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Dear Louise,

#### Electricity North West's response to Ofgem's position paper on Distribution System Operation

Thank you for the opportunity to respond to your recent paper outlining your approach and regulatory priorities in relation to Distribution System Operation.

It is good to understand Ofgem's current position and is important for stakeholders to be able to feed in to this critical piece of work that will potentially shape the future operations of their energy system. Having the philosophies, expectations on outcomes and the work-plan clearly laid out is important. This, together with the recognition of the direct link between this development of regulatory approach and that of the plans for RIIO-ED2 is crucial. Ofgem need to make the framework and timings for both policy areas work together and allow companies to build this into their stakeholder engagement and subsequent business plans.

Electricity North West is the DNO covering the North West of England, serving more than 5 million domestic customers in 2.4 million premises, across a diverse range of locations, from urban Greater Manchester to rural parts of Cumbria, Lancashire and Cheshire.

Whilst the UK has recently made the commitment to being Net Zero by 2050, areas within the North West have made their own commitments to achieve a carbon neutral position:

- Greater Manchester has a target of being carbon neutral by 2038
- Lancashire County Council has committed to their operations being carbon neutral by 2030
- Cumbria has declared their ambition of being carbon neutral, and will set a target date shortly
- 19 councils within our area have declared a climate emergency

Over the course of our engagement in the past year, it is clear that our stakeholders (particularly local government and businesses) see us as a trusted, neutral party and are looking to us to take a leading role in helping our communities achieve these aims, which require action at a different pace than national targets with a later date. This means that clear action and progress will need to be made within the North West during RIIO-ED2 to ensure we remain on track to meet these challenging regional targets.

We note that the publication is a position paper with three broad questions and therefore have provided our more detailed response within Annex 1, and would like to share our high level views and observations here. We also attach in Annex 2 a copy of our response to the RIIO-ED2 open letter for ease of reference.

In order to ensure that the aims and objectives stated within the paper can be achieved and that work is undertaken in a co-ordinated manner, decisions will need to be made during 2019 and 2020 to ensure that our stakeholders can consider the implications and we as the DNOs can have sufficient time to reflect these views in our business plan which we expect will be provided to our Customer Engagement Group in early 2021 and Ofgem in December 2021.

The work between the Price Control and Flexibility teams needs to be as joined up as possible and aligned now, as this will lead to a smoother process for stakeholders, Ofgem and companies. The timing of the position paper to coincide with the RIIO-ED2 Open Letter clearly demonstrates that Ofgem is aware of this need and it is positive that the link is being recognised and therefore the risk is being reduced by this positive start to engagement on this subject. In addition, the charging and access work Ofgem is leading on also needs to be timed to provide clarity to stakeholders so they can reflect any consequential changes in their needs to network companies.

#### Q1 Do you agree with our strategic outcomes?

The position paper clearly lays out four strategic outcomes from DSO reforms.

Electricity North West, and other DNOs, have made progress at a principle level in many of these areas including for example neutral tendering of network management and reinforcement requirements. Ofgem could make use of this work, as well as the work of Open Networks and other stakeholders, to make rapid progress in understanding what applying these DSO development aims means in practice for RIIO-ED2.

We have two key reflections on these proposed strategic outcomes. Firstly, we would not consider this work as DSO reform and would instead suggest that this is better termed DSO development. In reality DNOs have been undertaking some of what is termed DSO for many years, with the scale and breadth of this evolving organically as our system changes to harness new technologies and markets to meet customers' needs.

Secondly, we agree that the outcomes proposed are necessary outcomes, and it is important that robust tactical plans are put in place in order to deliver them, however we would suggest that these are more accurately defined as framework objectives rather than strategic outcomes. We think it is more appropriate to focus on tactical plans to achieve these outcomes, rather than a wider strategic focus at the present point in time and we expand on this further within Annex 1.

#### Q2 Do you agree that our work programme will help to deliver the strategic outcomes?

We are in agreement with the three workstreams proposed and our views in this area centre on the 'how' and the 'who' aspects of these pieces of work.

There is no detail within the position paper on whether these workstreams are intended to be Ofgem internal only, and to what extent stakeholders are expected to be involved in these workstreams. There needs to be increased recognition of the work already being undertaken by industry and stakeholders via the Open Networks project to expand how the Ofgem and Open Networks workstreams could operate in tandem. Ofgem should seek to steer Open Networks and other stakeholders if Ofgem considers any issue to be missing from this work or any perspectives being overlooked.

