



RIIO Team  
Networks Price Controls  
Ofgem

Sent by email to:  
[RIIO2@ofgem.gov.uk](mailto:RIIO2@ofgem.gov.uk)

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**Contact**

Joe Dunn

0141 614 1957 / 07753 624 494

[joseph.dunn@scottishpower.com](mailto:joseph.dunn@scottishpower.com)

Dear RIIO Team,

**Response to RIIO-2 Draft Determinations**

ScottishPower Renewables is part of the ScottishPower group of companies operating in the UK under the Iberdrola Group, one of the world's largest integrated utility companies and a world leader in wind energy. ScottishPower Renewables is responsible for progressing the deployment of onshore wind projects in the UK and Ireland, and offshore windfarms throughout the world, managing the development, construction and operation of all projects.

We currently have over 40 operational windfarm sites with over 2.7GW of installed capacity throughout the UK and Ireland, including our recently commissioned 714MW East Anglia ONE offshore windfarm and a share in the 389 MW offshore windfarm West of Duddon Sands. In addition, we have a substantial development portfolio of onshore windfarms in the UK and Ireland and offshore wind projects in the East Anglia Zone. SPR is also actively developing battery storage projects in Ireland and UK, including Gorman 50MW stand-alone battery participating in volume capped DS3 services and two co-located Battery Energy Storage Systems, Whitelee 50MW and Barnesmore 3MW, aiming to enter into frequency response and balancing markets.

Please find attached our response to Ofgem's RIIO2 Draft Determinations.

Yours faithfully

**Joe Dunn**  
**Grid & Regulation Manager**

## **RIO 2 Draft Determinations Consultation Response ScottishPower Renewables**

We are conscious that the extent of the considerations Ofgem is required to take when seeking feedback to the Draft Determinations is indeed both broad and complex. We have found that there are a number of areas that we believe are important to highlight outside of the specific consultation questions which we endeavour to succinctly note below under headings 1.1 through 1.6.

In sections 2.1 through 2.3 we have provided answers that aim to address specific consultation questions. We would point out that the question nomenclature in the main document titled “RIO 2 Draft Determinations - Full List of Consultation Questions” is inconsistent with the Core and main subsidiary documents. We have therefore aligned our question numbers and responses with the main subsidiary documents.

### **1. Opening comments**

#### **1.1. Overarching Concern**

#### **1.2. Committed and Co-operative Context for a Net Zero future**

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#### **2.1. Core Question Responses**

#### **2.2. Electricity Transmission Question Responses**

#### **2.3. Question Responses covering NGET, SPT and SHET**

## **1. Opening Comments**

In terms of considering a 'green recovery', we would emphasise that the current climate (particularly post-COVID impact and the opportunity for green economic recovery) needs the RIO T2 determination to work in alignment with Government policy and to deliver suitable and timely network connections infrastructure. Regarding investor confidence, the RIOT2 proposals must provide sufficient certainty and reward to ensure investors are not deterred by what is being described by Bernstein as an 'austere approach'. We believe intuitively that 'Lowest cost' must look beyond the RIOT2 period and take into account the consequential impacts on other parties such as generators which will ultimately feed through to customer bills. For Uncertainty Mechanisms to work, there must be sufficient pre-construction funding to allow them to be justified, and they must have the opportunity to be reopened in time to ensure customer projects are not delayed as a result. Where Uncertainty Mechanisms are necessary we would emphasise the importance for their processes to be efficient and to ensure there is ease of administration for both Ofgem and the TOs for the speed of decision making by Ofgem to reduce project delays.

- ***There are a number of areas where we seek assurance from Ofgem around the potential for customer project delays that could easily result from the proposals under the DDs. We have boxed and bulleted these points throughout our response.***

### **1.1 Overarching Concern**

Ofgem's RIO-T2 Draft Determinations (DDs) have raised concerns in the renewables generation industry regarding the potential impact of Ofgem's decisions on renewable generation businesses. This comes at a time when green recovery and the programme to deliver Net Zero needs a clear focus and stimulus. We also believe that a longer-term view of consumer savings is required, including a commitment to suitable and timely infrastructure investment that works in harmony with the TOs' customers (generators and suppliers) and the framework they operate within. We believe changes are required to ensure that the forthcoming 5-year period is not a lost opportunity<sup>1</sup>.

### **1.2 Committed and Co-operative Context for a Net Zero future**

The evolution of the energy system requires a whole system approach. Now more than ever that view must account for the important role of the energy sector in economic recovery. In response to the significant economic upheaval caused by the COVID-19 pandemic, the Government has recognised the need to stimulate economic growth in a sustainable and resilient way. Investment in clean energy infrastructure (renewable energy, storage and grid modernisation) has been identified as an area that can play an important role in driving economic growth<sup>2</sup>.

To achieve the Net Zero ambition, deployment of renewable energy must increase at a significant and consistent rate over the coming decades. National Grid's recent Future Energy Scenarios<sup>3</sup> show that renewable capacity could more than double by 2030 and will require at least 3 GW of wind and 1.4 GW of solar to be built every year from now until 2050. Achieving this will require all parts of the energy system to align in delivering a Net Zero ambition that provides best value for consumers. The renewable energy sector continues to be in a position to play a cost-effective role in delivering a Net Zero pathway, decarbonising the power sector and providing the solution to challenging issues within heating and transport.

