Network Innovation Advisory Committee

9 December 2019

Ausgrid

Agenda

#	SESSION	FACILITATOR	TIMING
	Arrival / Coffee / Greetings		1:45 – 2:00
1	Introductions & Updates from Committee	Junayd Hollis	2:00 – 2:15
2	Review of Actions	Junayd Hollis	2:15 – 2.45
3	Program Communications	Alex Moran	2.45 – 3:00
4	Community Battery Update	Felix Keck	3:00 – 3:15
5	DSO Update	Junayd Hollis	3:15 – 3:45
6	Next steps - 2020 meeting dates		3:45 – 4:00

Introduction & Updates

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Review of Actions

	Action Items	Status	Comments
1	Ausgrid definition of resilience	Complete	To present and discuss in meeting
2	Highlight link between Network Innovation Program and Ausgrid Strategy.	Complete	To present and discuss in meeting
3	Confirm process to report back to NIAC on project expenditure and how feedback has been incorporated in programs.	Complete	To present and discuss in meeting
4	Sensitivity weighting poll	In Progress	To present and discuss at next meeting
5	Community Batteries - Discuss outcome of feasibility study and provide an overview of regulatory issues to be addressed	In Progress	To present and discuss in meeting
6	DSO – present restructured table showing alignment with ENA EnOPN models and Ausgrid proposal.	In Progress	To present and discuss in meeting
7	DSO – Provide update on scope and objectives of DSO project and demonstrate alignment with NIAC criteria	In Progress	To discuss in meeting

Action 1: Definition of resilience

Drawing on key themes and definitions for the term **“resilience”** used by the AEMC, AEMO, and the IEEE Power and Energy Society we have defined **“improving resilience”** as:

*“the **ability** to **anticipate, withstand**, quickly **recover*** and **learn** from **disruptive events,**** particularly **high impact low probability (HILP) events.***

** Recover in this context refers to reconnecting as many customers as quickly and safely as possible to minimise customer time without power.*

*** Disruptive events refers to events such as extreme weather events, cyber attacks, or losses in power supply from fluctuations in intermittent energy sources.*

Does the NIAC support the use of this definition?

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Action 3: Network Innovation Program Dashboard

ID	Project	Project Stage	Estimated Budget $m	Actual YTD Spend $	Status	Update/Comments/Feedback	High Level Project Timeframes
							2020 2021 2022 2023 2024
A.	Advanced Voltage Regulation	Design	$3.0	$14,245		First unit to be delivered in January	
B.	Network Insight Program	Design & Implementation	$10.5	$646,675		ARENA EOI Submitted with EQL	
C.	Fringe of Grid Optimisation	Feasibility	$4.7	0		Feasibility study planned for early 2020	
D.	HV Microgrid Trial	Not yet commenced	$17.2	0		Not yet commenced	
E.	Advanced EV Charging Platform Trial	Not yet commenced	$1.2	0		Not yet commenced	
F.	Grid Battery Trials	Feasibility	$2.0	0		Feasibility study completed	
G.	Portable All-in-One Off-Grid Supply Units	Not yet commenced	$1.0	0		Not yet commenced	
H.	Self Healing Networks	Execution	$0.6	$92,383		Trial due for commissioning early 2020	
I.	Dynamic Load Control	Not yet commenced	$0.6	0		Not yet commenced	
J.	Asset Condition Monitoring	Feasibility	$0.6	0		Market product review underway	
K.	Line Fault Indicators	Feasibility	$0.6	0		Market product review underway	

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Program Communications

Knowledge sharing approaches may vary from project to project. Some of the approaches that will be used include:

- Leveraging Future Networks Forum as a sharing platform & collaboration platform
- Quarterly updates on the Network Innovation Program
- Project specific fact sheets, updates, and materials
- Establishment of a Network Innovation Program mailing list
- Establishment of a Innovation & Collaboration Register

Are there any other approaches the NIAC thinks that we should be taking to share & collaborate insights?

