



Future Networks Sub-Panel

Meeting #4 | Summary Notes

Details	Members	AusNet Staff	
10.00am-1.00pm Tuesday 22 August 2023	Chris Harvey	Ana-Maria Faccin	Matthew Charles Jones
Online (MS Teams)	Darren McCubbin	Charlotte Eddy	Shuyi Li
Chair: Charlotte Eddy	Dean Lombard	Chirag Desai	Sonja Lekovic
Secretariat: AusNet	Emma Chessell	Gaurav Sharma	
	Kate Hansen	Jade Park	
	Linus Mayes	Justin Betlehem	
	Nando Ochoa		

The focus of this session

Focus Question	Objective of the meeting	Key agreed positions	Next meeting objectives
FQ2: How might we support communities to realise their needs and energy aspirations?	Collaborate (reaching in-principle agreement) on the role of networks in enabling and investing in community energy solutions (as per agreed definition and community needs)	AusNet has a role to play in providing data and guidance to communities to help them achieve their objectives, which includes unlocking more network value. AusNet should only invest in community energy where efficient. Community engagement and a personalised approach to SAPS is critical. This is a new role for AusNet that may include solutions that don't apply to other parts of the network. AusNet should not bill SAPS customers as it is inefficient.	Early 2024 Involve on any proposed initiatives for community energy enablement, including considerations of what communities can provide for themselves and what options AusNet can provide.

Item	Time	Topic	Lead/s
1	10:00am	Agenda and general items	Charlotte Eddy
2	10:10am	Vic Gov ban on new gas connections	Gaurav Sharma
3	10:35am	Deep dive: Community energy solutions	Matthew Charles Jones
	11:30-11:40am	Break (10 mins)	
4	11:25am	Deep dive: SAPS	Shuyi Li & Justin Betlehem
5	12:15pm	Open floor	Charlotte Eddy
Close	12:28pm	Close & next steps	Charlotte Eddy

Summary

Welcome & Introduction

Key points

- Sonja from AusNet provided an update on the actions from the previous meetings and advised that many actions will be addressed in meeting 5 in September and meeting 7 which will be held in 2024. Some items were being held up due to the process to finalise the RINs.
- A panel member asked for clarification on the RINs. AusNet advised that it stood for Regulated Information Notices and provided a link in the group chat where panel members could access them.
- AusNet recapped some of the key overlaps identified in the in-person session and the plan to address them by working with the panel leads to make sure there is enough information sharing, and through sharing meeting summaries on the Community Hub webpage.
- A panel member noted that it would be helpful for the Future Networks panel to have a joint meeting with the Tariffs and Pricing panel. AusNet agreed with this, and informed that they will be holding in-person overnight meeting with all the panels every 6 months.

Part 2: The Victoria Government ban on new gas connections

Topics	Discussion points
Developing focus questions	• AusNet provided an overview of the Victorian Government's ban on new gas connections in homes from 1 January 2023. This included an overview of AusNet's initial considerations and further research that will be undertaken to gain a deep understanding of the impacts this will have on customers and AusNet, including changes to load profiles. • A panel member asked how the customer profile electricity usage compared to customers gas usage and what the difference is in the energy requirements of homes that are designed to 4kVA or 10kVA. AusNet provided an explanation that the range is based on the Alpine area which has a lot of slab heating, which consumes a lot of energy. • There was also a question around whether there would be need for more infrastructure, following a presentation from DEECA on the gas ban decision, which included a comment around no additional demand peaks resulting from electrification. AusNet provided a response that our view is that infrastructure uplift will be required and explained that DEECA's assumption are based on households using their air conditioning split systems for heating and diversifying other load. This is not what AusNet's data shows clearly, but we will conducting more analysis to understand the impacts of the decision over time. • There was a question around how many homes will be affected by the ban in the next five years (including what time lag we assumed in coming to that number) and whether AusNet can share that information. • There was also a question around how good AusNet's data is on the take up of gas over the last few years, and how that load will need to be substituted by electricity going forward – whether AusNet has data or makes assumptions. AusNet explained we have to make some assumptions, but our smart meter data can be used to support robust assumptions. • A panel member asked if AusNet can separate and identify what customers are using gas and electricity for which appliances (e.g., heating, cooking etc). AusNet responding that that type of analysis is something we are looking at for the moment to provide sensitivity to our modelling. This is part of developing future customer and usage profiles, which will need to be reflected in our demand forecasting. Some of the data can come from the Customer Segmentation study.