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<sup>1</sup> To achieve Net Zero, National Grid's Future Energy Scenarios set out a need of at least 3GW of wind and 1.4GW of solar to be built every year from now until 2050.

<sup>2</sup> <https://www.smithschool.ox.ac.uk/publications/wpapers/workingpaper20-02.pdf>

<sup>3</sup> <https://www.nationalgrideso.com/future-energy/future-energy-scenarios>

## **RIO 2 Draft Determinations Consultation Response ScottishPower Renewables**

The Committee on Climate Change highlighted in its Reducing UK Emissions Progress Report to Parliament<sup>4</sup> published in June 2020 that choices in the coming months must steer a recovery that drives vital new economic activity, accelerates our transition to Net Zero and strengthens our resilience to the impacts of climate change.

We believe that the established RIO regulatory framework for energy networks and the Contracts for Difference (CfD) auctioning process for renewable generation have the potential to unlock private investment in energy infrastructure with long-term funding models that minimise the impact to consumers. However, as we point out in section 2 below, there are several aspects of Ofgem's RIO-T2 proposals that must be changed to enable this, including:

- Significantly streamlining Uncertainty Mechanism processes (see our answer to Core Q21-23) and/or reallocating spend in certain areas back from UM to core (eg see our answer to NGTQ11);
- Ensuring that TOs are adequately funded for necessary pre-construction and preparatory work necessary to make a successful UM case (see our answers to Core Q21 and Core Q22).
- Reinstating certain key incentive mechanisms which were developed with the strong support of renewable generators (see our answers to NGETQ3 and NGETQ4)

### **1.3 Net Zero at Lowest Cost**

While Ofgem may be committed to delivering Net Zero at Lowest Cost, we believe there are three points to make clear on this:

- 1) Lowest cost must look into the significant future; well beyond the RIO period and to the longer term goal of a sustainable, flexible and interactive network; it would be wrong to cut costs for today's consumers if that stores up extra costs for future consumers.
- 2) Lowest cost must include consideration of the consequential impacts on other parties such as generators which will ultimately feed through to customer bills.
- 3) The overall 'lowest cost' trajectory post-COVID (taking into account wider national interests in economic recovery) may not be the same as the 'lowest cost' trajectory pre-COVID.

We consider a goal of 'most cost-effective Net Zero' would be more appropriate than 'Net Zero at lowest cost.'

### **1.4 Investor Community**

Decisions taken on RIO-T2 are being watched carefully by infrastructure investors across a range of sectors. As Bernstein noted in its Open Letter of 3 August:

*"Network investments can create much needed economic stimulus as well as enabling UK to achieve its Net Zero goal, but the Draft Determination is stuck in "austerity" mode."*<sup>5</sup>

We would go further to suggest that the DDs currently represent a missed opportunity to match the drive and leadership shown by the UK and Scottish Governments, where the focus is on how to best attract investment in a powerful economic stimulus that delivers long-term benefits. (The CCC Net Zero advice was clear that consistently strong deployment of low carbon generation will be required in order to quadruple low carbon supply by 2050.) Furthermore, the DD Uncertainty Mechanism processes do not appear flexible enough to react to evolving government policy or to be able to deliver sufficient infrastructure in a timely and efficient manner.

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<sup>4</sup> <https://www.theccc.org.uk/wp-content/uploads/2020/06/Reducing-UK-emissions-Progress-Report-to-Parliament-Committee-on-Cli...-002-1.pdf>

<sup>5</sup> 'An Open letter to the CEO of Ofgem: With great power comes great responsibility ...', Bernstein European Utilities & Renewables, 3 August 2020

### **1.5     *Route to Market***

Routes to market for generators require a high degree of certainty that infrastructure will be of sufficient capacity and be delivered within a specified timeframe prior to a generator's ability to fully commit to investment. While we are becoming more confident that Ofgem has Net Zero in its sights since the publication of its Decarbonisation Plan<sup>6</sup>, and that Ofgem appears committed to trying to create structured processes in RIIO-T2 to account for the current uncertainties in policy, we are unconvinced that the existing proposals (even with the Net Zero Advisory Group) will allow TOs to deliver appropriate services to customers within the framework in which they operate, e.g. the connections process and its component parts which we expand on below.

### **1.6     *Digitalisation of the network***

There are also concerns that digitalisation is not being progressed at a sufficient pace to ensure that renewable generators can play their full role in providing flexibility to the market. We note that Ofgem has either reduced or rejected proposals to digitalise networks. The drive towards Net Zero requires better information and more efficient signalling to improve flexibility, increase efficiency and ensure renewable generation can play a part in this – for which real time data is a key component. New digital technologies and enhanced data analytics are necessary for multiple benefits as identified in Catapult's Energy Data Taskforce report<sup>7</sup> which include, as an example, reducing costs and timescales for generation connections by unlocking dynamically available capacity, the benefits of which can be passed through to consumers.