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Community Battery Update

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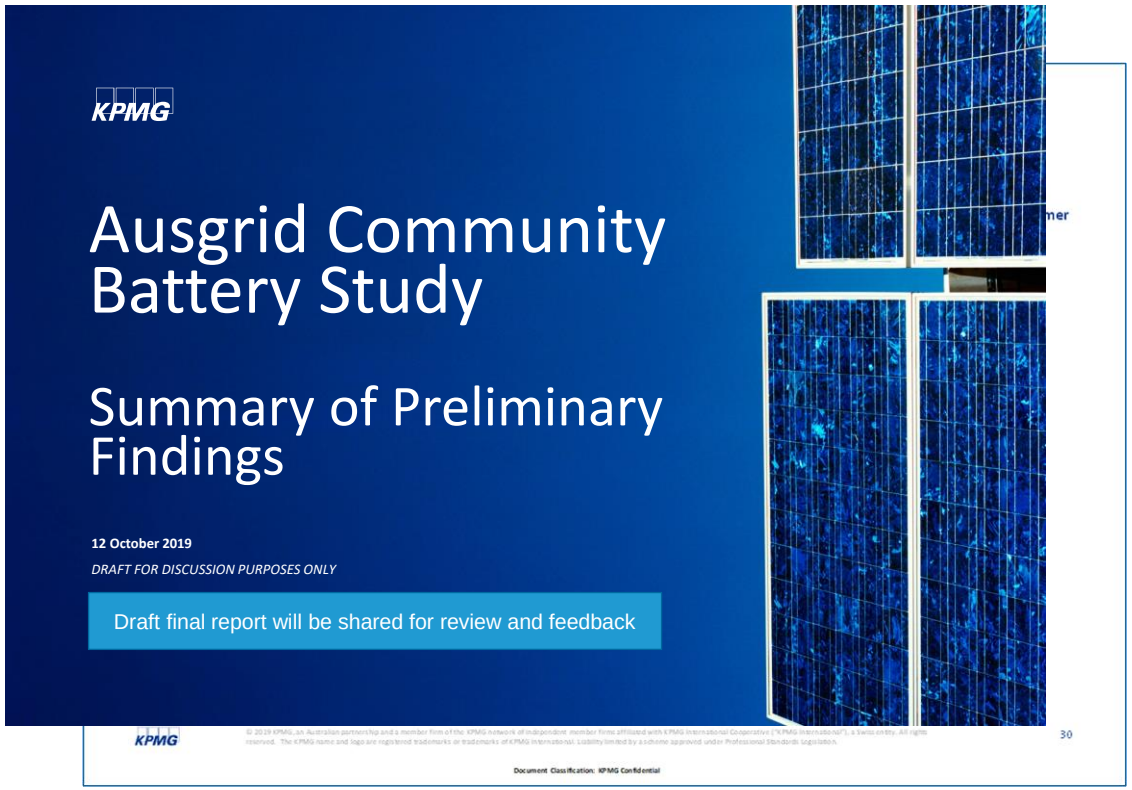
Summary presentation of KPMG feasibility study discussed – full report due for circulation once completed by KPMG

Feasibility study outcomes



- **Two** separate Feasibility Study outcome **presentations** were held on:
  - Friday, October 18th
  - Friday, November 8th
- A few points were discussed around sensitivities and technical details – no major concerns were raised
- Full KPMG report due to be circulated once completed by KPMG

Are there any further comments or questions from NIAC?

