



Clean Energy Council submission to the COAG Energy Council's Consultation Paper:

Cost Benefit Analysis of options to collect and share information about small scale battery storage

The Clean Energy Council (CEC) welcomes the opportunity to provide feedback to the COAG Energy Council on the Consultation Paper on the Cost benefit Analysis of options to collect and share information about small scale battery storage.

The CEC is the peak body for the clean energy industry in Australia. We represent and work with hundreds of leading businesses operating in solar, wind, hydro, bioenergy, marine and geothermal energy, energy storage and energy efficiency along with more than 4,000 solar installers. We are committed to accelerating the transformation of Australia's energy system to one that is smarter and cleaner.

The CEC supports the proposal to establish a national battery register. We are of the view that only a single national register could achieve the objectives described in the consultation paper. We do not believe that a private sector register would achieve the objectives described in the consultation paper.

The CEC is one of many organisations developing its own battery register. Nevertheless, we welcome the proposal for a national register and we do not view it as a competition issue, despite the effort and resources we have invested in advance of the national register. We work collaboratively with regulators to share information in order to improve the safety and quality standards within the solar industry. We intend to continue doing so. A national battery register should be considered a public good rather than as a business opportunity.

The CEC supports the proposal for the Clean Energy Regulator (CER) to host the national battery register. The reasons for this are outlined in further detail in this submission. Briefly, the main reasons why we support the CER as host in preference to the Australian Energy Market Operator (AEMO) are:

- Installers are already required to provide information to the CER when systems are installed. A requirement to provide additional information to the CER will be less of an

administrative burden compared to requiring them to provide information to the AEMO as well as the CER.

- The CEC and CER (as well as a number of leading companies within the solar industry) have spent a considerable amount of time and effort developing a serial number validation system for PV modules. It would be relatively simple to extend the system to include batteries and this would require minimal additional effort by installers and retailers. It would be wasteful for AEMO to develop a new serial number validation system. If it did installers would be required to use at least two different apps to register installations.
- The CER option is likely to be cheaper because they already have the customer-facing infrastructure (such as call centres) and the development of serial number validation apps is already well advanced. In that context it is difficult to understand how the option of an AEMO register is considered cheaper than the CER alternative.
- There are competition policy reasons to favour the CER over AEMO as the manager of a national battery register. Market operation is likely to become an area of competitive business in future. This has been canvassed by the Australian Energy Market Commission in its project on the distribution market model. There are several companies who are actively developing alternative market platforms that could either complement AEMO's work at the transmission level or potentially compete with AEMO at the distribution level. Competition issues are likely to arise in future if AEMO is given privileged access to information on batteries over their future competitors.

These and other issues are outlined in greater detail in this submission, as well as responses to specific questions raised in the consultation paper. We would be very happy to discuss these issues in further detail. We look forward to contributing further to this review.

Yours sincerely,

Darren Gladman
Director, Smart Energy

QUESTIONS FOR RESPONSE

- 1. Which of the advantages and challenges listed in Table 1 and Table 2 provide the most compelling reasons for choice of host? Why? Which host would stakeholders prefer? Why?**

The CEC has a strong preference for the Clean Energy Regulator to host the national battery register. The key reasons for our preference are as outlined below:

a. A privately owned and operated register would not achieve the stated objectives

The CEC has commenced development of its own battery database and we are aware of many organisations and companies that have also done so. It would be a mistake to assume that a privately owned or operated register could achieve the objectives proposed for the national battery register. A privately owned register would struggle with issues of privacy and commercial confidentiality. It would be unable to compel the reporting of battery installation and the data would inevitably be incomplete and piecemeal. The fact that some organisations and companies have already invested in a database should in no way constrain proposals for a national battery register hosted by a government agency. The CEC is closely cooperating with the CER in the development and continuous improvement of its data collection processes. We see the proposal for a national battery register hosted by the CER as an opportunity for further collaboration, rather than a competitive threat. A national battery register should be considered a public good rather than as a business opportunity.

b. A CER register would minimise additional regulatory burden for installers

Installers are already required to provide information to the CER when systems are installed. A requirement to provide additional information to the CER will be less of an administrative burden compared to requiring them to provide information to the AEMO as well as the CER. As noted in the cost benefit analysis, the CER would still need to maintain its existing STC database and data collection processes, whether or not the AEMO begins collecting information on battery installations. The only way to avoid the unnecessary duplication of effort would be for the CER to maintain the battery register.

