



The future

The Value of Lost Load

Customer Engagement Plan

5 February 2016



CONTENTS

- GLOSSARY 4
- 1 EXECUTIVE SUMMARY..... 5
- 2 THE VOLL PROJECT..... 7
- 3 HOW THE REQUIREMENTS OF THE GOVERNANCE DOCUMENT HAVE BEEN MET 9
- 4 THE VOLL METHOD 10
- 5 CUSTOMER ENGAGEMENT IN VOLL 11
- 6 VOLL CUSTOMER GROUPS..... 16
- 7 COMMUNICATION AND PRIORITY SERVICES CUSTOMERS 18
- 8 CUSTOMER STRATEGY AND CUSTOMER RELATIONS 19
- 9 CONCLUSIONS AND NEXT STEPS 21
- 10 APPENDICES..... 26

VERSION HISTORY

Version	Date	Author	Status	Comments
1	19 January 2016	Impact research	Draft	
2	5 February 2016	T Kennelly/ K Quigley	First issue	Amendments following revision of draft

GLOSSARY

Abbreviation	Term
CEP	Customer engagement plan
CCC	Customer contact centre
DECC	Department of Energy and Climate Change
EHP	Electric heat pump
EV	Electric vehicle
DNO	Distribution network operator
DPS	Data privacy statement
ECP	Engaged customer panel
GB	Great Britain
LCT	Low carbon technology
NIA	Network Innovation Allowance
Ofgem	Office of Gas and Electricity Markets
PSR	Priority services register
RIIO-ED2	Electricity distribution price control 2023 and beyond
SME	Small and medium enterprise
VoLL	Value of Lost Load

1 EXECUTIVE SUMMARY

1.1 The Value of Lost Load project

Responding to the future needs of customers, the value of lost load (VoLL) project is funded via Ofgem's [Network Innovation Allowance](#) (NIA). This project seeks to re-examine the existing model used by distribution network operators (DNOs) to place a value on the loss of electricity supply to customers. The project is due to take place between January 2016 and July 2017.

As Great Britain (GB) decarbonises heat and transport, customers will become reliant on electricity for their energy needs and hence it is likely that the VoLL may change.

The research aims to deliver a comprehensive assessment of customer impacts associated with the loss of electricity supply, how this is valued by specific customer groups and how this might change with the adoption of low carbon technologies (LCTs). It will also examine if VoLL could be influenced by adopting different approaches to managing outages.

At present in GB, a single VoLL is used to quantify what customers would be willing to pay to avoid a supply interruption. This project will investigate if a single, uniform VoLL, applied to all customer segments, remains appropriate. VoLL may have significantly different values across the various segments of the customer base, for example rural compared to densely populated urban regions. Extensive customer engagement will build on previous research in this area to determine if a revised VoLL model would benefit customers.

The findings of the research are intended to inform DNOs' policies and investment plans in meeting future demand for RIIO-ED2 and beyond, as low carbon generation replaces fossil fuels and demand increases with low carbon technology (LCT) adoption. VoLL will be influential in informing issues such as network reliability standards, design policy for LCT intensive networks and service standards.

The VoLL project itself will not have any direct implications for the network or any aspect of customers' security of supply.

1.2 Customer engagement in VoLL

The objective of this research is to understand VoLL by customer segment at present and how this might change in the future. This will inform DNO policies and investments plans for RIIO-ED2 and beyond.

To achieve this objective, customers and stakeholders will be actively engaged to identify the challenges in measuring VoLL and its application in developing investment plans for a DNO's customer base. This engagement will take place across three key phases, outlined below and explained fully in Section 5:

- Phase 1: Understanding the problem – consultation with key stakeholders to outline the approach and integrate feedback into the proposed method and publication of peer-reviewed project methodology
- Phase 2: Refining the problem – focus groups will be conducted with a demographically representative group of customers and depth interviews undertaken with specific customer groups (eg vulnerable). Depth interviews will also be conducted with stakeholders likely to be involved with customers during a supply interruption
- Phase 3: Measuring VoLL – a customer survey will be undertaken during two seasons to elicit customer perceptions and observations of their electricity supply.

This project will not directly affect customer power quality or supply as it does not involve physical changes to the distribution network, customers' private installations or any other aspect of supply provision.

1.3 Customers participating in the VoLL survey

A total of 5,000 customers including small and medium enterprises (SMEs) and domestic customers will be surveyed across GB.

The customer survey will mostly be administered through an online panel of customers who have pre-registered to take part in research studies. Provision will be made for some customer segments, such as those classified as being worst served or vulnerable, to be interviewed face-to-face in their home or place of work, should this be preferred.

The project team will utilise various tools to ensure that survey participants remain engaged throughout the exercise. These will include the use of easily understandable, piloted survey instruments and a financial incentive.

The development of the survey instruments will be guided by an engaged customer panel (ECP), qualitative depth interviews with stakeholders and the observations from a pilot survey. This will maximise their suitability, applicability and ease of understanding.

1.4 Other electricity consumers

The learning from the VoLL project has the potential to provide benefits to all electricity consumers by facilitating smarter, targeted investment strategies, to improve network resilience and mitigate against unplanned supply interruptions.

