

National Energy Action (NEA) response to Strategy consultation for the RIIO-ED1 electricity distribution price control

About National Energy Action (NEA)

NEA is a national charity which is impartial, principled and independent. NEA has delivered a wide range of services on behalf of central Government, relevant local and national agencies, local authorities, social housing providers and large and small businesses for over 30 years. NEA has a clear and focused mission to ensure that everyone in the UK has access to sufficient warmth in the home to ensure their health, comfort and well-being at an affordable cost.

NEA develops and promotes energy efficiency services to tackle the heating and insulation problems of low-income households. Working in partnership, NEA aims to eradicate fuel poverty and campaigns for greater investment in energy efficiency to help those who are poor or vulnerable.

Introduction to this response

NEA welcomes the opportunity to respond to the ED1 consultation and to shape the future development of industry practice in this area.

NEA highlights that the efficiency and cost effectiveness of future design, construction, maintenance, connections and operation of the distribution network will play a key role in either mitigating or exacerbating fuel poverty levels. It is estimated that around £32 billion would need to be spent on pipes and wires against an industry worth over £43 billion. This represents an increase in value of 75 per cent – and a doubling of the rate of investment from the previous 20 years.

Despite efforts to ensure that costs incurred are subject to scrutiny and present value for money, the increase in costs entailed will continue to be reflected in higher energy prices. The impact of these proposals can be mitigated through adequate and proportionate assistance to vulnerable households; however, according to an independent review of fuel poverty commissioned by the UK Government earlier this year, existing and future policy proposals fall far short of what is required to protect the health and welfare of fuel-poor households.¹

The regional distribution businesses, covering the whole of Great Britain, have the responsibility through their Distribution Licences to design, build, maintain and operate the distribution networks which provide power to practically every home, office and factory in the country. Looked at in an abstract manner, these companies are moving from a period of relative stability, to the unknown. Age-related renewal, governmental policy commitments to harness cleaner and renewable sources of electricity generation and a changing regulatory environment all present complex, integrated challenges which, alongside opportunities, may also prove to be fraught with many risks.

Like most businesses, Network Operators are reliant on their customers, the users of the network; energy supply companies, who pay Distribution Use of System charges to transport power through the network to their customers; generating companies who are connected to the distribution system and use the system to deliver their power to their customers; and private network companies.

- In their role in the delivery of electricity, DNOs are highly aware of the needs of consumers. This awareness has traditionally focused on understanding how reliability and network performance are valued and what constitutes good service, especially when new connections are being requested, or when the customer contacts the DNO (or vice versa) to report no-supply or to enquire on when supply will be restored.
- 2. As with energy supply and gas network companies, the DNOs are under Licence Obligations to maintain a Priority Services Register (PSR), which assists in providing a preferential service to certain consumers when supply is lost through a power failure or a planned disconnection. The relevant Licence Condition is includes as an appendix to this report.
- 3. Beyond this requirement, there is currently little obligation for DNOs to support social action and there is no obligation in relation to fuel poverty. However, given that DNOs are price-controlled and provide a monopoly service, in many ways this makes them well placed to deliver social action and support work to alleviate fuel poverty in a cost-effective manner.

¹ Getting the measure of fuel poverty: Final Report of the Fuel Poverty Review, John Hills March 2012.

This price review therefore provides an excellent opportunity to consider an increased role to protect vulnerable customers through innovative and efficient investment in the electricity network and wherever possible through links to the social obligations placed on GNOs and suppliers. Distribution costs represent around 25% of the average low-user total energy bill and it is important that they receive a fair share of the benefits of investment expected in this price review period.

Response to the consultation questions

Chapter Three

Question 1: Do you have any comments on our stakeholder engagement approach?

NEA welcomes the steps Ofgem are taking to enhance the extent and quality of engagement with these proposals. Given the radical departure from previous approaches to setting the distribution price controls (the new performance based RIIO model) and the longer eight-year price control period, this enhanced approach is required. It is also important that Ofgem monitor the level of engagement and ensure those stakeholders involved can contribute fully through effective communications channels.

Question 2: Do you have any views on how our engagement process or that of the DNOs could be made more effective?

