

# INTEGRATING CER AND FLEXIBLE DEMAND

STAKEHOLDER FORUM  
28 JULY 2022



# AGENDA FOR DISCUSSION



Time	Topic	Speaker
10.00	Welcome	Neil Gibbs, Online Power (Facilitator)
10.10	Overview of the CER Implementation Plan	Jo Witters, ESB
10.20	Horizon 1 – Activities update (including Data Strategy)	Matt Hyde, AEMO Jon Sibley, ESB Miriam Wishart, AER Trent Morrow, AEMO Chris Alexander, ESB Ed Chan, AEMC Sarea Coates, ESB
11.30	Q&A Session	Neil Gibbs, Online Power (Facilitator)
12:00	Conclusion and Next steps	Jo Witters, ESB

# PURPOSE OF THE WORKSHOP



## Objective –

Update stakeholders on the progress of workstream activities across the CER Implementation Plan.

**Today's session will be facilitated by Neil Gibbs and Jo Witters**

### ESB



**Jo Witters** – Program update

**Chris Alexander** – Customer Insights

**Jon Sibley** – Interoperability

**Sarea Coates** – Data Strategy

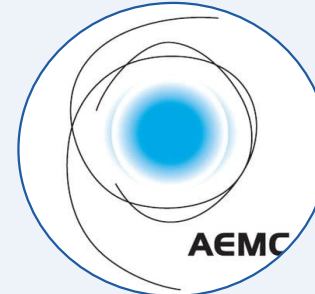
### AEMO



**Matt Hyde** – Interoperability & EV Charging

**Trent Morrow** – Scheduled Lite

### AEMC



**Ed Chan** – Governance of technical standards

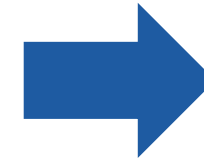
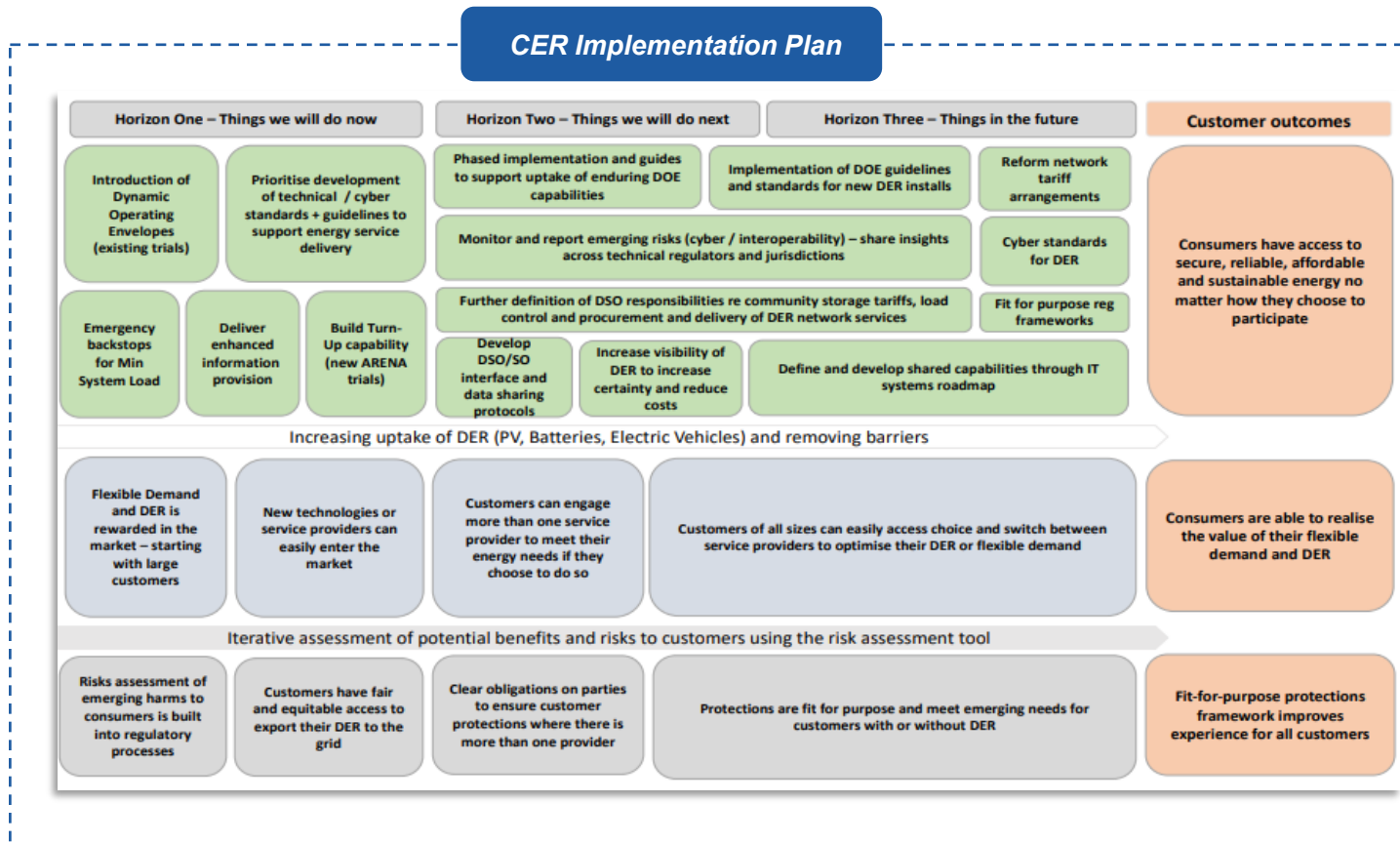
### AER