Part 3: Deep dive: Community energy solutions

Topics	Discussion points
Community energy solutions and AusNet's role	- AusNet provided an overview on community energy and the challenge for AusNet on how they continue to provide a safe, affordable, reliable and clean energy to all customers, regardless of whether they're small households or large industry. AusNet provided an overview of community groups around Victoria and the types of renewable energy projects that they are working with AusNet on. - A panel member raised that there can be confusion amongst community groups around understanding what areas of AusNet's network are experiencing the biggest challenges, where community energy solutions can provide value. There was a question around how community groups might get a better understanding around that. AusNet responded that recently a portal was established with more data helping communities understand the network, and in the future we are looking at creating a portal that can include AusNet reaching out to communities asking for support in the areas where most needed. In the meantime, we engage parties providing network support through contracts, where relevant. - There was positive feedback about AusNet's recently launched portal, however a challenge was highlighted that it is not possible to go into the portal to have a look around, or without a specific address. It limits opportunities to understand opportunities across AusNet's network, to allow proponents to find areas where AusNet is experiencing most challenges. There have been conversations with AusNet in the past, but never seem to get to a point where those areas are identified. - AusNet responded by saying that they will be looking at how they can make the portal more user friendly over the next few months, including potentially developing heat maps, to be published in the coming months. The panel member advised that this would be great and supported this work. Panel members agreed that the information on grid view portal has been very helpful. - A panel member raised it is unfortunately that the timing of government funding for community energy solutions like microgrids etc hasn't aligned well with the timing of AusNet's new portal and improved data sharing (the community energy projects started years ago but didn't have the data they needed). Applauding the new portal but highlighting some projects would have benefited from it earlier as communities are still naïve around where funding comes from and the benefits, and the data from AusNet is essential in assisting communities. AusNet can play a role in educating communities on community energy. - AusNet asked the panel members if networks constraints as a key driver for community energy projects, if it's something that is helping unlock the value once they've put in place, or if it's just a subset of projects are driven by this. A panel member answered that it is a key consideration and where communities see value in solving network problems, it excites and energises the community. For those in areas where there are no constraints, it's a strong message to communities on where the opportunities may not be (or may be). The panel member is keen on AusNet not misleading the community by either not sharing enough information or giving wrong signals. AusNet should intervene and be proactive and upfront about this data. - Another member added there are a lot of reasons a community would be interested in an energy project, and it is really good to have an openness to talk to communities about their needs and what the role of the network is. When this type of education goes well it goes far in building trust and social licence. Misunderstandings can lead to disillusion and lack of trust. - AusNet asked if and how they should prioritise conversations with different communities, given the number of communities interested in projects, or whether

it should be a basic offering only, e.g. providing basic level of data and information. A panel member responded there should be a base level of information shared with communities, with a level of internal research before responding (tailored to their question). Where there are opportunities (e.g., for network support), that's when the network should take it to the next level.