As noted in response to questions within chapter 6, what is clear from our research is the importance of the awareness of supportive agencies in referring eligible vulnerable households on to the priority services that DNOs can offer. If the range of organisations responsible for the health and wellbeing of residents within a given area (for example) are not aware of the additional support to which eligible households are entitled; they will not be in a position to ask for households to be added to the PSR. As noted below, DNOs should be encouraged to consider their social obligations as part of core business and not a community CR activity which is additional to main business. We would therefore highlight the immediate need to clarify what criteria could be applied by Ofgem in reviewing DNOs' business plans to demonstrate the breadth of this engagement and on-going cooperation.

Chapter Four

Question1: Do you have comments on the form or structure of the price control?

NEA is concerned about one discrete aspect of the form of the price control and the outputs that DNOs will need to deliver on. This may also have implications for the revenues they are able to collect from consumers for delivery.

In the strategy, Ofgem recognise that DNOs could play a valuable role in providing additional assistance to low-income or vulnerable off-gas grid households. As noted in the introduction to this response, NEA believes this recognises that the efficiency and cost effectiveness of future design, construction, maintenance, connections and operation of the distribution network will play a key role in either mitigating or exacerbating fuel poverty levels. It also acknowledges that, given that DNOs are price-controlled and provide a monopoly service, in many ways this makes them well placed to deliver social action and support cost-effective alleviation of fuel poverty.

As our commissioned work demonstrates, this assistance could be delivered in a number of ways (potentially involving direct rebates to households, liaising with a gas network to enable a connection to the gas grid, or helping to identify alternative electric heat technologies or energy efficiency improvements, if there is an economic test which demonstrates this is in the long term interests of consumers by reduced investment costs). However it is currently unclear how this potential DNO activity might arise or be structured within the proposed arrangements. More specifically, it is not clear whether Ofgem wish to establish a ring-fenced social fund or will look to wrap the aforementioned activity into the Network Innovation Competition (NIC) or a combination of the two.

NEA believes this decision should reflect the exact nature of the DNOs' social activity and not historic precedents. Under the NIC, for example, which will encourage the development of smart grids and low carbon energy networks, there is a significant opportunity to incentivise DNOs to work with different parties to take a longer-term view of reinforcement requirements on their network, leverage additional funds based on other parties' existing obligations and make sure the investment is cost effective (benefiting all energy consumers) but, critically, ensuring that there is a direct social outcome too.² At the same time, it has been suggested that Ofgem should simply introduce a separate discretionary reward scheme to incentivise DNOs to work with others in developing and strategically using the information they hold in their PSR on consumer vulnerability. A ring-fenced social fund for this necessary engagement would be a valid approach, but Ofgem should clarify any ambiguity that leads DNOs to believe that social action by them is potentially restricted solely to engagement on issues relating to the PSR. Once again, NEA would note that there would potentially be substantial savings that could be made through deployment of a new economic test which also has social impact at its heart.

Question 2: Do you agree with our proposed changes to the RIIO-ED1 timetable?

NEA believes that the longer eight-year price control period (and suggested overlap with other price controls) is valid. However there should be regular reviews as the assumptions made could deviate due to economic circumstances, and technology developments

Question 3: Do you have a view on the materiality of potential changes in allowed revenues/charges between price controls? Do you have proposals to address this?

NEA has no relevant views on this question.

² See response to chapter 7 and the need for DNOs to identify 'reinforcement hotspots' and establish an alternative cost benefit analysis which indicated 'other actions' which could be undertaken to either defer or mitigate the reinforcement need n this issue, NEA would request Ofgem considers commissioning NEA to undertake further work to explore this policy option in greater detail. In particular, the project team would like to capture DNOs input on whether this proposal would best sit within a ring-fenced social fund or the Network Innovation Competition.

Chapter 5

Question1: Do you consider that the proposed outputs and associated incentive mechanisms, taken together with other elements of the price control, will ensure that companies deliver value for money for consumers, and play their role in delivering a sustainable energy sector?

As noted in response to chapter 4, the strategy rightfully recognise that DNOs could play a valuable role in providing additional assistance to low-income or vulnerable off-gas grid households and continue to ensure that the PSR is an effective tool. As noted in the introduction to this response, NEA believes this recognises that the efficiency and cost effectiveness of future design, construction, maintenance, connections and operation of the distribution network will play a key role in either mitigating or exacerbating fuel poverty levels.