Recognising these wider implications, the project team will make relevant information available in the public domain in a manner that is easily understandable to customers, and by sharing findings and project outcomes with key stakeholder groups.

1.5 Priority services register customers

Electricity North West already maintains a priority services register (PSR) of customers who have special requirements or who may be vulnerable during a power outage. The register enables the company to provide prompt assistance to these customers if required.

Vulnerable customers, who may or may not be registered on the PSR, will not experience any negative impact on the quality or reliability of their power supply as a result of the VoLL project, as this research does not involve any installation works at customers' premises or on the network. Consequently, there are no plans to contact PSR customers, other than those selected to participate in the customer surveys.

Questions will be included in the survey to assess whether any vulnerable customers reside at the property. This question set will help to identify any potential differences in perceptions of VoLL held by this group when compared to other segments.

1.6 Customer feedback

Customers will be able to provide feedback or raise queries with the VoLL project team through various channels. These include the company website, which will have a simple contact form for that purpose; telephoning Electricity North West's customer contact centre (CCC); email and a postal address for written correspondence. Details of these contact methods are provided in Section 8.2. Customer survey participants will also be able to contact the research provider, Impact Research, directly by email or telephone.

1.7 Customer safety

It is not envisaged that VoLL will introduce any safety risks to customers as there will be no technical or operational interventions at either customers' premises or on the network.

1.8 Customer consents

Customers participating in the customer surveys or ECP will be fully informed before signing up about how their data will be used and shared. They will be asked to sign a consent form and by doing so, will agree to their information being used for the specified purpose. Draft consent forms are included in Appendices A and B.

Survey participants outside Electricity North West's operating region will be recruited from online panels of individuals who have previously agreed to participate in research of this nature. Participants who self-administer the customer survey online will have previously completed a double opt-in process when registering to take part in market research surveys.

Additional consent will be sought from customers before entering their premises for the purpose of a face-to-face interview. The process for obtaining customer consent is outlined in Section 5.6 and explained in detail in the [VoLL data privacy statement \(DPS\)](#).

There will be no installation of equipment or any other intervention works at customer premises and therefore, no requirement to obtain consent for any such purpose.

2 THE VOLL PROJECT

2.1 Background and context

Electricity supply interruptions ('lost load') have financial and social impacts on customers.

VoLL is defined as:

"A measure of the economic value given to an amount of electricity that is prevented from being delivered to consumers (ie is 'unserved') as a result of a planned or unplanned outage of one or more components of the electricity supply chain."¹

This measure of economic value can take a number of forms:

- The amount that customers are willing to pay in order to avoid an outage
- The amount they wish to be compensated in the event of an outage
- The actual financial cost they incur as a consequence of an outage.

The value of loss can be expressed as a customer damage function (CDF) relative to the duration, season, time of day and notice of an outage. Previous research into VoLL has identified that the impact of supply interruptions varies significantly among three distinct customer groups: residential, small/medium commercial and industrial enterprises (SMEs) and large commercial/industrial users. The value may also vary considerably within each of these groups for example rural and residential customers. The existing single VoLL is aggregated to provide an overall estimate of the value given to loss across all customer segments, based on existing customer energy usage and assigned value.

Improving or maintaining reliability of supply to customers requires significant and continuous investment in distribution assets by DNOs. VoLL is an input to DNOs' investment choices. A greater understanding of the VoLL by customer segment will be an important factor for informing DNO policies and investment decisions for RII0-ED2 and beyond.

¹ Electricity Authority – Te Mana Hiko, 2012, Investigation into the Value of Lost Load in New Zealand – Summary of Findings.

2.2 VoLL in a low carbon future

As GB decarbonises heat and transport, customers will become increasingly reliant on electricity for their energy needs and hence it is likely that the VoLL may change. This future VoLL is influential in informing issues such as network reliability standards, design policy for LCT intensive networks and service standards.

In GB, SMEs and domestic electricity customers cannot currently express dissatisfaction with their VoLL by switching from one DNO to another (known as 'revealed preferences'). A practical alternative is to gather 'stated preferences' through a survey.

Customer research designed to measure VoLL in this way has been undertaken in a number of countries and utility sectors, most notably for Ofgem and the Department of Energy and Climate Change (DECC) in 2013². This study observed how VoLL can vary by season, time of day, customer load and customer type (for example, urban/rural, worst served).

It is of note that while VoLL is also reflected in various incentive rates such as IIS, it may not necessarily follow that incentive rates should be segmented. Differential VoLL rates may be more appropriate in investment decisions where relative customer needs can be considered.

The biggest challenge for this project, and possibly its most significant contribution to understanding VoLL, is how to measure the likely changes in VoLL in the future, particularly in relation to the adoption of LCTs. Further information on the proposed method for addressing this challenge is published in a separate [methodology statement](#).

The aim of the project is to quantify VoLL by customer segment at the present time and how this might change in the future. This will be achieved by answering the following research questions:

1. What is the impact on customers of lost load?
2. What is the value of this impact – expressed as the financial and social cost to customers in £ per kWh?
3. How does this vary by customer type?
4. How can Electricity North West and key stakeholders mitigate the costs of lost load to customers?
5. How will this vary with LCT adoption?