There is already some degree of duplication of effort and records, with information being provided to distribution businesses (for grid connection approval) and to the CER (for STCs). The cost-benefit analysis considers the benefits of information-sharing between distribution businesses and AEMO. If CER were to become the holder of the register information-sharing between distribution businesses and CER could reduce duplication of paperwork and improve the integrity of the system.

The CEC and CER (as well as a number of leading companies within the solar industry) have spent a considerable amount of time and effort developing a serial number validation system for PV modules. It would be relatively simple to extend the system to include

batteries and this would require minimal additional effort by installers and retailers. It would be wasteful for AEMO to develop a new serial number validation system and if it did this would mean that installers would need to use at least two different apps to register installations.

c. The CER is likely to be the cheaper option

The cost-benefit analysis estimates that a national battery register operated by AEMO would have a lower economic cost than a similar register operated by the CER. This seems very unlikely. The CER option is likely to be cheaper because they already have the customer-facing infrastructure (such as call centres) and the development of serial number validation apps is already well advanced. If the CER maintains the register then installers can continue to report installations using a single app, such as the serial number validation apps that are currently being developed with the CER. If the AEMO maintains the register then installers are likely to be required to use two apps to report the same (or very similar) information to two regulators. It is difficult to understand how the option of an AEMO register is considered cheaper than the CER alternative.

The CER's serial number validation pilot program provides the basis for a comprehensive data collection system that is streamlined, reliable, minimises additional red tape and has many other advantages compared with the current paper-based system. We would encourage the use of this approach rather than 'reinventing the wheel' with a new AEMO data collection system.

d. Competition policy issues

There are competition policy reasons to favour the CER over AEMO as the manager of a national battery register. Market operation is likely to become an area of competitive business in future. This was recently canvassed in the Australian Energy market Commission's consultation paper on the distribution market model. There are several companies who are actively developing alternative market platforms that could either complement AEMO's work at the transmission level or potentially compete with AEMO at the distribution level, depending on the outcomes of the AEMC review of the distribution market model. Competition issues are likely to arise in future if AEMO is given privileged access to information on batteries that is not available to their future competitors.

e. Objectives for the register are broader than the AEMO remit

In order to achieve the objectives identified for the battery register it will be necessary to collect information on grid-connected battery systems as well as off-grid systems. Off-grid systems are beyond the legislative remit of the AEMO and the inclusion of off-grid systems within AEMO's regulatory control would represent a significant new regulatory impact. Although off-grid systems currently represent a relatively small proportion of all solar and storage systems, this is expected to change as the cost of solar and storage systems

continue to decline. The CER already collects information on off-grid solar systems and extending this to include maintenance of a register for off-grid battery systems would be a relatively small regulatory change.

2. Can stakeholders identify any other challenges or advantages for each option?

Yes. In future it is very likely that there will be new market operators that seek to compete with AEMO and they will demand the same access to information available to AEMO. It would be preferable for the information to be held by an independent regulator (such as the CER) that can then make the information available to AEMO or any other market operator competing with AEMO. AEMO needs to be able to use the information in the battery register but it should not be able to control access to that information. It would be a matter of particular concern if AEMO were to become the holder of the information with the ability to restrict access to the information to potential competitors. The cost-benefit analysis notes that the CER's database has an established channel with AEMO and information is updated every three hours. The national battery register should build upon this approach, ensuring that AEMO has access to the information it requires without having control over access to the information. As well as AEMO, new market operators that are currently in the process of establishing themselves should also be able to access information (as appropriate) from the CER.

We would dispute the assertion that "AEMO's existence is not subject to government funding or policy position". State governments, COAG Energy Council or the AEMC could in future take a very different approach to the regulation of market operators and the framework for deciding which aspects of market operation are a regulated monopoly and which are opened to competition. It would be wrong to complacently assume that AEMO's role will continue unchanged and unchallenged in the long term.

We also challenge the assumption that "AEMO would be the primary user of the data being collected". The AEMC's distribution market model project is currently considering business models and regulatory frameworks for market operation at the distribution level. The cost benefit analysis appears to have assumed that the AEMC will conclude that all rights to market operation at both the transmission and distribution levels will be granted as a monopoly operation to the AEMO. This is not the position advocated by those companies with an interest in competing with AEMO for the role of market operation at the distribution level.

3. Do stakeholders see a more efficient approach for collecting information from this wider set of equipment categories?

Yes. The key to encouraging installers to provide additional information will be to make that process as simple and streamlined as possible. A single process involving the scanning of serial numbers would be far preferable to filling in multiple pieces of paperwork. It would be even more likely that installers will report installation details if the app used to register installations also includes features that provide additional benefits to the installer and retailer. For

example, the apps that are being developed in conjunction with the CER serial number validation pilot program also include features that the installer and retailer can choose to utilise, such as databases for workflow management, stock control and customer relationship management.

