

Electricity Authority Advisory Group meeting notes

Short Notice Review – Small Business Definitions

1-2.30pm Monday 20 October

Attendees

Electricity Authority

Carl Billington - Principal Advisor Advisory Groups; Janet Humphris – Manager, Network Pricing; Bridget Moon – Concept; James O'Donnell – Principal Advisor; Oscar Horstmann – Senior Advisor.

Advisory Group

Jamie Silk (Chair); Jason Larkin; James Carberry; Jeremy Adamson; Keith Scoles.

Apologies

N/A

Confidentiality

The confidentiality status for this engagement was set as closed, temporary – the Authority is seeking advice ahead of public consultation on this topic. Discussions are confidential until this enters the public domain.

EAAG – Confidentiality & Information Sharing Rubric			
OPEN		CLOSED	
1. No restriction: share openly & widely	2. Limited: share in-confidence with a pre-agreed circulation. This might also mean we are open about the topic we are discussing but not the detail yet.	3. Temporary: will become open for sharing soon, but hold till then.	4. Confidential: Don't share.

Introduction and context

The Authority sought advice from the EAAG regarding the definition of small business consumers in relation to the [Competition Taskforce 2A Initiative](#) (requiring rebates for consumers who supply electricity back to the grid at peak times).

The Act currently defines “small business consumer” as those using less than 40,000 kWh a year. This potentially makes it hard for distributors to apply, as they generally work with connection capacity, not annual consumption. In addition, under this definition, some large generators could qualify for the negative charge, even though the policy is intended to apply to mass market consumers.

The Authority sought quick feedback from EAAG members ahead of public consultation on how to refine the eligibility rules to target the appropriate customers: the mass-market households and small businesses who typically can’t negotiate their own deals with distributors.

The Authority sought feedback on two specific proposals:

- To remove the reference to “small business consumer” and instead require that the negative charge is applied to price categories targeting business consumers with a connection capacity of 69 kVA or less. This would be in line with the new Network Connections framework.
- Whether to explicitly limit eligibility for the negative charge to distributed generation systems below a certain size – proposed at 10 kW. This would be in line with the simplest connection process for small-scale generation under the Code. It could be applied together with changes to the consumer definition, or as an alternative.

The key messages from the discussions were:

- The Authority should also consider a lower connection level that may be more consistent with the intended target of mass market and small business consumers and pragmatically align to current systems for implementation.
- The Authority should also consider aligning the effective export capacity cap (not nameplate capacity) with the connection limit as this is consistent with the intent to reward the benefits of DG at peak times for these targeted consumer groups. Setting a lower cap for exports may discourage efficient investment.
- There may be an evolving group of mass market and small business consumers that could be unintentionally excluded from the benefits of the 2A negative payments and work should consider these (e.g. customer and embedded networks that may include marae/papakainga and energy communities).
- There is a risk of diluting the incentive if the limit is set too high. This is as there is a fixed value of network deferral savings from peak injections that needs to be priced to distribute across all eligible kWh. Diluting the incentive too much would undermine its purpose.

As this was a short, one-off engagement in advance of consultation and no opportunity to seek supporting investigation work, the group did not seek to resolve complex differences and reach collective opinions.

Key discussion themes and feedback

Below is a summary of the key feedback and discussion points raised by advisory group members individually or collectively during the workshop:

- The 69kVA threshold could potentially include large scale generators unintentionally.
- There are challenges around identifying 40kVA consumers as distributors' price categories aren't designed to reflect these consumption levels.
- KW data only becomes available in hindsight, whereas price categories need to be determined upfront for billing data.
- There was a question of whether 69kVA is the right limit. The purpose of this is to enable small business and residential consumers to benefit from being able to inject back to the network.
- Is there a potential difficulty for community collectives (marae, papa kainga, neighbourhood initiatives etc) that might look like a larger connection threshold on paper?
- How will the approach handle embedded or secondary networks – is a look-through clause needed?
- Should there be a distinction between connection capacity and the assets involved?
- Having a capacity limitation helps EDBs but may work against the small end of town.
- The situation reinforces that EDBs need a lot more visibility of customer information and meter data.
- Things can also become complicated depending on whether you're relating everything back to the customer or the ICP (noting the two aren't always the same and some customers have separate ICPs for load and generation).
- Are customers designing for the connection size or not? If a 10kW inverter limit is applied, it may preclude this. That might have an impact for customers who work in a farming context and plan to optimise their set up around these situations. In provincial NZ, 69kVA is likely quite a high number.
- Other customers might be looking at a 12kW solar system. In that case a 10kW limit might be too low. 10kW could be quite limiting for those looking at 12-15kW systems.
- There was strong agreement regarding the challenges a 10kW inverter limit would potentially create – potentially ruling out small businesses.
- Recommendation to set it around 25/30 if this is really about small businesses – as the big end of town aren't operating in that threshold. There's a big step change between 30-and-below and 50-and-above.
- Do we need a DG limit? Could we just go with 60kVA and not put a limit on the DG side of things. Are there any risks of perverse incentives or outcomes, if this approach was taken?
- Currently, it's not economic to design just for exporting, so everything is still designed for the traditional consumer at the moment. Is there a need to change the investment signals to the market if we want to shift this?

- Instead of trying to classify what type of consumer we are dealing with – which is hard to verify and then necessitates associated eligibility criteria - we could focus instead on what capacity each user/ICP needs.
- It was observed the default approach relies on retailers to implement. Has the Authority considered the implications for networks that republish the tariff each year, and what obligations are being placed on retailers? How will retailers apply and pass on any costs associated with this?
- The group noted that additional validation steps will be required if the inverter threshold is different from the 69kVA load limits. Any variation for specific actors or assets in the system inevitably then requires validation processes.
- Aligning capacity and inverter size makes everything so much easier, but it does risk bringing the large end of town into the frame. It would also remove the need for look-through provisions etc.

The Authority asked if there were any other potential options EAAG members felt they should consider. The group added the following:

- A 63A connection is about 41kW. Could we use that instead of tipping the balance at 69kVA?
- Could we use phases – limit to a single-phase rather than a 3-phase approach?
- Some people might oversize their solar system (ie 50kW of solar on a 40kW connection). Has the Authority considered how to handle those situations? Another member commented that the alignment between the capacity size and the system size makes no difference in terms of export and another noted that inverters are likely to have a maximum export limit however.
- This raises the issue of connection standards for assets – this moves us towards setting a maximum export potential. This could mean setting export capacity limits. These things need to be addressed hand in hand: the more eligible participants you have, the smaller the marginal benefit will be. Keeping the number low will keep the incentive high.
- Farmers and commercial customers will typically have larger roof capacity, offering them much greater options for structuring solar panel configurations than residential customers.

In summary:

- Strong alignment across the group regarding the intent of targeting the injection benefits
- Suggest setting a higher injection limit with a lower connection size limit
- Further investigation is needed regarding embedded networks and look-through provisions (noting alignment of capacity and inverter limits may address this). Not all embedded network customers may be aware they are part of an embedded network (so may install a solar system only to find they are not eligible. This needs careful thought).
- Risk of diluting the benefit if initial uptake is too much.