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Energy Policy WA, Department of Energy and Economic Diversification

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Atmos Renewables welcomes the progress made through the PSSR Standards Review. The revised framework is more technology-neutral and outcomes-based, particularly the unified withstand SCR standard and clearer treatment of grid-forming capability. Atmos supports the overall direction, subject to the targeted changes below.

Atmos position

The final framework should preserve secure operation while avoiding unnecessary equipment, sub-optimal tuning and open-ended compliance obligations where actual network conditions do not warrant them.

1. 1. Withstand short-circuit ratio and settings

Atmos supports a single Minimum Access Standard of withstand SCR 3 or less for both GFL and GFM inverter-based resources. However, a mechanism should remain available to agree a higher withstand SCR where justified by actual and forecast network conditions at the connection point.

- Retain SCR 3 as the default Minimum Access Standard.
- Allow an agreed higher withstand SCR where supported by transparent network forecasts and studies.
- Use a Trigger Event or equivalent mechanism requiring additional equipment or retuning if forecast system strength later approaches the registered withstand level.

Atmos does not support an inflexible requirement to use the same settings for withstand SCR demonstration and normal operation in all circumstances. Where one setting set is impractical across the credible system-strength envelope, a separately validated weak-grid settings group should be permitted and documented through the GPS framework, including switching criteria, monitoring and rollback arrangements.

The final drafting should also clarify whether clause A12.9A.3.1 requires only Adequately Controlled and Continuous Uninterrupted Operation at the withstand SCR, or compliance with every other Technical Requirement at that same SCR.

2. 2. GFM requirements, conversion and curtailment

2.1 2.1 Targeted GFM requirement

Atmos supports a targeted GFM requirement for new electric storage in locations with an identified or forecast system-strength need, provided the designation, technical qualification and transitional arrangements are clear before the mandate applies.

- Align the project commitment test with the transition rules for amended Technical Requirements.
- Protect projects that have materially relied on an accepted R0 position, binding OEM commitment or executed major contract.
- Define the GFM service or technical outcome required, including energy, current and state-of-charge assumptions.
- Avoid treating GFM classification as an obligation to reserve headroom continuously unless that service is separately specified and valued.

2.2 2.2 GFL-to-GFM conversion cost and feasibility

Atmos does not consider it appropriate to assume that conversion of an existing GFL facility will generally be a low-cost firmware upgrade. The relevant measure is the whole-of-project cost and feasibility of delivering registered, validated, warrantable and operationally suitable GFM performance including activities and task not limited but :

- Firmware, licences and inverter/controller compatibility.
- PPC and supervisory-control modification.
- RMS and EMT model updates, benchmarking and validation.
- GPS modification and Western Power/AEMO assessment.
- Protection and current-limit coordination.
- OEM engineering and on-site support.
- Testing, commissioning, outages and rollback.
- Warranty and long-term service agreement changes.
- Operating headroom, energy and state-of-charge constraints.

Indicative Atmos planning estimate

For a utility-scale conversion that triggers GPS modification, Western Power and AEMO review, OEM involvement, testing and limited outage, Atmos's preliminary internal planning estimate is approximately \$4 million to \$5 million. This is not a supplier quotation and may vary materially by platform, facility configuration and approval scope.

“Capability to convert” should therefore require demonstrated technical feasibility, OEM support, suitable models, warranty acceptability and a practical registration pathway. Firmware availability alone is insufficient.

2.3 2.3 Curtailment priority

- Define each priority category and how capability, compliance and conversion status will be assessed and disputed.
- Do not curtail a compliant facility ahead of a facility in remediable non-compliance merely because the compliant facility has not converted.
- Protect a facility from adverse priority while it is progressing an accepted conversion application in good faith.

- Place an expiry, review point or shortfall-resolution endpoint on any transitional priority arrangement.

3. 3. GPS modification and re-registration

A GFM conversion should not automatically reopen every Registered GPS provision. Atmos supports a bounded, time-limited and proportionate modification pathway.

- Early agreement on the affected Technical Requirements and assessment criteria.
- Preservation of unaffected Registered GPS provisions unless a demonstrated interaction requires reassessment.
- Prescribed RMS, EMT, validation, protection and commissioning evidence.
- Defined completeness, review, response and decision timeframes.
- Staged approval covering studies, model acceptance, controlled site testing and final registration.
- Recognition of existing OEM evidence where directly applicable.
- Agreed commissioning success criteria and rollback arrangements.
- Transparent allocation of assessor, consultant, OEM, testing and outage costs.

Indicative Atmos planning assumption

GPS consultant, Western Power and AEMO assessment costs alone could exceed \$1 million. A well-bounded study and assessment phase may require approximately two to three months after scope and acceptance criteria are agreed. An open-ended or disputed scope could take materially longer. These assumptions are preliminary and not committed cost or schedule.

4. 4. Framework for control-setting changes

Atmos supports a mechanism for settings changes where network conditions materially change. The scope should be limited and governed to avoid unintentionally reopening the entire Registered GPS or directing changes to proprietary inverter controls.

- Limit routine directions to plant-level voltage and reactive-power controls within an approved and validated range.
- Treat generating-unit controls, protection settings, equipment limits and unvalidated firmware as formal modification matters requiring OEM involvement.
- Require technical justification, consultation, model assessment, testing, monitoring and rollback arrangements.
- Link periodic retuning review to the System Strength Report or another defined planning trigger.
- Ensure a facility is not placed in breach of its GPS solely because it complies with an approved settings direction.

5. 5. Drafting and implementation

Atmos recommends a final drafting check across the amended technical clauses and definitions. In particular, the relationship between Commencement Time and Rise Time should be clear and internally consistent, and cross-references should accurately identify the required current response.

The supporting WEM Procedures and guidelines should be consulted on before the new obligations are applied. These instruments should define study assumptions, evidence requirements, assessment tolerances, confidentiality treatment and decision timeframes.

6. Conclusion

Atmos supports the revised PSSR framework and the objective of enabling secure, efficient integration of inverter-based resources in the SWIS. The targeted changes above would improve proportionality, preserve practical tuning flexibility and reduce unnecessary investment while maintaining clear security outcomes.

Atmos welcomes continued engagement with DEED, AEMO and Western Power as the final rules, procedures and guidelines are developed.

Yours sincerely

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