

Session X

FLEXFORUM | 

Pre-reading for 9 June 2022 session

Shared 7 June 2022

Session overview – topics and decisions

Five items

1. **A distributor perspective on the journey to using flexibility**
 - a) Stathis Mokkas, Energy Markets Lead, UK Power Networks, will provide a distributor perspective on the journey to using flexibility
Note, several guests are joining for this item.
2. **Valuing & rewarding flexibility**
 - a) A DG owner, network and trader perspective on how value is calculated and payment structures
3. **Scoping the Action Plan**
 - a) A group discussion on the what, who and how of the Action Plan
4. **Workplan, engagement and communications**
 - a) Update on organisation of workshops
 - b) Update of progress with workplan tasks
 - c) Response to draft Publicly Available Specification for Smart Homes
5. **Administration – governance, budget and funding**

A distributor perspective on the journey to using flexibility

Efstathios (Stathis) Mokkas, Energy Markets Lead, UK Power Networks

- Distribution network operator perspective – flexibility vs infrastructure planning perspective
- Distribution system operator perspective – pushing the boundaries (market testing, market information, counterfactual, rounds of tenders)
- Wider market perspective – the role of other parties (aggregators, batteries, EVs, generators)
- Enablers for success eg, delivering innovation, industry v regulatory-led, regulatory settings, engagement and coordination, consumers and customers

Valuing & rewarding flexibility

A report back on considerations for valuing and rewarding flexibility from the perspective of a trader, a DG operator, and a network operator

- How does a buyer determine the price they are willing to pay for a service?
 - What are the payment structures that offer the best outcomes for both buyers and sellers of flexibility?
1. Guests – Mary Ann Mitchell & Chris Fincham – Independent Electricity Generators (IEGA) – will present on the value of commercial scale Distributed Generation, including a worked example of DG's responsiveness to an established pricing signal to share practical experience with DG responding to a well-established pricing signal (or contractual arrangement)
 2. Members will report back on how a trader might monetise flexibility and some practical considerations
 - initially through internal opportunities, eg, managing wholesale costs or offering products to delight the customer, ie, improve customer acquisition/retention
 - then existing opportunities, such as building on existing controlled rate options (eg, building on hot water control)
 - then moving into advanced products – providing flexibility for specific services under contract
 3. Members will report back on the three options available to networks for using flexibility
 - Price-based flexibility - distribution pricing signals are used to encourage consumers to adopt desirable load shapes and to shift load
 - Contracted flexibility – flexibility providers are paid to provide flexibility
 - Connection design – physical connections designed based on customer capability to use their flexibility to manage use of the network

Scoping the Action Plan – what, who and how (1)

Three sets of questions – what, who and how – to assist scoping the Action Plan

- The Action Plan needs to cover what, who and how

WHAT: The Action Plan – what is in it? Several members of the group have so far been quite specific about the importance of the next phase involving specific actions.

- What is the purpose and scope of the Action Plan?
- What specific actions can be / should be included? This includes unfinished business.
- What demonstration projects can be initiated/scoped to deliver the Action Plan?

WHO: Expectations and commitments of FlexForum members – what are individual members able to contribute as part of delivering the next steps?

- Who wants to be involved in the next phase (eg, existing / additional members) and what contributions eg, budget, resource, projects, are members willing/able to make to support delivering the next steps?
- Who within your organisation needs to make these decisions and can you get the ball rolling quickly on that? What information do you need to support that decision-making?

Scoping the Action Plan – what, who and how (2)

HOW: Governance of the Action Plan and outputs – what is the role of the FlexForum? There is a series of workstreams emerging from the FlexForum discussions

- What governance is needed to enable efficient delivery of the action plan?
- What is the role of the FlexForum in overseeing / coordinating these workstreams?
- Who delivers the outputs for each workstream and who will approve these? Where do the resources come from?
- What coordination is needed between individual demonstration projects and overarching workstreams and how will this be achieved?
- What has worked well to date and what would we change?