We suggest Ofgem will be able to develop more informed views by engaging stakeholders in their process, holding regular workshops and giving stakeholders the opportunity to fully engage in these pieces of work. We would also urge Ofgem to signpost this work extensively to allow a wide range of stakeholders to be engaged, particularly those who still need to understand their own role, or potential role within this evolving area in order to facilitate a functioning market in the future.

In order to allow stakeholders and their representatives the ability to plan their participation it would be useful for Ofgem to publish a clear and achievable timeline. This should include intended decision points, with interdependencies clearly signposted with advanced notice of activities and planned agendas.

Careful consideration is needed to ensure that the workstreams of both Ofgem and Open Networks can work in an effective manner so that maximum output is achieved, and ensure there is no harmful divergence or contradiction, so that timely progress can be made.

Given the level of activity underway in Ofgem, including RIIO-2 development, Significant Code Reviews, combined with activity driven by Open Networks, government policy or other external forces, there is a risk that this work could slip or take more resources than initially thought. Given the importance of this for RIIO-ED2 development, it is important to be mindful of the interactions between current policy areas.

Therefore we ask that the proposed workstreams in the position paper:

- Are not internalised within Ofgem and include key stakeholders to work through the development of DSO.
- The workstreams take account of work that has already been undertaken by Open Networks and establish links to ensure the two streams complement each other as both have the same aim, with Ofgem inputting now into the Open Networks plan for 2020 delivery.
- That the workstreams also consider the work being undertaken as part of RIIO-ED2 process and specifically key milestones and interactions between the project/programme timelines.

### Q3 Do you have anything to add to the thinking and analysis that informs how we propose to deliver our programme of work?

<u>Concerning the Analysis – recognition is needed that there are effective controls to mitigate risks of</u> <u>DNO delivery of DSO functions</u>

We note within the analysis shown in section 1.7 to 1.19 of the position paper Ofgem lays out a number of risks, but as is explained within the paper, it does not recognise the existing legislation and regulation in place in order to manage these risks. Indeed the characteristics detailed already exist in relation to DNO functions and are adequately managed by the existing controls in place, and therefore should be able to be managed in relation to any new DSO functions which the DNO may carry out in the future.

For example DNOs already participate in the delivery of contestable services for some aspects of connections which has been the subject of testing and assessment and has proven to bring benefits to consumers by providing choice. As part of our advocacy for competition in connections Electricity North West led the development of the 'Competition in Connections Code of Practice' which enshrined many of our approaches as best practice and were required to be adopted by the other DNOs. A similar approach, where appropriate, may be relevant to those DSO functions which are determined to be contestable.

<u>Considering the functional breakdown of DSO – careful consideration is needed to ensure DNO</u> <u>obligations are not at risk due to third party delivery of some DSO functions</u>

DNOs have defined responsibilities within the Electricity Act, Electricity Distribution Licence, Distribution Code and Grid Code. One such responsibility is to:

"Permit the development, maintenance, and operation of an efficient, co-ordinated, and economical system for the distribution of electricity;" (licence condition 21)

To fully discharge these requirements it is imperative that the DNO maintains control over how the network is designed, maintained, and operated. It is key to maintaining a safe, secure, efficient, and reliable distribution network that there is a defined legal entity which holds the responsibility for co-ordinating how the network is operated.

If there is no single legal entity that retains overall control over a distribution networks operation this will lead to un-coordinated decision making and could leave the network vulnerable. In turn this Page 3 of 4

decreases network reliability and creates an unclear liability for development, maintenance, and operation of an efficient, co-ordinated, and economical system for the distribution of electricity.

We recognise that the themes shown as DSO functions exist in literature developed by Open Networks and others; however the functions and services as shown are not as easily separable as the illustrations and references may suggest. The imagery of the functions shown does not recognise the nuances of how many of these interact. Within the "Long term planning" and "Operations, real-time processes and planning" functions, these are so intrinsically linked with the ability to meet DNO obligations that there could be significant risk should these be delivered by third parties and, in particular, if there are multiple third parties with many hand offs resulting in complexity, risks and costs to consumers.

