

# Distributed Energy Resources (DER) Workplan Four-Monthly Report #2: June 2020 Update

## The ESB DER workplan update

The Energy Security Board DER Steering Committee (DER SteerCo) developed a [DER Integration Workplan](#) in 2019 bringing together all the DER integration work being undertaken across the energy market institutions, identifying related actions being undertaken by industry and other bodies and gaps that needed to be filled. The resulting plan seeks to coordinate DER integration across technical, regulatory and market-related actions.

Over the last six months a number of changes in both internal and external activities have prompted the need to update this plan. There was a need to make the workplan more granular, with milestones per quarter for planning and reporting purposes. In addition the DER SteerCo has decided to choose four strategic priorities for 2020 on which it will work collaboratively to achieve important 'critical path' changes in DER integration:

1. Technical standards rule change and new governance structure and processes
2. Distribution access and pricing reform (under the DEIP process)
3. Battery storage in distribution networks
4. Creation of DER integration as a Post2025 Market Design Initiative.

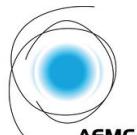
## Opportunities for involvement over the next four months

The following DER actions will have opportunities for stakeholder engagement over the next reporting period:

- DER technical standards rule change: consultation paper to be released in late June
- Public submission opportunity on AS/NZS 4777.2: DER Device Standards through the Standards Australia Process
- AEMO DER standard development consultation: June – October 2020
- ESB Consultation paper on the governance of DER technical standards: June/July
- DEIP DER Access, Pricing and Engagement: Rule change requests are expected to be submitted to the AEMC in late June/early July
- AER Value of DER study: Customer consultation process commences in Q3 2020
- ESB Post2025, including DER Integration Market Design initiative: consultation paper to be released in August.

## Major achievements over the last four months

- **Minimum DER Technical Standards:** On direction from the Council of Australian Governments (COAG) Energy Council, the ESB and AEMO worked together to draft a rule change proposal to put in place initial minimum DER technical standards by October 2020. This rule change proposal outlines the requirement for an initial national set of standards that will be applied uniformly contributing to the secure and reliable supply of electricity to all consumers and providing greater value to DER owners.
- **Review of governance of DER technical standards report released** – The [Sapere/CutlerMerz review](#) highlighted that to date the governance of DER technical standards has been fragmented, lacking clarity of roles and coordination. In addition, resourcing is inadequate and the pace of change is slower than needed given the rapid deployment of DER in the NEM. As a result in March the COAG Energy Council agreed that the ESB would develop new coordinating arrangements for DER technical standards governance, including thorough stakeholder consultation, and bring back a proposal with the details of these arrangements for Energy Council approval in October 2020.
- **LV Voltage report released:** UNSW prepared a report examining voltage across low voltage (LV) distribution networks in the national electricity market (NEM) and the possible extent of losses to prosumers from high-voltage curtailment of inverters. The analysis found that even in the absence of solar PV, there is a significant level of high voltage across all DNSPs in all NEM. The nominal voltage standard in the NEM is 230V - more than 95% of readings were found to be higher than this. A webinar was held on the report on 6 May and a [recording](#) is available on the ESB website.
- **Storage consultancy report drafted** – ITP Renewables (ITP) drafted a report and presented a webinar on the economics and regulation of business models for distribution-level storage and the interaction between the two. The DER Steering Committee are reviewing the ITP report and will issue it in June with an ESB Cover Note.
- **AER DER Guidance paper** – AER awarded a consultancy tender to CSIRO/CutlerMerz for review of Value of Distributed Energy Resources (VaDER). Draft report due Q3 2020.
- **VPP trial:** AEMO released its first [VPP knowledge sharing report](#) in March 2020. The second knowledge-sharing report will be released in Q3 2020.
- **DER Access and Pricing Work Package** – Collaborative stakeholder consultation phase of the work package completed in March. The Working Group's recommendation report is expected to be release in late-June and rule change requests are expected to be submitted to the AEMC shortly after.
- **DEIP EV workstream** - The EV work package has formed four taskforces focusing on the following key issues: availability, EV-related technical standards, residential tariffs and incentives, high capacity tariffs and connections AEMO has opted to lead the DEIP EV Working Group's Data Availability Taskforce and co-lead (with the Federal Government) the EV Standards Taskforce for effective grid integration of EVs.
- **Post2025 Market Design** – DER integration workstream established and expert advisers appointed to assist with consistency and coherence of DER integration across the six other market design initiatives.



