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Submission to System Restart Services, Standards and Testing (ERC0278)

AGL Energy (**AGL**) welcomes the opportunity to comment on the Australian Energy Market Commission's (**AEMC**) draft determination on the System Restart Services, Standards and Testing.

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 3.5 million customers in New South Wales, Victoria, Queensland, Western Australia, and South Australia.

The draft rule is an important development in meeting the challenges the market faces in a changing power system. As the market transforms, the public should remain confident a major supply disruption can be effectively resolved. It is therefore critical AEMO, transmission network service providers (TNSPs), and market participants undertake a range of preparatory measures to effectively prepare for major outages.

AGL therefore supports the AEMC policy objectives outlined in the draft determination. However, we consider the draft rule should be amended to better meet these objectives. Our submission focuses on clarifying the AEMC proposed changes to the definition of SRAS and the impact of these changes on the SRAS Procurement framework. We also outline our concerns, and propose amendments and clarifications, regarding the scope of system restart path testing and test program development.

If you have any queries about this submission, please contact me on (03) 8633 6758 or CStreets@agl.com.au.

Yours sincerely,

Chris Streets

Senior Manager Wholesale Markets Regulation

AGL Submission to AEMC System restart services, standards and testing draft rule change

The definition of SRAS

The AEMC has proposed amendments to the definition of System Restart Ancillary Services (SRAS) and black start capability. Whilst the definition of SRAS is amended to refer to both black start capability and system restoration support services (SRSS), AEMO will ultimately decide how the SRSS are defined within the current SRAS guidelines requirements. Consequently, the draft determination proposes the information requirements of the SRAS guideline do not need to be amended to define this new support service.

As stated in our previous submission, AGL is supportive of a technology neutral approach to the provision of SRAS. If system restart services can be safely and reliably provided by a non-generator, there is no reason to restrict SRAS provision to generators.

We understand the AEMC's pragmatic decision to provide AEMO with the flexibility to determine what support services are required now, and in the future, rather than prescribing them in the rules. However, the draft determination has provided limited guidance on what these services requirements may currently be. With limited context provided it is therefore unclear if the current information requirements under cl 3.11.7(d) of the NER are sufficient. It is vital that the information requirements appropriately guide AEMO on how these requirements are defined. This will ensure AEMO provides market participants and prospective service providers with the information necessary to effectively tender to supply these support services. We therefore encourage the AEMC to consider how the current guideline information requirements meet this objective.

More specifically the AEMC should consider if the current guidelines will clearly delineate the duration of different service requirements. Some required services may be enduring requirements that the system restart path will always require. Alternatively, there may also be more specific services that are only required for a limited period to address a discrete service shortfall. Without this information, in the context of a changing network, there may be uncertainty as how long some services will be ultimately be required. The guidelines should therefore require a distinction between these service requirements to improve investor certainty and transparency.

The AEMC assessment has predominantly focused on the emerging need to procure services arising from a system restart requirement which is not met by existing regional generators. Whilst this is an important feature of the proposed rule change, we consider AEMO should also be procuring the necessary support services even when they are currently available from market participants through their Generator Performance Standards and LBSP capabilities. This is consistent with the current procurement of SRAS when an agreement is created even when multiple generators can provide the service. Formalising the role of existing generators to provide SRSS will recognise the value of these services and better incorporate the role of these key generators into the local system restart plans. Furthermore, as SRSS providers these generators will need to meet the annual SRAS testing and availability requirements along with being better incorporated into the proposed system path tests. The AEMC should clarify if this is the case.

The procurement objective

The AEMC has proposed to make minor amendments to the SRAS procurement objective to clarify that AEMO can take overall costs (ie short term and long-term costs) into account when procuring SRAS to

meet the system restart standard at lowest cost. Furthermore, the AEMC has determined not to incorporate the National Electricity Objective (NEO) into the procurement objective.

AGL is supportive of clarifying the definition of the SRAS procurement objective. This will further facilitate a broader variety of technologies available for the provision of SRAS.

We agree with the AEMC's decision not to amend the procurement objective to refer to the NEO. Clarity of AEMO's objective is essential. AEMO should not be placed in the position where they are weighing up the level of SRAS required to meet the NEO. The separate roles of the Reliability Panel (defining the standard) and AEMO (procuring adequate services at least cost) therefore remain appropriate.

