NCESS Network Support Services for South West Interconnected System (SWIS) - WS5523724603

Call for NCESS Submissions - Questions and Answers

Question 1:

Regarding Como; Is there a common network interconnection point for the three feeders in the Como tender, near or at Penrhos College?

If so, is this point accessible to tenderers if needed (i.e. is there capacity to connect?)

Answer 1:

At this stage, there is no identified common network interconnection point for the three feeders in the vicinity of Penrhos College.

Western Power would assess feasibility and network capacity on a case-by-case basis, taking into consideration the specific details of each submission.

Question 2:

Can Western Power provide locations on the highlighted feeder areas where the existing transformers are and what sizes they are.

Can you also indicate which transformers are capable of being upgraded on the existing feeder lines.

Answer 2:

Yes, Western Power can provide a dataset outlining transformer locations, capacity and current peak load utilisation, which can be used to infer potential upgrade requirements. As a general guide, distribution transformers with a capacity below approximately 1 MVA may be candidates for upgrade; however, this is indicative only and subject to site specific parameters. A detailed engineering and site-specific assessment would be required to confirm upgrade feasibility, taking into account network constraints, physical space, and operational considerations.

Western Power is also open to collaborating with the vendor to assess upgrade opportunities where specific locations of interest are identified.

Please refer to the attached Excel dataset file titled "**NCESS Feeders DSTR Data v2.xlsx**"

Question 3:

Connection and Approval to Operate (ATO) timeline.

Given the anticipated commencement of 1 December 2027 and the Conditions Precedent (an executed connection contract, capability testing, and an Interim or full Approval to Operate): what is Western Power's indicative connection-application and ATO lead time at these feeders? Is host capacity available at each location, or is network augmentation required, and at whose cost? Will Western Power undertake connection assessment in parallel with the tender to protect the commencement date?

Answer 3:

Western Power will accept Connection Applications in parallel with the tender process. Assessment and processing timelines will depend on the specific parameters of each application and the nominated network location.

Hosting capacity is location-specific and cannot be confirmed in advance of a formal application. The availability of capacity, as well as any requirement for network augmentation, will be determined as part of Western Power's connection assessment process.

Proponents should assume that:

- All costs associated with the connection, including any required augmentation, are to be borne by the service provider, in accordance with Western Power's prevailing Capital Contribution policy; and
- Connection outcomes (including timing, scope, and costs) are subject to the formal assessment process and are not guaranteed at the tender stage.

Question 4:

Grid-forming requirement.

Is grid-forming (GFM) inverter capability required for the NSS, or is grid-following operation with standard voltage and frequency support modes acceptable?

Answer 4:

Grid-forming (GFM) capability is **not required** for the NSS under this procurement.

The service is intended to operate within a **grid-connected (non-islanded)** distribution network context. Accordingly, grid-following inverter operation is acceptable, provided that the resource can:

- Respond reliably to dispatch signals within the specified response-time requirements;
- Operate in compliance with applicable Western Power technical and connection standards; and
- Provide standard voltage and frequency support modes (e.g. Volt-VAR, Volt-Watt, frequency response) consistent with those standards.

Question 5:

Energy (MWh) versus Active Power (MW) and activation duration.

For every feeder, the stated seasonal NSS Energy (MWh) is lower than the energy implied by a single activation at the contracted Active Power for the maximum duration (e.g. Gosnells G515: 3.5 MW × 5 h = 17.5 MWh vs 9.9 MWh stated for 2029/30; Como COL327: 2.0 MW × 6 h = 12 MWh vs 7.8 MWh). Please confirm:

• what the NSS Energy (MWh) figure represents — expected/typical dispatched energy, or a binding seasonal/per-activation energy cap;

• that the provider must be capable of delivering the full contracted Active Power for the full maximum activation duration on each activation, regardless of the smaller MWh figure — i.e. does Western Power require the energy (MWh) or the power (MW)?

• whether any cap applies to the energy dispatched per activation; and

• whether more than one activation may occur on the same day within the 20-activations-per-season cap.

Answer 5:

The NSS service specification distinguishes between capability **(MW)** and expected dispatch outcome **(MWh)**. Clarification is provided below.