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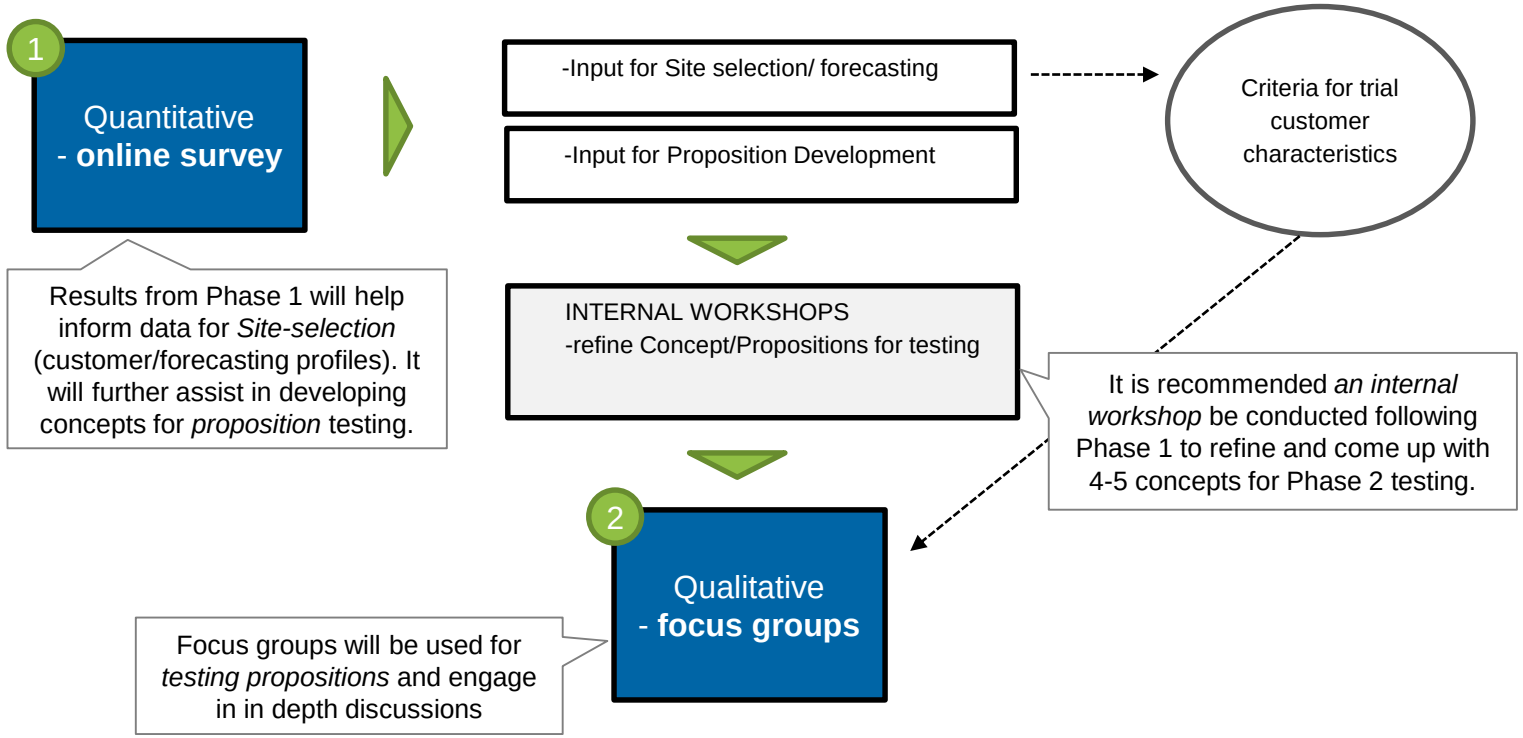
Overall proposed customer research framework will include 2 key research stages – an *online survey* and *customer focus groups*

Suggested research approach



1
- Phase 1 of this study will involve a Quantitative study among Solar and Non-solar customers.
  - The survey will be conducted online.
  - Participants will be asked if they would like to participate in Phase 2 of the study.

2
- Phase 2 will be exploratory, qualitative group discussions are recommended with 'ideal'/primary target customers.
  - This target group will be defined based on Phase 1 results in consultation with forecasting/site selection criteria.

Are there any comments or suggestions from NIAC? Would

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Customer interaction | Ausgrid internal