We note AEMO's procurement process remains within AEMO's discretion. With only a limited number of system restart capable generators available, it has previously been appropriate for AEMO to conduct the 'Direct request for offer process' in procuring SRAS. However, the extension of SRAS to facilities other than generators, along with the SRSS requirements, will mean this approach is no longer desirable. Given the importance of facilitating new entrant capacity, industry certainty and the added transparency that open tenders provide, the guideline requirements should be amended to restrict closed tenders to exceptional circumstances (such as a tight procurement timeframe requirement).

Amending the Generator Performance Standard

The AEMC's draft determination has not proposed any changes to the existing generator technical performance standards under the NER to require the provision of system support services. We agree with the AEMC that the proposed changes to the SRAS definition and clarifying the procurement objective provide sufficient market incentives to meet system restart requirements at an efficient level.

The Draft Regulatory Testing Framework

The AEMC has proposed a new framework for physical testing of system restart paths. The framework will require AEMO to undertake a co-ordination role and to consult with test participants when developing the test program. As set out in the draft rule, AEMO will consider any submissions during consultation however AEMO can finalise the test program without agreement with test participants.

In designing the test program, the test must be for the purpose of verifying whether the restart plan is likely to be consistent with the achievement of the system restart standard or AEMO power system security responsibilities. AEMO will also have regard to three principles: power system security, minimising market impact, and to the extent reasonably practicable, the operational requirements of TNSPs and affected registered participants.

Once the test program is finalised, the framework requires a set window in which the test will occur and a minimum six month lead time before testing can occur. AEMO will also provide guidance on the frequency of the tests in the SRAS guideline subject to the minimum one-in-three year test requirement.

While there are risks that need to be managed, AGL is open to being part of these tests because of the system benefits, where it is not overly disruptive or damaging to business operations and the plant and market risks are appropriately managed. The proposed framework largely addresses these concerns subject to three key issues we discuss below.

1. *Development of tests*

Whilst AEMO must consult with test participants under the framework, the rules do not set out the consultation requirements in terms of timing or process. We consider that the AEMC should include a requirement that AEMO disclose the draft test program to test participants following the initial AEMO consultation. Test participants should then be provided with an opportunity to provide further comment on the amended test program.

We are also concerned that a test participant is not required to approve the test, or at the very least has an opportunity to challenge the test program on the grounds set out under draft rule 4.3.6 (e) (3). The AEMC should therefore include an avenue under the framework for a test participant to challenge the final test program, particularly in the case of the timing of the test.

We consider these additional amendments to the process continue to meet the AEMC's objective making sure that such tests can occur while still providing adequate notice and certainty to affected participants.

2. *Frequency of testing*

We agree with AEMO's initial proposal that that the testing should only be conducted when necessary. As set out in the draft determination, the AEMC notes a number of factors that may give rise to the need for system path testing. Currently under the draft rule, the mandatory one-in-three year testing may be unnecessary if these factors have not arisen. Whilst we agree with the value of initially verifying a component of the restart path, once tested unless there is a material change either in the configuration of this part of the network or the relevant generators, there will be negligible value in testing this component of the restart path again.

The draft rule should therefore be amended to limit when a component of the restart path should be tested, rather than the generic term of the 'restart path'. The 'component of the restart path' may include either a part of the transmission network or a market participant's contribution to meeting the system restart path plan. The rule should state that that once a component of the restart path is tested, this component should only be tested again when there has been a material change in this component and AEMO considers it necessary.

3. *Scope of testing*

AGL appreciates the important insights that system restart path tests may provide. Not only would it provide a live test for the capability of the SRAS provider, but it could help to improve all party's understanding in how to effectively implement a system restart. This in turn will further improve public confidence in the resilience of the NEM.

However, public confidence in a system restart is formed only in part by system restart path testing. The overarching framework of preparatory measures such as Local Black System Procedures, SRAS testing, the continued development of System Restart Plans, the implementation of effective communication protocols and the regular testing of systems and facilities also ensure the market is prepared to respond in the event of a black system event.

