

## 1 Background

EDMI is a metering and software technology provider based in Brisbane Queensland and has been operating for almost 50 years. EDM I supplies around 80% of metering hardware in the NEM and around 85% of C&I installations.

Queensland back stop technology has proved to be unsuccessful.

An opportunity exists to solve this problem whilst creating a solution for the future by implementing a similar but more advanced proven solution to the one utilised in South Australia.

The installed assets and those being deployed during the current smart metering rollout are far smarter than the market appreciates, EDM I suggests the current technology (provided by multiple manufacturers) exists to solve many of the problems highlighted in the NSW Backstop paper.

Smart Meters have the ability to disconnect Consumer Energy Resources (CER) both load and/or generation based on configurable rules within the hardware whilst leaving light & power uninterrupted. This can also be performed remotely by accredited market participants using the secure communications channels the current meter fleet is being read via with 98% reliability. AEMO has proven utilising customer Wi-Fi is unreliable. A Utility Grade long term solution that with the ability to reach deep into the home if desired by the consumer should be considered.

Also consider that Australia is currently targeting full smart meter roll-out completion by 2030, so much of the cost is sunk.

## 2 Further benefits

- Cyber security (disconnecting PV/EV if compromised)
- Compliance, checking audit
- Disconnecting or load limiting non-complying sites
  - (Action 10)
- Auditing, remotely.
  - (Action 43)
  - (Action 44)

- Utility grade (secure & proven)
- Accurate Measurement
  - (Action 8)
  - (Action 10)
- DB access to multiple data channels
  - Load (EV & Batteries)
  - Export (PV)
  - Action 17, DB's gather information from smart meters
- Action 34 alleviated
  - Flexible export can be implemented within smart meter HW
- Action 41
  - Control
  - Implementation
  - Tariffing (Dynamic)
  - Accurate measurement (NMI M6)
- Action 36
  - Compliance monitoring
  - Enforcement (disconnection of load/export limiting)
- Generator restart functionality
  - PV hold off functionality

### 3 Questions

Question 1 - Do you support the requirement for NSW DNSPs to harmonise their implementation of the backstop mechanism? If not, please explain why.

Yes, although there is an opportunity to leverage the cost of deployed smart metering assets, which may best serve the consumer.

Question 2 - Are the scope and timelines for the Emergency Backstop Mechanism feasible? If not, please explain why.

Dependent of the technology chosen.

Question 3 – Do you agree with the order of the hierarchy of measures to increase load in the grid during MSL events? If not, please explain why.

Yes.

Question 4 – Are the design elements of the Emergency Backstop Mechanism appropriate and feasible? If not, please identify why and provide any alternative suggestions.

Assuming the immediate critical functionality is MSL and approach where the electricity meter performs this function is ideal. With >98% connection reliability it can be implemented within seconds. Furthermore, much of this intelligence can be distributed so smart meters become

more autonomous when reacting to system data. A mechanism where new builds as a minimum have 3 element functionality (Light & Power, PV and load) each of which can be orchestrated independently.

Question 5 – Are the roles and responsibilities of each organisation appropriate and feasible? If not, please identify why and provide any alternative suggestions.

Yes.

Question 6 - Do you support the threshold for the Emergency Backstop Mechanism using CSIP-AUS being 200kW and smaller? If not, please provide detail on what threshold you think is appropriate.

Yes, in the main if backed up by a utility grade solution, AEMO and Queensland government trials have proved that internet connected equipment is unreliable, whereas the solution implemented in South Australia has proven robust.

- I. Do you agree with the approach for systems above 200kW? If not, please explain why and provide any alternative suggestions.

Yes.

Question 7 - Do you have any concerns or insights into using CSIP-AUS compatible inverters and an internet connection to control the backstop mechanism?

Although CSIP-AUS is a solid industry standard if the transportation layer used is Wi-Fi it has proven unreliable during several trials, a more reliable solution would be 4G.

Question 8 – Is it appropriate for the Emergency Backstop Mechanism to be implemented using technologies and systems consistent with enabling the future use of flexible export limits? If not, please explain why.

Certainly, a smart meter can provide flexible export limits.

Question 9 – Which, if any, existing test protocols should be considered for implementation as the consistent test protocol for NSW?

No comment.

Question 10 – Do you think the conditions under which the Emergency Backstop Mechanism could be used are appropriate? If not, why? Please suggest any alternative conditions that should be considered.

Yes.

Question 11 – Do you have any views on the proposed implementation pathway (variation of DNSP licencing conditions) or alternatives?

No comment.

Question 12 – What information will manufacturers, installers, customers and distribution networks require to implement the Emergency Backstop Mechanism?

- I. Who is best placed to communicate this information to the different audiences?
- II. II. How should this information be best communicated to the different audiences?

If provided in the smart meter, the infrastructure already exists.

Question 13 – What CER should the Portal capture? Please explain the reasoning behind your answers.

- I. What types of technology?
- II. II. What size (capacity) of technology?
- III. III. What technology should be excluded? Why? NSW Emergency Backstop Mechanism and Consumer Energy Resources Installer Portal 37
- IV. IV. Should the Portal align with the Emergency Backstop Mechanism in capturing only systems under 200kW?
- V. V. Should the Portal capture technology consistent with that recorded in AEMO's DER register? Is there additional technology that should be captured?

No comment.

Question 14 – Do you support the functions outlined for inclusion in the CER Installer Portal? If not, please explain why.

No comment.

Question 15 – Are there any additional functions you would like to see included within a CER Installer Portal?

No comment

Question 16 – Are there additional ways that the Portal should be designed to support installers?

Providing the portal has the capacity to ensure compliance with standards.

Question 17 – Do you agree that the party that applies for a CER connection should be responsible for ensuring the installers they have engaged rectify non-compliance? If not, please explain why.

It's vital there is a mechanism to ensure compliance, however this is best achieved.

Question 18 – Do you have any other views on compliance and enforcement within the Portal?

We have learned one of the major problems with back-stop technology deployed in other jurisdictions is compliance.

Question 19 – Are there additional ways that the Portal should be designed to support installers?

No comment.

Question 20 – Do you agree with the phased approach proposed for the delivery of the Portal? If not, please explain why.

No comment.

Question 21 – Do you think that there are any functions that should be included or excluded from the first phase of the Portal development?

No comment.

Question 22 – Do you support the proposed joint NSW Government-DNSP delivery of the CER Installer Portal? If not, please explain why.

No comment.

Question 23 – What information will installers and any other stakeholders require to support the roll out of the CER Installer Portal?

- I. Who is best placed to provide this information?  
No comment.
- II. What are the best ways of communicating this information to stakeholders?  
No comment.