**Christian Rasmus** – Dynamic Operating Envelopes

**Miriam Wishart** – Dynamic Operating Envelopes

# RECAP – OVERVIEW OF THE CER IMPLEMENTATION PLAN



## Delivering the plan



The reforms address a range of technical, regulatory and market issues over a three-year period.



The plan sequences key dependencies to ensure the reforms are delivered promptly.



Reform activities are well underway to address urgent issues.

# HORIZON 1 – ACTIVITIES UNDERWAY



Objective

## Technical requirements

To establish technical foundations by developing technical standards (including cyber security protections) to support emerging needs and facilitate the integration of new energy services.

## Market Changes

To remove barriers so parties can offer services that customers value, and ensure customers are properly rewarded for access to their flexible assets (DER or flexible demand) in the market.

## System needs

To enhance visibility & forecasting of resources on the system, build capabilities & measures to support system security, and enhance understanding of how to integrate customer owned assets into the grid in ways that meet customer needs.

## Customer Protections

To establish fit for purpose protections for all consumers, so they can confidently engage in the delivery and use of new energy services and be fairly rewarded for their flexibility.

## Governance

To build a robust governance framework that provides clarity to all actors regarding obligations and compliance settings and supports the effective integration of new resources and technologies.

Workstream activities

Development of technical standards

Policy advice for application of tech. standards

Interoperability for solar PV / batteries

EV Charging

Cyber Security

Shared capabilities – Regulatory and IT roadmap

Flexible Trading Arrangements

Review implementation of Wholesale Demand Response Mechanism

Project Edge

ARENA trials – load flexibility

Scheduled Lite

Network visibility for market planning (Data Strategy)

Electric Vehicle Charging Data (Data Strategy)

Develop & implement DOEs

Ongoing tariff reform

Enhance information transparency regarding conditions contributing to minimum system load

Introduce emergency backstops alongside enduring frameworks

Jurisdictions

Customer Insights

Retailer Authorisation & Exemption Review

Metering services review

DOE policy / reg. framework

Bill Transparency (Data Strategy)

Review of governance of technical standards

Clarify roles & responsibilities and how these will need to evolve across actors

Initial data reforms and new Data Services

## Legend

■ Progressing
 ■ For discussion today
 ■ Paused / not yet commenced

# HORIZON 1 – ACTIVITY UPDATES



## Policy advice for technical standards – CER Interoperability

Tech.  
Standards



### Description

- Forward looking policies around technology and communications standards are needed to ensure efficient development of Australia's CER potential, protect and enhance consumer choice and ensure system can be maintained within its safe operating limits.
- A number of interoperability domains have been identified including network-device, aggregator-device and BTM interoperability
- The first stage is to implement a national framework for CSIP Aus for **flexible export limits** that will allow DNSPs and a customer's technology provider to communicate as required, and provide for a consistent national specification for technology developers.