Increasingly, products are being integrated. It was once the case that inverters, batteries and export-limitation devices came as separate items. There is a trend toward integration of these devices. The CEC is working with the CER and distribution businesses to consider enhancements to the listing and publication of inverters on the CEC Approved Product List to reflect changes in product capabilities and the availability of enhanced features. This approach would lend itself to integration with CER's existing STC system, with significant opportunities for improving the availability and usefulness of information needed by regulator, distribution businesses and market operators while reducing the administrative burden for solar installers and retailers.

4. Do stakeholders agree on the required degree of information needed and the need for various stakeholders to access the data shown?

Table 3 assumes that AEMO will be the only market operator seeking to obtain information for the purpose of market operation. There is a strong possibility that there market operators at the distribution level and that this will not be a monopoly role for AEMO. The cost-benefit analysis should consider the granularity of data needed and the access requirements of independent market operators at the distribution level.

5. Are there any other regulations that would require amendment? Is it possible to quantify the cost of a single regulatory change?

The CEC has not undertaken a comprehensive assessment of the regulations that would require amendment if the register were to proceed. We are not in a position to provide advice on the likely cost of the proposed regulatory changes.

6. Are there any issues with changing these regulations to capture batteries?

As the cost of batteries declines the usage of batteries in appliances is likely to become more widespread. For example, it is quite possible that in future appliances such as refrigerators could include small integrated batteries. The plan to change regulations to "capture batteries" raises the issue of which batteries are intended to be captured. Capturing all batteries might be unworkable.

7. Do the time estimates and other assumptions in Table 6 seem to be reasonable? If not, are you able to provide evidence to more appropriate estimates?

The assumptions behind the estimates in Table 6 are puzzling. Option 1 assumes that AEMO will collect data using a mobile app or web service. Option 2 assumes that CER will continue to use its current paper-based system. The basis for these assumptions is unclear. The CER is

currently working with industry to develop apps to assist installers with serial number validation. It seems reasonable to assume that data collection processes by the CER would be more efficient and more streamlined than a new procedure to be established by AEMO. The assumption that a new procedure yet to be developed by AEMO would be more efficient than the apps that are currently being developed by CER seems counter-intuitive. It would be instructive to vary the assumptions regarding the expected uptake of the CER's serial number validation app and the potential impact that would have on projected data collections costs.

8. Are any of the quantitative benefits or the assumptions or approach underlying their evaluation questionable? If so, why?

The estimate of \$11.6 million (net present value) for avoided network augmentation costs seems very modest.

The economic benefits of fraud prevention and improved consumer protection could also be considered in the benefits of a battery register that is integrated with the CER's other data collection activities. The CER's serial number validation program aims to prevent fraud and protect consumers. The scheme is linked to CEC's product listing procedure and the systems and procedures for the CEC Approved Product List are being tightened to further improve consumer protection.

9. Are stakeholders able to provide data or case studies that would support the quantification (in monetary terms) of any of the costs and benefits listed above?

United Energy and Greensync are currently working in partnership on the development of a distributed energy exchange that aims to avoid network augmentation. That project could be a useful source of data on the potential to utilise solar and storage solutions to avoid network augmentation costs.

10. Are any of the qualitative benefits questionable? If so, why?

The description of the anticipated qualitative benefits seems reasonable.

11. Would a new data collection app be appropriate if it was designed to streamline time taken to fill in forms? Or would industry have a preference to use existing industry development apps? What advantages do industry developed apps offer?

Installers will have a very strong preference for using a single app. Successful apps will provide installers and retailers with other business advantages. The CEC supports the approach taken by the CER, whereby many providers are expected to compete to provide the platform for serial number verification. We anticipate that the usefulness and functionality of installation apps will continue to improve over time. We expect that several industry-developed apps will emerge through the CER's serial number validation program.

It would be a retrograde step to require installers and retailers to use an AEMO app in addition to the apps that are being developed in conjunction with the CER's serial number validation

pilot program. An app developed by an agency such as AEMO is unlikely to be as innovative as those that are being developed with the CER. Unless the AEMO uses a process very similar to that which has been adopted by the CER, the AEMO app would lack the benefits of having competition in app development. If AEMO were to mimic the CER's approach in order to capture the benefits of competition in app development then they would be better off leaving the job to the CER and its industry partners.