



WEM Reform Program

Electric Storage Resource Metering

WRIG – 25th March 2021

Agenda

1. Uses of ESR Metering
2. Principals for Design
3. Approval Process
4. Specification of ESR Metering
5. Meter Data Verification

Uses of ESR Metering

ESR Metering allows for component level metering data for:

- Certification (RLM, Linear-derating)
- Testing
- Reserve Capacity Security return

Separately Certified Components	Certification
Non-Intermittent Generating Systems	Capability at 41°C
Intermittent Generating Systems	Relevant Level
Electric Storage Resource	Linear-derating

*Note there is no requirement for ESR Metering for Non-Scheduled Facilities, where the entire Facility is certified under the Relevant Level regardless of composition.

Design principles

ESR Metering design should achieve the following:

- Minimise required equipment to achieve compliance with ESR Metering
- Align (to the extent practical) with Clean Energy Council requirements for creation of Large-Scale Generation Certificates (LGCs)
- Provide a robust framework to ensure accuracy of ESR Metering

Approval process

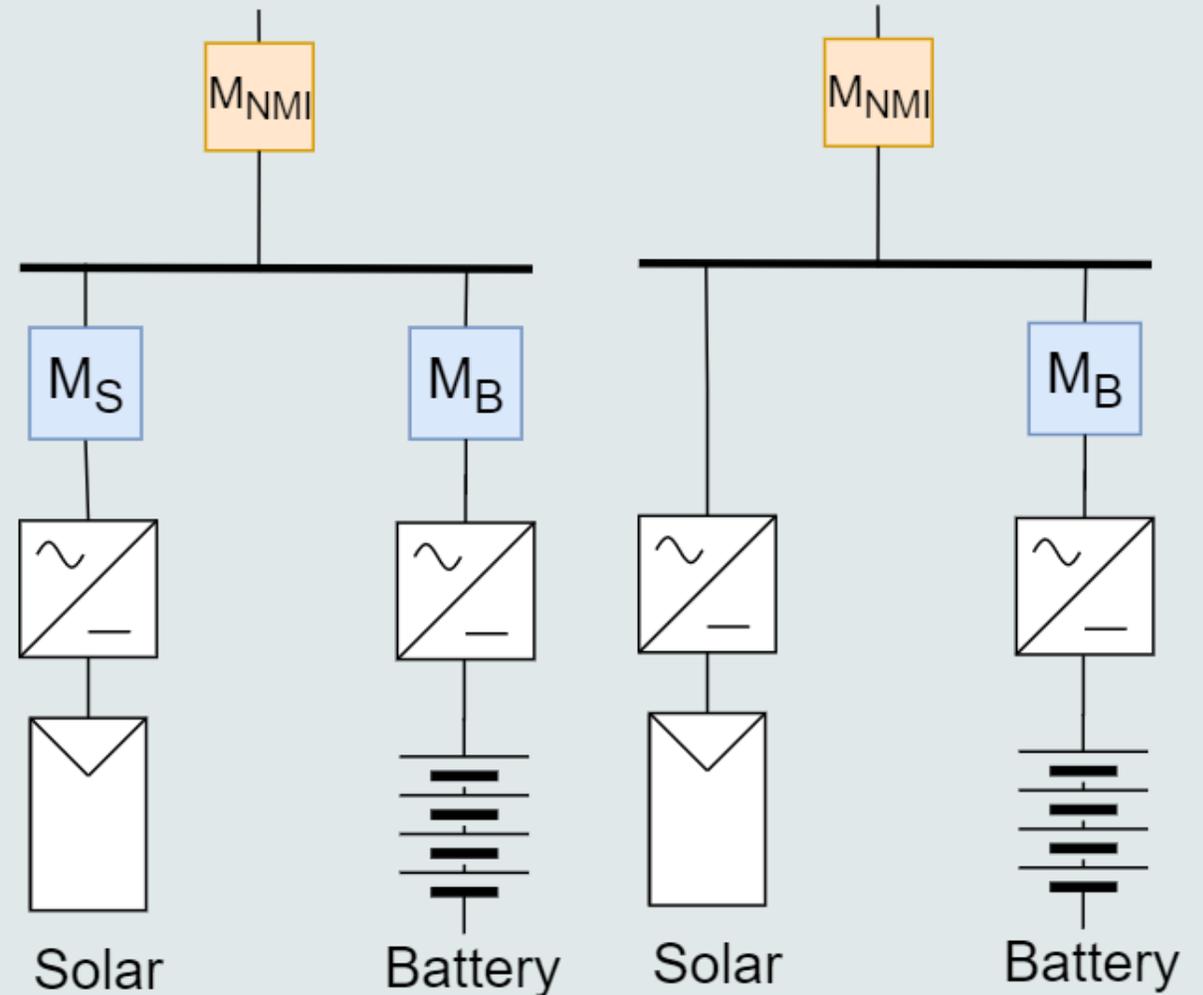
ESR Metering approval to be sought >1 year prior to Capacity Year in which the Facility enters service, in order to approve the proposed:

