

A few
words.

Steven Graham
Chief Executive
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235
21 September 2012



Dear Steven,

AGL Energy (AGL) welcomes the opportunity to comment on the Consultation Paper on "National Electricity Amendment (Changes to Normal Voltage) Rule 2012", issued by AEMC on 23 August 2012.

AGL is one of Australia's largest energy companies that operates across the supply chain including investments in electricity generation and electricity retailing. AGL has over 3 million retail customers and operational control of over 5,000MW of generation capacity in the National Electricity Market.

AGL is concerned that under the current definition of normal voltage, the normal voltage can be potentially varied through an agreement with AEMO and the relevant NSP. It is unclear what process would be followed by AEMO and NSP, if any, if and when a variation of normal voltage is proposed by an NSP. In AGL's view, there exists a potential risk for generators, who have previously contracted to operate at an agreed line voltage rating, to be adversely impacted by such a change in normal voltage by NSP. While AGL understands there is an expectation that AEMO and NSP should involve affected generators in making a decision to change normal voltage, it is prudent for the Rules to provide a clear obligation for AEMO and NSP to consult and seek agreement with the affected generators. AGL supports a Rule change that provides regulatory certainty for the generators to minimise risks associated with a change of normal voltage by NSP.

AGL acknowledges there may be merit with the proposed rule change to require the NSP to comply with clause 5.3 when proposing a change in normal voltage. AGL believes, in its current form, clause 5.3 may not provide the necessary and adequate obligations for NSP to consult and agree with the generators. In addition, clause 5.3 provides for the obligations for a generator requesting connection to a network, but is less clear how it would apply to network requesting changes to line rating or other network related technical requirements that may affect one or more connection points. AGL believes it is critical to clarify the adequacy of clause 5.3 and would support any necessary changes to clause 5.3 that provide clear obligations for NSP to consult and agree with the affected generators when requesting changes to line voltage rating or other network related technical changes that have the potential to affect one or more generation connection points.

AGL agrees it may be necessary to consider an alternative Rule change that may address the risks associated with NSP requesting a change in normal voltage other than through clause 5.3. The paper suggested possible inclusion of a new clause in the Rule. AGL would support a new clause that provides the necessary obligations for NSP to consult and agree with affected generators that is effective in mitigating the associated risks. In principle, AGL believes such a new clause, or any other proposed rule change, must require NSP to consult and agree with affected generators, and would need to take into account, at the very least, the following issues:

- Potential impact on connected generators in terms of costs and technical feasibilities of a modified connection;

- > Being selected as a member of the Dow Jones Sustainability Index 2006/07
- > Gaining accreditation under the National GreenPower Accreditation Program for AGL Green Energy®, AGL Green Living® and AGL Green Spirit
- > Being selected as a constituent of the FTSE4Good Index Series



- Implications on the terms and conditions of existing connection agreements;
- Cost impacts on third party generators should remain neutral;
- AEMO should have the power to approve any changes taking into account the NEM objectives;
- Inclusion of other potential requests by NSP to change network related technical parameters that could impact on existing generation connection points.

Please find attached AGL comments on the specific questions raised in the consultation paper.

If you have any queries, please contact Kong Min Yep on 03 8633 6988.

Yours sincerely,

A handwritten signature in blue ink that reads 'N Wallis'.

Nicole Wallis

Head of Energy Regulations (Acting)

- > Being selected as a member of the Dow Jones Sustainability Index 2006/07
- > Gaining accreditation under the National GreenPower Accreditation Program for AGL Green Energy®, AGL Green Living® and AGL Green Spirit
- > Being selected as a constituent of the FTSE4Good Index Series

Question 1 Scope of the problem

1. What are some of the potential triggers that give rise to a change in the normal voltage level?

The possible triggers for a change of normal voltage could be:

- *difficulty in controlling transient conditions;*
- *deficiency caused by embeded generators and network operations;*
- *constraints due to transmission network.*

2. In the absence of consultation:

(a) Could a change to the normal voltage level impose significant administrative, capital, and operational costs on generators?

Yes, depending on the magnitude of the change, the impact could be significant.

(b) Could a change to the normal voltage level cause existing market participants to exit the market?

There is a possibility that a market participant could be forced to exit the market if the normal voltage changes are severe and if the equipment are too old to adapt.

Could it create barriers to entry for new entrants?

AGL does not believe a new entrant would be affected to the point where it creates a barrier to entry.

