AGL Energy Limited
ABN: 74 115 061 375
Level 24, 200 George St
Sydney NSW 2000
Locked Bag 1837
St Leonards NSW 2065
t: 02 9921 2999
f: 02 9921 2552
agl.com.au

Mr John Pierce

Australian Energy Market Commission

PO Box A2449

Sydney South, NSW 1235

8 August 2019

Coordination of Generation and Transmission Investment – Access Reform: Directions Paper (EPR0073)

AGL Energy (**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 and provides energy solutions to over 3.6 million customers in New South Wales, Victoria, Queensland, Western Australia and South Australia.

AGL welcomes the opportunity to comment on the Australian Energy Market Commission's (**AEMC**) Access Reform Directions Paper (**Directions Paper**) to its Coordination of Generation and Transmission Investment Review (**COGATI Review**). We appreciate the AEMC's willingness to meet with stakeholders to clarify its current thinking on the proposed reforms. We acknowledge that this increased engagement, spanning the COGATI Review technical working group meetings, the public stakeholder forum, and individual consultation, has been helpful to better understand how the AEMC envisages the proposed Access Reforms could work.

AGL accepts that there is a need to consider changes to the transmission access regime to ensure it evolves in line with the transformation of the generation sector. AGL agrees that the AEMC's proposed design mechanics are likely to encourage more efficient generation investment decisions[1]. However, we note that structural market changes entail significant complexity, which must be worked through to ensure that any solution[2]:

- is fit for purpose, and can be operationalised within the framework of existing markets;
- is developed in close consultation with market participants and authorities;
- maintains competitive neutrality and liquid financial markets;
- complements existing and forthcoming reform processes to transmission and wholesale markets; and
- delivers an overall market benefit for consumers.

[1] In conjunction with the increased level of information and data transparency proposed by the AEMC's Draft Determination on its Transparency in New Projects rule change project.
[2] Including the AEMC's preferred model.

Complex reform should not be rushed

The AEMC has reiterated its intention to finalise its COGATI Access and Charging Reforms[3] by the end of 2019, with implementation commencing in July 2022. As flagged in our previous submission, and given the detail that currently remains undeveloped, AGL is concerned that the speed of the COGATI Review process risks unintended outcomes.

The proposed access reforms comprising three interrelated pillars, namely Locational Marginal Pricing (**LMP**), Transmission Hedges (**TH**) and Coordinated Planning and Investment (**Market Coordination**), are individually complex regimes with significant operating and risk management impacts across the National Electricity Market (**NEM**), forward contract and wholesale markets. These mechanisms will only work if properly designed and tested. Sufficient time and design detail are therefore necessary to work through the intricacies of each Access regime to ensure they are workable, and maintain compatibility with other existing and impending reforms such as the Retailer Reliability Obligation (**RRO**) and the Wholesale Demand Response Mechanism.

AGL points to the development timeframes of other similarly complex reform processes, including the Optional Firm Access proposal[4], and the Power of Choice reforms[5], as examples of the necessary degree of scrutiny and explanation. Both of these reviews and reforms were examined, designed and implemented (where applicable) over several years with investigation of a range of options, and to allow for the design of complex mechanics, modelling to demonstrate operational function and market benefit, and detailed legal drafting and system changes, to be understood and managed by market participants and authorities alike.

While the Directions Paper provides a more fulsome explanation of the LMP regime, it concedes that details beyond a basic skeleton on TH are yet to be developed. Without a more specific understanding of the TH product design, auction and trading mechanics, it is difficult for AGL to fully understand how the future market is intended to operate, the risks stakeholders may face, and the value, price and availability of TH. Similarly, the inter-relationship between LMP and TH means that it is equally difficult to holistically respond to a number of the AEMC's detailed LMP design questions. It is therefore also challenging to visualise how these two reforms work together to deliver greater Market Coordination.

AGL calls on the AEMC to provide a significantly greater level of detail on its proposal to introduce TH, and information on how the three Access Reform regimes will link together in its forthcoming COGATI Access Review Draft report. Importantly, the AEMC should outline a clear transitional plan and appropriate grandfathering arrangements to protect existing investments in the NEM. To enable a thorough examination of the complexity inherent in these reforms and assist in mitigating any unforeseen or untested risks currently being flagged by participants, AGL also encourages the AEMC to extend the timeframe for publication of its final design report and its proposed implementation date by at least 12 months. We also consider that the AEMC should further develop other options, potentially transitional to a market approach, should the practical obstacles under the proposed Access reforms prove impossible to resolve at acceptable risk and cost levels.

