

Network Innovation Advisory Committee

December 2020 Update Pack



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Review of Actions



Review of Actions

	Action Items	Status	Comments
1	Compare innovation priorities to the feedback on priorities from customers in the CCC and report back by exception.	In Progress	In progress
2	Reference findings of ECA Consumer Expectations research when defining measures of success for SAPS.	In Progress	In progress as part of project development
3	Provide a view on the potential benefits of the travelling wave technology and the potential scale of a rollout if the trial is success	In Progress	In progress as part of project development
4	Provide feedback on the dynamic load connection pilot offer - why the business did not sign up	Complete	Please see slide 5
5	Provide more information on customer interface for community battery trial	In Progress	In progress as part of Customer Partner development
6	Provide committee with customer partner models for community battery trial	In Progress	In progress as part of Customer Partner development
7	Provide committee with any technical documentation available for neutral integrity monitoring trial	In Progress	In progress as part of project development



Action Updates

	Action Item	Status
4	Provide feedback on the dynamic load connection pilot offer - why the business did not sign up	Complete
	• In May 2020 Ausgrid offered a dynamic connection agreement option to a large data centre to connect to a highly congested part of Ausgrid's netw	ork.
	• When examining the connection application, a temporary capacity constraint was identified which would exist until the final 33kV solution was buil	t. Significant

- When examining the connection application, a temporary capacity constraint was identified which would exist until the final 33kV solution was built. Significant augmentation costs would be incurred to support a temporary 11kV connection. A large dynamic connection offer was introduced to address the capacity constraint and some augmentation costs. Under the agreement, the customer would be required to leverage their backup generation to decrease imports during system stress events. The customer chose to forego the temporary dynamic connection option in favour of waiting for the future 33kV connection.
- We note that the desirability of a dynamic connection agreement with a large business customer is very dependent on the value to the customer of the connection cost savings vs the cost of any constraints it places on their operations (either actual constraints, or in terms of their ability to market their capabilities). This will vary significantly from customer to customer and from industry to industry.
- We are continuing to pursue opportunities to facilitate the connection of large customers in capacity constrained areas through large dynamic connections where it is expected to deliver better options and greater value to those customers.



Network Innovation Dashboard



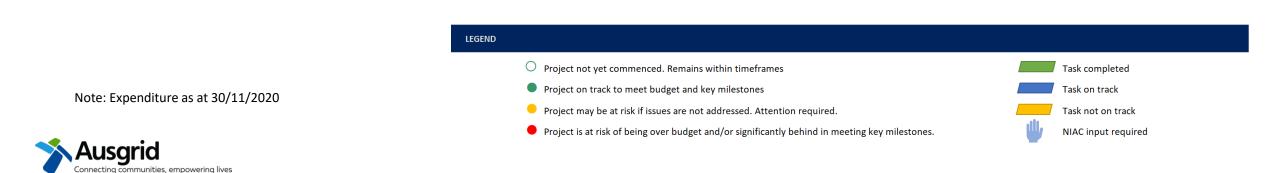
Network Innovation Program Dashboard

Connecting communities, empowering lives

Workstream	Project Score	Estimated Budget \$m	Actual Spend \$m	Committed Spend \$m	Status	Update/Comments/Feedback	High Level Project Timeframes					
workstream							2020	2021	2022	2023	2024	
Advanced Voltage Regulation	3.45	\$3.50	\$0.33	\$0.50		LV Statcoms for Stage 2 delivered and tested, designs for first site complete and ready for installation in December.	Stage 1	ge 2 - LV	age 3 - HV Regulati	ion Research & Trials		
Network Insight Program	3.82	\$12.33	\$2.32	\$5.12		New device designs commenced and implementation of deployment plan underway. Evolve platform integration commenced.	Distribution Monitoring & Control Strategic Deployment Evolve Project Future DSO Visibility Trials					
Fringe of Grid Optimisation	3.71	\$4.97	\$0.11	\$2.38	•	Request for Information released to the market for potential SAPS suppliers. Community engagement strategy development underway	Stage 1 - Develop and trial Stage 2 - Pilot Program					
HV Microgrid Trial	3.44	\$19.00	\$0.00	\$0.00		Feasibility studies underway.	Stag	ge 1 - Feasibility	Trial pr	ogram to be develop	ed	
Advanced EV Charging Platform Trial	3.53	\$1.30	\$0.00	\$0.00	0	Not yet commenced.		I		To be developed		
Grid Battery Trials	3.81	\$3.04	\$0.67	\$2.37		Battery supplier contracts signed. Three site selected in Lake Macquarie, Northern beaches and Canterbury-Bankstown. LGA consultation underway	Stage 1 - Dev	velop and trial	Stage 2 - Pilot Dep	¥_	aluation	
				LEGEND								
Note: Expenditure as at 30/11/2020						oject not yet commenced. Remains within timeframes oject on track to meet budget and key milestones oject may be at risk if issues are not addressed. Attention required. oject is at risk of being over budget and/or significantly behind in meeting key mile	estones.		1			