2.3 The solution which will be enabled by solving the problem

The VoLL method will encompass three phases of customer and stakeholder engagement to acquire a detailed understanding of variations in VoLL over time and by customer segment. Other DNOs will be able to embed a revised VoLL model into their future investment planning by using the outputs that will be generated and shared throughout the VoLL project.

The project success criteria are:

- An understanding of customer impact, how value is defined and how this might be influenced (eg better communications)
- A credible segmentation and future VoLL model by key customer groups to guide investment decisions
- A demonstration of how these values would help Electricity North West and other DNOs to better plan their network investment strategy
- Guidance on customer compensation strategies.

² London Economics, 2013, The Value of Lost Load (VoLL) for Electricity in Great Britain, Final Report for OFGEM and DECC.

3 HOW THE REQUIREMENTS OF THE GOVERNANCE DOCUMENT HAVE BEEN MET

3.1 The customer engagement plan

Section 4.7 of the *Electricity Network Innovation Allowance Governance Document version 2* sets out certain requirements for DNOs undertaking projects funded by the NIA.

Specifically, it requires the DNO to submit a plan to Ofgem, at least two months before initiating any form of customer engagement, explaining how it, or any of its project partners, will engage with relevant customers for the purposes of the project.

This customer engagement plan (CEP) sets out the approach that Electricity North West will take to engage with customers who are affected by the VoLL project, either directly or indirectly. It provides a framework for all customer engagement that will be undertaken and sets out the activities and tools that Electricity North West and its partners will draw upon to maximise customer outcomes.

The remainder of this section outlines how the requirements of the governance document have been met, and points the reader to the relevant later sections of the document where appropriate.

3.2 Requirements for a communication strategy

The governance document requires DNOs to define a communication strategy that sets out:

a: 'Any proposed interaction with a relevant customer or premises of a relevant customer or proposed interruption to the supply of any customer for the purposes of the project, and how the customer will be notified in advance'

This requirement is met by:

Section 5 of this plan, which describes how survey and ECP participants will be engaged in the VoLL project.

Section 5.5 sets out how the VoLL project team will engage with an ECP, ie a focus group comprised of a cross-section of customers. The ECP will help to develop, test and refine a survey instrument and associated communication materials to ensure that customers participating in the survey understand them and they achieve the required outcomes.

Sections 5.6 and 6.2 of this document outline how the VoLL project team will engage with survey participants from within and outside Electricity North West's operating region.

Section 6.3 outlines the engagement strategy for customers not actively taking part in the research who may be interested in the process or findings.

Section 7.3 sets out the expectation that there will be no customer impact as a result of the VoLL project.

b: 'Ongoing communications with the relevant customers involved in the Project'

Section 8 of this document sets out how the VoLL project team will engage with the ECP, survey participants and customers who will not actively participate in the research, but who may be interested in the project. This engagement will draw on various tools, including a range of educational/communication materials and simple, easily understood survey instruments, which the ECP will help to develop and test. Project information, updates and key documents will be published on Electricity North West's [website](#).

c: 'Arrangements for responding to queries or complaints relating to the project from relevant customers'

Section 8.4 of this document outlines the various channels that customers can use to feedback their concerns or raise queries with the VoLL project team.

3.3 Requirements to provide information on priority services register customers

The governance document also requires DNOs to provide:

'Information on the PSR customers who will be involved in the project and how they will be appropriately treated'

Section 7.2 of this plan outlines how the VoLL project team will interact with customers on Electricity North West's PSR.

3.4 Requirement to provide details of any safety information that may be relevant

The governance document requires DNOs to detail:

'Any safety information that may be relevant to the project'

This research project does not involve installation works, technical or operational interventions or techniques of any kind at either customers' premises or on the network. As such, it is not envisaged that VoLL will introduce any safety risks to customers.

3.5 Requirement to provide details of any customer consents

The governance document requires DNOs to provide:

'Details of how any consents that may be required as part of the project will be obtained'

Section 5.6 sets out how consent will be obtained from customers who agree to participate in customer surveys or the ECP. Additional consent will be sought before entering a customer's premises for the purpose of a face-to-face interview, details of which are also outlined in Section 5.6. Draft survey and ECP consent forms are provided in Appendices A and B.

As there will be no installation of equipment or any other intervention works at customer premises associated with VoLL research, there is no requirement to obtain customer consents for access to premises for any such purpose.

4 THE VOLL METHOD

Previous research has identified that VoLL varies significantly among three distinct customers groups: residential, SMEs and large commercial/industrial users. Research indicates that VoLL also varies considerably within each of these customer segments (such as geography, vulnerability and LCT adopters). However, it is still the practice for the GB electricity industry and key stakeholders to use a single uniform VoLL to inform key issues such as network reliability standards, design policy decisions and service standards. This project will elicit stakeholder feedback and customer perception to develop revised VoLL values, segmented across the customer base.

This project will not involve any technical or operational network interventions or techniques and will therefore have no direct implications for the network. No equipment will be installed, or any other works conducted at customer premises as part of this research project. As such, there are no envisaged direct or indirect impacts on any aspect of customer supply resulting from the VoLL project during the customer engagement outlined in this plan. The research is

based purely on assessing the perception of customers across GB, in regards to the impact of lost load on themselves, their households or business.

