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Australian Energy Market Commission

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Clarifying registration for non-generating units providing system security services draft determination

AGL Energy (AGL) welcomes the opportunity to respond to the Australian Energy Market Commission (AEMC) clarifying registration for non-generating units providing system security services draft rule determination.

System security is critical to the future of the NEM

As the energy system transitions away from synchronous thermal plant toward variable renewable sources, the provision of system security services will become increasingly critical. Technologies such as stand-alone synchronous condensers are well-suited to deliver services like inertia and reactive power, yet current market frameworks do not provide a clear and fit-for-purpose registration pathway for these assets. Without structural reform, investment in these technologies will remain constrained, undermining system security as the energy transition progresses.

AGL does not support the AEMC's draft determination

We do not support the AEMC's draft determination to clarify the application of the existing Integrated Resource Provider (IRP) registration category to standalone synchronous condensers. We believe the proposed approach fails to adequately address the underlying regulatory and investment certainty gap. The AEMC's reliance on minimal change prioritises short-term expediency over long-term regulatory integrity. We believe this risks entrenching confusion and deterring investment.

We strongly advocate for the creation of a new, dedicated registration category for non-generating units providing system security services, as proposed by CS Energy's original rule change request.

Issues with utilising the existing IRP category

The IRP category was originally introduced for bi-directional and hybrid storage systems, not for non-generating assets like synchronous condensers. Retrofitting this category could set a problematic precedent for future registration decisions, potentially leading to inconsistent regulatory treatment.

The AEMC's draft rule proposes to clarify the IRP registration category by adding a note to clause 2.3.4(b) of the National Electricity Rules (NER). This note, however, does not create binding obligations and relies on the assumption that standalone synchronous condensers can be registered via market connection points. We consider this approach inadequate since:

- It does not resolve the definitional mismatch between synchronous condensers and bidirectional units under Chapter 10 of the NER.
- It introduces uncertainty regarding the scope of services that can be provided under IRP registration, particularly when assets are classified as "loads."

If a standalone synchronous condenser were to be registered as a market participant under the IRP category, as proposed by the AEMC, any electricity consumed due to internal losses (e.g. from excitation systems or auxiliary loads) would be treated as load. Consequently, the asset would be settled in the NEM for that consumption and would have to pay market prices for the electricity consumed, even though it did not generate or consume electricity in the traditional sense. During high price events, this could result in significant financial exposure, especially if the asset is operating continuously to provide system strength or

inertia. In contrast, synchronous condensers owned by network service providers (NSPs) are treated as regulated network assets. Any associated costs, including electricity losses, are recovered through Transmission Use of System (TUOS) charges, which are spread across all users of the network i.e. consumers. This model effectively shields the NSP from market volatility and ensures predictable cost recovery. Therefore, treating non-network synchronous condensers as market participants creates a competitive disadvantage compared to network-owned equivalents. This ultimately undermines the development of market-based system security solutions that could potentially meet the needs of the system at the lowest cost.

Why a new registration category is necessary

The introduction of a new registration category is the most effective and transparent solution. The proposed category would be technologically neutral and broad enough to accommodate all non-generating units capable of providing system security services. This approach avoids the interpretive risks associated with retrofitting the IRP category, which was originally designed for bi-directional and hybrid units. A new category would offer legal clarity, administrative simplicity, and a well-defined pathway for participation, thereby supporting timely and cost-effective investment.

Converting retired thermal generators into stand-alone synchronous condensers also requires substantial capital investment. While this approach offers significant system security benefits and cost efficiencies compared to new builds, it is not a low-cost undertaking. The conversion process would involve complex engineering work, refurbishment of existing infrastructure, and compliance with technical standards; all of which carry material commercial risk. In the absence of a clear and fit-for-purpose registration framework, participants are unlikely to commit to such investments. The lack of a clear registration pathway delays investment decisions, especially for projects aligned with system strength RIT-T outcomes. Regulatory certainty is essential to unlock these opportunities and ensure that commercially viable, non-network solutions can be deployed to support the energy transition.

Minimising costs & emissions

We strongly support the repurposing of retired synchronous generators into stand-alone synchronous condensers. This strategy offers significant cost savings and enables faster deployment. Reusing existing infrastructure such as cooling systems and grid connection points enhances efficiency and reduces implementation timelines. The AEMC's draft rule does not adequately support this opportunity, as it fails to provide the structural clarity needed to unlock investment in repurposed assets.

This approach is also inherently less emissions-intensive than constructing entirely new plant. Repurposing existing infrastructure avoids the carbon footprint associated with manufacturing, transporting, and installing new equipment. This approach supports a lower-emissions pathway to delivering system security services while accelerating the energy transition.

About AGL

Proudly Australian since 1837, AGL delivers around 4.6 million[1] gas, electricity, and telecommunications services to our residential, small, and large business, and wholesale customers across Australia. AGL operates the largest electricity generation portfolio in Australia of any ASX-listed company, with a total operated generation capacity of almost 8000 MW across Australia. AGL is Australia's largest privately-owned hydro power station operator and operates the largest portfolio of renewables and storage assets of any ASX

[1] Services to customers number is as at 30 June 2025.

listed company. Since 2006, AGL has invested billions of dollars in the construction and delivery of over 2 GW of renewable and firming capacity in the National Electricity Market.

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Yours sincerely,

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Wholesale Market Regulation

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