[3] AGL notes that the AEMC's Charging Reforms review has not yet commenced. Any proposals to amend the Transmission Use of System charging regime must complement the proposed Access reforms and wider AEMC reforms to the transmission system and wholesale market.

[4] https://www.aemc.gov.au/markets-reviews-advice/optional-firm-access%2C-design-and-testing

[5] https://www.aemc.gov.au/markets-reviews-advice/power-of-choice-stage-3-dsp-review

A clear need for analysis to demonstrate benefit, and practical complexities

If the current Access Reform proposals are to continue at the current pace, AGL considers that the AEMC must refocus its efforts on providing robust quantitative analysis and worked examples.

Specifically, the AEMC should undertake modelling and analysis that outlines how each aspect of the Access Reform will work cohesively with each other and the broader National Electricity Rules and National Electricity Law to meet the National Electricity Objective, so as to demonstrate that the benefits of reform outweigh the costs.

We also request the AEMC present a range of simple and more importantly, complex scenarios as worked examples across all three proposed reforms so we can understand how they are intended to work under the range of conditions likely to be experienced in the NEM.

AGL strongly believes that undertaking these actions as part of the AEMC's development process will be critical to retaining industry confidence. It will also ensure that stakeholders understand the AEMC's process the proposed reforms, and the overall benefits it is expected to deliver.

AGL has provided responses to the AEMC's specific questions in Appendix 1.

If you have any queries about the submission, please contact Dan Mascarenhas on (03) 8633 7874 or DMascare@agl.com.au.

Yours sincerely,

Elizabeth Molyneux

General Manager Energy Markets Regulation

Appendix 1 – AGL's Targeted Responses

Locational Marginal Pricing (LMP)

AGL welcomes the additional detail prepared by the AEMC on the LMP mechanism. These details provide a suitable basic framework for the operation of LMP during periods of network constraint. We believe the economic principles and operational mechanics suggested by the AEMC appear sensible, however urge the AEMC to test them thoroughly through comprehensive scenario and sensitivity modelling.

While we appreciate the simple worked examples to demonstrate how LMP would work where a binding constraint is enforced on a transmission line between the local and regional nodes, these are not sophisticated enough to reflect current and future NEM operation. The AEMC should prepared more complex examples, including those which cover multiple and/or different constraint types, interactions with interconnectors, and interactions of generators connected to radial, meshed and looped transmission lines. In addition, AGL welcomes further details on how ancillary service market constraints (such as Frequency Control Ancillary Services) will be treated when co-optimised with energy prices, and the rationale for capping the LMP at the regional reference price. Regarding the latter, we believe this may undermine the basis of the AEMC's approach to the calculation of nodal prices, particularly where generators are operating to a volume-based strategy (rather than one informed by price).

AGL agrees in principle with the AEMC's assessment on which market participants should face the local or regional price. We believe the approach is both simple, economically rational and operationally practical to implement. While we agree non-scheduled participants (both loads and generation) should have the ability to opt-in to face the local price, taking into account the increase in regulatory compliance imposed on scheduled/semi-scheduled participants, this should be a one-way gate to remove any risk or incentive to price arbitrage. Introducing this market condition would further preserve the market principles of simplicity, flexibility and competitive neutrality.

With respect to transmission losses, it is hard to assess this in detail at this time. Our initial preference would be to build marginal loss factors into the local price. We believe this would strengthen the locational signal without artificially inflating the price of risk management tools available. However, further details on TH is required before we can comment fully.

Importantly, the impacts of the LMP reform require further consideration once the full Access Reform design is developed. AGL flags the following possible risks which require an additional assessment:

- perception of market power, including in high load regions;
- willingness of generators to offer primary hedge contracts (i.e. off taker agreements);
- impacts on forward contract market operations, including on contract liquidity;
- third party contracting risks may (i.e. generator-retailer contracts based on volume – not price); and
- change in law risk (i.e. management of basis risk within existing contractual agreements).

The AEMC should also explore whether there is any additional compliance and enforcement risks introduced as a result of the COGATI Review reforms. AGL suggests the AEMC initially focus its efforts on areas of contract market reform, noting there are currently a number of overlapping rules in this space. For example, how does LMP and TH work with existing reforms such as the RRO and other existing financial contracting arrangements.

