Australian Energy Operations

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Australian Energy Markets Commission
Level 15, 60 Castlereagh Street
Sydney NSW 2000
Reference: ERC0402

Via email: www.aemc.gov.au

Australian Energy Market Commission (AEMC)– Clarifying registration for non-generating units providing system security service

1.1.The role of Stand-alone Synchronous Condenser

A stand-alone synchronous condenser (syncon) is a rotating machine connected to the electricity network that provides system strength and voltage stability — critical non-energy services that support secure and reliable power system operation. Unlike traditional generators, a stand-alone syncon does not produce electricity for export; rather, it draws power from the grid to provide a regulated transmission service such as fault current injection, inertia, and voltage support.

Australian Energy Operations (AEO) is currently constructing such an asset adjacent to the Ararat Terminal Station (ARTS) in Western Victoria. This project has been contracted by the Australian Energy Market Operator (AEMO) through its System Strength Remediation initiative in coordination with VicGrid. [redacted] "Confidential information has been omitted for the purposes of section 24 of the Australian Energy Market Commission Establishment Act 2004 (SA) and section 108 of the National Electricity Law."

1.2.How the Syncon operates under the current framework

The syncon draws power from the transmission grid to operate — [redacted] "Confidential information has been omitted for the purposes of section 24 of the Australian Energy Market Commission Establishment Act 2004 (SA) and section 108 of the National Electricity Law."These are not commercial loads or discretionary energy uses, but inherent to the function of the asset in delivering transmission-level services.

Despite this, under the National Electricity Rules (Rules), the asset is treated as an unclassified load. [redacted] "Confidential information has been omitted for the purposes of section 24 of the Australian Energy Market Commission Establishment Act 2004 (SA) and section 108 of the National Electricity Law."

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This is at odds with the fact that the service the syncon provides is equivalent to that delivered by transmission network service provider (TNSP) owned system strength assets — but without the supporting cost recovery framework.

1.3. How the current rules hinder the intended use of syncons

The current regulatory framework does not support the efficient operation of stand-alone syncons that are not owned or operated by a licensed TNSP or being re-classified as a generation asset like CS Energy's rule change. While the Rules provide a mechanism for transmission services and cost recovery via TUoS, these mechanisms are not fully accessible in Victoria due to the operation of the National Electricity (Victoria) Act 2005 (NEVA).

[redacted] "Confidential information has been omitted for the purposes of section 24 of the Australian Energy Market Commission Establishment Act 2004 (SA) and section 108 of the National Electricity Law."In addition to these cost impacts:

- the asset is required to be market-metered, even though it does not engage in wholesale market activity or energy trading; and
- compliance pathways and settlement arrangements are not fit for purpose, creating regulatory inefficiencies and operational uncertainty.

These issues highlight the need for a Rule change that either:

- establishes a fit-for-purpose classification within the Rules that can be recognised under the NEVA framework, or
- is accompanied by jurisdiction-specific clarification or derogation to allow appropriate treatment of stand-alone syncons in Victoria.

Without such reform, Victoria risks missing out on flexible, cost-effective approaches to delivering system strength, particularly those sourced competitively or developed through non-TNSP pathways.

1.4. Future market opportunities and network needs for syncons

With the growing penetration of inverter-based renewable energy and the progressive retirement of synchronous generators, system strength and voltage support services will become increasingly vital. Syncons are one of the few proven, scalable technologies that can provide these services independently of energy generation.

Going forward, it is likely that many system strength assets will be delivered outside the traditional TNSP framework, particularly where governments or market bodies (like AEMO) procure them directly to address system needs.

Without regulatory reform to support non-TNSP ownership and standalone configurations, the deployment of these critical assets will be constrained given the lack of commercial incentives. The

current framework fails to anticipate this future need and risks locking out otherwise viable system strength solutions due to cost and compliance inefficiencies.

1.5. The importance of reclassification for market access and competition

Reclassification is not just a matter of regulatory tidiness; it is essential to ensuring fair and efficient access to the system strength services market. Without a suitable classification:

- independent or non-TNSP providers are effectively disincentivised or excluded from providing these services
- market competition is stifled, as TNSPs or generator-tied syncons can cost-recover under TUoS
- the cost burden is inequitably allocated, with energy charges falling on proponents of non-market, non-energy assets.

A rule change that explicitly classifies stand-alone syncons as providers of regulated transmission services — exempt from metering,— would create a level playing field. It would unlock innovation in system strength solutions, encourage third-party investment, and support timely delivery of services critical to network stability.

1.6. Syncons should have their own classification

We strongly support a rule change with the support of AEMO that:

- establishes a clear classification for stand-alone syncons as non-energy transmission assets
- exempts them from market metering obligations under the Rules/NEVA
- allows their energy consumption to be treated like other forms of network assets such as transformers, line losses, capacitor banks
- supports broader market access for new models of system strength service delivery.
- requires no registration.

Such reform would remove current inefficiencies, provide cost certainty for project proponents and ensure the NEM can continue to support secure system operation in a high-renewables future.

We would be pleased to discuss this submission with the AEMC should that be of assistanc [redacted] "Confidential information has been omitted for the purposes of section 24 of the Australian Energy Market Commission Establishment Act 2004 (SA) and section 108 of the National Electricity Law." In the first instance, please reach to me on 0499 202 244 or Lauren.Fetherston@ue.com.au

Kind regards,

Glen Thomson

Chief Executive Officer

Australian Energy Operations