(c) Are there likely to be impacts to system reliability and security if the normal voltage level is changed.

There is a possibility that system reliability and security could be affected depending on the extent of the change and the local conditions of the network. An increase in normal voltage may create a more dynamic operating conditions which could increase the risk on system reliability and security.

3. How often is the normal voltage level likely to be changed?

AGL believes it should not happen too often provided that there is adequate planning and investment on voltage control of distribution and transmission system.

4. How would a change to the normal voltage level impact the following parties:

(a) Generators – *increased cost associated with potential modifications to the excitation system, protection system, modelling, capability of equipment that could be unsuitable.*

(b) New entrants – *higher level of equipment specifications and costs.*

5. Do connected parties/connection applicants have provisions in their connection agreements that obligate NSPs to notify them of any planned changes to the normal voltage level?

Connection agreements vary from network to network, and sites to sites. There is no consistency on the issues of changing normal voltage level across different connection agreements. There is usually a specified normal voltage but generally, there are no specific provisions on future changes to normal voltage.

If not, is this likely to require changes to connection agreements?

In most cases, AGL believes the connection agreements would require amendment.

- > Being selected as a member of the Dow Jones Sustainability Index 2006/07
- > Gaining accreditation under the National GreenPower Accreditation Program for AGL Green Energy®, AGL Green Living® and AGL Green Spirit
- > Being selected as a constituent of the FTSE4Good Index Series

6. Do NSPs consult informally with affected parties in the event that the normal voltage level needs to be changed? If so, how widely do they consult? Do NSPs use the provisions contained within clause 5.3 of the NER as a guide?

AGL is not aware of any consultation on changes to normal voltage in the past.

7. Do generators take into account potential changes to normal voltage within 10% higher or lower of the nominal voltage level in connecting to a network?

No. The plant is designed and built to comply with the agreed normal voltage.

8. Would consultation requirements:

(a) provide benefits to connected parties, and if so, what would be the nature and value of these benefits? Plan and prepared for change.

AGL does not believe there is any upside to an increase in normal voltage for the generators. It will almost certainly increase the cost of compliance.

(b) create material time delays to process new connections?

Not likely.

(c) improve system reliability and security relative to the current arrangements?

Unlikely. This could only be assessed on a case by case basis.

Question 2 Assessment of proposed solution

1. Given the current industry practice, is there a need for a formal consultation process within the rules?

Yes. A transparent and predictable process need to be defined and the Rules need to provide obligations for the NSP to consult and agree with affected generators.

2. Is the Proponent's proposed solution likely to provide a timely and efficient consultation process?

Clause 5.3 is designed for a generator to establish or modify a connection and for the NSP to respond and specify its requirements to provide a connection. NSP is required to consult other affected generators and AEMO when a proponent seeks to connect.

Clause 5.3 does not provide for the process when NSP initiates a change in the line ratings which could affect one or more connection points. In its current form, AGL does not believe it provides for NSP initiating a change in normal voltage and hence there is no obligation for NSP to consult and agree with affected generators.

Therefore, AGL does not believe it will provide timely, efficient and effective solution without significant changes to clause 5.3.

3. If additional consultation is required, who should NSPs have to consult with and what should be the timeframe for this consultation?

AGL believes that all owners of affected connection agreements must be consulted and agreement on cost and technical impact of the proposed changes must be reached before line ratings are changed. It is likely to take at least 12 months from proposal to commissioning.



4. If additional consultation is required, do NSPs and AEMO need additional guidance on what factors they should consider in deciding whether changes to normal voltage should be made and the timing for the approval of changes to normal voltage?

It depends on the complexity and capability of affected equipment. The issues of compensation and cost allocation should be considered. A cost and benefit analysis should be carried out before a decision is made and the NEM objectives should be met.

5. Do stakeholders have views on any alternative solutions which could be used instead of clause 5.3 of the NER?

As indicated before, AGL believes clause 5.3 is set up for a generator to request a connection. It may be simpler and more effective if a new clause is created to deal with NSP initiated changes in normal voltage and any other NSP initiated changes that affect one or more connection points that provides the obligations for NSP to consult and agree with affected generators or other connection points.

- > Being selected as a member of the Dow Jones Sustainability Index 2006/07
- > Gaining accreditation under the National GreenPower Accreditation Program for AGL Green Energy®, AGL Green Living® and AGL Green Spirit
- > Being selected as a constituent of the FTSE4Good Index Series