We acknowledge the Traditional Owners of country throughout Australia and recognise their continuing connection to land, waters and culture. We pay our respects to their Elders past, present and emerging.
<table>
<thead>
<tr>
<th>Timing</th>
<th>Topic</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>5:00pm</td>
<td>Welcome and introductions</td>
<td>NECA</td>
</tr>
<tr>
<td>5:05pm</td>
<td>AEMO DER Register overview</td>
<td>Australian Energy Market Operator</td>
</tr>
<tr>
<td>5:20pm</td>
<td>Distribution Network overview</td>
<td>Evoenergy</td>
</tr>
<tr>
<td>5:30pm</td>
<td>Panel Q&amp;A session</td>
<td>All</td>
</tr>
<tr>
<td>6:00pm</td>
<td>Networking</td>
<td>All</td>
</tr>
<tr>
<td>6:30pm</td>
<td>Close</td>
<td></td>
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</tbody>
</table>
About AEMO

Shaping a better energy future for all Australians

We operate Australia's National Electricity Market and power grid in Australia's eastern and south-eastern seaboard, and the Wholesale Electricity Market and power grid in south-west WA.

Both markets supply more than 220 terawatt hours of electricity each year.

We also operate retail and wholesale gas markets across south-eastern Australia and Victoria's gas pipeline grid.

Collectively traded more than A$20 billion in the last financial year.

Ownership

40% Market participants
60% Governments of Australia
The growing level of consumer choice

Source: AEMO 2019 ISP Insights, neutral scenario
High rooftop PV in the operational domain

Source: OpenNEM
Reversing the distribution network

Forecast ‘reverse electricity flows’ across Australia’s distribution networks

Source: CSIRO 2019
AEMO’s DER Register
DER Register

Required to be implemented by the National Electricity Rules

A national database of DER assets to enable the realisation of consumer value and enhance power system reliability via DER installed in homes and businesses across Australia

Implemented and operational from 1 December 2019

Input source
Planned benefits
Identified additional benefit
# What kinds of data?

<table>
<thead>
<tr>
<th>Level</th>
<th>Data types</th>
<th>Expected source of data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Network</td>
</tr>
<tr>
<td><strong>Installation</strong></td>
<td>Approved capacities, technologies and central control/protection (e.g. export limits)</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Installer licence number / ID</td>
<td></td>
</tr>
<tr>
<td><strong>AC interface</strong></td>
<td>Inverter or generator manufacturer, model, serial number and capacities, and numbers of installed units</td>
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</tr>
<tr>
<td></td>
<td>Inverter control modes and settings (e.g. volt-watt etc)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Non-inverter generation control modes, settings and protection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Date of commissioning</td>
<td></td>
</tr>
<tr>
<td><strong>Device</strong></td>
<td>Device (e.g. solar PV panels or battery) manufacturer, model and capacities, and numbers of installed units</td>
<td></td>
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</tbody>
</table>
What changes?
From 1 December 2019 a condition of the connection of all small generator and battery installations to the network will require DER installers and electrical contractors to provide information for the DER Register.

**As-approved information**
- Network provides
- Aligns to connection approval
- Includes approved capacities, technologies and site protection and control information

**As-installed information**
- Installer provides
- Includes information about the equipment installed, such as manufacturer, model and serial numbers
- Protection and control settings can be confirmed

**Confirmed DER Record**
- Data submitted to Register

**Workflow**

*Step 1*
Apply to the network for a connection and receive approval

*Step 2*
Customer agrees and installation goes ahead

*Step 3*
DER installer collects information about what is installed on site

*Step 4*
DER installer provides information to the DER Register

*Step 5*
Network can review and confirm data

**DER installation certificate**
Step 1: Create an account with AEMO

1. Create account
2. Access records
3. Provide data

• To pre-register for an alert when the account system is open email DERRegister@aemo.com.au
Step 2: Access a DER Record

1. Create account
2. Access records
3. Provide data

Or, register your AEMO account with your smartphone application provider to access DER records and provide the data.
Providing information

Step 3: Provide DER data

1. Create account
2. Access records
3. Provide data
Providing information

Step 3: Provide DER data

1. Create account
2. Access records
3. **Provide data**
Readiness

- Installers and electrical contractors should progress DER connection approvals with their local network as per current processes.
- AEMO high level Fact Sheets are high level.
- Your local distribution network will provide information on steps that are needed within their connection processes.

ACT DNSP overview

Introducing coming changes to implement the DER Register and changes to inverter requirements
Evoenergy process for installers

1. Complete SCR Form on Evoenergy website
2. Receive email with form submission and unique job reference number
3. Complete Evoenergy RFS Form to connect to the network
4. NEW STEP: You must now record equipment commissioned data by logging into AEMO Portal or mobile apps:
   - Form Bay
   - Kickstart Agile
   - Solar Scope

Important: To enter commissioned data via the Portal or available apps, you need to be a Registered Installer and have the:
   - NMI and Job Reference Number issued by Evoenergy
Guideline Changes
Embedded generation guidelines update

<table>
<thead>
<tr>
<th>Current State</th>
<th>ENA National DER Guidelines</th>
<th>Future State 12/2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>EG Guidelines (SM3201)</td>
<td>ENA National DER Guidelines Framework and Principles 05/2018</td>
<td>New Documents</td>
</tr>
<tr>
<td>S&amp;I Rules</td>
<td></td>
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<tr>
<td></td>
<td>Basic Micro 03/2019</td>
<td>Relevant Sections Revised</td>
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<tr>
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<td>LV 03/2019</td>
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<td>MV/HV 10/2019</td>
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Revised Sections
- 03/2019
- 05/2018
Major changes

- Document Splitting
- Changes in allowable residential limit
- Protection changes and classes changes for systems over 30 kW
- Fees unchanged
For more information regarding the DER Register or MSO changes:

<table>
<thead>
<tr>
<th>ACT DNSP</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evoenergy</td>
<td>Phone: 13 23 86</td>
</tr>
<tr>
<td></td>
<td>Email: <a href="mailto:embeddedgeneration@evoenergy.com.au">embeddedgeneration@evoenergy.com.au</a></td>
</tr>
<tr>
<td>Australian Energy Market Operator (AEMO)</td>
<td>Email: <a href="mailto:DERRegister@aemo.com.au">DERRegister@aemo.com.au</a></td>
</tr>
</tbody>
</table>