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Ms Daniela Moraes
Project Leader
Australian Energy Market Commission

Submitted online: www.aemc.com.au

17 April 2018

Dear Ms Moraes,

National Electricity Amendment (Register of distributed energy resources) Rule 2018, Consultation Paper

AGL Energy (**AGL**) welcomes the opportunity to respond to the Australian Energy Market Commission's (**Commission**) Consultation Paper on the National Electricity Amendment (Register of distributed energy resources) Rule 2018, proposed by the COAG Energy Council (**Rule Change Proposal**).

AGL is one of Australia's leading integrated energy companies and the largest ASX listed owner, operator and developer of renewable generation. Our diverse power generation portfolio includes base, peaking and intermediate generation plants, spread across traditional thermal generation as well as renewable sources. AGL is also a significant retailer of energy, providing energy solutions to over 3.5 million customers throughout eastern Australia.

AGL is continually innovating our suite of distributed energy services and solutions for customers of all sizes (residential, business and networks). These 'behind the meter' (**BTM**) energy solutions involve new and emerging technologies such as energy storage, electric vehicles, solar PV systems, digital meters, and home energy management services delivered through digital applications.

AGL believes that the energy market transformation presents an important opportunity to empower customers to more fully participate in the broader energy market. Indeed, there is the potential to create personalised ecosystems located BTM that can be co-optimised to deliver substantial value to customers.

AGL does not support the Rule Change Proposal in its current form.

AGL strongly supports the principles of open access to data. We also appreciate the anticipated benefits of accessing and sharing data on distributed energy resources (**DER**) between market participants, given the increasing proliferation of these assets and their potential impact on the operation of the electricity grid. From a power system security and reliability perspective, we consider that the critical data insight on DER is in terms of their behaviour in aggregate. We consider that network businesses should already be well positioned to provide an aggregated view on the impacts of DER. Into the future, we consider that the energy sector's data sharing capability could be enhanced through a model that builds upon the Consumer Data Right and the fundamental principles outlined in the Commonwealth Government's Open Banking Review.

Nevertheless, we do support the establishment of a static register for DER as proposed. We do not believe that a static register would serve the long-term interests of customers. Rather, it would fundamentally interfere with the rights of customers to retain control on their own assets and make informed decisions about the way in which they would like to manage those assets.



We consider that a static register will do little to enhance the management of these assets. On the contrary, it risks imposing an unnecessary additional cost on consumers.

We are also concerned with the Rule Change Proposal's imposition of an obligation on network businesses to collect information about DER. This obligation assumes that because network businesses currently collect information from customers' grid connection application, these businesses should also be required to collect certain information on DER. In our view, the connection process continues to present a barrier for customer investments in DER, due to cumbersome and lengthy application processes and network resistance to high proliferation of DER assets. Linking reporting on DER to the connection process will only add more complexity and stifle investment and customer options. In our view, it may be more appropriate for customers' to individually manage their own energy system requirements into the future, entailing a more limited role for network businesses.

As we emphasised in our submission to the COAG EC's Energy Market Transformation Team, *in the longer term, more dynamic data exchanges will prove to be a more suitable means for accessing and sharing data between those who need it.*¹

We believe that a more appropriate approach to accessing and sharing customer data in the energy sector would take as its basis the Consumer Data Right and the fundamental principles outlined in the Commonwealth Government's Open Banking Review.

In the Attachment to this submission, we elaborate our views on the following specific aspects of the Consultation Paper:

1. The assessment framework for the Rule Change Proposal;
2. A cost benefits analysis of the Rule Change Proposal;
3. Transparency and confidentiality; and
4. Safety issues and emergency response.

Should you have any questions in relation to this submission, please contact Kurt Winter, Manager, Policy and Research, on 03 8633 7204 or myself on 03 8633 6836.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Stephanie Bashir', written over a light blue circular stamp.

Stephanie Bashir

Senior Director, Public Policy

¹ See AGL, Submission in response to the Cost Benefit Analysis of options to collect and share information about small scale battery storage: Consultation Paper, May 2017, prepared by Jacobs for the COAG Energy Council (9 June 2017), Available at http://aglblog.com.au/wp-content/uploads/2017/06/AGL-submission_Energy-Storage-Register-CBA_June2017-FINAL.pdf.



ATTACHMENT

1. The assessment framework for the Rule Change Proposal

AGL does not consider that the proposed assessment framework, elaborated in section 4.2 of the Consultation Paper is sufficient to appropriately assess whether the Rule Change Proposal satisfies the National Electricity Objective (**NEO**) and National Energy Retail Objective (**NERO**). The core interest at the heart of both the NEO and NERO is the *long-term interest of consumers*. Accordingly, AGL believes that the prevailing criteria in the assessment framework should be whether the Rule Change would best serve customers' changing preferences and needs.

In our view, the long-term interest of consumers is not only concerned with the efficient operation of the power system and efficient investment and appropriate risk management but the extent to which customers can actively engage in the energy market to realise the full benefit of their own DER assets. Indeed, with the proliferation of DER in Australia, AGL believes that the future of the grid will be as a gateway to multiple competitive platforms that enable a range of markets for customers. The distribution network will increasingly become the platform across which customers expect to be able to connect and transact. Rather than simply enabling the consumption of electricity delivered from centralised plant, the grid will have an increasingly important role facilitating a range of other service markets. These include markets for grid stability services (frequency and voltage), markets for services which support the network in constraint conditions, markets for wholesale demand response at times of tight supply, and 'peer-to-peer' energy trading.

In our view, there will not be a single business or delivery model to enable these mixed interactions and respond to the broad spectrum of customer needs and preferences. Reflective of the heterogeneity of customer needs and preferences, AGL expects product and service offerings from a broad mix of energy service providers to be similarly heterogeneous. The grid should provide a two-way energy platform upon which competing energy service providers can build their product and service offerings. The distributed energy ecosystem of the future may involve multiple distributed markets and service platforms co-existing and interacting. Energy service providers will invest, test, learn and innovate their offerings, and bear the risks and rewards associated with these endeavours.

AGL sees competition and innovation in technologies and business models as the primary means of meeting this challenge and aligning the interests of energy service providers with those of the customers they serve.

We recognise that the ability to harness insights from customers' data drives product and service innovation, which is in our customers' best interests. As we elaborate in our Data Policy Principles that were formalised in 2017:

- Customers should be provided easy access to their own consumption data.
- Customers should retain direct control over who is permitted access to their data, other than regulated entities for market settlement and other regulated and controlled purposes.
- The ability to use data to drive a competitive advantage will motivate data creation and product and service innovation, which is ultimately in the customers' interest.

Data on the nature of customers' DER assets and the behaviour of those assets should be no exception and, as far as possible, customers should retain direct control over who is permitted access to that data.



2. A cost benefits analysis of the Rule Change Proposal

We do not consider that a static register as envisaged in the Rule Change Proposal would appropriately meet the objectives outlined by the COAG Energy Council.

We appreciate that greater visibility of DER assets and their behaviour would support more efficiency in the energy market and reliability in the power system, as the Australian Energy Market Operator (**AEMO**) has outlined in its 2017 report, *Visibility of Distributed Energy Resources*. We note in particular the need for visibility to determine and revise operational bounds of the system and to properly inform longer term system planning and investment. We also acknowledge the range of technical impacts the increased uptake of distributed energy resources can present to distribution networks, as outlined by the Commission in its Distribution Market Model Final Report of 2017.

However, from a power system security and reliability perspective, we consider that the critical data insight on DER is in terms of their behaviour in aggregate. Indeed, as the Commission acknowledged in its Distribution Market Model Final Report, individual DER assets may have a minimal impact on distribution networks that can be appropriately accommodated within distribution networks' existing operational settings.

In our view, a static register of individual DER assets would be ill-suited to gaining an insight into the behaviour of these assets in aggregate. We consider that alternative models may presents more appropriate avenues to address this concern.

We consider that network businesses should already be well positioned to provide an aggregated view on the impacts of DER at a more granular level within their networks, given the nature of network businesses' responsibilities enumerated under Chapters 2 and 5 of the *National Electricity Rules*. Further relevant information could also be obtained from an open source and economy-wide open source system, such as the Australian Renewable Energy Mapping Infrastructure system, which could be expanded to provide information on DER assets and network performance.

AEMO could also aggregate a range of useful information obtained through its Demand Side Participation Portal, in accordance with the Demand Side Participation Information Guidelines.

Into the future, the data sharing architecture in the energy sector should take as its basis the Consumer Data Right and the fundamental principles outlined in the Commonwealth Government's Open Banking Review.

AGL strongly supports the principles of open access to data, as we elaborated in our recent submissions to the COAG Energy Council's Facilitating Access to Consumer Energy Data Consultation Paper and the Commonwealth Treasury's Review in Open Banking. In 2017, AGL formalised new Data Policy Principles, that drive our focus and policy in this area.² We consider as fundamental principles that:

- Customers should be provided easy access to their own consumption data.
- Customers should retain direct control over who is permitted access to their data, other than regulated entities for market settlement and other regulated and controlled purposes.
- The ability to use data to drive a competitive advantage will motivate data creation and product and service innovation, which is ultimately in the customers' interest.

² For more information on AGL's Data Policy Principles and customer data and transparency, please see AGL's sustainability report, available at: <http://agl2017.reportonline.com.au/sustainabilityreport/customers/customer-experience>.



- Any data access rule change should impose minimum obligations for data provision that include format standardization and data portability, but should not limit innovation or come at a cost to customers that does not realise sufficient benefits.

Consistent with the principles elaborated in the Open Banking Review Final Report, we also consider that the data sharing architecture should:

- be customer focused;
- promote competition;
- encourage innovation to create opportunities; and
- be efficient and fair.

Designing data sharing platforms for the energy sector in accordance with these principles would better serve the long-term interests of customers. As we elaborated above, customers are not only concerned with the efficient operation of the power system and efficient investment and appropriate risk management but the extent to which they can actively engage in the energy market to realise the full benefit of their own DER assets.

Accordingly, we are strongly opposed to the models that utilise central data hubs. In our view, centralised hubs are a highly intrusive design, with associated privacy concerns of having all data available to a single party and within a single location. Central data hubs require robust security protocols, given the sheer volume of data and potential access seekers, and have major establishment and compliance costs with a high likelihood of issues relating to replication of existing solutions and participant systems. Furthermore, centralised hubs reduce incentives to create new data.

We consider that it would be more appropriate for customer data to be transferred via application programming interface (**API**), and that these APIs should be built in accordance with standards set by an independent body.

As we emphasised in our submission to the COAG EC's Energy Market Transformation Team, in the longer term, more dynamic distributed data exchanges may prove to be a lower cost, lower risk and more suitable means for accessing and sharing data between those who need it.

AGL notes that the Jacobs study excluded consideration of funding options for the collection of data, development of the database and operation of the database, as well as cost recovery options. In our view, it is essential that costs and funding options be aligned with those stakeholders primarily benefitting from its establishment. We consider that a data exchange architecture underpinned by APIs would prove to be more cost effective and would urge the Commission to consider further analysis to assess the cost benefits of this approach.

3. Transparency and confidentiality

We consider that customers' right to privacy should properly inform the design of the data sharing architecture in the energy sector.

We note that privacy protections are a fundamental design feature of the Customer Data Right and Open Banking Review Final Report. In our view, customer confidence is critical to the success of open access to data. Customers need to trust that the right safeguards are put in place to ensure that an innovative data



industry does not come at the cost of customers' rights to confidentiality. To that end, we support the development of safeguards to maintain confidence in the system, including expanding certain privacy and confidentiality principles and remedies beyond their current ambit, and clarifying liability.

With customers' privacy concerns in mind, we consider that it would be more appropriate for customer data to be transferred via APIs rather than aggregated into a static register, and that these APIs should be built in accordance with standards set by an independent body. Customers' data should only be shared with their explicit informed consent and that data should only be shared when the customer has given an explicit direction to the data holder to do so. Additionally, the direction to share data should be consistent with the existing authorisations on an account, and customers should be notified of the data they are sharing and be able to revoke access easily.

4. Safety issues and emergency response

Safety for all end-use energy customers is AGL's primary concern and core to our business offerings. In our view, safety encompasses both site level and system wide considerations entailing different policy approaches in each context.

Nevertheless, we do not consider that a static register of DER assets is the most appropriate approach to managing safety risks in either context as other approaches would be more suitable.

At the site level, we consider that the best approach to safety and the management of risks associated with new technologies such as battery energy storage is to introduce a product safety standard as a matter of priority. This ensures that all product risks are appropriately managed and mitigated at product level. This approach is also consistent with international best practice. We continue to advocate this approach to Standard Australia, safety regulators and policymakers across jurisdictions.

At the system level, market participants would benefit from real time network usage and constraint data to enable them to better manage system security issues. Network businesses should already be well positioned to provide an aggregated view on the impacts of DER. As we have elaborated above, the energy sector's data sharing capability could be enhanced in the future through a model that builds upon the Consumer Data Right and the fundamental principles outlined in the Commonwealth Government's Open Banking Review.