### Progress

- The ESB is currently developing a draft directions paper. This builds on engagement with stakeholders, peak body groups and members of the SWG over the past few months regarding adoption and implementation of CSIP-Aus and the broader CER interoperability environment.
- The ESB intends that this paper will set out draft directions regarding the adoption of CSIP-Aus including proposed timing for implementation across NEM jurisdictions.
- FTI Consulting were commissioned to explore options for the proposed roll out of the CSIP-Aus. This paper will also be published as a companion piece to the ESB draft directions.
- The ESB is working with market bodies to ensure alignment with other workstreams (AER on DOEs and AEMC on Governance of Technical Standards).



### Key issues for H1 and H2

- Key to CER interoperability will be clarity and ownership of roles and responsibilities across the different capabilities and functions in the CER ecosystem. The ESB paper will provide a roadmap for how we propose to work together to enable the broader development of interoperability policy.
- Via the DEIP workgroup for interoperability, work is underway to consider high priority retailer and aggregator use cases.





## Policy advice for technical standards – EV Charging

Tech.  
Standards



### Description

EV Smart Charging paper will support the development of policy advice on one of the most important energy sector questions of our time – how to efficiently integrate EVs into the power system? Industry consultation to date suggests this integration requires industry consideration of a Smart Charging Framework that could be comprised of none of, one key, or two key features and the EV Paper asks for industry perspectives on these:

1. **Minimum Technical Capabilities:** Smart charging functionality comes in-built into all new household electric vehicle chargers, but smart charging use is not mandatory.
2. **Consumer Participation:** In smart charging is mandatory with coordinated over-ride functionality to enable consumer choice.

The two-part framework could enable consumer charging as and when required at the press of a button, while ensuring EV's default charge times slide outside peak periods minimising pressure on network expansion and cost. The ESB's paper discusses the integration of EVs from the transition perspective and the potential impacts on both EV and non-EV consumers. It also covers a variety of other EV integration fields such as public charging.



### Progress

- EV Paper released last Thursday – stakeholder webinar to be held next Tuesday 2<sup>nd</sup> August.
- Submissions will greatly assist in the development of policy advice for smart charging.
- Considered at the same time the Data Strategy – EVSE commencing – ensuring agencies and market participants have sufficient visibility of emerging electric vehicle supply equipment for effective planning and management of the system. This data initiative will be a key input into the ESB policy workflow.



### Key issues for H1 and H2

- Policy approach to a potential smart charging consumer participation framework with coordinated consumer override and minimum technical capabilities.





## Scheduled Lite

Market  
changes



### Description

- Mechanism that aims at lowering barriers and providing incentives for non-scheduled load and generation to participate in market scheduling processes.
- Visibility Model involves the submission of price-responsive forecasts and real-time information to enhance short demand forecasting and market information.
- Dispatch Model will provide a framework for aggregated portfolios of CER (as well as other non-scheduled loads and generation) to participate in dispatch and short-term operational processes.
- Visibility and dispatchability are essential requirements for the operation of the power system. As coal generation exits the system, these power system services will need to be replaced. Scheduled Lite provides an opportunity for CER and flexible demand to play a role in the provision of security and reliability services in the NEM.



### Progress

- Consultation on draft high-level design has been completed. Stakeholders were generally supportive of the mechanism and the draft high-level design, however they expressed caution over mandating the mechanism or making participation a requirement of existing services (like Contingency FCAS), minimum capacity threshold and zonal approach to aggregation.



