Meeting Notes – Emerging Generation and Energy Storage

MEETING: BRISBANE STAKEHOLDER SESSION

DATE: Friday 16 November 2018

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ATTENDEES:

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Nick Bartels	Greenview Strategic Consulting
Nic Buckley	Stanwell
Byron Carter	Powerlink
Michael Craig	Origin Energy
Alex Driscoll	Edge Energy Services
Adam Earnshaw	Origin Energy
James Googan	Origin Energy
Bruce Iliff	GHD
Phong Le	Ergon Energy
Richard Loh	GHD
Rizah Memisevic	Powerlink
James Miller-Randle	Yurika
John O'Brien	W Wightman Advisory
David Ritson	AusVolt
Ron Roduner	RnP Corporate Advisory
Chandana Samarasinghe	Risen Energy Australia
Glenn Springall	Energy Queensland
Terry Sullavan	Aalborg CSP
Greg McGarvie	Teebor Clean Energy

These meeting notes reflect key stakeholder discussion points to the questions in the presentation.

Section B: Energy Storage Systems (ESS) and proposed Bi-directional Resource Provider category

Theme 1: Participation challenges for ESS and 'hybrid' systems, and the proposed definition?

1. Are there any other benefits associated with defining and integrating ESS into the NEM?
    - Standardisation of charges and clarification of transmission use of system charges (TUoS).
    - Communication – understanding where ESS fits in registration.

2. Should the definition of ESS be generic (encompass technologies other than batteries, e.g. pumped hydro)?

    - Assuming ESS is to be included as a category, there was support for a generic definition that covers all ESS.

3. What do you think of AEMO's proposed ESS definition? Can you suggest any improvements?

    - One stakeholder commented that it is too flexible as it captures ESS that are not bi-directional if charging or discharging locally.
    - Questioned whether the definition should also consider the energy capacity, for example, is a very small energy content (a few minutes) still an energy storage system?
    - The definition should recognise the capability of the different types of ESS.

Theme 2: Proposed participation model – ESS and hybrid system

4. Would the stand-alone ESS proposed participation model meet your future needs? Why/ why not?

    - Stakeholders expressed mixed views on whether ESS needs to be defined and integrated in the NEM, including:
        - There is a need to create a new category for ESS and for 'hybrid' systems.
        - There is no need for additional categories or treating an ESS as a single asset (one dispatchable unit identifier (DUID)), particularly in dispatch. It was noted that markets are about buying and selling, this is what the existing Customer and Generator categories deal with.
        - Receiving simultaneous targets to import and export is only because of incorrect bidding and participants should wear that risk because it is within their control to avoid.

5. Are all the proposed information requirements able to be provided by ESS proponents? Why/ why not?

    - It was noted that the registration process needs to capture the information on the technical capability of the systems and AEMO should have all the information it requires to run the system. Specifically, some stakeholders discussed that AEMO should know the state of charge so that it can properly account for the energy limits although participants still have the obligation to reflect their energy limits in the offers as reducing availability.

6. Would the 'hybrid' system proposed participation model meet your needs? Why/ why not?

    - Yes, an option to aggregate could be valuable.
    - Yes, however in designing the new participation model, it is important to keep in mind the distinction between people that participate in the NEM as their main business purpose versus those where electricity is an input to their processes (e.g. industrial loads). The arrangements should not be generalised so that participants with a load should be treated in a similar fashion to other participants.
    - Does aggregation result in greater simplicity:
        - No, since AEMO needs to observe/monitor all elements behind the DUID individually. Given this, there is no operational simplicity in creating an aggregated category as it will add a lot of complexity to the party operating the

aggregated hybrid facility. This occurs because the participant would need to know what all the different components can physically do at any time and make a single offer incorporating all capabilities. When cleared, the participant will need to satisfy the dispatch target by disaggregating this target into the components of the hybrid facility. It was noted that this is particularly challenging when also offering FCAS.

    - There can be administration simplicity, but it may be harder during registration.
    - Would need to evaluate if it is simpler financially.

- The following was noted:
    - People should be able to choose whether to aggregate and to what extent to aggregate - it should not be required to aggregate everything behind a connection point.
    - That it may be a small number of participants that take this up.
- The Bi-directional Resource Provider should be extended to all circumstances where there is a bi-directional flow. The reason for this is that a load and generator pair can have the same structure.

Section C: Immediate work

(i) Exempt networks and application of performance standards

(ii) Providing NEM information to project developers

7. Regarding exempt networks, are there any costs, risks and benefits associated with AEMO's preferred option?
    - There was agreement that a performance standard should be applicable to parties connecting to an exempt network and AEMO should seek to address this through a rule change.
    - No other costs, risks or benefits were identified.
8. Should a person intending to develop or build a generating system (and not subsequently register as a Generator) be allowed to register as an Intending Participant?
    - Yes, there was agreement that project developers should be able to register as an Intending Participant to access information to build a generating facility or ESS.
9. Are there other costs, risks and benefits associated with providing NEM information to project developers?
    - No other costs, risks or benefits were identified.

Section D: Future work

(i) Separation of operational and financial responsibilities

(ii) Logical metering arrangements

Due to timing constraints, presentation questions on the separation of operational and financial responsibilities and logical metering arrangements were not work-shopped.