The paper also identifies that different DSO functions should be ring-fenced to allow for future unbundling. Whilst we agree that not all functions of DSO need to be delivered by a single legal entity, it is our view that it is essential that we as a single entity continue to be accountable for delivery of a clear set of intrinsically linked activities. A limited set of functions from those highlighted, such as running exchanges, might best be done independently but would need to be co-ordinated with effective interfaces with the procuring party.

Through the work we are carrying out within Open Networks we are looking to standardise flexibility service contracts and naming convention with other DNOs to provide consistency for potential providers. These service contracts have also been developed to allow a greater range of service stacking between different markets. The service contract standardisation has been designed to remove perceived barriers to entry and to encourage all parties to be able to participate.

We support Ofgem's view that flexibility markets offer benefits to allow DNOs to defer or avoid sunk costs in traditional reinforcement. We have sought to develop flexibility markets within the North West region and have been proactive as a DNO to publish our reinforcement requirements as flexibility service contracts with these being well publicised within our stakeholder groups. Our DFES<sup>1</sup> is the leading example across our sector highlighting the potential needs for developing the distribution network.

We look forward to working with Ofgem and other stakeholders over the coming period to develop and, where appropriate, deliver change as Distribution System Operations evolve.

If you have any questions on any elements of the response, please don't hesitate to contact me or Paul Bircham (paul.bircham@enwl.co.uk).

Yours sinc

Peter Emerv Chief Executive Officer

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#### Attachments:

Annex 1 – Electricity North West response to Ofgem's Position paper on Distribution System Operation Annex 2 - Electricity North West response to Open Letter Consultation on approach to setting the next electricity distribution price control (RIIO-ED2)

1 https://www.enwl.co.uk/get-connected/network-information/dfes/ Page 4 of 4

# Annex 1: Electricity North West response to Ofgem's Position paper on Distribution System Operation

This annex develops each of the areas discussed in the position paper and expands upon the points highlighted within our covering letter.

#### Approach to distribution system operation - Philosophies

In principle we do not disagree with either of these philosophies, our reflections on the two philosophies driving the current Ofgem position at present are set out in turn.

"...., we consider DSO is a set of functions and services that need to happen to run a smart electricity distribution network. This does not focus on a single party as an operator, but recognises roles for a range of parties to deliver DSO".

As we explain in our covering letter, we recognise that the themes shown within your paper as DSO functions are informed by work developed by Open Networks and others. A number of these functions already exist as DNO functions, and are a natural part of meeting our core obligations and therefore the move to formalise Distribution System Operations is more a development rather than radical transformation. We note Ofgem seems to recognise this within the paper by stating it is too early to implement institutional reform at the distribution level, although greater acknowledgement needs to be made of the evolution of DNOs.

The functions and services (as shown within Figure 2 page 11 of the paper) are not always as easily separable as the illustrations and references would suggest. Further, they do not recognise the nuances of how many of these interact and are interrelated and/or interdependent. The potential costs, risks and inefficiencies caused by separation of services is an important consideration for the scale of benefits delivered for customers and for the decisions to be made by Ofgem in this sphere.

When the primary aim is to enable decarbonisation, digitisation and decentralisation, institutional reform and fragmentation of how customers' needs are met needs to be very carefully considered. We, as an evolving DNO, believe we are in the strongest position to deliver for customers in the North West acting as a leader in delivering this change at the right pace for our customers' needs. Our RIIO-ED2 plan will deliver this and we will use competitive processes to ensure best value.

We acknowledge that there are some functions which may be more efficiently provided by a third party, for example operation of flexibility trading platforms. However, we would see accountability for provision of this service residing with, and being procured by, the network operator as opposed to accountability being transferred to the third party. In the latter case, the burden of interoperability with other processes and the consequence of financial instability of the third party would reside with Ofgem whereas we believe such risks are better managed by the network operator; particularly during RIIO-ED2 where some DSO functions are still likely to be evolving.

"...optionality is currently valuable given the changing nature of the energy system. We believe that we should not make premature decisions that lock the energy system into path-dependent routes whilst there is still uncertainty about potential developments. Instead, we should maintain optionality where we think this could be beneficial. This means delivering major progress to DSO now, but keeping options open for wider institutional change in future."

