

FlexForum session V 31-03-22 notes

When	900 – 1200, Thursday 31 March 2022
Where	Virtual
Who	Shay Brazier (ReVolve Energy), John Campbell (Our Energy), Jason Christini-Crawford (Ecotricity) [apology], Glenn Coates (Aurora), Jenny Van der Merwe (Kāinga Ora), Terry Paddy (Cortexo), Eric Pyle (solarZero), Buddhika Rajapakse (Mercury) [to 1130], Ed Harvey, (EVNex), Scott Scrimgeour [9-11] and Ray Hardy [11-12] (Wellington Electricity), Quintin Tahau (Trustpower) [apology], James Tipping (Vector) [to 1130], Evie Trolove, (Orion), Glen Baxter (Ara Ake), Fiona Wiseman (Trustpower/Manawa) Facilitator: Geoff Sharples Secretariat: Craig Evans, Matt Smith

Session notes

Five topics were discussed:

1. Stakeholder inputs on topics A and B
2. Workplan topic B: proposed high-level requirements
3. Workplan topic A: description of Flexibility Needs
4. Workplan, engagement and communications planning
5. Administration – governance, budget, and funding

Agenda overview

The group agreed the agenda.

Topic 1: Stakeholder input on topics A and B

The group approved the stakeholder engagement plan for workplan topics A and B to be delivered for the group by Ara Ake.

- the format is an initial open webinar (60-90 minutes) to inform all interested parties of the FlexForum and to request input from key stakeholders on draft outputs of

workplan topics A and B. Input will be sought via several channels, including via a comments function on the webpage and subsequent targeted webinars.

- the content of the webinar will include an introduction to the FlexForum, setting the scene, and the outputs/conclusions of workplan topics A and B
- the initial webinar is scheduled for 27 April, with the targeted webinars about a week later. The initial webinar will be announced immediately after session VI on 14 April 2022.

The group was asked to provide names/contact details to assist in populating the contact list.

The group noted the webinars will occur over a holiday period and engagement options would be provided to maximise involvement, including by publishing a recording of the initial webinar.

Topic 2: Workplan topic 2: proposed high-level requirements

The group endorsed the proposed high-level technical and physical requirements for the operational response to specified conditions – an event – needed by network owners, system operator and market participants, agreeing they provided:

- the event-related information needed by a DER owner/flex supplier to make decisions about investing in and supplying DER capability to respond to network/system/market conditions
- a reasonable starting point for a common and accurate taxonomy that is familiar to network owners, system operator and market participants.

The group requested:

- refinements to the description and presentation of the high-level requirements
 - distinguishing between physical/technical requirements and commercial arrangements when describing the requirements, and presenting the examples separately
 - distinguishing between responses which are event based and responses which involve ongoing shaping of the demand profile
 - considering the value options in the value driver column and potentially using it to define whether the party with the need (in a given row of the table) can realise that value i.e. EDB able to realise financial and reliability values
- collate a single table of use/need cases based on the high-level requirements.

Highlights from the discussion were:

- the audience for the high-level requirements is the buyers of the 'services' required to deliver an operational response for the need/use case, which will not typically be households and businesses
- there is no expectation that end customers understand the technical parameters; intermediaries are expected to use the technical parameters to develop commercial propositions based on the associated upstream need (ie, benefit/value)
- the technical parameters need to reflect a benefit or value available from supplying the associated response and service
- the high-level requirements are about 'the what', or the physical response, and developing a common language to guide procurement mechanisms. A standard and common approach to 'how' 'the what' is signalled and exchanged is needed as standards support innovation on packaging and stacking the value of flexibility services for consumers. However, standards, eg, communication protocols, will rely on clear definitions of 'the what'
- the high-level requirements do not represent the full set of information needed by DER owners for investment decisions. They provide the event-based information. DER owners also require pre-investment information, such as, potential compensation/benefit from supplying flexibility services, other relevant network conditions (eg, voltage issues that might cause limited export capabilities) etc
- each need case will have different expectations that a response will be available which informs the cost of supply. Providing greater certainty of response means higher cost of supply, eg, due to the foregone opportunity costs. More details on compensation and how services are valued and priced will be considered as part of workplan topic D.