• What the NSS Energy (MWh) represents
The stated NSS Energy **(MWh)** is an indication of the energy expected to be dispatched per activation event under typical operating conditions. It is not a seasonal cap nor a strict per-activation maximum.

• Requirement for Active Power (MW) vs Energy (MWh)
Western Power requires the service provider to have the capability to:

- provide up to the **contracted maximum instantaneous Active Power (MW)**; and
- deliver at least the specified **minimum Energy (MWh)** per activation.

This means the service must be capable of sustaining dispatch over the full event duration, but operation within an event may involve a variable MW setpoint to achieve the required energy outcome.

For example:

- For COL327 (Summer 2029/30), Western Power requires the service to have the capability to provide an instantaneous maximum NSS Active Power of 2 MW at any given time, with a minimum energy delivery of 7.8 MWh per event.
- Where an activation event extends to the maximum duration of 6 hours, the dispatched MW setpoint may be varied below 2 MW across the event period to ensure the energy delivery aligns with ~7.8 MWh rather than operating at 2 MW continuously for the full duration.

• Whether an energy cap applies per activation
There is no strict upper energy cap per activation beyond what is physically achievable given:

- The contracted MW capability;
- The event duration; and
- Dispatch instructions issued by Western Power.

However, in practice, dispatch is expected to be managed to achieve the target energy (MWh) amount, rather than requiring continuous operation at maximum MW for the full event duration.

• Whether more than one activation may occur on the same day
Yes, more than one activation may occur on the same day, provided that:

- The total number of activations remains within the 20 activations per season cap; and
- Each activation is treated as a separate dispatch event with its own instructions.

Question 6 :

Availability measurement.

How is the minimum 95% availability measured (time basis over 1 December – 31 March, at full Service Quantity), what events are excluded from the calculation (e.g. planned outages, force majeure, Western Power-side network outages), and how is partial delivery within a single activation treated?

Answer 6 :

Performance:
The 95% performance requirement is measured per event and at the verification of service step of each activation using the following criteria:

- The facility Active power must be at or above the minimum Active power in each 5-min interval
- Under a partial accepted NSS activation, the balance of the of the reduced quantity will be deemed non-complying

The following events are excluded from the performance calculation:

- Where the NSS Activation request is cancelled less than 150minutes from the start of the planned Activation
- A Western Power action
- Switching reconfigurations
- Planned maintenance of the VPP where WP is advised
- Where there is inconsistency with an instruction from AEMO (I.e. there should be alignment)
- Act or omission from subcontractors beyond the control of the supplier
- Malfunction of hardware / software

Partial Service Quantity:
If a supplier provides notice that it can partially meet the Service Quantity and if Western Power accepts this then the supplier can provide only the partial Service Quantity, noting the performance impact.

Question 7:
Is there a preferred fuel strategy diesel or gas for the genset component of the system?

Answer 7:
For this type of Network Support Service (NSS), the focus is not on generation from traditional fuel sources such as diesel or gas. Instead, the service is expected to primarily leverage aggregated energy from rooftop solar systems and/or battery storage solutions, including both behind-the-meter and standalone network-connected batteries. Western Power would also be open to demand side management solutions where customers are able to reduce their consumption during peak demand periods.

Question 8:
Can you please confirm if Western Power will complete their selection process under 3.11B.9(a) (of the ESM rules) before 1 July 2026 for any bids involving non-contestable customers?

Answer 8:

Yes, Western Power intends to conduct its assessment and selection process in accordance with the ESM Rules and the procurement timeline.

Question 9:
Given that this is pretty much DER based and that aggregated DERs are allowed, how does the metering of this get accounted for? Is it at the meters of the homeowners? Or is there a need to have a dedicated meter to consolidate all these?

Answer 9:
DER performance will be measured using DER telemetry data per NMI, which is used as the primary source for service verification. This telemetry is compared with AMI data during backend assessment to confirm when the service has been delivered. Performance is assessed based on the output and responsiveness of the DER assets, including batteries.

Question 10:
Assuming then if the proposal is to be a new stand-alone BESS ONLY feed-in to act as this support, would there be a need to register as a new NMI?

Answer 10:
Yes, a new NMI would be required.