We do agree with the need to retain optionality at this early stage and indeed it is prudent to do so, however we would add that there may be some areas where locking down a decision will be beneficial and would suggest that a similar approach to that taken in the RIIO-ED2 open letter

published at the same time as your position paper is considered: i.e. in areas where stakeholder views are well known, and it is clear that one particular pathway is in the best interest of customers, then Ofgem should indicate a firm policy position in a timely manner.

#### Decisions required to inform RIIO-ED2 business plans

As we discuss in our covering letter, there is a clear link between the work underway on DSO policy and the RIIO-ED2 business plan process. It is therefore crucially important that the work being undertaken by both Ofgem teams are fully aligned to ensure a smooth and effective process for Ofgem, stakeholders and companies.

Decisions on how Ofgem wants DNOs to evolve are a business plan input so need to be available in a timely way. Ofgem should be clear on which aspects of DSO it intends to decide and which are within scope for companies to determine through the enhanced RIIO-ED2 stakeholder engagement already taking place.

Currently the paper contains a mismatch of timings which will need to be reviewed, for example figures 3 and 4 within the position paper show Ofgem milestones of "broader consideration of DNO participation in new contestable services in the period 2021-2023", whereas the DNO milestone shows they must take into account DSO contestable service policy in their RIIO-ED2 plans which are to be submitted in 2021 to the RIIO-2 challenge group and Ofgem.

Whilst it is necessary to ensure that decisions are made holistically, and that piece-meal decisions do not undermine the ability to meet tactical objectives, there can be some decisions that can be made relatively soon and these would greatly assist stakeholders and companies to develop detailed plans based on policy certainty. This will reduce regulatory risk, offsetting the increase in external risks for RIIO-ED2. We discuss risk in more detail within our RIIO-ED2 Open Letter response.

Examples of these would be:

- A view of which DSO functions Ofgem initially would view as non-contestable (i.e. remaining within DNOs) and which others Ofgem believes should initially be open to competition.
- How delivery is managed for contestable DSO functions i.e. who retains liability for delivery of each DSO function. If Ofgem wants DNOs to retain accountability for reliability and safety then separation of any function will need to be done in detail in discussion with any DNO.
- The need for clear and transparent access to network data as outlined in the requirement for network operator digitisation strategies.
- What level of network data should be shared externally without compromising network security, GDPR, and parties' commercial sensitivities.

This will have the benefit of avoiding having everything on the table and risking inaction, and allow the focus to be on those key areas where options should be fully explored and remain open until further developments are known. We consider the timing of new customer needs for a decarbonised, decentralised and digitised energy system are the determining factor for the pace DSO should be developed. This transition has already begun so Ofgem should carefully consider any risk of their decisions delaying benefits for consumers.

Open Networks commissioned a piece of work by Baringa<sup>1</sup> which has been consulted on by stakeholders. This shows a least regrets path "future world B" scenario and it is Electricity North West's intention to progress in line with this.

<sup>&</sup>lt;sup>1</sup> http://www.energynetworks.org/electricity/futures/open-networks-project/workstream-products/ws3-dso-transition/future-worlds/future-worlds-impact-assessment.html

With reference to the specific decisions indicated within Ofgem's work plan:

<u>Long Term Development Statement (LTDS)</u> - we agree that this can be an invaluable source of information for stakeholders and welcome Ofgem's review of this area to drive improvements. The current guidance was issued in 2011 therefore it is appropriate that this is the right time to review the ability of the statement to meet user needs and we look forward to the opportunity to share our views as this piece of work gets underway.

<u>Customer Load Active System Services (CLASS)</u> – our innovation strategy has focussed upon extracting the maximum value from our existing asset base. CLASS has been developed by Electricity North West in a highly transparent way as a result of this strategy and our drive to enable the low carbon transition for our customers in the most efficient manner possible. CLASS is a network solution we (and other DNOs) are uniquely able to provide from operating our network differently. We have not confined our focus and have sought to apply ourselves to the whole energy system where appropriate.

As we have done throughout CLASS development and implementation, we will continue to engage with Ofgem and wider stakeholders and look forward to the opportunity to participate in wider consultation during 2020 when Ofgem considers the regulatory treatment as indicated in the paper.

#### **DSO outcomes – Four Strategic Outcomes**

As we explain in our covering letter, we see this better termed as DSO development, rather than reform, and whilst we agree that the four outcomes are necessary, we would describe them as tactical rather than strategic and suggest that a tactical approach is appropriate given that a number of DSO functions exist at present, with the focus being on transparency, consistency and utilising competition where it is in customers best interests. We suggest that a broader strategic outcome, if so desired, would be more aligned with the wording used within the Smart Systems and Flexibility Plan<sup>2</sup>.