DSO Update

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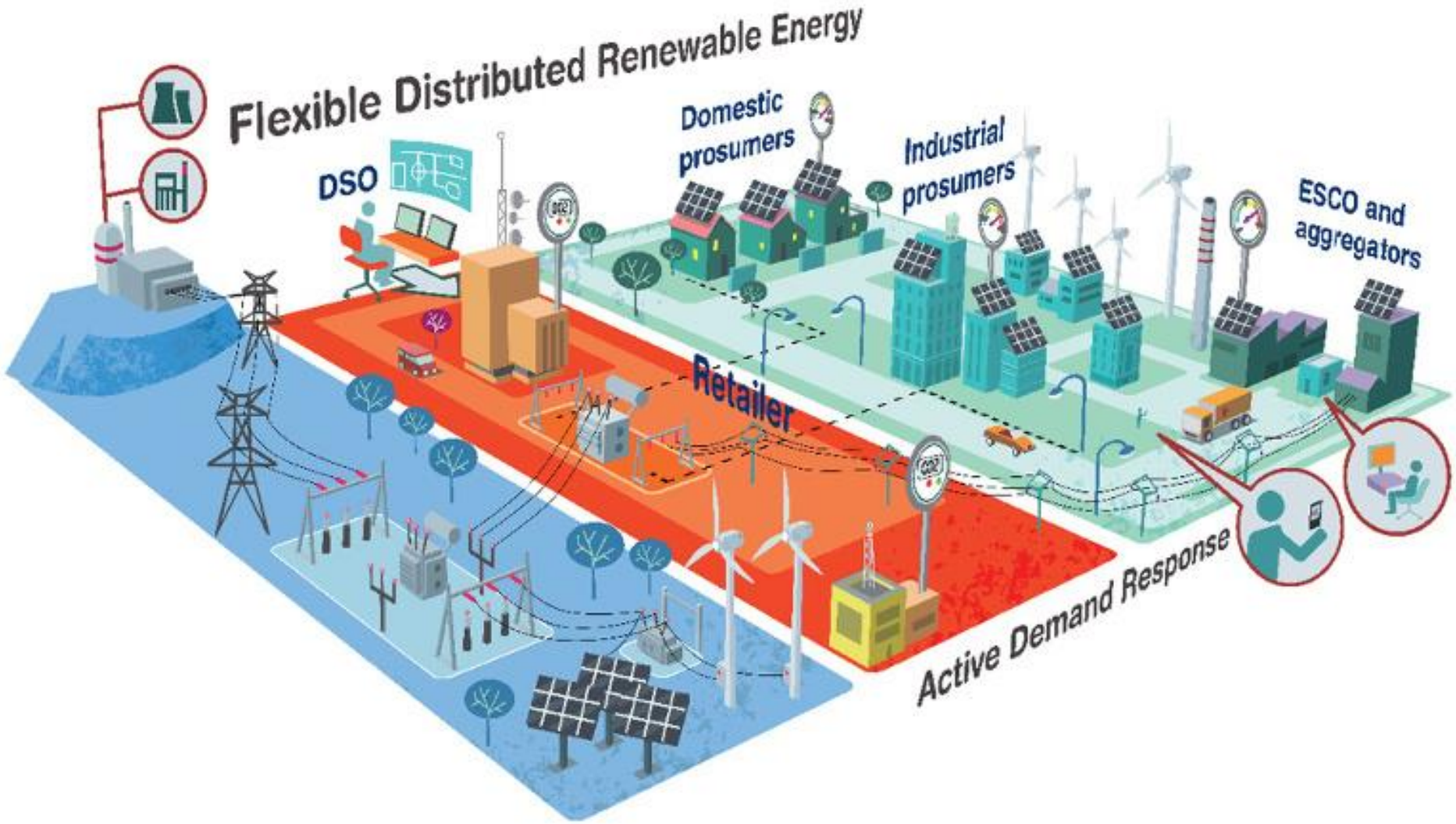
DSO Overview



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DSO Activities & Models

Industry Capabilities	New Activities	Open Energy Networks Frameworks				Ausgrid learning period	Comments
		iDSO	SIP	Hybrid	TST		
Customer Management (Networks)	• Offering of new connections products • Supporting customers to connect DER • Customer engagement	DSO	DSO	DSO	DSO	**Trial, learn, enhance**	• Core DNSP responsibility • Approach is to trial, learn and enhance existing capabilities • Initial focus on DSO Connection Agreements and publishing data
Network Planning	• Network monitoring and planning • Strategic planning and network development • Develop network operating envelopes • Operational planning and investment prioritisation • Procurement of scheduled flexibility services • Maintain and update DER Register						• Core DNSP responsibility • Approach is to trial, learn and enhance existing capabilities • Initial focus on new non-network solutions (flexibility tenders and services)
Network Operations	• Forecast network operating state • Active network management • Optimise the system in real-time • Solve network constraints and needs • System security and resilience	iDSO or MO	MO	MO			• Logical expansion of core DNSP responsibility • Ausgrid deploying the Advanced Network Management System and ways of working
Commercial and Market Operations	• Develop flexibility product and services • Operate market infrastructure / platform • Market data and external communications • Financial data and settlement						• Extension / new DNSP responsibility • Community Battery to test business model options and capability requirements
Market Participants	• Customer engagement • Aggregate DER • DER control • Sell load and service offerings to the system	AGG	AGG	AGG	AGG		• Currently managed by aggregators ./ retailers and services are procured from these participants.

DSO – DSO responsibility
MO – Market Operator responsibility
AGG – Aggregator responsibility

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Next Steps

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Thank you