

Respond Customer Survey

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November 2015

Customer Survey Introduction

You may recall that you recently registered/agreed to take part in the Respond customer survey. The survey should take approximately 25-30 minutes for you to complete. If you need to stop the survey at any time and complete it later, you will be able to re-enter the survey using the same link and continue from the same position.

Respond is one of a number of Projects being trialled by **Electricity North West**, which uses innovative techniques and new technology to utilise existing electricity networks more effectively. The Respond Project is funded by Ofgem's Low Carbon Networks Fund. Respond actively manages 'fault level' on the network by a range of techniques, including the Fault Current Limiting service (FCL service).

This survey will provide you with some more information about Respond and ask your opinion on some of the key elements. Please answer on behalf of your organisation to the best of your ability.

Your feedback will be combined with that of others from across a range of industry sectors to assist Electricity North West in understanding the commercial appetite for the Respond method and specifically the **Fault Current Limiting Service** (FCL service) amongst customers with large Alternating Current (AC) rotating electrical equipment i.e. generators and motors.

For more information about Respond please click on the following link: <http://www.enwl.co.uk/respond>. This is a genuine market research study which has been designed in strict accordance with the Market Research Society's Code of Conduct.

As you may know, Electricity North West is a Distribution Network Operator (DNO) responsible for electricity distribution in the North West of England, making sure customers in their region have a safe and reliable supply of electricity. Respond trials will take place in the North West but we are interested in the views of customers from across GB, regardless of who distributes your electricity, as the FCL service could potentially benefit organisations across GB in the longer term.

Data Privacy

Before proceeding we would like to ensure that you understand the purpose of this market research, which organisation is responsible for the research, what personal or sensitive data will be collected from you and who this data will be shared with. This information is provided in the **customer research FAQ** document. If you have a query regarding this market research or data protection that is not addressed in this document, please contact us at respond@impactmr.com.

SCRIPT Q1-Q3 ON THE SAME PAGE

S ASK ALL

Q1 I am **satisfied with the information** I have been given about the data that will be collected from me and how it will be used in the future.

- 1) Yes
- 2) No

If No (code 2) selected at Q1:

- issue a warning that this will terminate the survey
- provide the customer with the option of continuing
- provide a link to our mailbox (respond@impactmr.com) to give the customer the option of raising the query

S ASK ALL

Q2 I am happy to have the feedback I give through participating in this market research attributed to me so that Electricity North West are **aware that I have taken part** in this survey..

- 1) Yes
- 2) No

S ASK ALL

Q3 I am happy for my data to be passed to **Electricity North West** in order that they can discuss any aspect of Respond with me in the future?

- 1) Yes
- 2) No

If you have any questions regarding the survey, need technical assistance or wish to unsubscribe from future surveys please contact our Respond Project Manager by clicking **here**.

...This activates their email software and sends an email to respond@impacmr.com

Information about your organisation:

This first section will help us to ensure that we speak to a representative sample of customers. The FCL service may appeal more to some industries than others, therefore, the information in this section is necessary to identify the sectors most open to the concept.

M ASK ALL

Q4 What is the **main** activity of your organisation?

You may select more than one option if appropriate for your organisation.

Agriculture, Forestry and Fishing	1
Mining and Quarrying, Electricity, gas, steam and air, water supply, sewerage, waste management and remediation activities	2
Manufacturing	3
Construction	4
Wholesale and retail trade; repair of motor vehicles and motorcycles	5
Transport and storage	6
Accommodation and food service activities	7
Information and communication including data centers	8
Finance and insurance activities	9
Real estate activities	10
Professional, scientific and technical activities	11
Administrative and support service activities	12
Public administration and defense; compulsory social security	13
Education	14
Human health and social work activities	15
Arts, entertainment and recreation	16
Other service activities	17
Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	18
Activities of extraterritorial organizations and bodies	19
Other [PLEASE SPECIFY]	20

M ASK ALL

Q5 Which of the following best describes your organisation?

You may select more than one option if appropriate for your organisation.

- 1) Public Sector
- 2) Private Sector
- 3) Charity
- 4) Other (please specify)

S ASK ALL

Q6 Are you the provider of electricity related services i.e. Aggregator / EScO / Energy Consultant?