Our specific observations on the four framework objectives are:

#### Clear boundaries and effective conflict mitigation between monopolies and markets

We support that clear boundaries and effective conflict management between monopolies and markets are a key element of facilitating a neutral market. The work carried out to date within the Open Networks Project has been focused on ensuring a fully neutral market is being developed, whilst maintaining system security.

#### Effective competition for balancing and ancillary services, and other markets

We see the use of flexible resources to defer and avoid conventional reinforcement as key to maximising existing asset usage, avoiding stranded assets, and delivering the best value for money to our customers. We have promoted the use of flexible services within our own investment decisions and offer a range of flexible connection solutions to customers so they can realise the value of flexibility at the point of connection.

In 2018/19 we issued requests for 12 sites totalling 23.2MW of requirements. These relate to all the large area requirements for reinforcement triggered by anticipated load growth that we have identified within the next few years.

<sup>&</sup>lt;sup>2</sup> https://www.ofgem.gov.uk/system/files/docs/2017/07/upgrading\_our\_energy\_system\_-\_smart\_systems\_and\_flexibility\_plan.pdf

The market for flexible services is nascent and so we have committed that we will further develop our flexible services requirements by seeking this capability for smaller scale reinforcement, as well as larger scale and connections driven reinforcement, in order to encourage participation.

In our experience, capacity provision has two fundamental drivers;

- the organic development of demand within an area, which can be effectively mitigated through flexible services,
- redevelopment activities; such as those occurring in Manchester, where flexible resources are simply not present due to repurposing and rebuilding.

We continue to be fully committed to seeking flexibility services and have adopted the ENA best practice guidelines.

## Neutral tendering of network management and reinforcement requirements, with a level playing field between traditional and alternative solutions

The ability to offer flexible services should be inclusive to all parties irrespective of capacity, technology, or consumer type whilst solutions procured should always represent best value for money. We issue a detailed request for proposal for all of our tenders and make these tenders accessible to all parties.

A clear element of developing a neutral market will be that DNOs and other market participants should be open to trialling new approaches to allowing different types of customers to participate in flexible services. This will require innovative approaches to procurement. For example we no longer specify the duration of flexible service contracts leaving this for the technology/service provider to suggest the optimum contract duration and payment terms for their proposal.

#### Strongly embedded whole electricity system outcomes

We support that, as an industry, it is important that there is close collaboration to deliver whole system outcomes. With the increase in flexibility within the distribution network we believe there is a wide potential for distribution networks and IDNOs to be able to offer solutions to each other and for transmission network related requirements. Likewise there may be potential for the transmission networks to provide solutions to distribution network requirements although we see this as more limited. It will be integral that the Electricity sectors work closer with other sectors such as Gas, Transport, Telecoms, and Water; delivering whole system benefits and maximising the value for customers. For example, we have regular conversations with other utilities and our local authorities to inform our DFES and strategic planning.

#### DSO work - Workstreams

As we explain in our covering letter, we agree with the three workstreams as the areas of categorisation and reiterate our views which centre around the delivery of these workstreams.

It is important that stakeholders are able to become more informed, particularly those who are still gaining an increased understanding of their potential role in this area. Equally DNOs, and the Open Networks project, which has a wide stakeholder membership and reach, have already undertaken, and are continuing to do so, a significant amount of work in this area to explore the functions and services of Distribution System Operation and it is vitally important that the work being done within Ofgem is closely co-ordinated with the work underway and being planned by Open Networks.

Ofgem should look to utilise and influence the work, harnessing stakeholder input, already engaged in Open Networks. This is preferable to Ofgem undertaking separate work when the issues are already being explored. The 2020 Open Networks programme of work is being scoped at present, and therefore it is essential Ofgem input to ensure that these two streams (Open Networks and Ofgem's DSO development work) act effectively, in a complimentary manner, with meaningful dialogue to ensure that all stakeholders get the best value and output from this work.

We have proposed in our covering letter that in order to allow stakeholders the ability to become informed themselves, and ensure the appropriate representatives are able to plan their participation, it would be useful for Ofgem to publish a clear and achievable timeline, including intended decision points. Interdependencies need to be clearly signposted and advanced notice of activities and planned agendas provided ahead of time.