Engagement – breaking down silos

Since the last session, there have been efforts to involve more people in the conversation

- the group is joined by observers from MBIE and the Electricity Authority
- invitations have been made to the Commerce Commission and EECA to send an observer
- a range of people were invited to join the discussion with UK Power Networks
- planning has started on targeted workshops (progress to be outlined during item 4)
- Initial discussion of coordination between the FlexForum activities and the South Island distribution group roadmap

A further opportunity for engagement was created with the release of a draft Publicly Available Specification (PAS) for Smart Homes – feedback has been requested by 21 June 2022. **Does the FlexForum want to provide feedback?**

- EECA commissioned Standards New Zealand to produce a PAS for Smart Homes, a network of residential appliances to optimise efficiency and reduce grid demand at peak times
- The PAS is intended to provide steps to help New Zealanders understand what a ‘smart home’ is, and how to start their journey to live in one
- The draft PAS deals with matters being considered by the FlexForum – the content is quite generic, yet there is a risk of unnecessary divergence
 - terminology – the draft PAS proposes terms not aligned with the common language emerging from the UK, IPAG and FlexForum glossaries
 - the Smart Home value drivers and opportunities are described without accounting for commercial propositions and the practical use cases of the DER in a Smart Home. The FlexForum discussions have highlighted the existing gap between capability of DER and ability to monetise that capability.

The draft PAS is available here: [Have your say on the draft PAS →](#)

Key tasks, actions and timelines - update

Task	Description	Responsible	Timeframe
1. Valuing & rewarding flexibility	<ul style="list-style-type: none"> How much is the buyer prepared to pay the provider? How does the provider get paid for the service they are providing? 	<ul style="list-style-type: none"> Network perspective: Evie, Scott, James Market perspective: Buddhika, Fiona, Jason, John Review: Shay, Tom, Eric 	Initial discussion 9 June
2. Minimum contracting arrangements	Document insights from discussions and review contracts / identify minimum contract terms	Secretariat	Initial draft by 26 June
3. Connectivity & communication	<ul style="list-style-type: none"> Workshops to develop requirements for sending/receiving instructions, measurement and validation 	Terry, Matt, Quintin & Mike	Workshops being scheduled
4. Product templates	Develop and refine templates for each service – distributor example being developed	Secretariat, Evie, Buddhika	Initial draft by 26 June
5. Connection requirements and DOEs	Options and pathway for flexibility to maximise access to networks	Secretariat coordinating input from Shay, Glenn, Evie, Scott, Eric	Initial draft by 26 June
6. Pre-procurement information – planning & operational information	<ul style="list-style-type: none"> Refine planning & operational information (tables 1 & 3 of first paper) Workshops to test terminology and descriptions 	Secretariat, Evie, Buddhika.	During June. Closely related to task 4

Five main services and three types of response to network, system & market conditions

Peak shifting to obtain...

- Portfolio optimisation
- Predictive congestion management
- Generation capacity adequacy

Demand adjustment to obtain...

- Portfolio optimisation
- Corrective congestion management
- Generation capacity adequacy
- Balancing

Generation adjustment to obtain...

- Portfolio optimisation
- Corrective congestion management
- Balancing

Characteristics of service

- Shift load
- Shed load
- Shimmy load (up or down) over short timescales
- Share load (up or down) routinely over long timescales

Planning & operational criteria of service

- Detection & location
- Procurement & deployment timeframe
- Lifespan
- Speed & duration of response

Exchange (procurement) mechanism

- Price flexibility (indirect)
- Contracted flexibility (direct via buyer or platform)

Services used to respond to a need

- standard specification (ie, the technical characteristics and criteria)

Counterparties

- who are the contracting parties
- who operates the exchange mechanism

Payment & compensation

- How is value calculated
- How is value signposted

Workplan topic D

Terms of trade

- Conditions on participation, eg registration
- Liability & non-performance
- Option to deliver

Commercial (topic C and D)

Communication & connectivity

- Sending & receiving instructions requesting delivery (type & timing)
- Performance & measurement of delivery

Coordination

- Tx & Rx interface
- Wholesale market

Operational (topic C)

Investment information

- Planning information. Actual or forecast demand for a need & response
- Connection requirements + DOEs
- Signalling information. Timing and location of need & response

Planning (Topic D)

Customer proposition

- Factors enabling or blocking creation of attractive and effective propositions for transacting flexibility

Implementation (topic E)

Technical (topic B)

• Key underway

• Tasks being completed by FF or others

Administration – governance, budget & funding

- Update