- Another member highlighted the importance of giving communities the positives and negatives of community energy projects early, as communities can get excited when new technologies are introduced, without understanding whether they are ultimately beneficial or simply won't work.
- A panel member highlighted that community energy projects might have goals and objectives that are beyond the energy system, like growing the local economy. This is something networks should be aware of when assessing efficiency of projects.
- AusNet asked the panel members if they see any benefits in networks going above and beyond their usual investment process, where AusNet would only invest if there is value of network support. A member highlighted how nuanced these issues are, and that in some cases, looking deeper at these projects might uncover some network value that would not have been known otherwise. There is also probably a role for network affiliated companies to play in engaging with the community and assisting them with energy project. Another member added that the suggestion from a previous meeting regarding the need for a back-casting approach for distribution system design incorporating DER, from a fully transitioned energy system, may be necessary.
- It was suggested in the chat that AusNet could partner with communities where the funding is shared in a way that AusNet contributes towards network benefit and the community contributes the rest. AusNet confirmed this is a viable path forward.
- A member highlighted there were some hiccups with the Mallacoota battery in operation, and whether this is a common program on the network. AusNet responded there have been some operational difficulties of moving from a generator to a battery, but AusNet is working on re-integrating the battery for smoother operations. Some issues also arise from different battery standards and their use in Australia. Another member mentioned that given these are novel technologies some teething issues are not surprising.
- AusNet highlighted Energy Networks Australia (ENA) is working on a white paper around battery standards for Australia, and a member indicated this is something that would be useful for communities (as they do not always know there might be issues). Also, AusNet should not be comfortable with communities blaming AusNet for things not working if the real reasons for things not working could be shared.

From the Padlet

Should AusNet play a bigger role in delivering and investing in community energy solutions?

- There is support for Ausnet's involvement in the current phase of experimental and early deployment distribution scale projects that can be called 'community' scale. However, ultimately, when adopting long term solutions, there are equity considerations that need to be resolved for a distribution-led project - eventual models should aim for efficient deployment of batteries that deliver benefits equitably and don't exclude vulnerable or low-income consumers from the benefits.
- The bigger role needed is (a) engagement with the communities; and (b) focus on equity and benefit sharing across the diversity of the community.
- A member added that community energy solutions have to be driven by networks, since they have a more robust understanding of local capacity/constraints and are the ones with the responsibility to maintain supply.

LV batteries are a great start, and hopefully will save the network/customers a lot of money by deferring network upgrades.

How should AusNet prioritise investment in community energy solutions, when support is requested by various communities?

- A member added that an efficiency approach would be useful in combination with a co-contribution requirement from the community. Another member added that they would like AusNet to prioritise export capacity, reliability of the Network and lower costs for community groups. And another member added the focus should be on shared benefits.
- It was also added AusNet should prioritise the cheap & easy ones to hit the ground running. Learnings and momentum will justify and help the delivery of more complex projects.

Part 4: Deep dive: SAPS

Topics	Discussion points
Regulated Standalone Power Systems (SAPS) trial and regulatory reform to enable them	• AusNet gave an overview of the current SAPS program and the benefits of the program, including reducing bushfire risk (which was a question asked in the chat). AusNet indicated there are more SAPS planned, however, the current national framework needs to be actioned in Victoria for AusNet to be able to remove the line and treated these SAPS as physically disconnected from the network. • There were some questions around what is needed regarding the regulatory framework to allow AusNet to operate SAPS. AusNet explained the regulations in Victoria need to be updated to establish that SAPS are physically separate to the network and still part of the network. These updates would allow AusNet to remove the line that now connects the SAPS to the physical network. It was explained the benefits are the highest if AusNet can remove the lines that are expensive to maintain. • A member asked about the kind of retail savings SAPS customers could experience. AusNet explained there could be savings from the retailer not having to pay line losses (which are reduced with SAPS). However, there is no guarantee retailers would pass on this saving. • A question was raised around where the Victorian Government is at with regard to making the regulatory changes, and why there is a retailer at all at the SAPS site. It was explained that the framework was developed to mirror the network-connected customer framework as much as possible, and that there are inefficiencies in networks providing the retail service to these customers. AusNet's experience shows, with customers at Mount Baw Baw, that it can be more costly and inefficient to bill a small number of customers. • A member mentioned that it's unlikely retailers would pass on the savings to customers, and that it is strange that customers are being charged for using the energy when it can't go anywhere else. It was seen a potential barrier for people taking up the SAPS option. It was mentioned that network tariffs might need to be altered to provide more incentive for customers to go onto SAPS, particularly for customers with solar exports (before moving to SAPS). • There were questions around who looks after the diesel generator and AusNet explained the diesel generator is managed by AusNet through a system that notifies AusNet when a refill is needed. • AusNet mentioned that insulation and the efficiency of the home that is connected to the SAPS makes a difference to the effectiveness of the SAPS and how much energy is needed (especially when the sun isn't shining). There was a question around whether AusNet can pay for a customer to improve energy

efficiency in their home, to reduce the need for a larger SAPS. AusNet said it could potentially be a non-network solution but might need further thought as to what is possible.