The timely development of the regulatory approach and its prioritisation is a significant element of the transition to a smart, flexible energy system. We are mindful of the extent of activity underway in the sector at present, whether this is price control development, significant code reviews, Open Networks activity and work driven by government policy or other external forces. Given this unprecedented scale of change and sector development the risks exist that delivery may slip or decisions get delayed. Given the importance of the link to RIIO-ED2 development, it is crucial that this risk is mitigated by all parties and this can be helped by clear milestones and signposting of decisions where there is need for input.

Therefore we re-iterate our proposal that the Ofgem workstreams:

- Are not internalised within Ofgem and include key stakeholders to work through the development of DSO.
- The workstreams take account of work that has already been undertaken by Open Networks and establishes links to ensure the two streams complement each other as both have the same aim, with Ofgem inputting now into the Open Networks plan for 2020 delivery.
- That the workstreams also consider the work being undertaken as part of RIIO-ED2 process and specifically key milestones and interactions between the project/programme timelines.

#### **DSO** functions

As we explain in our covering letter, DNOs have defined responsibilities within the Electricity Act, Electricity Distribution Licence, Distribution Code and Grid Code.

One such responsibility is to:

"Permit the development, maintenance, and operation of an efficient, co-ordinated, and economical system for the distribution of electricity;" (licence condition 21)

As a result careful thought needs to be given when considering DSO functions and the parties delivering those functions in order to ensure that as a DNO we can continue to meet our core obligations:

To illustrate this issue we would offer the following example:

- 1. Following the identification of a requirement for flexible services through 'Forecasting demand and generation and DER' a request for 'supply of grid-operational services using DER' needs to be generated.
- 2. Following this request flowing through a market system and DERs responding with availability and costs there will need to be a gate closure of the markets and a review of proposals against requirements will need to be carried out.
- 3. The proposals will need to be verified to ensure that they meet the requirements of the request.

- 4. If the procured DER services do not adequately meet the requirements of the network demand/generation then this could cause overloads on the distribution network resulting in a requirement to curtail customers on the DNO network and/or cause damage to network assets.
- 5. This could be the result of errors in: forecasting, specification of requirements, procurement, or dispatch.
- 6. This could have a negative impact on the reliability of the network to serve its customers whilst affecting a DNO's CI & CML figures, a DNO's asset maintenance/fault costs, and have a reputational impact on the DNO.

We think this illustrates that if these items are separated into different legal entities the question arises: who is responsible for the impact upon customer supplies, the network and associated costs? We believe that, at least initially, the overall lead organisation with responsibility for co-ordination needs to be the DNO.

We have previously stated that many of DSO functions are inter-related, and in the case of delivery of these functions by DNO, particularly in the case of the "existing" and "extended" functions many could be delivered by the same team. As a result it may not be possible to fully ring-fence all activities without impacting resourcing requirements.

Figure 2 in the position paper presents 19 functions of DSO; and whilst we recognise the desire to maintain optionality for the future, in practical terms separating these out across individuals/departments to completely ring-fence all 19 items would represent an inefficient operating model, would not lead to co-ordinated planning and operation and therefore is not in the best interest of consumers.

A balance needs to be struck between ensuring that activities are provided in the most efficient manner, but not embedded into companies such that they cannot be unbundled in the future. We interpret this recommendation as it would be acceptable (where there is no breach of competition rules) that these 19 functions may be carried out by the same resources where appropriate however should not be fully integrated into any single legal entities business as usual processes. We would note that there may be a cost to retain this optionality, as naturally there would be efficiencies generated as processes are streamlined into companies systems and processes.

The development of DSO also brings the opportunity to IDNOs to undertake some elements of DSO and therefore consideration needs to be given as to the role of DSO within IDNOs. Taking into account DNOs responsibilities for the overall coordination of the distribution network, how the DNO and IDNO roles can interact most effectively and how DNOs can support and guide IDNOs on this journey is an area which will need to be explored further.

#### **DNOs and New Contestable Services**

We fully support that there is a requirement for Distribution System Operation to encourage third party services to be procured to provide grid balancing services; we believe there remains a clear element that DNOs should be able to provide certain "contestable services" where it demonstrates best value for money for the end customer. Indeed this would seem to be consistent with a policy objective of retaining optionality at this stage.