- 1) Yes
- 2) No
- 3) Don't know

S ASK ALL

Q7 Is your organisation located across multiple sites (*addresses*)?

- 1) Yes (1 to 9 sites)
- 2) Yes (10 or more sites)
- 3) No

S ASK ALL

Q8 Has your organisation opted into any special industry relationship or contract with a Distribution Network Operator or Transmission Network Operator, such as a Short Term Operating Reserve (STOR); or, has your organisation opted into a contract with a Supplier or Aggregator to participate in flexible energy demand or supply arrangements such as demand response?

- 1) Yes
- 2) No
- 3) Don't know

M ASK ALL WHO CODE 1 AT Q8

Q9 Which of the following special industry relationships or contracts has your organisation opted into?

An explanation of the various contracts can be accessed by [clicking here](#).

Select all that apply.

- 1) Short Term Operating Reserve (STOR)
- 2) Demand Side Response (DSR)
- 3) Load Shedding
- 4) Capacity Market
- 5) Energy Storage
- 6) Don't know
- 7) None of the above (**Exclusive**)

S ASK ALL

Q10 When you agreed to take part in this survey you told us that your organisation (or the organisation that you provide an electricity service for) has its own electricity generation capability **or** a CHP (Combined Heat and Power) plant and/or a rotating motor or combination of motors, with a capacity of between 0.5MW (500 kW) and 15MW (15,000 kW).

Does your organisation have both generation and motors/s that meet these criteria at either the same site or across different sites?

- 1) Yes both generation and motor/s
- 2) No just generation
- 3) No just motor/s

S ASK ALL

Q11 What is the **largest single piece of rotating equipment** or the **largest combination of rotating plant connected** to a common circuit breaker that your organisation operates at any of its sites?

Please select one option.

- 1) CHP plant
- 2) Other generator
- 3) Large single motor 0.5MW (500 kW) or above
- 4) Combination of smaller motors connected to a common circuit breaker with combined minimum capacity of 0.5MW (500 kW)
- 5) Don't know: SKIP TO Q14

IF CODE 1-4 SELECTED ASK: Please provide brief details of the equipment i.e. 2MW biomass CHP / 1MW motor driving compressor or conveyor

S ASK ALL – SCRIPT ON SAME SCREEN AS Q11

Q12 Thinking of your (**INSERT ANSWER FROM Q11**), In a typical 24 hour period, how many hours, on average, is it running?

ENSURE RESPONDENT CLICKS TO CONFIRM POSITION ON THE SCALE.

0 hours _____ 24 hours

Don't know: SKIP TO Q14

ASK ALL, SINGLECODE

Q13 In a typical 24 hour period your (**INSERT ANSWER FROM Q11**) is running for [**INSERT ANSWER FROM Q12**] hours. During this period, at approximately what percentage of its **full capacity** is the equipment operating at, on average?

Using the scale below, please give an approximate answer where '0' means 'it is at full capacity 0% of the time' and '100' means 'it is at full capacity 100% of the time'.

ENSURE RESPONDENT CLICKS TO CONFIRM POSITION ON THE SCALE.

0 _____ 100

It is at full capacity 0% of the time

It is at full capacity 100% of the time

Don't know: SKIP TO Q14

ASK ALL, SINGLECODE

Q14 Thinking again about the **largest single generator, asynchronous motor** or the **largest combination of connected motors** in your organisation (or the organisation that you provide electricity services for), which of the following statements best describes your/their situation?

- 1) It is essential that electricity supply is available 24/7 to our generator / CHP / motor
- 2) Our generator / CHP / motor could be constrained (disconnected) for **up to 10 minutes** but there **would** be a significant impact on the operation and/or losses in productivity for the organisation
- 3) Our generator / CHP could be constrained (disconnected) for **up to 10 minutes** and there would **not** be a significant impact on the operation and/or losses in productivity for the organisation
- 4) Other, please specify
- 99) I don't know

Introducing the RESPOND Proposition

This section of the survey is designed to provide you with more information about the Respond concept.

ADD TO VIDEO VERSION OF THE SURVEY

This survey is to test the market for the FCL service agreement. You will now see an information video regarding the **Fault Current Limiting service** (FCL service).

If after further discussions your organisation was to enter into the FCL service trial, please remember the agreement would only affect a specified generator or motor, not your entire electrical supply.