The findings of the research are intended to better inform DNO investment strategies now and in a low carbon future, ensuring the industry can adapt to meet changing energy needs and expectations. It is intended that this research will provide a credible VoLL model, enabling DNOs to use segmented values to improve investment decisions by focusing resources more efficiently on customers and networks in greatest need.

Security of supply in the future will become more critical to customers as increasing numbers replace traditional heating sources and transportation with LCTs such as electric heat pumps (EHPs) and electric vehicles (EVs). Consequently, the VoLL project will establish LCT adopters' sensitivity towards supply interruptions that occur under normal operating conditions and during severe weather events, affecting large populations (such as the flooding seen across the North West of England in the winter of 2015/16).

Seasonal variations in perception of VoLL will also be conducted among all customer segments outlined in Section 5.6 and any additional segments added to the scope of the research, following consultation with key stakeholders.

The research will examine if VoLL could be influenced by adopting different approaches to managing outages and enhanced communication strategies. It will also assess VoLL in the context of the DNO's social responsibility and customer vulnerability strategies.

5 CUSTOMER ENGAGEMENT IN VOLL

Customer engagement in VoLL is focused on assessing the perception of customers across GB concerning the impact of lost load on themselves, their household or business.

To achieve the project objectives, the VoLL team will actively engage customers and stakeholders in three key phases:

Phase 1: Understanding the problem

This phase will be conducted before any engagement with relevant customers to ensure all parties with a vested interest are consulted and the customer research methodology is shaped appropriately. This phase will comprise the following activities:

- Consultation with key stakeholders (Ofgem, DECC and Citizens Advice) to outline the approach and integrate their feedback into the proposed method
- Publication of peer-reviewed project methodology including a review of published literature on the measurement of VoLL.

Phase 2: Refining the approach

This phase will comprise focus groups conducted with a demographically representative group of customers and depth interviews with vulnerable customers to explore:

- How reliability of supply is defined by customers
- How customers and businesses prepare, if at all, for power outages
- How expectations differ between planned and unplanned power outages
- The financial impact of lost loads
- The social impacts of lost loads
- Expectations of communication and support from DNOs during a power outage
- Which key attributes, such as frequency, duration and time of the supply interruption, should be tested quantitatively in the customer survey.

Each issue will be investigated by engaging with separate groups of customers, likely to have shared experiences (eg SMEs, worst served customers and vulnerable customers).

There will also be depth interviews with stakeholders (eg British Red Cross, Age UK and communication companies) who are likely to be in contact with customers during a supply interruption. These stakeholders will be interviewed individually to understand their unique position between Electricity North West and their own customers. These interviews will provide important stakeholder views, which will inform the research methodology and will be influential in developing appropriate survey instruments. This feedback will ensure all variables, specific to the customers represented by the stakeholders and other interested parties, are captured to accurately calculate VoLL at a more granular level.

Phase 3: Measuring VoLL

A large scale quantitative survey will be conducted to provide answers to the following research questions:

- Does VoLL vary by customer segment and what are their relative value assignments?
- How will VoLL vary with LCT adoption?
- How would the level of incentives tested for demand side response in other Low Carbon Networks (LCN) Fund trials compare to future VoLL?
- Which segments, if any, would support a high VoLL and, hence, potentially higher investment?
- How does the scale and duration of an interruption affect VoLL? Is there a tipping point at which investment to mitigate against infrequent, lengthy and widespread interruptions (as seen across the UK during exceptional flooding events in the winter of 2015/16) becomes the most financially viable option?

The VoLL project will generate outputs and learning in a number of key areas. These will be of particular interest to other DNOs, Ofgem and DECC. The project team will share relevant learning from VoLL with stakeholders in addition to specific customer and stakeholder engagement activities.

5.1 Customer engagement activities

This CEP covers the following activities:

- Establishing which customers need to be engaged
- Implementing engagement plans
- Planning customer selection and the approach for focus group and customer survey participation
- Bringing customers into the project
- Keeping customers engaged in the project
- Managing customers' enquiries
- Incorporating learning from Electricity North West's other customer survey activities.

5.2 Project partner

Electricity North West will work with Impact Research who will support the VoLL project in convening the ECP, administering customer and stakeholder interviews, managing the customer survey and analysing and disseminating the results.

Impact Research has extensive experience in customer engagement activities in the utilities industry and more specifically, on Second Tier LCN Fund projects. It will draw on this to support the project in maximising positive outcomes from the various customer engagement activities.

5.3 Continued quality assurance of customer engagement outcomes during the project

The VoLL project is supported internally by Electricity North West's executive leadership team (ELT) and the future networks steering group (FNSG), which is comprised of members of the ELT and oversees the company's future grid activities. The FNSG will have ultimate oversight of the project's strategic direction and will receive bimonthly updates on its progress.

Key stakeholders such as Ofgem, DECC and Citizens Advice will be consulted at the outset of the project to guide its direction. DNOs, electricity suppliers and other interested parties with a vested interest in VoLL will also be engaged to maximise customer engagement opportunities and outcomes.