- There was a question around how SAPS adopt to changing energy demand or high energy demand through new load like electric vehicles or electric farm equipment. AusNet explained in the first trial the focus was largely on customers with smaller load, but further thought need to be given to larger loads for the future.
- There was a question around AusNet's insurance and what the implications of SAPS are on obtaining insurance. AusNet explained that it's likely that reducing the highest risk lines would reduce risk, but not sure if we would see the cost fall as insurance costs are highly exposed to global markets. Insurance of the SAPS systems are consistent with AusNet's existing insurance arrangements for network assets. It also hasn't affected any of the SAPS customers' home insurance policies.
- A member mentioned that removing the line that physically connects the SAPS to the network might make the customers less flexible to growth in demand, or for the SAPS to grow. AusNet explained new customers can be connected to any existing SAPS in the future, and the distributor would upgrade the SAPS capacity if needed.
- A member indicated surprise by the number of residents that didn't want to be connected to a SAPS, which may be due to no ability to export excess solar, or it could be psychological factor from being removed from the network. More consultation with communities to explain that customers will not be any worse off, and likely to be better off, is important. AusNet explained that we are surveying SAPS customers to understand their views and what they are advising their neighbours. It was recognised that the first customers took a leap of faith, and now we might be in a different circumstance where we have evidence of the type of service the average customer may get. It was acknowledged that having the voice of the customer is important in representing those benefits.
- It was recognised that hesitation may be because people are not sure what type of energy needs, they will have in the future and would prefer the flexibility of being connected to the grid. It is a very personal decision.
- There was a question around whether there are implications for diesel generator on fire ban days, and whether the presence of diesel discourages people who are more focused on emissions reductions, and whether AusNet has had success explaining that a small amount of diesel enables more renewables in a SAPS. AusNet explained that there are risk assessments around how the diesel generator operates including fireproof materials, to ensure risk is lowered as much as possible.

From the Padlet

What are some of the key learnings from these trials AusNet can apply to other customers and communities?

- The number of properties that elected not to take-up the offer surprised me. My gut says that the method of consultation/information communication is likely to be a contributing factor.

Are there benefits or risks of SAPS we have not captured and should be considering?

- The broader acceptance of the SAP model may be at risk because it's not a 100% renewables solution.
- There is risk of technical failure like with the Mallacoota Battery.

How can AusNet evolve its community engagement to improve customer understanding of SAPS / willingness to participate?

- Support for the 'community-lead' consultation/communication model, that is where trusted community representatives play a significant role in the engagement process.
- Need to stress the regulatory environment that surrounds the deployments. Communities are concerned that SAPS mean lower servicing as they become responsible for their own energy.
- As they are mostly individual properties, needs a very personalised approach. Flexibility is paramount. The issue of future demand changes is critical – lifestyles change and past usage is an unreliable indicator of future usage. SAPS need generous contingencies to work properly.

Close & Next Steps

- A panel member asked to include discussion about the customer compliance with AS 4777 standard in solar inverter in the discussion for the September session.

Action items			
Action	Assigned to	Status	Due date
AusNet to provide more data and information on the impacts of the gas connections moratorium, once data and insights are available	Regulation	Not yet started	TBC
AusNet to investigate non-network solutions that benefit the network, such as subsidising insulation of houses	Regulation	Not yet started	2024

Padlet Board

Panel members were encouraged to add comments, challenge and questions to the Padlet online whiteboard ahead of and following the meeting, which can be accessed [here](#) or via the QR code at right.