It is also worth highlighting in this context that by tackling fuel poverty it is not only possible to improve people's lives, it can also improve local areas and enhance streetscapes, reduce national and local health and social care spending, put additional money back into the local economy and, crucially, make a significant contribution to a more efficient, less carbon intensive energy sector.

Question 2: Do you consider that the proposed outputs and incentive arrangements are proportionate (eg do we have too many or too few)?

As noted above, NEA believes the proposed outputs and incentive arrangements should reflect the exact nature of what Ofgem believe is an appropriate role for DNOs in the future, and not historic precedents. NEA supports the changes to the socialisation of costs and the requirement that the costs of major new commercial developments should be borne by the commercial investors and not the domestic customer in that area. However NEA would also highlight that network companies could charge a lower cost to customers (reduced or zero Use of System charges) on the PSR if there is an effective mechanism to discount these charges by the supplier (pass on the lower cost to serve) as a rebate on energy bills (up to a maximum level).

Question 3: Do you have any views on the proposed outputs and incentives?

NEA understands that companies will have to highlight in their business plans where they propose to roll out innovative technology, techniques or commercial strategies and (if these pose higher costs than the business-as-usual approach), DNOs need to set out the longer-term business case for the innovation and commit to outputs relating to this expenditure. NEA wishes to comment about the nature of these specific outputs.

The approach to outputs highlighted above, builds on the continued need for an evolution (highlighted in the introduction) towards more active distribution networks. As part of this process, several electrical power technologies and innovative information systems may be required. It is likely for instance that DNOs will need to invest in network management devices for network interfacing of distributed generation sources and voltage/power flow management, and adjust their current approaches to reinforcement to adapt to novel transmission and distribution systems designs.

However, NEA would highlight a concern has been raised that the level of flexibility suggested may encourage DNOs to innovate (or over-engineer) at the expense of consumers or in isolation of the wider objectives within the distribution period. It should be noted that there is a risk that some DNOs may be overly keen to innovate and so in a way that fails to future-proof these infrastructure decisions. There is therefore a tension between wishing DNOs to innovate and move towards active distribution networks and their doing so before all the technical challenges (and potential solutions) are apparent.

Given this challenge, NEA believes that the ED1 period should be used by DNOs to strain the operational capability of their networks and therefore glean a more accurate picture of the more acute potential challenges that will need to be met in the future. Whilst this approach may seem radical, at the same time DNOs could be encouraged to:

- Identify 'reinforcement hotspots' across their geographic territory
- Obtain a forecast of the BAU reinforcement costs and work with supportive local delivery agents thereby creating an opportunity to simultaneously assess the scale of EDR potential (and aggregate it) and identify any complementary energy efficiency activity
- Once this research is complete, it should be possible to establish an alternative cost-benefit analysis indicating 'other actions' that could be taken to either defer or mitigate the reinforcement need in an area entirely
- Grade the potential aggregation of electrical demand reductions and prioritise electrically heated domestic (off-gas grid) customers on the basis that there are positive social impacts and wider benefits (reduction in local health costs etc)
- Match alternative investments to existing or planned activity within that area and approach potential delivery partners
- Provide annual reports on the aforementioned activity

The value of this proposal for all energy consumers could be safeguarded by a variation of the current 'Golden Rule' (the contribution by the DNO to the cost of these alternative projects would always have to be lower than the cost of the network reinforcement).

The emphasis then would be on DNOs to work with different parties to take a longerterm view of reinforcements on their network, leverage additional funds based on other parties' existing obligations and make sure the investment is cost effective (benefiting all energy consumers) whilst ensuring that there is a direct social outcome too.³

Chapter 6

Question 1: Is our proposed approach to cost assessment appropriate? And Question 2: Do you have views on our proposed use of proportionate treatment?

NEA has no relevant views on this question.

Question 3: Do you have any views on the criteria for assessing business plans?

As noted in response to chapter 2 (question 2), NEA believes there is an immediate need to clarify what criteria could be applied by Ofgem in reviewing DNOs' business plans to illustrate the breadth of engagement and on-going cooperation that will be need to support DNOs' future activity on the PSR.

³ NEA would request Ofgem considers commissioning NEA to undertake further work to explore this policy option in greater detail. In particular, the project team would like to capture DNOs input on whether this proposal would best sit within a ring-fenced social fund or the Network Innovation Competition.

