Building electricity resilience that builds community resilience, the role of intermediaries emerges

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Introduction & Background

In the face of mounting disaster, resilience building efforts are needed for both communities and infrastructures such as the electricity system. Community resilience and electricity system resilience are acknowledged as interdependent in disaster management documents.

Currently, the Australian electricity system has neither a system wide definition of resilience nor a resilience building framework. While in disaster management documents, community resilience is described as a shared responsibility between the community itself and its various stakeholders, there is no defined approach to resilience building. In particular, one that allows for communities and electric utilities to meet and build local electricity resilience that meaningfully contributes to local community resilience.

The first step in this journey would be to develop a shared understanding of general, community and electricity resilience between the various stakeholders.

This project set out to explore to breadth of resilience meaning across the various stakeholders and their thoughts on how to build community resilience and the role of electricity resilience in it.
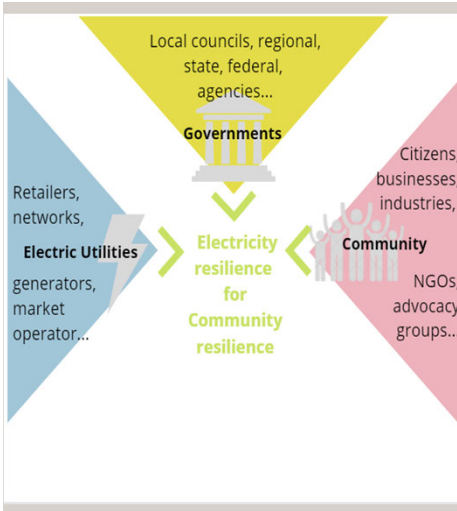

Figure 1: Community electricity resilience stakeholders

Method

Twelve convergent interviews were conducted with various electricity stakeholders. The interview participants belonged to the three stakeholder groups presented in Figure 1. They held a diversity of roles and backgrounds including electrical engineering, local government, and community members.
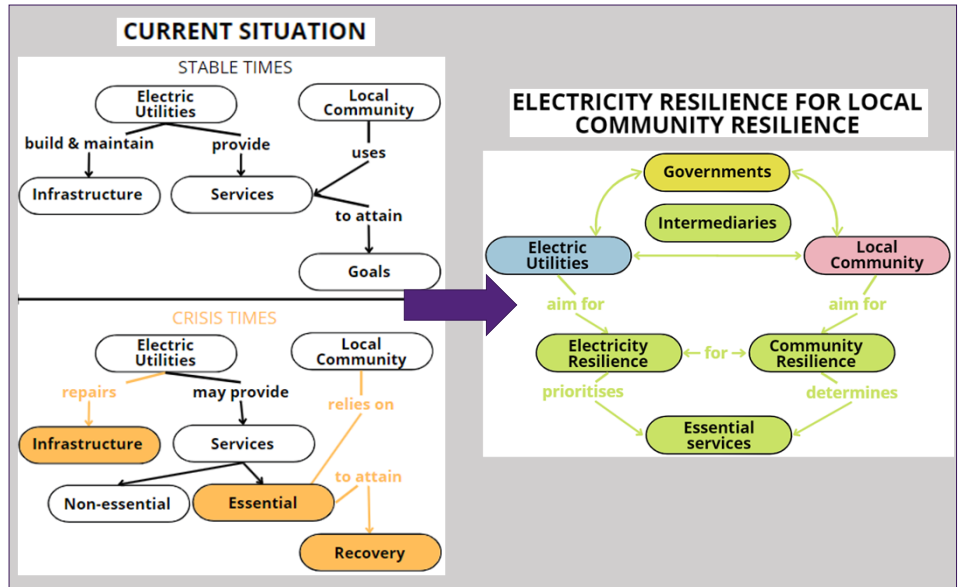

Figure 2 – Electricity resilience for Community Resilience

Findings for resilience definition

General resilience
- Resilience is broadly the "**ability to withstand disruptions**". However, what those words entailed, seemed different depending on participants' background.
- Resilience is **difficult concept** to grasp and **confusion** ensues.
- In general, it is confused with **sustainability and risk**.

Community resilience
- Community resilience definition is **context dependant and dynamic**.

Electricity resilience
- Resilience is conflated with **reliability and/or security**.
- Electricity resilience definition needs to include the **role of electricity resilience in community resilience**.

Findings for resilience building

General and community resilience building
- Resilience building needs to **address everyone's resilience.**
- **The engagement and participation of all stakeholders** is at the heart of resilience building for all.
- Resilience for all is concerned with **social justice matters** such as agency, inclusivity, representativeness and power imbalances.

Electricity resilience building
- Current **regulations and rules hinder** electricity resilience building and community participation.
- **Intermediaries can play a key role** in addressing stakeholder groups' gaps in resilience knowledge and participation capacity.

Implications for resilience definition

- **Resilience education and capacity building** is required for all stakeholders.
- **On-going engagement process** are tailored to each community in order to assert **place-based resilience definitions** and to keep them up to date.
- **Electricity resilience definition** needs to be translated into **metrics** that can be measured, **including social dimensions**.

Implications for resilience building (Figure 2)

- Resilience building is a **collaborative effort**.
- **Successful participation is long-lasting, exploratory**, and include the resolving of language issues.
- Participation processes are designed to **address social justice issues** concerns and **build social cohesion**.
- Building electricity resilience that supports community resilience requires a **transformation** of the current electricity governance model and structures.
- **Support existing and emergent intermediaries** and ensure transparency in their involvement.

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