

UNDERSTANDING THE ELECTRICITY RELATED NEEDS AND WANTS OF CUSTOMERS: A STAKEHOLDER PERSPECTIVE (DRAFT PAPER)

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Introduction

The increased pressures facing a range of stakeholders when it comes to the procurement of electricity are becoming increasingly well understood. However, what is not so clearly understood are the potentially nuanced electricity related needs and wants across a diverse range stakeholder groups. For example, the issues faced by dairy farmers operating 24/7 in regional Victoria are likely to be quite different to a Local Council located in a metropolitan location. Gaining a better understanding of these differences is important for a network business like AusNet Services, particularly as we commence planning for the upcoming 2021-25 regulatory period.

Methodology

The study involved undertaking multiple qualitative and exploratory stakeholder interviews to investigate the needs and wants of customers regarding the supply of electricity to their organisation/business/members. Utilising a purposive sampling technique, the interviewed stakeholders included local councils (n = 18), large businesses (n = 13), small to medium businesses (n = 3), customer advocates (n = 9) and community energy groups (n = 2). Importantly, this study moves beyond the monochromatic perspectives of previous studies conducted for regulatory purposes, which have tended to focus solely on the views of residential customers.

Stakeholder interviews utilised a protocol of standardised open-ended questions, where each respondent was asked the same pre-planned questions to highlight differences in responses, yet retaining the flexibility to probe further into participants' answers. Qualitative data extracted from the interview transcripts are currently being analysed using a grounded theory framework (see Glaser and Strauss, 1967). This technique involves within case analysis to identify key components and the formulation of codes that then produce common themes. Cross case analysis will then be utilised to compare similarities and differences with respect to participants' response patterns and themes.

Results

A summary of preliminary themes and some key insights across each of the stakeholder groups are presented below. A more detailed analysis is currently underway and a full report will be provided in due course.

Salient themes	Large Businesses	Small to Medium Businesses	Customer Advocates	Community Groups	Councils
AFFORDABILITY					
Electricity affordability a key priority/concern	✓	✓	✓	✓	✓
Increasing electricity prices are of concern and creeping up to surpass labour costs	✓	✓			
Complex trade-offs are having to be made to ensure energy bills are paid on time (i.e., food vs. bill payment)		✓	✓		
Given the price pressure facing customer and stakeholders Networks need to exercise constraint within their next pricing cycles			✓		
RELIABILITY					
Reliability increasingly becoming a key priority/concern	✓	✓	✓	✓	✓
Large customers will have more to say about than smaller customers			✓		
Extremely sensitive to outages. If an outage is to occur at the wrong time during production there can be disastrous outcomes (i.e., days of lost production)	✓		✓		
Appreciate that unplanned outages are going to occur from time to time. However, would appreciate more proactive communications from AusNet Services regarding the reasons for the outage and what is being done to prevent the situation from occurring again in the future	✓		✓		
ENERGY EFFICIENCY					
Strong environmental focus driving considerable investment in energy efficiency efforts	✓		✓	✓	✓
Government requirements to meet certain efficiency standards a key driver for the implementation of efficiency programs	✓				✓
Energy efficiency efforts have predominately focused on the investments in new equipment	✓				
NEW TECHNOLOGY ADOPTION INTENTIONS					
There is widespread interest in new energy technology (especially solar PV). Organisations are looking for ways to reduce their electricity costs utilising technology	✓		✓	✓	✓
There is an increasing trend in the size of solar systems that customers and stakeholder are looking to install. Many are getting themselves 'battery ready'			✓	✓	✓
Changing organisational mindsets and attitudes towards renewable technologies are encouraging innovation in this space	✓		✓	✓	✓

Government focus on renewables a key driver of investment in this space (esp. Government owned organisations)	✓				✓
Long payback periods are a key barrier to the adoption of new technology (especially storage batteries)	✓	✓	✓	✓	✓
Exploring innovative ways to generate electricity from existing wastes sites (i.e., biogas, methane capture)	✓			✓	✓
Collaborating with Councils and Community Groups to look at investing in large scale solar farms				✓	✓
Investment in renewables does not stack up economically (esp. for organisations with 24/7 operations). Electricity loads are too large to cover with any kind of renewable generation	✓				
CONNECTING RENEWABLES TO THE NETWORK					
The connection process needs to be streamlined so customers and stakeholders do not have to work too hard to get the answers. People do not understand network capacity constraints, they feel that it is a hard limit and that it is unfair			✓	✓	
We need a smart distribution grid that can handle decentralised distributed energy resources			✓	✓	✓
DEMAND MANAGEMENT					
There is considerable interest in Demand Management (DM) among customers and stakeholders but the concept requires significant education to successfully engage people			✓	✓	✓
DM is an unfamiliar concept		✓			
Strong willingness to utilise back-up generation to participate in DM opportunities	✓				✓
In the absence of back-up generation, strong willing to shift operation/production timelines to participate in DM opportunities	✓				
The costs associated with having to utilise diesel generation to participate in a DM event outweighs any economic benefit that could be realised (this is particularly the case for top electricity users). Typically use generation for emergency events only	✓				
Limited ability to participate in DM trials because main sites are often used as a place of reprieve from residential customers on hot days (i.e., civic centres, swimming pools)					✓
Believe that they can play a key or leading role in educating people around DM			✓	✓	✓
ACCESS TO DATA					
Heavily reliant on detailed consumption data to mine for efficiency improvement opportunities	✓				✓

Believe that having access to more accessible and readable interval data would be helpful	✓			✓	✓
Have employed dedicated resources to interrogate energy consumption data	✓				✓
Rely on the information presented on their bills to track changes in consumption. Do not have an interest in more sophisticated consumption data		✓			
Only a small proportion of involved customers would be interested in accessing data (i.e., small to medium businesses). It needs to be more understandable before others realise the benefits of this information			✓		
Network business, like AusNet Services, would be a trusted source of this information	✓		✓		✓