The project will be undertaken in accordance with Electricity North West's governance and project management approach. This will ensure that the deliverables are of the highest quality and that any deviation is quickly rectified.

5.4 Feedback and review

In accordance with Sections 4.6 to 4.10 of the *Electricity Network Innovation Allowance Governance Document version 2*, this CEP and a DPS will be submitted to Ofgem to comply with customer protection requirements. These documents specify how Electricity North West and its project partner will interact with, or impact upon, relevant customers where any form of engagement is undertaken as part of the project.

This customer engagement plan is a starting point for communication with customers throughout the VoLL project between January 2016 and July 2017. The following sections briefly summarise the communication strategies that are proposed throughout the project. The project partner will adhere to this CEP and its basic principles. However, there may be a need to review the plan as the project progresses to reflect feedback and lessons learned.

VoLL will develop survey instruments and associated educational materials to provide information and context to customers actively engaged in this research. This information will be published on Electricity North West's [website](#) and made available to customers. Specific customer groups will be engaged as follows:

Customers

The VoLL team will seek feedback on customers' perception and experiences relating to their electricity supply throughout the project. Customers will be able to use a range of methods, as specified in Section 8.2, to contact the project team. The project team may use the results of the feedback to amend processes.

Priority services register customers

Electricity North West already maintains a PSR of customers who have special requirements or who may be vulnerable during a power outage. This register enables the company to provide extra services to vulnerable customers along with assistance and support if required.

Vulnerable customers will be able to contact the project team using the methods outlined in Section 8.2.

A sample of vulnerable customers registered on the PSR will be approached to participate in depth interviews and customer surveys. Other vulnerable customers, not currently registered on the PSR, may be identified during this research as a result of information supplied voluntarily. All survey participants will be provided with information about the PSR and details of how to register via their electricity supplier or their regional DNO, if they consider they are eligible.

DNOs, project partner and interested stakeholders

Electricity North West will work with its partner to disseminate the learning objectives of the project and seek feedback from interested parties identified during the course of the research.

The project team will provide regular updates on Electricity North West's [website](#). They will share project outcomes with key stakeholders and other interested parties. All interested parties will be able to contact the project team with any enquiries about the research via the communication channels outlined in Section 8.2.

Stakeholder consultation

Electricity North West has consulted relevant internal departments, its market research project partner, and will engage with key stakeholders such as Ofgem, DECC and Citizens Advice to develop the project plan. Other industry stakeholders including suppliers and DNOs will also be engaged during phase two of this project to understand their unique position between Electricity North West and their customers. They will also provide feedback to shape and support the VoLL project.

On completion of the project, the stakeholders will be provided with advanced notice of the summary results and the implications for implementing a revised VoLL model.

The project team will be available to these stakeholders throughout the life of the project to answer questions about its progress.

5.5 Engaged customer panel and customer depth interviews

An ECP will be convened in advance of the customer survey. It will comprise a cross-section of electricity consumers reflecting the demographic profile of the SME and domestic customer base across GB. This approach has been used successfully in previous engagement activity with Electricity North West customers to explore complex concepts and encourage informed discussions. The ECP will consist of four focus groups, each one representing a key customer group.

Certain customers, such as those who are vulnerable, those who have been affected by interruptions caused by severe weather events and those who use specific LCTs, will be more directly engaged and interviewed by phone or face-to-face. Vulnerable customers will be able to opt for either a telephone or face-to-face interview. It is anticipated that some of these customers, particularly those who are medically dependent, may benefit from surveys being administered in the comfort of their own homes with the assistance of a professional interviewer.

Participants who elect to be interviewed at their own premises will be asked to sign a consent form and, by doing so, will agree to provide access to a professional interviewer. They will also agree to their information being used for the stated purpose (see Appendix B).

This approach will enable the recruitment of a suitable survey population among these key segments. It will also mitigate against problems associated with the geographical spread of these customers and difficulties impeding their attendance at focus group meetings in central locations.

The ECP and customer interviews will influence the design of the customer survey through evaluation of the instrument to maximise its effectiveness and clarity. This will be achieved by repeated engagement with the ECP.

An appropriate financial incentive will be offered to all customers who participate in the ECP.

5.6 Customer survey

A customer survey will be used to measure VoLL accurately, examine variations by customer segment and model the likely changes to VoLL as LCTs are increasingly adopted onto the network. Customers will therefore be recruited to participate in the customer survey, which will be conducted over two seasons.

A representative sample of customers will be surveyed in Electricity North West's operating region and across the wider GB population. It is thought that the following customer segments are likely to exhibit greater variation in VoLL than others:

- Worst served customers (customers who can remember experiencing 15 or more interruptions in the past three years)
- Vulnerable customers
- Customers in fuel poverty
- Customers off main gas networks
- Adopters of LCTs
- Heavy users of electricity
- SMEs with a heavy reliance on electricity.

These customer groups will be targeted to ensure sufficient interviews are completed to accurately assess the calculation of their VoLL.

A total of 5,000 customers will be surveyed across two interview periods in summer 2016 and winter 2016/17. The surveys will be completed by customers from Electricity North West's operating region and from other GB DNOs.