In order to help establish how DNOs use the Priority Services Register, NEA has reviewed the findings of a previous research project carried out by Ofgem on this topic.⁴ The research found that:

- All DNOs store their registers electronically on their databases. The registers are made up primarily of referrals from suppliers on the Data Transfer Network (DTN). The DTN includes a dedicated form for transferring information about customers on the PSR. However, there were <u>only a limited number of referrals</u> <u>from other sources</u>, either direct from customers themselves, or from someone with a responsibility for the customer's care, such as a hospital or health centre.
- DNOs' registers hold names, addresses, and in most cases information about customers' particular needs, for example that they have medical equipment that requires the use of electricity. However, it was <u>unclear whether the extent of</u> <u>information held fully reflected the extent of medical conditions of households</u> <u>within their distribution territory</u>.
- Most DNOs update their registers on a regular basis and also carry out some data validation exercises, though the <u>frequency of these verifications is variable and</u> <u>there is limited knowledge about whether this information matches the</u> <u>information held by supply companies</u>. Some report that they rely entirely on suppliers for the accuracy of the data that they hold and were not confident about the accuracy of some of the data.
- All DNOs distinguish medically dependent customers from others, with the former being a priority for contact during power cuts. However, <u>some DNOs complained</u> <u>about the number of referrals sent by suppliers that either contained no relevant</u> <u>details beyond the customer's name and address</u>, or that contained no details relevant to the DNO's obligations.
- DNOs communicate information about planned interruptions by letter or handdelivered cards, although some will telephone or door-knock customers with medical needs. <u>Most DNOs do not use large print or Braille cards for customers</u> <u>with sight difficulties</u>, although a few reported that they will do so on request. The study did not report any alternative techniques (or use of effective local conduits) which might support the DNOs in informing relevant customers of potential planned interruptions (as well as communicating what additional support may be on offer to help these households reduce their energy costs).

Having considered these factors, the conclusions one might draw are still largely valid today.⁵ Whilst, in general, services to customers on the PSR are deemed to be effective, there may be confusion regarding the separate obligations of suppliers and DNOs. In particular, there are differences in the amount and quality of data being sent from suppliers to DNOs and how that information is applied by DNOs.

DNOs operate in full compliance with their "regulatory contract". As a natural monopoly, their actions are very much governed by what has been agreed and is embodied in their Distribution Licence. Therefore, Ofgem's views of how the DNOs should conduct their business are of paramount significance when considering or recommending change.

 ⁴ Priority Service Research Project, A report on services to vulnerable customers. December 2003
⁵ NEA would request Ofgem considers commissioning NEA to undertake a questionnaire of DNOs to validate

this statement.

In this context, if the range of organisations responsible for the health and wellbeing of residents within a given area are not aware of the additional support to which eligible households are entitled; they will not be in a position to ask for households to be added to the PSR. NEA would therefore highlight the need to adopt the following criteria in reviewing DNOs' business plans:

- An illustration of the extent of future engagement with local authorities on seasonal resilience planning and engagement in the development of relevant local authority HECA strategies.
- Evidence that DNOs will attempt to build constructive relationships with local health representatives, through the Health and Wellbeing Boards to exchange relevant information to improve the accuracy and breadth of information they hold in the PSR.
- Evidence that DNOs are seeking to engage with other local groups and agencies to help design local initiatives to support and improve the information held within the PSR and help ensure vulnerable householders are aware of the benefits that DNOs could offer through the PSR.
- Evidence that DNOs will seek to target or support the production of relevant publications which can help ensure that supportive information on the benefits of the PSR is distributed effectively within relevant networks.
- Evidence that DNOs will seek to establish effective cross referral with supply businesses to ensure vulnerable customers can access other benefits such as WHD or ECO

These proposals are deliberately modest and reflect a need to ensure any recommendations are both proportionate and achievable.

Chapter 7

Question 1: Do you have any views on the role of innovation in RIIO-EDI?

As noted in response to chapter 5 (question 3), there is currently a concern that the level of flexibility for innovation may encourage DNOs to innovate (or over engineer) at the expense of consumers or independent of the wider objectives within the distribution period. It should be noted that there is a risk that DNOs that are overly keen to innovate may do so in a way which fails to future-proof these infrastructure decisions. There is therefore a tension between wanting DNOs to innovate and move towards active distribution networks and their doing so before all the technical challenges (and potential solutions) are apparent. Getting this balance incorrect would lead to increased consumer costs and fuel poverty levels.