### Key issues for H1 and H2

- Prepare rule change request for Scheduled Lite and submit to the AEMC.
- Give further consideration to the incentives required to encourage participation in Scheduled Lite and how these incentives could be implemented.
- Work with the Customer Insights workstream to consider how we communicate with customers about the mechanism, the potential benefits and risks of participation, and how we protect customers from potential risks.
- Work with other CER initiatives (like DOEs and interoperability) and other ESB reforms (like the capacity mechanism) to jointly progress overlapping areas of the market design.



## Customer Insights

Customer  
Protections



### Description

- The Customer Insights Collaboration is informing the design and delivery of CER Implementation Plan activities.
- The knowledge share report for the first six-month block of work on barriers and enablers to customer reward for CER and flexible energy use was published today. The report and the supporting evidence review is available on the ESB website.



### Progress

- With Release One of the Collaboration now complete, work is now commencing on Release Two, where the focus will be applying the insights about barriers and enablers to customer reward for flexible CER and energy use in the CER Implementation plan projects.
- There will be a particular focus on three projects Retailer Authorisation and Exemptions Review, the roles and responsibilities aspects of the interoperability workstream, and scheduled lite.



### Key issues for H1 and H2

- The reforms seek to unlock the huge potential for flexible management of consumer assets and energy use, to create value for customers, and underpin the efficiency and reliability of a decentralised, largely renewable energy system, however we cannot take customer participation for granted. The headline message from Release One of the Collaboration is that to unlock these benefits we need to meet consumers 'where they are'.
- Key design and implementation issues how the allocation of roles and responsibilities for compliance and service delivery services, and the consumer protection regime, can support the best possible experience at every step in the customer journey, from making a choice, to installing and learning about the equipment, to using and living with it, and getting help, and being protected when things go wrong.



## Dynamic Operating Envelopes – regulatory frameworks

System  
needs



### Description

- DOEs allow a more efficient approach to managing network capacity as DNSPs can vary rooftop solar generation dynamically allowing consumers to export more from their systems.
- As part of the ESB's CER Implementation Plan, the AER is undertaking a project to deliver policy direction and advice to ESB in relation to DOEs (aka flexible export limits) and their implementation within the National Electricity Market.
- This work is being led by the AER on behalf of the ESB, in collaboration with AEMO and the AEMC.



### Progress

- The AER will publish an Issues Paper in August seeking stakeholder feedback on key issues including:
  - Capacity allocation – principles and methodology
  - Consumer participation
  - Contractual mechanisms
  - Monitoring export limit calculation and application



### Key issues for H1 and H2

- The Issues Paper will be available for consultation from around mid-August to mid-September
- Following consultation, the AER will develop and publish a Directions Paper later this year to outline what (if any) proposed changes should be considered to the frameworks to support the implementation of DOEs and ensure good consumer outcomes.



## Review – Technical Standards Governance

System  
needs



### Description

- The AEMC has committed to conducting a review on technical standards for consumer energy resources. The high level terms of reference for the review was published as part of its final determination on the *Governance of DER technical standards* rule change request.
- For 2022, the review will report on progress in adopting and implementing DER technical standards across the national electricity market. The review report will identify existing activities regarding the implementation of technical standards (including the roles and responsibilities of industry and regulatory organisations; consider the progress made on implementing existing technical standards; and identify and prioritise any new work or action required to more effectively achieve the objectives from introducing technical standards



### Progress

- The AEMC has consulted with a range of stakeholder on the scope of the review. We will incorporate feedback when we finalise the terms of reference
- The review is scheduled to commence in September 2022. We will publish a consultation paper and invite stakeholder submissions



### Key issues for H1 and H2

- For 2022, the review will focus on compliance and enforcement of consumer energy resources technical standards in the NEM
- The review will consider existing arrangements in place for compliance and enforcement issues, especially in relation to AS4777.2
- The outcomes of the review on existing standards will inform a generally applicable approach or framework to consider how to achieve improved and workable technical standard compliance across the NEM that balances the needs and objectives of different stakeholders



## Clarify Roles and Responsibilities

Governance



### Description

- As the energy system evolves, the roles and responsibilities that market participant plays in achieving customers and system outcomes are also evolving
- Every element of the CER Program has an aspect related to roles and responsibilities.
- This stream of work is intended to support all others in the program by identifying roles and responsibilities which stakeholder feel require further clarification and making sure those priorities will be addressed.