The video lasts approximately 8 minutes. Please put your sound on for the duration of the video. If you would like to watch the video again, please press play when it has finished after the 1st viewing.

SHOW VIDEO, EMBED INTO ONLINE SURVEY; RESPONDENT HAS TO WATCH 100% OF VIDEO BEFORE PROCEEDING. ENABLE RESPONDENT TO WATCH THE VIDEO AGAIN IF DESIRED.

ADD ANALOGY TO BOTH VERSIONS OF THE SURVEY

The following water analogy, whilst not completely accurate, may be of use in demonstrating the effect of fault current on the electricity network and the FCL service in operation.

To view the water analogy please [click here](#).

Alternatively to skip to the next question please press the forward arrow below.

ADD CONCEPT BOARD TO BOTH VERSIONS OF THE SURVEY

ENSURE IMAGE IS AS LARGE AS POSSIBLE – IT NEEDS TO FILL THE ENTIRE PAGE

Here is a written summary of the Respond FCL service concept. Please read the information and press proceed at the bottom of the page. (Please click on the image to enlarge it)

RESPOND Fault Current Limiting service

Background The UK's electricity demand is expected to increase significantly in forthcoming years as we move towards a low carbon future and reduce our reliance on fossil fuels.

Problem

- Higher demand for electricity will increase faults on the distribution network and this will raise **fault current**. Normal current is the steady flow of electricity through the network whilst fault current is the instantaneous surge of electrical energy, which occurs only when there is a fault.
- Fault level** is the potential maximum amount of fault current that will flow during a fault.
- Additional demand and generation will inevitably increase fault level and if the safety rating of network equipment is exceeded, it must be replaced. This can be a disruptive, lengthy and expensive process.

Solution Respond will use innovative techniques to manage fault level at much lower cost than traditional reinforcement by optimising existing assets and offering a new commercial solution - the Fault Current Limiting service (FCL service). Respond will ensure that customers continue to get the power they need and allow the network operator greater flexibility to connect demand and generation to the network.

How? Electricity North West will buy a managed service from some industrial and commercial customers which will allow them to remotely switch off large electrical motors and generators, for just a few minutes, when a network fault occurs. This will stop the customer's equipment from contributing to the fault current. The fault level response is expected to occur only a few times each year.

What's in it for me? Respond offers significant financial benefits to customers who are willing and able to sell a FCL service to Electricity North West through a managed service agreement.

Faster & cheaper adoption of low carbon technology | less disruption | lower bills

ASK ALL, RANDOMISE, RANK ALL STATEMENTS

Q15 What do you perceive to be the top five **benefits to your organisation** of signing up to the new Respond FCL service concept?

*Please rank order **five** of the following benefits to your organisation where position 1= most Important.*

You can answer this question by dragging and dropping the benefits into the relevant position, one at a time.

You can also change your mind and alter the position of the statements, if you need to do so.

- 1) Financial rewards /income generation from a managed service agreement
- 2) Greater return on investment for existing DNO assets
- 3) Avoid future increases in your bills (from premature reinforcement of DNOs assets)
- 4) Ability to connect load or generation to the network at lower cost
- 5) Minimise disruption to the electricity network
- 6) Contribution toward smart solutions to meet future energy demands
- 7) Environmentally friendly- accelerating uptake of low carbon generation.
- 8) Contribute towards the future of my region
- 9) Other (please specify)
- 10) None of these (**EXCLUSIVE**)

1	
2	
3	

ASK ALL, MULTICODE, RANDOMISE, SELECT A MINIMUM OF 1 AND MAXIMUM OF 5

Q16 Thinking specifically about your organisation's generator / CHP or rotating motor, what do you perceive the main **barriers/risks** to your company of signing up to the new electricity Respond FCL service concept, if any?