Given this challenge, NEA believes that the ED1 period should be used by DNOs to strain the operational capability of their networks and therefore glean a more accurate picture of the more acute potential challenges that will need to be met in the future. Whilst this approach may seem radical, the value of this proposal for all energy consumers could be safeguarded by a variation of the current 'Golden Rule' (the contribution by the DNO to the cost of these alternative projects would always have to be lower than the cost of the network reinforcement). The emphasis then would be on DNOs to work with different parties to take a longer term view of reinforcements on their network, leverage additional funds based on other parties' existing obligations and make sure the investment is cost effective (benefiting all energy consumers) whilst ensuring that there is also a direct social outcome too.⁶

Question 2: What should the funding threshold for the NIC be? Do you agree with our proposal to review it after two years to reflect learning from the LCN Fund?

The funding threshold for the NIC (as well as Ofgem's approach to monitoring DNOs business plans) should reflect the tensions and opportunities raised above.

⁶ NEA would request Ofgem considers commissioning NEA to undertake further work to explore this policy option in greater detail. In particular, the project team would like to capture DNOs input on whether this proposal would best sit within a ring-fenced social fund or the Network Innovation Competition.

Annex: Summary of recommendations from Ofgem commissioned research

Enhancing the use of the Priority Services Register

"Ofgem should ensure that stakeholders outside of the energy industry are made aware of the benefits of the PSR, through a variety of effective communications channels".

Like energy supply companies, network operators are obliged by licence to maintain Priority Services Registers (PSR), which assist in providing a differentiating service to certain consumers.⁷ The project team highlights that enabling priority services to be provided to the right customers depends on the quality of information available on an individual's specific circumstances and the ability of supportive agencies to refer eligible vulnerable households to access these services. It is therefore critical that Ofgem monitor the breadth and effectiveness of this engagement and ensure that stakeholders outside of the energy industry are made of the benefits of the PSR, through a variety of effective communications channels.

These proposals are deliberately modest and reflect a need to ensure any recommendations are both proportionate and achievable. However an equally valid consideration is whether concerns with data protection are justified within this context. The project team believes that the proportionate use of the information (and transfer of information between obligated parties) to fulfil current licence obligations under the PSR are justified and are not contentious.

1. Reducing network reinforcement cost and contributing to attempts to enhance domestic energy efficiency and demand reductions

"Further steps are warranted to ensure all DNOs are aware of the opportunity to embed the efficiency incentives within ED1 alongside a direct social outcome".

The project team has also investigated innovative approaches to demand reduction (utilising micro-generation and community energy as well as conventional energy efficiency measures) and the practicability of replicating them through new policies in the UK through DNOs. NEA would note that there would potentially be substantial financial savings that could be made through deployment of a new economic test which also has social impact at its heart.

The opportunity to integrate this new approach within the development of future network policy, and appropriate enabling mechanisms have been considered. NEA recognises that DNOs will be subject to an efficiency incentive during ED1 and will be encouraged to foster innovation but notes that further steps would be warranted to ensure all DNOs are aware of this opportunity and embed these principles alongside a direct social outcome.⁸

⁷ The relevant Licence Condition is included as Appendix 2 to this report

⁸ It is currently unclear how this potential DNO activity might arise or be structured within the proposed arrangements. More specifically, it is not clear whether Ofgem wish to establish a ring-fenced social fund or will look to wrap the aforementioned activity into the Network Innovation Competition (NIC) or a combination of the two or expect this to happen naturally. NEA believes this decision should reflect the exact nature of the DNOs current and future activity and not historic precedents. Under the NIC for example, which will encourage the development of smart grids and low carbon energy networks, there is a significant opportunity to incentivise DNOs to work with different parties to take a longer term view of reinforcement requirements on their network, leverage additional funds based on other party's existing obligations and make sure the

DNOs should be encouraged to identify 'reinforcement hotspots'. By ascertaining a forecast of these BAU costs, and working with supportive local delivery agents, establish an alternative cost-benefit analysis which indicated 'other actions' which could be undertaken to either defer or mitigate the reinforcement need entirely. These 'other actions' should specify the potential aggregation of electrical demand reductions from domestic (off-gas grid) customers; in instances where there would be a positive social impact (*e.g.* activity was focused on low-income and vulnerable communities). In particular, DNOs could identify alternatives to reinforcement in the form of replacing electrically heated tower blocks by making a financial contribution towards a modern efficient district heating network, extensive insulation and link up to Green Deal and ECO (or gas connections in blocks of less than three storeys in height).