An appropriate financial incentive will be offered to all customers who complete the customer survey.

Customers will predominantly respond to the survey online. In conjunction with the ECP methodology, customers who may be more challenging to engage, ie vulnerable customers, will be offered a telephone or face-to-face interview, to maximise their potential to respond and allow them to ask questions about the project. Customer consent will be sought before entering any premises to conduct a face-to-face interview. This will be in the form of an introductory question, requiring the customer's confirmation that he/she is happy to be engaged for the purpose of participation in VoLL research. If verbal consent is granted, and the customer indicates they are happy for the interviewer to enter their premises, a signature will first be obtained.

Customers who agree to participate in the survey will be fully informed about how their data will be used and shared before taking part, irrespective of the initial contact method. They will also be advised that their personal data will not be included or shown in any customer survey analysis. Participants will be asked to sign a consent form and by doing so, will agree to their information being used for the stated purpose. A draft of the consent form is provided in Appendix B. This process is defined in further detail in the [DPS](#).

Survey participants outside Electricity North West's operating region will be recruited by Impact Research utilising online panels of individuals who have previously agreed to participate in research of this nature. Participants who self-administer the customer survey online will have previously completed a double opt-in process when registering to take part in market research surveys. A double opt-in refers to the process by which a check is made to confirm that the person joining a panel or database wishes to be a member and understands what to expect (in advance of participating in an actual survey). Participants taking part in this manner will be provided with further information about how their data will be used and shared and asked to digitally indicate their acceptance before completing the survey. No further personal data will be collected during the surveys.

The project team will use the PSR register to identify vulnerable customers willing to participate in the survey. Impact research will be advised only that a meter point administration number (MPAN) has been assigned a PSR marker. No information relating to any particular vulnerability within the household will be shared. The engagement principals specific to PSR customers are specified in Section 7.2. Throughout the VoLL project any potential effects on vulnerable customers will be kept to a minimum. Interviewers will be informed of PSR services available to customers and how to register. Details of how to contact the VoLL project team with any queries or concerns will also be provided. Survey materials will include similar information.

The survey instrument must be focused, engaging and easily understandable to maximise the data collection opportunity, guaranteeing accuracy of results and a successful output. This will be achieved by repeated engagement with the ECP, who will provide feedback on its scope and wording.

The survey is expected to take approximately 20 minutes to ensure is not too onerous to complete, thus maximising potential participation among all customer segments. It will include questions concerning supply provision, past experience, future expectation and will capture the participant's unique perception of VoLL and their satisfaction with service. Personal data collected during the survey will include demographic information such as age, gender, customer vulnerability, business type, geographical location, electricity consumption data (including use of LCT) and energy affordability.

The survey instrument will be piloted with a small group of customers before the main customer survey. This approach is a direct learning from previous customer engagement projects and will lead to the final survey instrument being sufficiently robust to accurately measure VoLL.

5.7 Incorporating learning from previous customer engagement

The techniques that will be used to engage with customers during this project draw heavily on previous Electricity North West customer engagement activities, some of which have already been described. Based on this experience, the project team is confident that it can successfully explain the DNO's role in the electricity industry and introduce relevant concepts which will enable customers to make an informed evaluation of project materials. The insight developed from previous experience in this sector will ensure that the question set presented in the survey will support the most accurate method of measuring VoLL.

6 VOLL CUSTOMER GROUPS

Three customer groups have been identified as being directly or indirectly involved in the VoLL project, and therefore must be actively engaged. These customer groups are defined below.

6.1 Customers participating in the VoLL ECPs and depth interviews

An ECP will be formed in advance of a targeted survey and will play a key role in guiding the development of the VoLL customer engagement materials and survey instruments. The ECP will comprise a small but representative cross-section of domestic and SME customers reflective of the GB customer base.

Certain customers, such as those who are vulnerable and those who use specific LCTs will be more directly engaged and interviewed in-depth, by phone or face-to-face.

The ECP will be actively engaged in phase two of this research and will consider the issues outlined in Section 5, phase 2 of this document. Each issue will be investigated by engaging with separate groups of customers (eg SMEs, worst served customers and vulnerable customers) and service providers likely to have shared experiences.

Feedback from customers and service providers will be used to develop the survey instruments and additional stimulus materials.

ECP participants will be further consulted to test and refine these materials to maximise their effectiveness, suitability, applicability and to ensure the VoLL survey is understood and simple to complete.

The material that the ECP will support the project team with developing will include:

- Customer survey instruments
- Any additional stimulus materials required to supplement the survey.

6.2 Customers participating in the VoLL surveys

The customers recruited to participate in the customer survey will include a statistically robust representation of the diverse composition of the population. This will allow differences in VoLL across the various segments of the customer base to be identified.

Approximately half the survey participants will be drawn from Electricity North West's operating region and the remainder will comprise a representative sample from the rest of GB.

The customer survey will mostly be conducted through an online panel who have pre-registered for research of this kind. This cost-effective approach permits the targeted selection of rural and urban customers from across GB and ensures the participants are representative of the national population, with quotas on key demographics such as age, gender and social grade. It also easily allows for quotas by DNO region, energy consumption and customers off main gas networks.