Identifying tangible and practical impacts of regulatory settings

The group noted the purpose of the FlexForum is to identify practical and tangible actions to integrate DER into the electricity system and markets but agreed that regulatory settings may enable or block implementing those steps.

Noting that the impact of regulatory settings will be considered as part of workplan Topic E, the group requested creation of a list of issues/barriers, the practical consequences (for using DER/flexibility), and the associated regulatory impediment/intervention.

A key purpose of the list is to contribute to future regulatory workstreams such as the Commerce Commission input methodology review by highlighting the practical and tangible impacts of regulatory settings on implementing the FlexForum outputs.

Topic 3. Workplan topic A: description of flexibility needs

The group endorsed the outline of the conclusions relating to flexibility needs identified through the discussions of DER potential and Network & Market potential.

- technical and market inputs required by DER owners to maximise the net benefits from DER – the flexibility need is information to enable decisions to invest in ‘extra’ DER capability and to invest in DER where it will be useful (ie, to supply flexibility services alongside the owner needs)
 - service definitions & performance criteria - what do you need to do to deliver the service, approach to evaluating delivery and what happens if you don’t deliver (eg, penalties)
 - payment/price mechanisms for compensating supply of the service
 - localised network optimisation, automation and information on network/market conditions to enable the DER owner access to the input signals needed to deliver
 - network access and network use terms which reflect DER capability
- outputs (ie, services) required by network operators, system operator and market participants – the flexibility need is an operational response to network, system and market conditions
 - network operators require new capability to manage forecast electrification-related constraints & connection-related constraints and maintain/improve reliability and affordability
 - market participants and the system operator require new capability to manage changing market and system conditions, eg, more volatility in price and quality of supply, and maintain/improve reliability and affordability.

Topic 4: Workplan, engagement and communications planning

More detail on workplan topics

The group gave feedback on the scope of workplan topics C (market access and participation) & D (market opportunities) and the key questions to be addressed.

Highlights from the discussion were:

- topics C and D are about defining the commercial aspects for transacting flexibility services. Topic C focuses on defining market mechanisms for flexibility services. Topic D focuses on calculating and signposting the value of flexibility services

- the FlexForum will not be able to answer all the questions, but will be able to identify what needs to be explored and tested
- considering what guardrails or obligations on DER owners are needed to prevent unintended outcomes from use of DER/flexibility services. These will in part be covered through developing performance criteria for flexibility suppliers.
- the group should consider risks and risk management associated with use of flexibility services, including stress testing mechanisms around abnormal events to identify potential unintended consequences and safety nets, particularly focusing on risks of system/network failure and risk of 'market' failure (poor outcomes)
- potentially the most significant barrier to investment in flexibility services is ongoing confusion about the value/compensation available to flexibility suppliers. The question posed to the group is what are the things which can be done to provide more transparency about value?

Examples for reducing the mystery elsewhere in the world include disclosing payments 18 months later with anonymisation and publishing a payment range (for contracted flexibility).

- UK distributors publish revenue ranges: https://smartgrid.ukpowernetworks.co.uk/wp-content/uploads/2020/11/Appendix-6-Revenue-Ranges_v1.0.xlsx, and will use lowest cost solution (non-wire or wire)
- Another UK distributor publishes what flexibility is needed under several scenarios <https://www.westernpower.co.uk/network-flexibility-map-application>
- a build it and they will come attitude represents a barrier to flexibility providers and equipment providers – clarity on value is required to encourage investment in capability required to supply flexibility services
- adoption by network owners of a consistent decision-making model for assessing capex/opex (flexible) options would be valuable to EDBs, flexibility providers, and regulators
- UK network owners made a commitment to a flexibility first approach for major investments. This provided a strong signal to flexibility suppliers that network owners were committed to flexible solutions that helped underpin investment in capability to supply flexibility. The commitment was backed up by transparent processes about decision making to support choice to not use flexibility. Practical implications of the commitment for Aotearoa NZ network owners of this approach need to be identified

Topic 5: Administration – governance, budget, and funding

The group heard an update on governance, budget and funding.