The project team has also considered mechanisms that would enable fuel-poor households to have equal access to the operational incentives targeted at microgeneration. Unfortunately, obtaining separate finance currently exacerbates the current key barrier to increased take-up of these technologies by financially disadvantaged households. The preferred option would be for DNOs to provide support by funding an increase to the current grant maximum available under Warm Front. In future, it may be possible to establish a new scheme which could facilitate a transfer of potential operational incentives back to a grant administrator. This model was seen to be desirable as it addresses the key barrier of upfront capital, concerns over double subsidy for ableto-pay households and reduces demands on ECO to fund other measures within the scheme as a whole.

Key to unlocking these future opportunities is the need to encourage distribution companies to recognise their value in being able to secure low-cost finance and build partnerships with a range of other agencies already involved in attempting to provide a joint proposition for domestic energy consumers.

2. Recommendations for reducing network connection costs

"Whilst NEA recognises that a clarification on G83 processes has recently been issued, it may be useful to clarify (to a non-technical audience) how there will continue to be a standardised approach to the "middle ground" between G83 and G59 connections."

As noted above, the efficiency and cost effectiveness of future design and construction of connections on the part of gas and electricity distribution companies will also play a key role in either mitigating or exacerbating fuel poverty levels. Whilst in many cases larger energy projects require bespoke negotiation, the associated timelines or negotiation to establish the connection design and provide costings could be subject to greater standardisation across electricity distribution companies. This approach would reduce the cost and uncertainty of projects and this saving, in turn, could be passed down to the customer of the energy service that generator will ultimately serve.

investment is cost effective (benefiting all energy consumers) but, critically, ensuring that there is a direct social outcome too.

Whilst NEA recognises that a clarification on G83 processes has recently been issued,⁹ we propose that work should be accelerated by the regulator Ofgem, the Energy Network Association and industry to clarify how there will continue to be a standardised approach to the "middle ground" between G83 and G59 connections, thereby helping reduce the complexity (and therefore costs) of connecting different technologies and/or reinforcing the network.

3. Potential for further interventions

"Ofgem should investigate the need to introduce more radical proposals in a regular manner".

During the research it has become clear that there are further policy options which would provide further benefits for low income consumers. As noted above, for gas operators for instance, the work highlights whether there is effective provision to deliver a service to householders who fall out of the economic test. This could be achieved by amending the current restriction to allow DNOs (or respective GDN partners) to apply the full NPV of future transportation revenues to the successful connections of fuel-poor households and create a mechanism to hypothecate any surplus to assist fuel-poor households whose premises are not situated in close proximity to a relevant main. These changes may be made possible by modifying the GDN and IGT licences or introduced as part of periodic review of the structure of charges to ensure that it provides appropriate incentives to GDNs, shippers, suppliers and consumers.

Similarly, the project team has considered the possibility of allocating a zero use-ofsystem charge to fuel-poor households by creating a new DUoS charges profile, set at zero. The householder's energy supplier then passes on the cost saving to them through a deduction on their electricity bill. One possibility to trial this concept would be to seek inclusion of these matters within the replacement of the Low Carbon Network Fund (LCNF) or the proposed Network Innovation Allowance (NIA).

However, further work would be needed to explore the potential implications for all customers and, in particular, to investigate any disadvantage or distributional impacts that might accrue to different types of energy consumers who may not directly benefit from these proposals. NEA would hope that further investigation of the need to introduce these more radical proposals will be considered on the basis of a regular and robust assessment of any disadvantage to low-income and vulnerable consumers as a result of current or planned regulation or policy intervention by the Regulator or the UK Government.

⁹ Connection of Small-Scale Generation – revisions to the Distribution Code to replace Engineering Recommendation G83/1-1 with G83/2; Ofgem, November 2012.