Network Innovation Program Dashboard

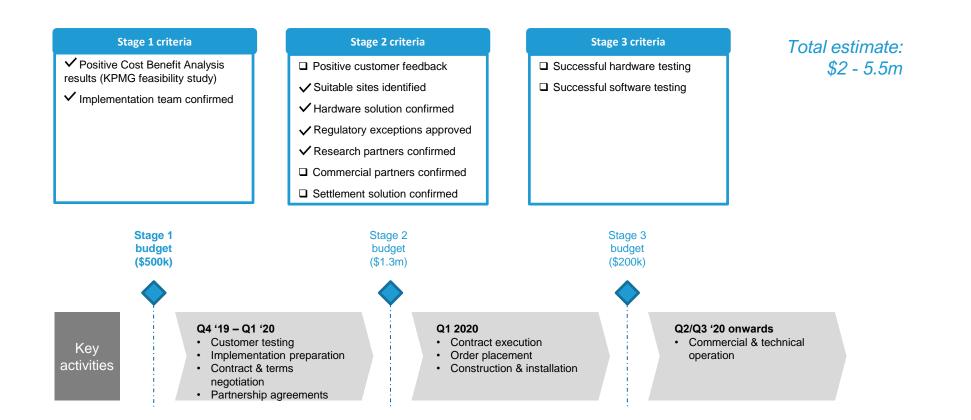
Morket room		Estimated	Actual Spend \$m	Committed Spend \$m	Status	Update/Comments/Feedback	High Level Project Timeframes				
Workstream		Budget \$m					2020	2021	2022	2023	2024
Portable All-in-One Off- Grid Supply Units	2.51	\$0.50	\$0.00	\$0.03	•	No suitable products yet identified.	Market Revie	w Device	trials		
Self-Healing Networks	3.58	\$0.63	\$0.17	\$0.20	•	Testing of Castle Cove has commenced.	Castle Cove tr	ial	,	Future automation	trials
Dynamic Load Control	2.83	\$0.70	\$0.00	\$0.04		Market immature. Will continue to explore options to develop market.	Engage marke	t Tech t	rials		
Asset Condition Monitoring	3.17	\$2.79	\$0.15	\$0.56	•	Travelling wave fault locating trial commenced but potential design delays. Neutral integrity device trials in approval phase.	Scoping Study	Fault Location 1			,
Line Fault Indicators	2.75	\$0.70	\$0.04	\$0.04	•	One trial device failed lab testing. Further review of devices underway.	Develop optio		evice trials		



Community Battery Project Update



Progress to Plan





Project update

Regulatory

• 2/11/20 AER staff issued a letter confirming phase 1 of our trial does not require a waiver, as it is a 'virtual' trial and we are not formally providing a service.

Stakeholder

- Positive feedback from all three councils (Lake Macquarie, Canterbury Bankstown, Northern Beaches)
- Some resident concerns regarding visual and noise impact at Charlestown
- New designs in development to mitigate these concerns. These proposed designs will be shared with residents for feedback prior to Christmas
- No responses during resident notification period at other sites
- We have issued a second notification letter to confirm no concerns

Customer

- Finalising customer partner selection which will deliver customer facing app, billing, data provision etc
- Qualitative survey completed early Dec
- Survey results are being compiled before Christmas

Project update

Engineering

- New wrap designed for MTU battery to reduce visual impact and help to explain project to passersby (battery will be located in a park).
- Developing communication protocol between kiosk substation and battery
- Developing technical guideline for configuration and operation of the battery (including safety requirements)
- Settlement solution investigation commenced
 Timeline
- Finalise customer partner selection (Dec)
- Ongoing resident consultation (Dec / Jan)
- Battery commissioning (Jan / Feb)
- Onboard solar customers (Mar)
- Installation of 3rd party metering device (Mar)
- Solar storage commencement (Apr)



Stand Alone Power System Project Update



Progress Update

Supplier Engagement

- We released a 'Request for Information' (RFI) to the market in late November, targeting potential SAPS suppliers
- We are seeking information on supplier's capabilities to:
 - Design
 - Supply
 - Install
 - Operate
 - Maintain
- The RFI closes on 18 December, and we will use the responses to finalise our operational model, and also produce a 'Request for Tender' for shortlisted suppliers.

Community Engagement

- We have drafted a community engagement plan, that will be developed over early 2021 with the assistance of an external partner
- This includes:
 - Community survey development
 - Preparation of key messages, fact sheets, website materials
 - Stakeholder engagement briefs material for State and Local Governments
 - Potential announcement
 - Targeted customer engagement
 - Trial customer sign-up activities



AER Ring Fencing Review



AER Ring fencing Review

Background

- In November 2020, the AER re-commenced its review of the distribution ring fencing guideline.
- In its issues paper, the AER proposed changes to the guideline to reflect the changing nature of services offered by distribution businesses, including via new technology such as SAPS and storage devices.
- Some of these services operate at the boundary between regulated and unregulated electricity markets. The AER is keen to enable distributor adoption of these technologies whilst at the same time not stifling the development of competition in emerging markets.

Ausgrid Views

- We support:
 - Clarifying the guideline to make it clear that a distributor can grant another legal entity the right to use its assets for the purposes of earning unregulated revenue, beyond the shared asset rules.
 - Including additional exclusions in the guideline, for example, for indirect use of a battery by market participants.
 - Extending the timeframe for the granting of waivers to more closely reflect the life of some of the assets that may be subject to waivers, such as SAPS and batteries.
- Submissions are due on 21 December 2020.



Thank you

