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COAG Energy Council Secretariat
GPO Box 9839
Canberra ACT 2601
Via email: energycouncil@industry.gov.au

Dear COAG Energy Council Secretariat

Submission on Energy Storage Registration Consultation Paper

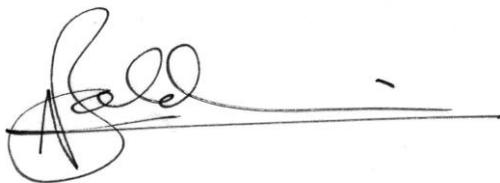
Please find below a submission by the Australian National University Energy Change Institute on the Energy Storage Registration Consultation Paper.

The ANU Energy Change Institute combines leading research and teaching on the science, engineering, policy, law, sociology and economics of moving to a sustainable and dominantly renewable energy future.

We hope that this submission is useful in informing your thinking, and look forward to further engagement with the COAG Energy Market Transformation Project Team as it carries out this important work.

In the meantime please contact Professor Ken Baldwin for queries regarding this submission.

Yours sincerely,



Professor Ken Baldwin,
Energy Change Institute Director

SUBMISSION ON ENERGY STORAGE REGISTRATION CONSULTATION PAPER BY AUSTRALIAN NATIONAL UNIVERSITY ENERGY CHANGE INSTITUTE (ANU ECI)

2.1 WHY A REGISTER IS NEEDED?

Do stakeholders agree an energy storage register is needed in Australia?

The ANU ECI is supportive of the establishment of a register

Are there any other reasons energy storage data should be collected?

ANU ECI would like to submit two additional reasons for this data to be collected:

1. This data is highly desirable to research organisations, and will enable them to conduct work which supports the integration of such systems into our electrical networks.
2. The ANU ECI believes this data is highly desirable for distribution network operators. This is based on our work consulting with eight distribution network service providers, has found that the majority of them currently have no mechanism for collecting installation data for energy storage devices and are not being directly informed by installers of the presence of these devices within their networks.

Given large-scale energy storage systems are now required to be registered as a Generator under NER, should a register be established for distributed energy storage (less than 5 MW generating capacity)?

The ANU ECI is generally supportive of the establishment of a register for distributed energy storage.

Do stakeholders agree the Victorian Case Study is an effective framework for storage emergency response?

No response. (Outside of area of expertise)

2.2 DATA AND ACCESS

Given the needs of AEMO, emergency response and other potential users, what is the “must have” data which should be collected? What are the likely costs of this data and do the impacts outweigh benefits?

“Must have” data includes the installed storage (Wh) and power capacity (W), technology type, connection point (NMI), approximate location (locality/postcode).

What is the “nice to have” data, and does the cost of this additional data collection merit its collection?

“Nice to have data” includes: exact location, (near) real-time operational data, the registered operator, detailed technology information (e.g. battery typology), battery operating modes, battery control inputs (e.g. discharge schedules/set-points, demand response functionality, etc.)

How would data be collected and provided to a central register?

As with solar installations, the ANU ECI envisages that energy storage installers will report this information to the register.

What arrangements and requirements should be put in place to ensure data is collected and supplied in a timely manner?

This system should be fully electronic, standardised and require as little effort as possible, to minimise the additional costs to energy storage owners.

Could a national register be linked to other databases e.g. data collected by distribution businesses? Are there other databases which should be considered?

Linkage to the CER solar PV installation data is ideal, as well as to ABS localities (e.g. LGAs).

Beyond AEMO and emergency response providers, what other parties should be able to access the data register and on what grounds? Are there particular conditions which should apply to these users?

The ANU ECI believes that this information should be available to research organisations for the purposes of conducting research which facilitates their integration with the electrical grid/markets. This information should be provided at the highest level of detail available whilst still protecting owner privacy.

2.3 HOW THE REGISTER SHOULD BE SET UP

Do stakeholders agree with setting up a register led by a national body? Are there any other key benefits or concerns that the Energy Council should be aware of for this approach?

The ANU ECI generally agrees with a national body running the register, based on the natural alignment of this task with current work by the CER (see next response below).

Can CER, AEMO or a new register be a feasible option? If yes, how can the barriers or challenges discussed be overcome?

The ANU ECI believes that the CER is the natural choice for establishing and maintaining the register, given the work with SRES.

Are there other organisations suitable to host a national energy storage register?

No response.

What are stakeholders' views on maintaining information on distributed solar after the scheduled decline in SRES incentives for solar installations from 2017?

This information is very valuable for university research, and the ANU ECI would encourage this level of data collection being continued for research purposes.

2.3.2 A REGISTER LED BY AN INDUSTRY BODY

Is an industry-led register a feasible option? Who can lead this register?

This option appears feasible. The ANU ECI does not have a suggestion for whom should lead this.

Are there examples of industry-led initiatives or industry operated schemes that are underpinned by a regulatory framework / minimum regulatory requirements?

No response.

What are the other benefits and challenges of an industry-led approach?

No response.

2.3.3 STATE BASED REGISTERS

Is a state-based energy storage register a feasible option?

This option is feasible, but clearly less ideal than a national register.

Are there other organisations (apart from electrical safety regulators) that can host this register?

No response.

3 OTHER REGISTRATION REQUIREMENTS

Are there opportunities to leverage data collection under other frameworks into a national register?

There are clear benefits to collecting the data in a manner that matches these installations with any collocated energy generation technologies.

Should relevant jurisdictional licensing frameworks be reviewed and amended to require registration of energy storage devices? Are there other alternatives?

No response.

It is understood that off-grid distributed generation, including energy storage, is not currently captured under both national and state/territory registration frameworks. Should consideration be given to registration of off-grid storage systems for emergency purposes or other uses?

No response.