### Progress

- A series of deep dive sessions have recently been undertaken by members of the Stakeholder Working Group (SWG) to analyse 9 high priority use cases (e.g. community storage; inverter technical standards) and get a better common understanding on what issues are priority to address now, and stakeholder views on issues that require clarification?
- Following completion of these deep dives, the ESB is working with market body colleagues to “map” the matters raised into the existing reforms (to assess how well these are being addressed), which may include identifying areas currently not being addressed by the existing CER Program. Some additional work to clarify roles and responsibilities may be defined.
- The ESB and market bodies will shortly be discussing progress with the SWG, with a view to ensuring alignment and clarity re these activities will be taken forward over the next few months. SWG papers are publicly available.

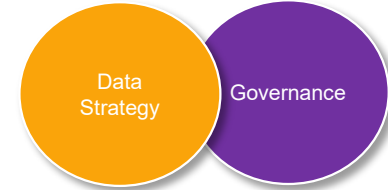


### Key issues for H1 and H2

- The analysis will also identify “meta themes” that appear across multiple use cases. The deep dive group concluded that these are likely to include clarifying the role of the DNSP in managing DER behind the meter, and the critical role of the Installer in delivering effective outcomes for customers and for the system.
- This work is still underway and will help frame the next steps with regards to progressing priority CER issues.



## Data Strategy – Initial Reforms



### Description

- The aim of the Initial Reforms workstream is to enable greater access to existing data held by AEMO, to support more effective planning, policy and research in the market transition and ensure better consumer outcomes.
  - The reforms reduce immediate barriers in the regulatory framework by: enabling prescribed access for a range of trusted bodies; and clarifying market body powers and liabilities as data holders.
- Further reforms will be considered in a subsequent New Framework, to deliver an energy data regulatory framework "fit-for-purpose" in a digitalised future.



### Progress

- An ESB Consultation paper proposing the initial reforms has been released. Submissions are **due by 19 August 2022**.
- After submissions are considered, ESB will finalised proposals and draft legislation for Energy Ministers to consider and progress.



### Key issues for stakeholder views

- **Prescribed bodies:** ESB proposes to expand the existing list of "prescribed bodies" which AEMO is allowed (but not obliged) to share data with, including:
  - **Class A bodies:** trusted agencies with existing obligations to protect data and clear direct needs: jurisdictional Energy Departments, ABS, CER, ARENA, ECA and CEFC.
  - **Class B bodies:** Australian public universities and researchers, where disclosure may be supported with security conditions appropriate to the data seeker, the project and any outputs.

### Supporting amendments including:

- Ability to amend the list of prescribed bodies by Ministerial Order
- Arrangements for imposing conditions on data access and enforcement
- A new statutory function for AEMO to disclose information, supporting coverage by arrangements such as immunity and cost recovery.
- Clarification over AEMO's rights to use held information



**ANY QUESTIONS?**





Consultation on **Electric Vehicle charging** issues paper is currently open and accepting submissions. Submissions will close on **19 August 2022**.

The ESB is hosting a webinar discussion on this paper on **2 August 2022**.



The **Data Strategy – Initial reforms** consultation is currently open and accepting submissions. Submissions will close on **19 August 2022**.



Stakeholders will be invited to make submissions to the AER on the policy and regulatory framework for Dynamic Operating Envelopes over – scheduled for release **mid-August**.



The ESB is working with market bodies and members of the Stakeholder Working Group to work through feedback regarding CER related roles and responsibilities. An update will be published shortly, aligning consideration of priority issues and upcoming activities across market bodies.