We are mindful that some system restart testing can give rise to risks that are not present during normal system operation or standard generator performance testing. System restart path modelling is therefore a necessary alternative to certain types of physical testing. Whilst not an ideal way of testing components of

the restart paths, the actual testing of these components would expose generators to risks that should only be accepted at times of exceptional importance, such as a system black event.

We consider the purpose of the proposed system restart testing framework is therefore to draw out testing that is sufficiently safe to conduct in the real world on a regular basis. This change will further improve the overarching framework's effectiveness in preparing for a system restart response without compromising the reliability of available generation.

Currently, the draft rule defines the system restart path tests broadly as:

> AEMO must undertake a test for each electrical sub-network to verify whether the system restart plan as it relates to that electrical sub-network is likely to be consistent with the achievement of the system restart standard or the AEMO power system security responsibilities for that electrical sub-network …(see draft rule 4.3.6 (a))

In terms of risk of plant failure or damage, this will include tests that are no more risky than the normal operation of plant. These tests would be equivalent to the risk a generator is exposed to when connected to the system and generating, or when undertaking normal generator performance testing.

However, this will also include scope for testing that is materially more risky than the normal operation of the plant. In this case, the generator could be connected to an isolated component of network which is not as secure as normal system operation or the testing procedure requires a significant alteration to how the plant and/or switch yard is conventionally configured.

Given the scope of testing may include tests that pose an unacceptable risk to a test participant's facility, in the interests of industry certainty and clarity of purpose, the testing framework should be better defined to limit the nature of these tests to those envisioned by AEMO and the AEMC.

We are mindful that there are some protections in place that will address industry concerns when the test is developed, however we do not consider these protections directly apply to the issue outlined above. Whilst the testing framework falls under the overarching Power System Security Responsibilities under Chapter 4, this responsibility is primarily focused on the preservation of system security rather than protection of behind the connection point, ie a generator. While a generator is conventionally protected by virtue of operating in, or contributing to, a secure system, this is not necessarily the case when a generator is participating in a test undertaken separate from the normal operation of the system. That is, this responsibility may only protect the non-participants of the test.

In addition, the AEMC have also proposed a draft rule to require AEMO to have regard to testing principles when designing the test. In particular, the draft rule provides AEMO to have regard to:

> *to the extent reasonably practicable, the timing, duration and technical specifications of the test should consider and be coordinated with the operational requirements of the Transmission Network Service Provider and other affected Registered Participants so as to minimise the cost and impact of the test on the operations of all parties* (see draft rule 4.3.6 (e) (3))

We agree with this principle and consider it is an important factor in designing the test, however it is too broad to address the issue outlined above.

Whilst we appreciate the AEMC does not envision high risk testing, this should be reflected in the rules. The rules should therefore expressly exclude AEMO from implementing tests that will expose a market participant to risks to their facility that are materially greater than the normal operation of their facility.

These limitations on the framework will ensure the tests continue to meet the type of testing the AEMC envisioned now and into the future. This is particularly important as the power system or market conditions change such that testing requirements change from what may be currently required or expected.

If the testing framework is limited to these types of tests and this is reflected in the rules, we agree with the AEMC's assessment that the compensation framework should be limited to direct costs. Given the limited frequency of these tests and the proposed testing principles, the indirect costs arising from these types of tests should be treated in the same way as the costs that arise from directions other than energy and FCAS. We also agree with the AEMC's sentiment that given the public importance of system restart capability, the indirect costs of testing should be absorbed by market participants.

What if high risk system restart path tests are necessary?

Should high risk testing be considered valuable and necessary, then the AEMC may facilitate these types of tests in the rules through formal contractual agreements between AEMO and the test participant. Just as AEMO assesses the suitability of potential SRAS providers to meet the restart standard, this may be particularly useful if AEMO considers a market participant's location and/or type of facility mean they could play a more central role in testing components of the restart path.

Along with the agreed requirements of the tests, due to the material risk to plant, the agreement would also include appropriate indemnity in the event that a significant loss is suffered due to plant failure or damage.

AEMO could enter into these agreements in accordance with the same process as the formulation of SRAS agreements under cl 3.11.9 of the NER. Alternatively, the additional testing role could be included in an SRAS agreement for system restart support services.