Certain customers, such as those who are vulnerable, may be more directly engaged and interviewed by telephone or face-to-face, as outlined in Section 5.6.

Section 5.6 also sets out the following aspects of the project design, which will ensure that survey participants remain engaged throughout the survey:

- Engaging and easily understandable survey instruments
- Piloting and refinement of survey instruments
- A financial incentive.

6.3 Other electricity consumers

The outcomes of the VoLL project have the potential to provide benefits to all electricity consumers in terms of targeted, efficient and smarter investment, to mitigate against unplanned supply interruptions.

Recognising these wider implications, the project team will make relevant information available in the public domain in a manner that is easily understandable to customers; and by sharing findings and project outcomes with key consumer groups. The range of tools that will be applied will include the following:

- **Electricity North West's website**
The website will provide a library of published materials and other resources relating to the project.
- **Knowledge-sharing with consumer groups**
Learning and outcomes will be shared with organisations that have a specific interest in consumer and energy issues as part of the project's knowledge dissemination activities. These will include Citizens Advice and Ofgem.

- **Internal communications channels**

An overview of the VoLL project and the outcomes of the research will be shared periodically with the wider Electricity North West community via articles submitted to the internal company magazine, intranet and Electricity North West's website.

7 COMMUNICATION AND PRIORITY SERVICES CUSTOMERS

7.1 Customer engagement principles

The project partner will adhere to the following key principles:

- Codes of practice will include guidance to ensure that customer contact is appropriate. This includes making clear to customers that the contact relates to the VoLL project. As a minimum requirement, contact will involve providing clear information about the objectives and applications of the VoLL research in which they are participating.
- Clear information on the aims and objectives of the contact will be provided.
- Information on data protection will be provided.
- The project partner with access to customer data gathered for VoLL will sign an agreement to ensure this data is not used for any purpose other than the VoLL project. Electricity North West's data security manager takes responsibility for all aspects of data privacy within the VoLL project.
- Where the project partner has relationships with customers participating in the VoLL research that are outside the scope of the project, the partner will make it clear in customer communications whether their communication relates to the VoLL project or the wider relationship.
- Any customer considering participation in the VoLL surveys will receive clear information about what participation will involve, together with details of who to contact if they have queries or complaints, and who will have access to their data.
- Any customer agreeing to participate in VoLL will receive sufficient information to enable them to understand what will be expected of them and the purpose and scope of the programme.
- When collecting data, the project partner will be transparent about why they are collecting the data and how it will be used, stored and accessed. (A detailed approach for managing personal data is set out in the [DPS](#).)

7.2 Priority services register and vulnerable customers

Electricity North West appreciates that some of its customers have additional requirements due to disability, being elderly, having a chronic illness or other form of vulnerability. The company has a strong history of promoting safety and security at the homes of these vulnerable customers. Among other things, the company maintains a PSR of customers who have special requirements or who may be vulnerable during a power outage. The register enables the company to provide appropriate assistance to these customers where required.

The project team will use this register to identify vulnerable customers willing to participate in this research. Impact Research will be advised only that an MPAN has been assigned a PSR marker. No information relating to any particular vulnerability within the household will be shared. If a vulnerable customer wishes to participate, any information they provide about their vulnerability will be on a voluntary basis and any such information will only be used at an aggregated level for analysis.

These customers will be initially contacted by telephone. However, as outlined in Sections 5.5 and 5.6 they (or persons nominated by the vulnerable customer to act on their behalf) will be offered a face-to-face interview in the comfort of their homes.

Certain vulnerable customers, interested in taking part in this research, may find the online survey preferable to an individual depth interview. These numbers are not anticipated to be significant; however, alternative means of administering the survey will be available for vulnerable customers and they will be provided with details of these alternatives during the recruitment exercise.

The VoLL team and its project partner will adopt appropriate measures in all engagement with vulnerable customers to ensure the project is suitably introduced, its aims fully explained and critically, these customers perceive no undue pressure to participate in any element of the research. A full suite of supportive and explanatory information will be produced and will be available in alternative formats such as audio, large print, Braille or minority languages on request.

It is expected that some vulnerable customers who are not currently registered on the PSR may be identified in the national survey from their responses. These will be included in the aggregated subgroup analysis. These individuals will also be provided with information about the PSR and details of how to register via their supplier or their regional DNO, should they feel they are eligible.

Throughout the VoLL project any potential effects on vulnerable customers will be kept to a minimum. Interviewers will have access to details of PSR services available to customers and details of how to contact the VoLL project team with any queries or concerns. Survey materials will also include similar information.

If an enquiry or complaint is received from a PSR or vulnerable customer regarding any aspect of the VoLL project, the project team will investigate and resolve the enquiry as a matter of urgency. Response times will be a maximum of ten working days, in line with Electricity North West's standard practice.

This research project does not involve any installation of equipment or any other intervention works at customer premises or on the network. Therefore, it is not expected that any customers, including vulnerable customers registered on the PSR, will experience any negative impacts in power quality or supply as a result of the VoLL project. As such, there are no plans to contact each PSR customer as part of any general campaign to discuss their specific requirements. The PSR customers who agree to participate in the customer surveys/ECP/depth interviews will be consulted, to determine how their unique requirements influence their VoLL.

