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By email: fwp@ofgem.gov.uk
Forward Work Programme 2018-19
Ofgem
9 Millbank
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## Dear Ofgem,

Thank you for providing us with the opportunity to give our feedback on the draft Forward Work Programme 2018-19. We have reviewed the draft document and share our views with you in this letter.

We see Ofgem as a global leader in energy market regulation, taking a proactive approach to address the industry's uncertain future and incentivising network companies to deliver benefits to consumers through output-based mechanism in the RIIO framework. Ofgem are clearly dedicated to making sure that consumers are protected and that the energy market is more competitive and fairer. We see this dedication in RIIO where Ofgem has awarded returns to network companies based on their ability to deliver value to their customers and complete projects that improve energy deliverability. This has stopped network companies from profiting simply by investing in capital projects. We believe that the Ofgem model of rewarding network companies based on the benefits they deliver to their customers and the positive impact they make to the grid rather than simply having a guaranteed rate of return for all capital spend should be used in energy markets across the world.

We admire the manner in which Ofgem drives innovation and encourages network companies to maximise the efficiency and effectiveness of their grid using new technologies, all while keeping the customer in mind. We support the NIA and NIC mechanisms and see them and excellent vehicles for network companies to test out new ways of planning and operating their grids. We also support Ofgem's plan to continue the 'Smart Systems and Flexibility Plan' and 'Innovation Link', and see these as encouraging signs that the UK energy market is open to innovation and actively planning for a grid of the future.

In addition to Ofgem's current Programme for 2018-19, we would like to propose the following points for consideration:

#### 1. RIIO

The RIIO1 framework has been successful in ensuring that network companies invest in projects that ultimately benefit the consumer. However, the existing framework neglects to fully value new innovative technologies that can be installed in a particular location and then redeployed to different locations as the needs of the electricity grid change. Furthermore, the existing least worst regrets framework does not recognise the value in solutions where decisions can be deferred. Minimising the least worst regret across scenarios is a major advance on previous methods as it recognises the inherent uncertainty in predicting the future. However, new technologies, such as Smart Wires and others allow network companies to scale their solution as the network need unfolds. This introduces optionality that allows the solution to be much more closely tailored to future system needs and provide a much more efficient solution for consumers. Least Worst regrets does not consider the value in a solution with a decision point in the future. Ideally this ability for a future decision point would be considered by evaluating the Least Worst Regret against the most appropriate decision for any given scenario rather than testing the same decision in all cases - even in ones where it clearly would not be the decision used in reality. By addressing this it will greatly encourage network companies to explore innovative ways to fully utilise flexible new technologies that reduce the risk to consumers of investments in solutions that are not appropriate to the future need as it unfolds.

## Redeployability

While we accept that movable transmission solutions may not have existed during the creation of RIIO1, there exists in today's market solutions that are easily and economically moved from their initial site to a different location. We propose that redeployability benefits be incorporated into RIIO2. Redeployable assets are a no-regrets investment that allow network companies to respond to today's needs and know that, should the system problems shift, they can relocate the solution to a new location on their network. Compared with investing in fixed, immoveable assets, the ability to redeploy and reuse a solution improves the certainty that a network company will fully utilise that asset for its full lifetime. Furthermore, redeployable solutions are a capital conscious method to solve short-duration needs (e.g. problems that are anticipated on the system for a known period of time but will resolve at a known point in the future due to other planned system upgrades). As highlighted throughout your draft document, the energy system is changing and the future is uncertain. Redeployable solutions provide the flexibility that network companies need when dealing with this uncertainty.

### **Optionality and Scaling**

The current RIIO framework requires that an investment option submitted by a TO to the SO be fully defined for the entirety of the planning horizon on day one of the analysis. This does not take into account the potential for technological developments to be integrated over time, which may change the optimal solution. Furthermore, it does not allow for an incrementally deployable solution capable to be scaled in accordance with the network needs that actually unfold. We believe that RIIO2 should enable a solution to be continually optimised over time based on new technological advancements and the evolving needs of the energy system. This will ensure that consumers continue to benefit throughout the planning time horizon.

We think that it is important to consider the value provided by redeployability, optionality and scalability into account when creating RIIO2. This would benefit the network companies by incentivising

them to create a more flexible system and deliver benefits to consumers by reducing overall system costs.

# 2. Focus on optimising existing grid

We support Ofgem's intention to develop proposals that drive more efficient use of today's network and help network companies make better investment decisions. Despite new uses for electricity such as electric vehicles, overall demand for electricity in the UK is not expected to exceed previous levels of demand in the early 2000s. It is clear that network companies need to better utilise their existing grid instead of investing large sums of money into new fixed infrastructure. New innovative power flow control solutions can increase utilisation of existing infrastructure by leveraging available capacity on under-utilised paths. Given that excess system capacity exists today, that power flow control solutions can unlock this capacity and that load growth projections for the future are minimal, we support incentives for network companies to optimise the existing grid. This will guarantee affordability, reliability and security of electricity supply to UK consumers.

## 3. Integration of renewables

In line with the UK's Low Carbon Transition Plan, and the energy system's progress towards its future state, we propose that Ofgem formalise a strategy for the seamless integration of future renewable generation into the grid. This is particularly important now as generation becomes more intermittent and more decentralised and faces new challenges when connecting to the grid. This connection process must be as quick, easy and low cost as possible. In order for network companies to achieve this, they must embrace new methods of network reinforcement. We encourage Ofgem to continue to support network companies as they explore new technologies, new applications of existing technologies and combination solutions to achieve seamless renewable integration.

Once again, we appreciate the opportunity to participate in this open consultation and look forward to reading the final Forward Work Project in the coming months. Please feel free to contact me at the details below if you would like any further information or clarification on any of the points in this letter.

Yours sincerely,

Grace McLoughlin

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