*Please select **up to five** of the following barriers/risks and rank order any that you select where position 1= greatest risk to your organisation.*

- 1) Concern that installation/setup may be too disruptive to my organisation
- 2) Concern over the downtime, disruption to business processes and losses/waste when our generator / motor is off
- 3) Concern over the immediate impact on our machine when the power is switched off and restarting
- 4) Lost productivity in terms of labour force (employees unable to work during down time)
- 5) Concern over the long term impact on our machine and its maintenance requirements
- 6) Uncertain of how it will affect the quality/reliability of my electricity supply
- 7) Concern over being able to agree contract terms (sufficient financial incentives).
- 8) Concern over being able to agree an appropriate contract term (number of years)
- 9) Concern over credibility of the new concept and being one of the first to enter into an agreement
- 10) Concerns over gaining senior/board approval to join trial
- 11) Need further information
- 12) Other (please specify)
- 99) I do not think there are any barriers/risks to signing up (**Exclusive, skip question**)

1	
2	
3	

APPEAL, ASK ALL, SINGLECODE

Q17 Overall, how **appealing** do you find this new Respond FCL service concept for your organisation?
Please use a scale of 1 to 7 where 1 is 'not at all appealing' and 7 is 'very appealing'?

Not at all appealing						Very appealing
1	2	3	4	5	6	7

CREDIBILITY, ASK ALL, SINGLECODE

Q18 Based on the information we have provided, to what extent do you believe in the following aspects of the new Respond FCL service concept?
Please use a scale of 1 to 7 where 1 is 'I don't believe in it at all' and 7 is 'I completely believe in it' and drag and drop the cursor onto the relevant number on the rating scale.

Don't believe in it at all						Completely believe in it
1	2	3	4	5	6	7

- 1) The Fault Current Limiting service method can provide an effective solution to managing fault current
- 2) The Fault Current Limiting service will result in significant cost savings by maximising the use of existing assets
- 3) Fault Current Limiting service will defer or prevent the need for reinforcement of the network
- 4) Fault Current Limiting service will speed up the connection of low carbon demand and generation

LIKELIHOOD TO TAKEUP- UNPRICED, ASK ALL, SINGLECODE

Q19 You may not have responsibility or influence in your company's commercial/contractual decisions. However, given what you know about the new Respond FCL service concept *so far*, how likely would you be to recommend that your organisation **considers opting into a new commercial contract**.

Please use a scale of 1 to 7 where 1 is 'Not at all likely' and 7 is 'Very likely' and drag and drop the cursor onto the relevant number on the rating scale.

Not at all likely						Very likely
1	2	3	4	5	6	7

I don't know..... 98

RESPOND Pricing Structure

We would now like you to think about the potential financial rewards for signing up to a Respond commercial agreement. **We will now show you some different possible versions of the Respond FCL service contract.**

The contracts will vary by the following characteristics:

- Financial Reward in £
- Pay per use of contract (per event) vs guaranteed annual retainer fee
- Cap on number of uses per year
- Length of contract

You will be asked to make a choice between **twelve different pairs of contracts**. In each case, please indicate which one of the pair you prefer. You will then be asked how likely you would actually be to take up that contract, if it was available.

Please note that the prices quoted are for illustration purposes only, to enable Electricity North West to prepare suitable commercial templates for the Fault Current Limiting service, which will be used as part of the trial. Financial payments are subject to contract terms and conditions.

The Respond trial will only be available within the North West and involve selected customers that meet specific criteria (e.g. size, operating voltage and location on the network). If the trial is successful, the concept may be rolled out more widely across the UK in the future. This is why you have been asked to complete this survey.

ASK ALL, SINGLECODE

Q20 Before we proceed please can you specify the maximum generation capacity of your largest generator and/ or the maximum demand capacity of your largest asynchronous motor/ largest set of asynchronous motors connected to a common circuit breaker in the box below? You can choose to enter the capacity in kW or MW.

NO LOWER/UPPER LIMIT ON THE VALUE ENTERED IN EITHER BOX.

kWMW

RESPONDENT ONLY REQUIRED TO ENTER A NUMERICAL FIGURE IN ONE OF THE BOXES. AS A FIGURE IS ENTERED IN ONE BOX THE OTHER BOX IS AUTOMATICALLY POPULATED.

1MW = 1000kW

1kW = 0.001MW

BEFORE PROCEEDING, PROMPT RESPONDENT TO REVIEW THEIR ANSWER.

The contracts you are about to see will be based on the maximum generation capacity of your largest generator and/ or the maximum demand capacity of your largest asynchronous motor/ largest set of asynchronous motors. You have said the capacity is approximately: **[PIPE IN kW]**

	kW
--	----

Are you happy to proceed on this basis?