## Further Information:

More information about each of the DER Program priorities and how to get involved, visit:

[ESB Website](#)

[AEMC Website](#)

[AEMO website](#)

[AER Website](#)

## Technical Integration

- T1. Device standards – AEMO submitted rule change proposal for initial minimum DER technical standards; AS/NZS 4777.2 available for public comment; AS 4755 available for public comment.
- T2. Comms standards and protocols – AEMO established the DEIP Standards, Data and Interoperability Working Group, which includes Data Interoperability and Cybersecurity Standards.
- T3. Cybersecurity standards – As above.
- T4. Data - DER Register (NEM) commenced on 1 March 2020. Work underway on ESB data strategy, including LV visibility.

- T1. Device Standards – AEMC commences consultation on DER technical standards rule change request. Development of initial DER minimum standard and implementation of accelerated inverter standard conformance.
- T2. Comms standards and protocols – Data interoperability and Cybersecurity standards specifications continue to be developed
- T3. Cybersecurity standards – AS 4755 cybersecurity input completion and VPP cyber threat assessment undertaken.
- T4. Data – Further consultation on LV data gaps through the ESB data strategy.

## Regulatory Integration

- R1. Planning – Tender placed with CSIRO/CutlerMerz for review of Value of Distributed Energy Resources (VaDER).
- R2. Ringfencing – Consultation delayed due to Covid-19. Deferred to Q3.
- R3. Storage – report on distribution-level storage completed.
- R4. Non-network alternatives – AEMC to review as part of 2020 Electricity networks economic regulatory framework review.
- R5. Regulatory sandbox – Final advice provided to COAG Energy Council.
- R6. SAPS and microgrids - Final report on distributor-led SAPS published.
- R7. Voltage investigation – Completed. Available on ESB website.

- R1. Planning – Draft report due: CSIRO/CutlerMerz review of Value of Distributed Energy Resources (VaDER).
- R2. Ringfencing – Consultations commence. Final distribution guideline and draft transmission guideline due.
- R3. Storage – ESB Cover Note to be issued.
- R6. SAPS and microgrids - AEMC to review as part of 2020 Electricity networks economic regulatory framework review.
- R6. SAPS and microgrids – Once AEMC rule change is completed, update to AER guidelines will follow.

## Market Integration

- M1. Demand Response Mechanism – [High level design](#) document published and final determination on Wholesale Demand Response (June 2020).
- M2. Distribution Access and Pricing – DEIP Working Group consultation completed recommendation report to be published end-June.
- M2. Distribution Access and Pricing – Network guidelines draft paper released for consultation.
- M3. Network tariff report – SA and Qld final decisions deferred to 5 June to allow for assessment of changed economic conditions.
- M4. Open Energy Networks – ENA published its own separate report.
- M4. DEIP DER Market Development Working Group established.
- M5. Post-2025 market design – AEMO and AEMC leading workstream with the DER Steering Committee on consistency and priorities for DER integration.

- M1. Demand Response Mechanism - Wholesale Demand Response consultations commence.
- M2. Distribution Access and Pricing – Rule change requests to be submitted to AEMC in June/July
- M3. Network tariff report
- M5. Post-2025 market design – Consultation paper due out in August 2020.

## Other relevant DER actions

- Sapere and CutlerMerz final report on governance and compliance of DER technical standards released.
- Renewable Integration Study – launched 30 April 2020, is the first stage of a multi-year plan to maintain system security in a future National Electricity Market (NEM) with a high share of renewable resources.
- Demonstrations: VPP Demo Knowledge Sharing Report #1 published.
- EV Roadmap – DEIP EV Working Group agreed upon six Taskforces to progress work on effective grid integration of EVs.

- Consultation paper on options for the governance of DER technical standards to be released
- VPP demo knowledge-sharing report #2 to be released.

## Further Information:

More information about each of the DER Program priorities and how to get involved, visit: