

Network Innovation Allowance Progress Report

Notes on Completion: Please refer to the appropriate NIA Governance Document to assist in the completion of this form.

Network Licensees must publish the required Project Progress information on the Smarter Networks Portal by 31st July 2014 and each year thereafter. The Network Licensee(s) must publish Project Progress information for each NIA Project that has developed new learning in the preceding relevant year.

Project Progress

Project Title

Activating Community Engagement (ACE)

Project Reference

NIA_NPG_005

Project Licensee(s)

Northern Powergrid

Project Start Date

Apr 2015

Project Duration

2 Years 9 Months

Nominated Project Contact(s)

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Scope

The scope of the project is to scale up and trial the GenGame direct control DSR product for residential customers, to run a feasibility trial for up to one year to test and refine the product and, if successful, to expand up to 2000 customers and run the trials up to December 2017 to test for sustainability over a longer period. The data from the trials will be used to develop the predictive planning tool.

Objective(s)

The primary objective is to incentivise a wide range of residential customers to become engaged in sufficient numbers within specific geographic areas to deliver a large enough DSR response to defer network reinforcement.

The secondary objective is to develop a tool for designers to predict the residential DSR potential in an area with sufficient confidence to know whether this is a strong enough case to consider deploying The GenGame as an alternative to reinforcement.

Success Criteria

- 1 **Cost effective** (cost compared to traditional reinforcement)
- 1 **Easy to promote and recruit** (based upon speed and effort of recruitment)
- 1 **Quick deployment** (ease of registration, equipment deployment and set-up);
- 1 **Reliable** (size of loads offered and limited use of the override facility)
- 1 **Sustainable** (test for sustained engagement over a 2 year period);
- 1 **Targeted and Predictable** (statistically robust analysis of response over a range of demographics to obtain the data required to develop predictive planning and design tools)

Performance Compared to the Original Project Aims, Objectives and Success Criteria

As outlined in the PEA document, the Activating Community Engagement Project's primary objective is to trial an innovative residential DSR proposition called The GenGame, targeting specific areas on our network across a range of demographics. The GenGame was initially developed with Technology Strategy Board (TSB) funding for a small scale trial and proved successful in engaging customers

to volunteer domestic electricity load for curtailment using self-install remote monitoring and control kits in return for financial incentives accessed via participation in a league table. The secondary objective of the Project is to ascertain whether the data from the project can be used to develop a predictive planning tool.

To date, the Feasibility Trial has begun to address the following research objective a):

a) Whether residential participants can be recruited in sufficient numbers in the places required to address the localised network constraint;

Weardale, County Durham was selected as the location for the Feasibility Trial, with initial recruitment being focussed in Wolsingham to reduce load on the Oakenshaw Tanners 20kV feeder fed out of Brancepeth primary substation. Recruitment was supported by Durham County Council and the Weardale Area Action Partnership. Both the Customer Engagement and Data Protection plans were approved by Ofgem in August 2015; however recruitment of participants onto the project was delayed due to supply issues of the smart plugs from China. An alternative supplier was identified and engaged, however this pushed back development of The GenGame platform, the beta-testing and commencement of recruitment by 5 months. Consequently, both The GenGame and recruitment campaigns launched in October 2015. The original plan saw the demand response trial running from October 2015 to the end of February 2016 but due to the delay in recruitment the trial was pushed back to start in November 2015 and ran until the end of March 2016.

This loss of recruitment time prior to launch was detrimental, with uptake in the Weardale area found to be limited. By the end of December 2015 we had engagement with 8 community groups (6 of whom had formally signed up to the Project's T&Cs), however only 10 individuals had signed up to participate in TheGenGame and only 2 of these had registered their smart plugs. This was significantly behind the 500 sign-up target outlined in the original project plan and affirmed the need for adequate customer engagement time prior to launch.

Based on feedback from our colleagues at Durham County Council that more face to face engagement was required in Weardale in order for the project to gain traction, we deployed 2 members of staff from Durham Community Action (a community support charity) to actively promote the project in the area. After 10 weeks of engagement in Weardale, one additional community group had signed up to take part in the trial and the number of sign-ups to the GenGame had increased to 38 (with 27 registered plugs in play), an improvement, but still significantly behind target.

Required Modifications to the Planned Approach During the Course of the Project

We are implementing a number of changes to the approach based on feedback from Durham Community Action's customer engagement activities. We are expanding and adapting the Feasibility Trial in the following ways:

- We will expand the Community Group catchment area to encompass the whole of County Durham and run a second trial from May 2016 up to 30th October 2016.
- The prize award approach will differ in that 'everyone's a winner' and all groups will be rewarded funds for their participation, proportional to the number of plugs their supporters have in play and the number of GenGame points earned. Bonus prizes will be paid to the top three performing community groups to add extra incentive for them to recruit supporters.
- Anyone living within the Northern Powergrid Licence area will be allowed to participate in The GenGame, through an individual league competition.
- All participants will have the opportunity to win individual prizes wherever they live, with those that live within County Durham being also able to support a Community Group to raise funds. Prizes will be cash, music & high street vouchers.
- We will remove any perceived barriers to participation for community groups, implementing a much simplified on-line application process.
- The GenGame will re-launch with a new look website with additional focus on engaging the individual participant who will be able to interact with with more leagues, more prizes and in-game achievements to earn more points.

These changes retain the community-led approach in County Durham and will maintain the original intention to develop learning associated with the ability to recruit for specific geographic constraints but should also increase the number of plugs in operation to enhance the statistical robustness of our analysis regarding the diversified contribution to load reduction from the direct control of smart plugs.

Lessons Learnt for Future Projects

This project is currently in-progress and we are yet to draw firm conclusions from the learning to date. The Feasibility Trial phase is due to close in October 2016 after which the project will move into its Sustainability phase which will answer research question b) whether participation can be sustained over time and reliably delivered when needed. We will disseminate learning via our project close down report in early 2018.