ON EACH CONJOINT CONTRACT SCREEN DISPLAY THE CONTRACT NUMBER [x / 12] SO THAT THE RESPONDENT KNOWS HOW MANY THEY HAVE LEFT TO ANSWER [ACTS AS A PROGRESS BAR].

POST CONJOINT APPEAL QUESTIONS

ASK ALL, SINGLECODE, EASE OF COMPLETING TASK

Q21 Generally, how easy was it to choose which contract option you preferred on a scale where 1 means not at all easy and 7 means very easy?

Not at all easy							Very easy
1	2	3	4	5	6	7	

EASE OF COMPLETING TASK, ASK ALL WHO CODE 1-3 AT Q21, SINGLECODE,

Q22 Why weren't you able to select a preferred option in the choices presented to you?

- I did not understand the task 1
- Not enough information provided on the options 2
- The options were not sufficiently different 4
- The options were not appealing to me 5
- Other [PLEASE SPECIFY] 6

KEY DRIVER OF CHOICE (STATED), ASK ALL, SINGLECODE

Q23 What was the **most** important factor in making your choices between each pair of options?

- Length of contract (years) 1
- Financial Reward in £ 2
- Pay per use of contract (per event) vs annual payment 3
- Cap on number of events per year 4
- Don't know 6

KEY DRIVER OF CHOICE (STATED), ASK ALL

Q24 Why is (**INSERT ANSWER TO Q23**) the most important factor influencing your choice?

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LENGTH OF CONTRACT, ASK ALL, SINGLECODE

Q25 Does your organisation have an existing policy which determines the maximum length of contract it will enter into for new commercial agreements?

- Yes..... 1
- No..... 2
- Don't know 3

ASK ALL WHO HAVE AN EXISTING POLICY (CODE 1 AT Q25), SINGLECODE

Q26 How long, subject to company policy and agreeing terms and conditions, is your organisation likely to enter into a new commercial agreement for?

- One year 1
- Two years 2
- Three years 3
- Four years 4
- Five years 5
- Longer than five years 6
- Don't know 7

CALCULATING THE RISK, ASK ALL, SINGLECODE

Q27 When you were making your choices, did you attempt to quantify any possible risks to your organisation in order to evaluate the appeal of the various financial rewards presented?

- Yes..... 1
- No..... 2

CALCULATING THE RISK, ASK ALL WHO CALCULATED RISK (CODE 1 AT Q27)

Q28 Please describe in your own words how you went about quantifying the risk?

For instance calculating the relative cost of machinery/electrical equipment being interrupted?

CALCULATING THE RISK, ASK ALL, SINGLECODE

Q29 If, under a Respond FCL service agreement, your company's generator / CHP / motor was temporarily constrained for up to a maximum of ten minutes, meaning machinery needed to be re-started; are you able to quantify the value of **lost productivity / lost generation** to your organisation?

Please think about the cost **per occasion**.

Please note: During such an occasion, the FCL service would only constrain selected machinery, not your entire electrical supply. For the purposes of answering this question, assume your generator/motor would be switched off for up to a maximum of 10 minutes.

- I can confidently estimate the cost now 1
- I can estimate the cost of lost productivity now 2
- I could calculate the cost if given the time to do so 3
- I am not able to calculate the cost 4

CALCULATING THE RISK, ASK ALL WHO CAN CALCULATE THE COST NOW (CODES 1-2 AT Q29)

Q30 What would the likely cost in lost productivity be to your organisation?

£

CALCULATING THE RISK, ASK ALL, SINGLECODE

Q31 How many times would your organisation find it acceptable for your generator or motor to be remotely constrained (disconnected) for ten minutes under a FCL service agreement in a 12 month period?

- Once 1
- Twice 2
- Three times 3
- Four times 4
- Five times 5
- Six times 6
- Seven times 7
- Eight times 8
- More than eight times 9
- None 10

ASK ALL, OPEN ENDED RESPONSE

Q32 If you were to have a face to face or telephone meeting with Electricity North West to discuss the FCL service and commercial contracts in more detail, what would be your main questions/queries?

General Attitudes & Previous Interaction with Distribution Network Operator

ASK ALL

The following map indicates which DNO (Distribution Network Operator) your organisation’s electricity supply will be fed from depending on the location of your site(s)?