Where a DNO is procuring flexibility products from the market as well offering contestable services to the market; there would need to be a clear and transparent decision making to avoid any perceived unfair commercial advantage.

It is routine that competition to contestable markets already takes place within transmission such as when transmission circuit outages are deferred in order to avoid needing to buy generation redispatch services. As such there is already a direct effect on contestable services in the energy system determining the size of any market. This isn't too dissimilar in principle to DNOs developing service or other offerings to minimise cost to consumers.

There are inherent capabilities within the distribution network which can only be accessed by utilising DNO assets to provide services to benefit consumers. There are also areas of the network where it is not currently possible to procure sufficient levels of flexible services from third parties, as the overall business case for developing solutions to resolve a short term network issue do not make it financially viable. In these circumstances there needs to be a clear route which allows DNOs to develop and own solutions which can offer such services.

Should DNOs be prevented from developing "contestable services" this will reduce the ability to offer the most cost effective whole system outcomes and enable decarbonisation as efficiently as otherwise could be achieved – CLASS is a prime example where we have developed a solution which lowers costs to customers both in the North West and across GB.

Where DNOs invest in providing "contestable services" these should demonstrate that they are expected to provide cost savings to customers. Any profits resulting from DNO owned "contestable services" should be shared with customers, either being reinvested into the network to deliver future savings, as well as delivering a return to DNO shareholders to incentivise future investment and innovation where a DNO is uniquely placed to develop an approach.

In supporting Ofgem's ambitions to ensure that opportunities are opened up to more market solutions we would like to highlight that even where DNOs are currently undertaking extended DSO functions, market solutions to delivering these are already in operation via subcontracting. For example; to facilitate forecasting we utilise a number of different external agencies and stakeholder groups to inform our modelling. We draw all of these inputs together to form a completed sense-checked forecast which is then overlaid upon our network model to provide internal and external stakeholder reference materials. Within areas of our Low Voltage network we have subcontracted activities relating to fault detection, monitoring, network management, and forecasting. We retain liability for managing the low voltage networks whilst delegating responsibility for activities where a third party can provide specialist knowledge and provide best value for our customers.

Although we understand Ofgem's desire to ensure premature decisions are not made that lock the energy system into path-dependant routes; we believe it is key that more direction is given to allow the Open Network project to begin delivering the benefits of DSO. Currently the project has identified and consulted upon five transition pathways; with "World B" broadly being accepted as the starting position for any DSO development (following results of impact assessment). It would reduce regulatory risk and uncertainty if Ofgem could provide a view upon if "World B" broadly represents their own view of the current path of least regret so that the project can focus upon the benefits which can be achieved during RIIO-ED1 delivering a credible initial starting model.

We agree there isn't current clear evidence to support a single entity being the optimal operating model at this point, and therefore support the position that optionality needs to be retained in some areas. This optionality should not preclude there being one single entity emerging at a future point in time, however this should emerge more organically and be supported by evidence that this is in customers interest rather than being institutionally generated early in the process.

Whilst the majority of functions described, particularly the 'Long term planning' and 'Operations, real-time process and planning' functions can be delivered by DNOs, and indeed already are, with work to explore where this is appropriate and in customers best interests, some, such as those described within 'Markets and settlement' might be best delivered by third parties however the DNO will need to be closely involved in some aspects.

Our current view is a market provided solution to flexibility platforms would be the best solution and as such we do not believe that DNOs, TOs, or the ESO should be the owners of flexibility platforms but the DNO should form arrangements with platforms for their areas.

We believe that this is an element of the DSO functionality which could be provided by a market solution. By providing platforms which are open for everybody to utilise we believe that this will encourage more trading and enable a greater range of value stacking. Current early models of platforms have been designed for a narrow group of user types and we would like to see platforms opened up to allow for a variety of different user types.

Where it is appropriate we would recommend that DNOs must be able to have a path to directly contract, dispatch, and settle with customers outside of any platforms. As with the existing balancing market platforms we believe there will need to be a gate closure procedure which will require the host network owner/operator to carry out a sense check of the trades to ensure that system stability is retained. In developing markets for distribution areas Ofgem should investigate whether markets for transmission services can also be moved to independent platforms and if this could act to stimulate the development of markets.

