes

The proposal to impose retrospective changes on existing generators needs to be carefully considered. Generators are long term investments in which the cost, benefits and risks are carefully considered before an investment decision is made. There are concerns that these long term investments are becoming increasingly difficult to justify with the degree of policy uncertainty regarding climate and energy policy. Having regulators impose retrospective impositions onto existing generators is likely to exacerbate these concerns and be a further barrier to future investment. This will not be in the interests of South Australian electricity consumers.

If nevertheless there is to be a retrospective condition imposed onto some existing generators, then the suggested justification of only doing this if the costs are low or the benefits are high is inadequate. For example, although there may be a view that the cost of a proposed retrospective obligation is low from an industry wide perspective, if that cost is then allocated to a single generator business, then that particular business might find that the cost is significant to their operation and in the worst case, might cause that generator to withdraw from the market.

It would seem that if there is a benefit that is derived from a retrospective imposition of a condition onto an existing generator, then it is likely to be a benefit for all electricity consumers (and perhaps generators) within the state, if not the entire NEM. This being the case, it would seem that a more efficient allocation of the costs of imposing retrospective conditions on existing generators would be to spread the costs as widely as possible across the industry, and not unfairly single out participants that were unlucky enough to be the target of the proposed additional conditions.

ENGIE trusts that the comments provided in this response are of assistance to ESCOSA 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,

A handwritten signature in black ink, appearing to read "Chris Deague". The signature is fluid and cursive, with a prominent initial "C".

Chris Deague
Wholesale Regulations Manager