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To	Energymarkets@deed.wa.gov.au
Subject	Essential System Services Framework Review
Date	10 December 2025

Good Afternoon

Thank you for the opportunity to provide comment in response to the Essential System Services Framework Review Consultation Paper (the Paper). As a major electricity retailer, Perth Energy is very mindful of the increases in electricity prices faced by customers within the SWIS. Essential System Services (ESS) make up a significant portion of retail costs, so we appreciate the work that has been undertaken recently by Energy Policy to reduce ESS costs. We generally support the actions proposed within this Paper and provide the following responses to the questions raised.

***Proposal 1**: AEMO to update and publish the technical and operational guidelines relating to FCESS quantification and dispatch processes: ESS Quantities WEM Procedure, DFCM process, RTFS process, and SESSM documentation.*

Consultation questions:

Do stakeholders support the proposal for AEMO to update and publish these technical and operational documentation?

Perth Energy Response: We support the proposal to update and publish this documentation. There is a general benefit in having such information readily available to developers and other interested parties. The updating and publishing process will also provide an opportunity for AEMO to further check their work.

Do stakeholders consider there is additional documentation pertaining to the ESS requirements and processes that is missing or require review?

Perth Energy response; Not that we are aware of.

***Proposal 2**: AEMO to review the inputs, parameters and assumptions for the DFCM and test whether they should be updated to reflect current system conditions, and drive relevant and correct outputs.*

Consultation question: Do stakeholders support the proposal for AEMO to review the inputs, parameters and assumptions for the DFCM?

Perth Energy response: In view of the reliance placed on the DFCM, Perth Energy considers that the proposed review is appropriate.

***Proposal 3**: Increase the RoCoF Safe Limit from 0.25 Hz per 0.5 seconds to 0.75 Hz per second to reduce the need for AEMO interventions.*

Consultation questions:

Do stakeholders support the proposal to increase the RoCoF Safe Limit from 0.25 Hz per 0.5 seconds to 0.75 Hz per second to reduce the need for AEMO interventions?

Perth Energy does not have the depth of technical understanding to comment on whether this is a sound proposal or not. However, we are happy to defer to the opinion of other experts who consider this change to be appropriate. We note, too, that the proposed increase still leaves the SWIS with tighter requirements than have been identified in various similar electricity systems elsewhere so is a conservative proposal.

Do stakeholders have supporting documentation to demonstrate that the proposed increase to the RoCoF Safe Limit may endanger existing Facilities?

Perth Energy Response: No.

***Proposal 4**: AEMO to implement a monitoring program over a twelve-month period to track the amount of headroom and footroom available from unaccredited Facilities or non-dispatched FCESS Facilities to better quantify MPFR availability to assess the level of Contingency Reserve Raise and Lower that could be provided from the inclusion of MPFR.*

Consultation question: Do stakeholders support the proposal to establish a twelve-month monitoring program for AEMO to track the amount of headroom and footroom available from unaccredited Facilities or nondispatched FCESS Facilities?

Perth Energy Response: The analysis results discussed in the paper certainly indicate that more contingency reserve is available within the power system than is assumed in the current dispatch process. Undertaking the proposed 12-month study appears to be a sound approach to identify the potential savings that may be achievable. There are a couple of caveats on this.

The first is, obviously, that the retirement of coal fired synchronous generators will remove a significant source of reserve that may currently be available to the system. The other is that we should take care when estimating the level of resource that can be provided by BESS. While the limited analysis undertaken to date indicated that BESS units contributed a substantial share of mandatory primary frequency response (MPFR), these units will, at times, be fully committed to providing reserve capacity or other services. Perth Energy suggests that BESS capacity must either be specifically set aside for the provision of frequency response, or this function can only be called upon when capacity is not committed to the BESS's primary functions. This potential restriction links into proposal 5 below.

***Proposal 5**: Assess of suitability of synthetic inertia (RCS) from BESS in complementing synchronous inertia from rotating machines, and consider potential barriers and suitable incentivisation for grid forming BESS to provide such services.*

Consultation questions:

Do stakeholders support further analysis and assessment by AEMO to assess the suitability of synthetic Inertia from BESS in the WEM?

Perth Energy Response: The expected closure of the remaining large coal-fired generators within the SWIS will remove a substantial portion of the major synchronous plant which currently provides system inertia. Clearly, new facilities will be needed to fulfil this role, but we consider that there are other factors which make it imperative that prompt consideration be given to the potential use of synthetic inertia from inverter connected plant.

A key issue is that there are already areas within the transmission network that are relatively weak, and which would benefit from local support. Providing this from existing or proposed renewable energy systems, or storage facilities, would appear to be a relatively low-cost mechanism to provide this additional support.

A second issue is that any new gas-fired firming plant is unlikely to provide substantial inertia. To meet the requirements for certification as flexible capacity, this plant is likely to be aero-derivative or smaller light industrial type plant. These machine types both have very limited inertia. Current certification requirements are unlikely to support installation of further higher inertia, large industrial type gas turbines.

Do stakeholders support further investigation to better understand the incentives required to support this?

Yes. As noted in the Paper, the provision of active power headroom, which is required to provide synthetic inertia, will limit the facility's ability to offer certified reserve capacity or FCESS. Perth Energy considers that direct payment for the provision of inertia is justified in the same way that payment is made for other services. Facilities should receive a payment sufficient to compensate for their removal from other revenue sources along with recompense for any dispatch of energy associated with the provision of inertia if called.

One option could be to have facilities offer capacity for inertia, as well as for reserve capacity, as part of the certification process. AEMO could then optimise the assignment of capacity to ensure that sufficient capacity is provided for each of the two separate functions.

Should you have any questions please do not hesitate to contact me at p.peake@perthenergy.com.au or on 0437 209 972. This submission may be made public.

Kind regards

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I am based in the Perth Office and work Tuesday, Wednesday and Thursday