ASK ALL, SINGLECODE

Q33 Do you have a site in North West England (in Electricity North West’s distribution region) with a generator/motor or combination of connected motors with a capacity of over 500kw (0.5MW)?

- Yes 1
- No 2
- Don't know 3

ASK ALL, SINGLECODE, SCRIPT ON SAME PAGE AS Q33

Q34 Which DNO currently distributes electricity to the site of your largest generator, single motor or the largest combination of motors connected to a common circuit breaker?

<i>Please select at least one answer.</i>	
Scottish and Southern Energy	
SP Energy Networks	
Electricity North West	
Northern Powergrid	
Western Power Distribution	
UK Power Networks	
I don't know [EXCLUSIVE]	

ASK ALL WHO HAVE A SITE IN THE ENWL REGION (CODE 1 AT Q33), SINGLECODE

Q35 Have you had reason to contact Electricity North West in the past year?

- Yes 1
- No 2

ASK ALL WHO HAVE CONTACTED ENW IN THE LAST YEAR (CODE 1 AT Q35), MULTICODE

Q36 What did you contact Electricity North West about?

- 1) Interruption to your power supply (planned/unplanned)
- 2) A new electricity connection / change to authorised supply capacity or export generation capacity
- 3) A query about the quality of your electricity supply
- 4) A general enquiry (substations, meter board cut outs, site management, other)
- 5) A complaint
- 6) Other (Please specify)

ASK ALL WHO HAVE A SITE IN THE ENW REGION (CODE 1 AT Q33), SINGLECODE

Q37 ENW is responsible for ensuring homes and businesses in your region have a safe and reliable supply of electricity, no matter which supplier customers pay their bills to.

On a scale of 1-10 where 1 is completely dissatisfied and 10 is equal to completely satisfied, how satisfied are you with the reliability (*often thought of in terms of frequency and duration of power cuts, spikes and dips in electricity supply*) of your organisation's electricity as provided by Electricity North West

Completely dissatisfied										Completely satisfied
1	2	3	4	5	6	7	8	9	10	

Thank you for taking part in our online customer survey. The results of this survey will be analysed and published on the Respond website.

ASK ALL, SINGLECODE

Q38 Would you like to be sent a link to the results of this survey by email when published?

- Yes..... 1
No..... 2

ASK ALL, SINGLECODE

Q39 Would you be interested in finding out more about participating in the Respond FCL service Trial?

- Yes..... 1
No..... 2

Electricity North West will be in a better position to discuss the possible commercial agreements in more detail with customers when the results of this survey are published. If you have expressed an interest in participating in FCL service Trial, Electricity North West will consider the suitability of your organisation and will make contact with you directly. Suitable customers will be contacted by Electricity North West from May 2016 onwards.

ASK ALL, SINGLECODE

Q40 Now that you have completed this interview, you will receive a £25 payment. Would you prefer?

- e-voucher..... 1
Charity donation..... 2

ASK ALL WHO WOULD PREFER TO DONATE TO CHARITY (CODE 2 AT Q40), SINGLECODE

Q41 Please select the charity you would like to donate your incentive too?

Multiple sclerosis Society.....	1
The Christie	2
British Heart Foundation.....	3
Macmillan Cancer Support	4
ChildLine.....	5
Oxfam	6
SolarAid.....	7
I do not mind, select a registered charity for me.....	8

ASK ALL WHO WOULD PREFER AN E-VOUCHER (CODE 1 AT Q40), SINGLECODE

Q42 Please select the shop you would like the e-voucher for?

Amazon.....	1
B&Q	2
Burtens	3
Dorothy Perkins	4
Pizza Express	5
Starbucks.....	6
Zizzis.....	7
GO BACK TO PREVIOUS QUESTION (GO BACK TO Q41).....	8

You should receive your e-voucher within 30 days of completing the survey or if you have opted for a charity donation we will send your preferred charity funds within 30 days of our survey closing.

S ASK ALL

Q43 Finally, please confirm if you are happy for **Impact Research** to get in touch with you again in the future to discuss the service your organisation receives from Electricity North West for **market research purposes**?

- 1) Yes
- 2) No

Thank you, your answers have been received and this survey is now completed. We appreciate you taking the time out of your busy day to share your thoughts and opinions with us. Your input today will directly impact future electricity services in Great Britain.