

Exploring the impact of power cuts upon an aging population

Project team

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The project brings together academics and key stakeholders, working with older people (British Red Cross, Age UK and Age Friendly Manchester) and concerned with the management and operation of the electricity network (Electricity North West). These stakeholders will be involved throughout the project ensuring the research is policy relevant to older people from the outset, that it includes a diversity of expertise and experience, and that the findings inform services, locally and regionally.

Research Aim

This interdisciplinary research seeks to understand how power cuts impact on older members of the UK population and explore with stakeholders, how potential vulnerabilities can be reduced.

Research context

In February 2014, severe storms caused extensive damage to electricity networks in the West of the UK and resulted in 1 million people being without power at some point, and 16,000 customers being without power for 48 hours¹. Interviews with households who suffered power cuts during these storms, undertaken as part of the RESNET project², suggest that older people may find it harder to carry on with everyday tasks such as keeping warm or moving around their home when they experience a power cut. This tallies with a review of the health impacts of power cuts which identifies that elderly people may find it harder to keep warm during a power cut, and be more socially vulnerable should they find themselves isolated in their homes³. Beyond this review there appears to have been little published research which considers how power cuts may impact on older people, a gap which this project seeks to fill.

Many older people live alone, in 2010, 25% of people aged 65-74, and 46% of people aged 75 and over lived alone⁴, and may be reliant on external support or healthcare. Moreover, the UK population will see an increasing proportion of older people, with the proportion rising from 15.9% in 2006, to 22% in 2031⁵. People who consider themselves, or who are deemed by their carer, to be vulnerable in the event of a power cut can register for support with their distribution network operators (DNO). In the event of a power cut individuals on this Vulnerable Persons Register would have access support services such as a priority phone number to call, or a visit from an organisation

¹ *Ofgem* (2014). December 2013 storms review – impact on electricity distribution customers. London, Ofgem.

² The RESNET project is exploring the resilience of the electricity network to climate change impacts <http://www.mace.manchester.ac.uk/our-research/centres-institutes/tyndall-manchester/major-grants/resnet/>

³ *Klinger C, Landeg O, Murray V*. Power Outages, Extreme Events and Health: a Systematic Review of the Literature from 2011-2012. PLOS Currents Disasters. 2014 Jan 2. Edition 1. doi: 10.1371/currents.dis.04eb1dc5e73dd1377e05a10e9edde673.

⁴ http://data.gov.uk/dataset/social_trends/resource/a831aa5e-8ad5-4414-bca8-43fbedf1e1a6

⁵ *ONS*. (2010a). Sub-national Population Projections by the Office for National Statistics. 2008-based. Available online: <http://www.ons.gov.uk/ons/index.html>.

such as the Red Cross. A review into the winter storms, however, highlighted the need for DNOs to review how they deal with vulnerable customers in the event of a power cut, in particular communication. Furthermore many people who would benefit from additional support would not judge themselves to be vulnerable, or are not aware of this service, and have not registered for additional support. This project therefore seeks to address these issues and identify ways of supporting older people during power cuts.

Project approach and timescale

The project would be undertaken as follows:

- Literature review to scope academic literature, relevant to understanding how power cuts may impact upon older people, and to map out sources of vulnerability due to health needs, urban versus rural living or housing type for example (February 2015).
- Gathered during the RESNET project, Tyndall Manchester has interview and focus group data which explores perceptions of power cuts and coping strategies in the event of power outages. This dataset has not been analysed to consider older people to date, as this lies outside the scope of the wider project. This rich qualitative data will be analysed using Atlas-ti, specifically to focus on an aging population (March 2015).
- A stakeholder workshop will be held with invited participants including Tyndall Manchester researchers, Electricity North West (ENWL), the British Red Cross, UK Age, the Age Friendly Manchester team and Public Health England. The facilitated workshop would provide a forum for sharing learning from the academic studies and the perspectives of the stakeholder partners. Discussions and focused activities would seek to identify the vulnerabilities of older people to power cuts and identify both ways of increasing resilience of and the appropriate approach to achieving this (April 2015).
- The team would work closely together to ensure that the project outputs were disseminated widely amongst other network operators (via the Electricity Networks Association for example) and relevant stakeholders.

Project outputs

- Output 1: The workshop will be written up as a report that would be shared with project partners and other distribution network operators (July 2015).
- Output 2: The literature, data analysis and workshop outputs will be written up as an academic paper (August 2015).