- Metering Arrangement within Facility
- Meter accuracy and granularity
- Data storage and communication requirements
- Audit framework

AEMO would verify compliance with the requirements of ESR Metering as part of Commissioning Testing

Specification of ESR Metering

- Compliance with accuracy requirements of the Metering Code and National Measurement Act
- Arranged to allow, in combination with Meter Data Submissions, the energy flows associated with each Separately Certified Component to be identified

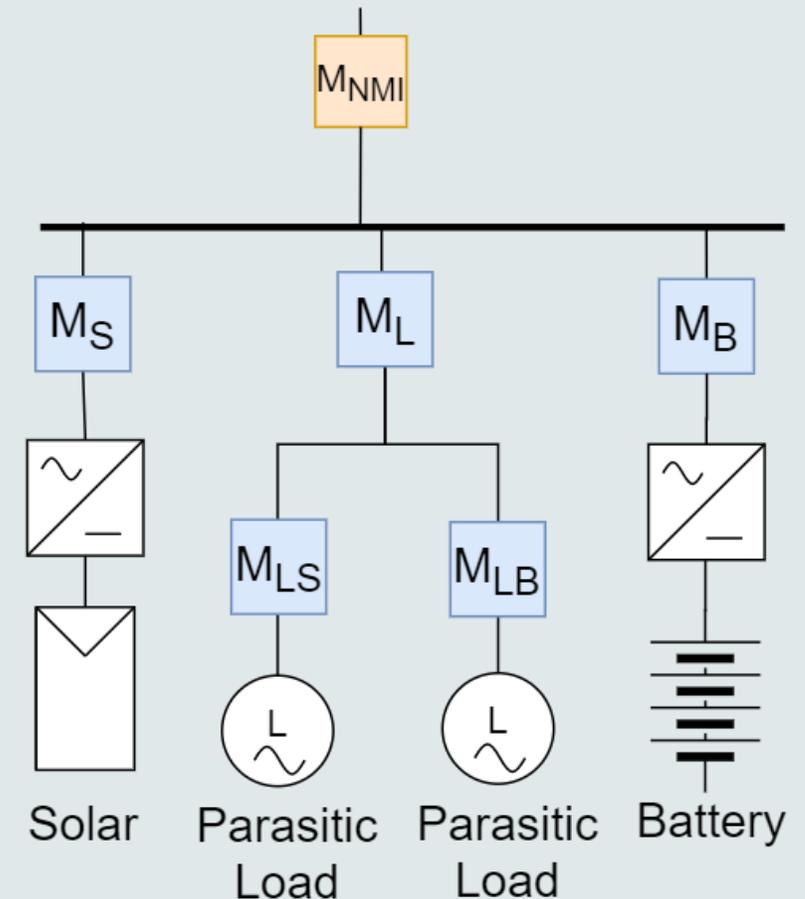


Specification of ESR Metering

Different meter arrangements will require different calculations for:

- Internal Facility reticulation/step-up losses
- Parasitic Load allocation
- Use of Metered Data Submissions

Allow for an approved formulation to allocate contribution to each Separately Certified Component



Meter Data Verification

AEMO may verify ESR Metering through data analysis of alternative data-sources available to it:

- Meter Data Submissions (NMI)
- SCADA
- Battery State-of-Charge
- Estimates for Intermittent Generation

An ability to require independent meter audit if AEMO or Market Participant identifies irregularities

Questions

Additional comments or questions can be provided to AEMO:

Specific queries to:

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