Transmission Hedging and Grandfathering

AGL believes that a significant amount of detail across the broad information categories identified in table 5.1 (High level design aspects of transmission hedging)[6] is immediately necessary to enable stakeholders to properly assess the complexity of the proposal. As part of this detail, AGL encourages the AEMC to release a further developed strawman outlining the procurement (i.e. auction) process, as well as providing details on how hedges will be priced and valued in market (i.e. where valuation is dependent on the availability of hedges and therefore the Integrated System Plan, as currently proposed)[7].

AGL also note that the number of hedges made available and therefore their market valuation is likely to be underpinned and informed by the ISP. Under current processes to "Action the ISP"[8], there is no verification process to scrutinise the Market Operator's determination. Noting the significant interactions proposed between the ISP, COGATI Review and the Regulatory Investment Test for Transmission (**RIT-T**), AGL strongly considers that an independent verification process, delivered by an independent expert panel or the Australian Energy Regulator, is necessary to ensure that the number and value of hedges are properly informed, and consumers only contribute to transmission investments that are cost-efficient and provide overall market benefits. The AEMC must also ensure that the price of hedges is viable for a range of generators, noting that it is the purchase of hedges that contribute to the underwriting of additional transmission infrastructure.

In addition, AGL welcomes further details on a proposed grandfathering regime which suitability values existing investment made by market incumbents. In our view, existing generators should be protected for their remaining economic life, as this would be akin to their existing risk profile. However, we welcome further discussions on these arrangements, note that developing the regime is likely to be complex.

Interactions between Access reform and Renewable Energy Zones

AGL supports the AEMC's continued efforts to identify options for the implementation of well-coordinated Renewable Energy Zone (**REZ**). We recognise that a significant issue facing the industry is a lack of clear transmission planning for the energy transition. While the Integrated System Plan provides a long-term view on possible opportunities for the creation of REZs, a suitable regulatory mechanism (which incorporates the RIT-T) to encourage its development does not exist. AGL also agrees that existing regulatory options available to coordinating renewable generation and transmission infrastructure are not fit for purpose, either due to timing or commercial constraints.

The Directions Paper outlined two proposals to encourage the uptake of REZ. AGL does not support the Transmission Network Service Provider (**TNSP**) 'Open Season's approach, on the basis that this model would not address the significant timing disconnect that currently exists and may in fact increase in the

[6] Refer to page 72 of the Directions Paper.
[7] Refer to pages 74-75 of the Directions Paper.
[8] http://www.coagenergycouncil.gov.au/publications/energy-security-board-%E2%80%93-converting-integrated-system-plan-action-consultation-paper

connection time for new generators. However, we believe the 'Shared Risk Model' presented by PIAC has some merit, should be further considered and potentially explored under NER sandboxing arrangements. However we acknowledge that this model also has some challenges which require further assessment, such as how to prevent the REZ from being constrained, whether different levels of flexibility in REZ design/regulatory enforcement is necessary based on location, and the role of Governments in initial funding arrangements. It is however, imperative that any REZ development undergoes a RIT-T to ensure that consumers only face cost-efficient investments.

Implementation and Timing

The current timeline for the COGATI Review is overly ambitious and rushed. AGL requests that the AEMC slow the process down and push back the current implementation date of 1 July 2022. Focusing on this date, has placed additional pressure to design a mechanism in an untested environment. In the absence of robust modelling and analysis, we are concerned implementation of the COGATI Review reforms will lead to unintended consequences and additional complexity, mechanisms that may not be operational, and/or one that may not deliver overall market benefits. A slower timetable would also allow further consideration of alternative mechanisms, both transitional and full market-based access regimes, with less implementation risks.

AGL note that the AEMC have not yet commenced industry engagement on its COGATI Review Charging reforms, and that these are likely to intersect with the operations of the Access reforms, and will influence aspects of the planned inter-regional settlement residue (proposed to absorb the existing Settlement Residue Auctions process).

We strongly encourage the AEMC to push out its final design report and overall implementation timetable by at least 12 months to:

- enable a comprehensive assessment of the complexities inherent in the proposed access reforms, and other potential alternatives which achieve similar goals;
- allow development of suitable, fair and competitive grandfathering arrangements;
- support the development of a thorough economic assessment (with sensitivity analysis) to detail the interactions of the operationalised COGATI reforms;
- demonstrate how the COGATI reforms would work with the existing NEM and incoming NER reforms on foot (including the NEM 2025 review) to preserve market benefits introduced under these reforms; and
- ensure that any new access regime will not require further amendment post the completion of the NEM 2025 review.