#### **Key enablers for DSO Functions**

The driver of decarbonisation, and the UK's recent commitment to Net Zero has seen a number of organisations considering the role of networks as a facilitator, some of which call for direct action by networks. Electricity North West is already acting as demonstrated by the work undertaken in 2018 to produce and publish our Distribution Future Electricity Scenarios (DFES)<sup>3</sup>. We are also working directly with platform providers to give services required to support platform development in Open Networks. In addition Electricity North West is proactively contributing to Ofgem's significant code review work, as well as supporting industry Network Innovation Competition projects in this area such as T.E.F.<sup>4</sup>

We agree that the use and availability of data will be of benefit to delivering the changes required in the industry. Through our work in developing the DFES and heat mapping tools we have already improved the level and quality of network data which is available to our stakeholders and continue to work, both individually as Electricity North West, and collectively through Open Networks to better understand the steps that we need to take to act upon the Energy Data Taskforce recommendations.

Some of the data which DNOs hold should be treated as critically integral to regional and national security. There are other elements of data which the DNOs hold which is commercially sensitive to DNOs and customers businesses, or is protected under data protection rules; so could not be shared without anonymisation.

It is important to note that there are some third party sources of data which currently are not available to DNOs or historical data sources where the data quality is not sufficient to be relied upon. As part of any data sharing exercise the quality and source of data will need to be considered.

<sup>&</sup>lt;sup>3</sup> https://www.enwl.co.uk/get-connected/network-information/dfes/

<sup>&</sup>lt;sup>4</sup> https://www.ofgem.gov.uk/system/files/docs/2017/11/ofg1031\_innovation\_competitions\_brochure\_web.pdf

It is important that where changes in data policy require costs to facilitate a change in ways of working this needs to be clearly and unambiguously set out. Projects to support open data may be costly for a DNO to implement, with benefits accruing to other segments of the value chain, so we support this noting we expect efficient levels of funding will be provided to deliver these projects. It should also be explicit where costs may be incurred in RIIO-ED2 yet the benefit to the industry may only be fully realised during future periods.

#### **Development of co-ordinated flexibility markets**

As we explain in our covering letter, we are fully supportive of the aim to develop the flexibility market and have been proactive in the North West to ensure all of our reinforcement requirements are well publicised, in addition to the work we are undertaking with Open Networks on standardisation of products, services and contracts.

We believe that Community and Local Energy groups will provide a good range of flexible services and we have been keen to promote our flexible services contracts to these groups. As part of our work to promote Community and Local Energy groups in 2018 we launched our Community and Local Energy strategy as well as appointing a dedicated Community and Local Energy manager.

It should always be recognised that flexibility services will (likely) only take a DNO so far in terms of avoided reinforcement, and there may be cases when a DNO is called upon to undertake strategic investment whereby (after options assessment) an asset based solution is the only outcome. It is important for us to develop in detail the internal processes and interactions in these situations.

It is also worth noting that the differing capacity management strategies of DNOs, combined with external factors such as growth of low carbon technologies (LCT) or distributed generation will mean that each licensed distribution area will be at a different point in terms of capacity headroom. For example within Electricity North West we take a long-term view and take proactive steps to invest to ensure sufficient capacity headroom is available for growth and greater LCT uptake and as a result can accommodate a significant number of electric vehicles in the region before further capacity generation is required. It is our intention to continue with this approach, however we recognise the likelihood that RIIO-ED2 will see a faster pace of uptake than we have seen in previous periods.

We note that DNOs tend to install 100A service connections for new residential customers thereby ensuring that customers can adopt LCTs such as Electric Vehicles (EVs) in the coming years. This contrasts sharply with some IDNOs who design to a lower after diversity maximum demand. Whilst this offers short term cost savings it ignores the future costs that will be associated with whole-scale upgrade of such short sighted designs. In many instances when EVs and Heat Pumps (HPs) are installed the services will need to be reconstructed. It is important to ensure that all customers within a region receive a common efficient service thereby managing future costs to an efficient level.

#### Other impacts - Access and Forward Looking Charges Significant Code Review

We support the work of the Access and Forward Looking Charges significant code review and are actively working in and delivering the activities of all the working groups.

Ofgem's policy making on charging and access will also impact how DNO's evolve. For example the nature of capacity rights, their value and transferability along with scope for aggregation will all impact the dynamism of Distribution System Operations.