8 CUSTOMER STRATEGY AND CUSTOMER RELATIONS

8.1 Customer strategy

Electricity North West understands that without the support and buy-in of all customer segments outlined in this CEP, the research will not fully meet its objectives. The project team is therefore committed to ensuring that the customer journey is a good and positive experience, which is essential for the successful delivery of the project. To ensure this is achieved, the VoLL project will require engagement with all groups of customers outlined in Section 6.

The underlying communications strategy will be to:

- Engage with customers on an on-going basis throughout the project to ensure that the customer experience remains a positive one
- Consider the needs of any vulnerable customers identified on the PSR who are affected by the project.

8.2 Customer relations

Customers and stakeholders who require further information about the VoLL can access this in the following ways:

Website

Electricity North West's [website](#) will be the hub for all information relating to the project. It will provide general information and key project documents.

Enquiries

Customers can ask questions or raise queries related to the project by using the following channels:

Telephone

Electricity North West's CCC provides a contact service for customers, which is continuously staffed and operates 24 hours a day on 0800 195 4141. There is a specific interactive voice response (IVR) option available for all smart grid and low carbon enquiries.

Written correspondence

The VoLL project team will handle written enquiries from customers and stakeholders sent to the following address:

VoLL project team
Electricity North West Limited
Frederick Road
Salford
M6 6QH

Alternatively, customers can email queries or requests for further information to the project team at futurenetworks@enwl.co.uk. Response times will be in line with Electricity North West's standard practice, ie a maximum period of ten working days.

Other communications

Electricity suppliers will be advised about the project. They will be informed of the timing of customer engagement activities and the nature of the communications.

Information for interested parties

Electricity North West's website will be updated with relevant information and learning outcomes from the project will be shared with stakeholders and other interested parties throughout the project.

Alternative formats

All customer information about the VoLL project will be available, on request, in alternative formats such as large print, audio, Braille or minority languages.

8.3 Communication plan – VoLL research participants

The range of tools that will be used to engage and communicate with VoLL research participants has been outlined in Section 6.2.

Once the VoLL research methodology has been finalised, on the basis of stakeholder guidance, it will be subject to peer review by an external third party before the pilot survey. This will ensure its robustness and applicability to achieve the required outcomes.

8.4 Customer enquiries and feedback

The customer research will provide a mechanism for obtaining feedback about VoLL and customer perception. The range of tools that will be used to facilitate and obtain customer feedback is outlined in Section 6.2.

The CCC and wider business will be educated about the VoLL project and the project team will implement a process to capture and record all queries or concerns raised by customers relating to this research. This will ensure that any enquiries or complaints are handled promptly and appropriately, and resolved to the satisfaction of the customer. It is anticipated that any customer enquiries will be resolved during the initial contact. However, those which are not resolved at the first point of contact will be managed centrally by the VoLL project team.

The methods of communication available for customers to make enquires is set out in Section 8.2.

8.5 Feedback from DNOs, the project partner and interested parties

The VoLL customer engagement process is expected to result in key lessons being learned about how to engage customers effectively, adding to the learning achieved in previous projects. It is anticipated that key stakeholders such as Ofgem, Citizens Advice and DECC will also take a keen interest in the research findings. As part of learning and dissemination activities, lessons and outcomes will be shared with other industry stakeholders and interested parties, including suppliers and other DNOs.

9 CONCLUSIONS AND NEXT STEPS

This CEP sets out the VoLL project's approach for communication and engagement with customers throughout the project. The project's market research partner will adhere to the plan and the basic principles outlined.

Appendix C summarises the activities outlined in this plan to engage customers in VoLL and their associated timings.

There will be ongoing learning as the project progresses and the plan will therefore be reviewed regularly to reflect any feedback and adapt to lessons learned. Ofgem will be consulted before any material changes are made to the plan.

In line with the vision of the NIA, all outputs and learning acquired from customer engagement activities will be made available to other DNOs.

10 APPENDICES

Appendix A: Customer engagement consent form

Appendix B: Customer survey consent form

Appendix C: Timetable of customer engagement activities

When	Criterion	Required evidence
Phase 1	Literature review, research approach and CEP (as documented in this report)	Publish the methodology statement by end January 2016
	Draft the CEP and DPS by January 2016	Send the CEP and DPS to Ofgem, for approval, by end January 2016
	Inform DNOs of the project aims and customer impact	Circulate methodology statement to DNOs by end March 2016
Phase 2	Executive summary (PowerPoint) of ECP and key customer depth interviews	Publish executive summary of ECP and key customer depths interviews by end July 2016
Phase 3	Executive summary (PowerPoint) of customer survey and VoLL model analysis	Publish key analysis from model in final report by March 2017
	Annual NIA progress report	Submitted to Ofgem July 2016
	Final survey report (Word document) including lessons learned	Submit the final report to Ofgem for publication on the NIA portal by April 2017
Stakeholder updates	Update reports to key stakeholders and Electricity North West's executive leadership team	Quarterly email updates sent directly to stakeholders throughout project at key project milestones Dissemination events held for key stakeholders at project milestones by webinar or in person