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<sup>6</sup> <https://www.ofgem.gov.uk/publications-and-updates/ofgem-s-decarbonisation-action-plan>

<sup>7</sup> <https://es.catapult.org.uk/wp-content/uploads/2019/06/Catapult-Energy-Data-Taskforce-Report-A4-v4AW-Digital.pdf>

## **2      *Specific Consultation Question Responses:***

### **2.1      *Core Question Responses***

#### **Core Question Q20. Do you agree with our approach regarding legislation, policy and standards?**

The consultation document recognises that a number of changes occurred during RIIO-1 which would have benefited from legislative policy change re-openers<sup>8</sup>. We are therefore curious why Ofgem decided not to implement something in this area for RIIO-2. We would suggest that legislative reopeners are critical to responding to wider policy changes that may result in unforeseen costs.

#### **Core Question Q21. Do you agree with our overall approach to meeting Net Zero at lowest cost to consumers? Specifically, do you agree with our approach to fund known and justified Net Zero investment needs in the baseline, and to use uncertainty mechanisms to provide funding in-period for Net Zero investment when the need becomes clearer?**

(In addition to our response to this question, please also see our responses to SPTQ11, SHETQ6 and NGETQ11 below (under section 2.4))

#### ***Net Zero at Lowest Cost to Consumers***

No. We believe there is a real risk that the aim of delivering Net Zero ‘at lowest cost to consumers’ could be (and is) being interpreted in too narrow a sense, focusing on short term impacts on consumer bills and failing to strike the right balance between current and future consumers. Renewable projects are already queueing for connection and a ‘lowest cost’ approach which jeopardises networks’ ability to respond will be very short-sighted. Meeting Net Zero must therefore be delivered ‘as cost-effectively as possible’ to consumers, in a way which delivers the overall long-term cost benefits. Lowest cost ‘now’ risks slowing down the effectiveness of connecting generation having consequential impacts (e.g. through development and construction delay costs) which will ultimately feed through to customer bills.

#### ***Uncertainty Mechanisms***

The Uncertainty Mechanisms as proposed, appear to leave the TOs with no room to consider more speculative network development without significant investment risk. The lack of approved pre-construction spend (covered below) will act as a barrier to enabling the zero carbon generation investment to come forward that is needed to justify the project investment in the first place. This is particularly concerning where large-scale projects have been removed from the operator’s baseline and made subject to the Uncertainty Mechanisms which we cover in a further point below.

Ultimately, such mechanisms need justification before commitment to the required infrastructure can be considered. Therefore, the potential for getting this wrong and subsequently stifling Net Zero is significant and must not be underestimated. As a minimum, certainty of works going ahead for both a TO and a generator must be provided in sufficient time to ensure appropriate financial investment decisions can be made. We would also note that delays and/or stop/start investment decisions will give rise to uneven patterns of deployment which, contrary to Government desire to see growth in the UK supply chain for renewables, can create gaps in contracting works, restricting the delivery and growth of the supply chain businesses that support the renewables industry.

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<sup>8</sup> Consultation-RIIO-2 Draft Determinations, Core Document (Addressing changes to legislation, policy and technical standards), 7.85-7.86 including the Consultation Position Table

### **Generation Volume Drivers**

Ofgem noted in its Net Zero webinar of 10 August that the **Volume Drivers** will play a key part in "...enabling Net Zero." Noting Ofgem's acknowledgement of this, there are two key areas of concern: i) feedback received from all of the TOs suggests that the £/MW allowance is insufficient to enable the vast majority (90%+) of new renewable generation connections to progress without making a loss, and ii) there is a need for ongoing efficient and practical processes to allow TO submissions and Ofgem approval without delay.

On the first point, while we recognise the relevant licence obligations placed on operators to deliver connections and we encourage this being delivered as economically as possible, we are concerned that a TO's ability to deliver connections efficiently will be compromised and that they will be forced to offset this against other load or non-load related deliverables - which could ultimately directly and/or indirectly impact the timeliness and/or cost of a generator's connection.

On the second point, we believe that Ofgem will need to be sufficiently resourced and have sufficiently efficient processes in place to ensure decisions are not unduly delayed and to minimise the significant administrative burden that tends to be placed on TOs to justify a drive in volume.

- ***We would seek assurance from Ofgem that TOs have been provided with sufficient unit cost allowances for this UM to progress without impacts on other TO investment projects, and***
- ***We would seek assurance that Ofgem is able to sufficiently resource and to commit to process deadlines that align with TO and customer project and contractual needs***

### **Low cost projects (sub £25m)**

There does not appear to be a mechanism for low cost projects to progress. Where projects in this category have been removed from the TO's baseline or have been identified as part of the ESO's Network Options Assessment (NOA), we understand that TOs must rely on i) pre-construction funding of which most, if not all, is at risk, and ii) Ofgem approval. We cover pre-construction funding specifically below.

***Core Question Q22. Do you think the package of cross sector and sector-specific UMs provides the appropriate balance to ensure there is sufficient flexibility and coverage to facilitate the potential need for additional Net Zero funding during RIIO-2?***

The 2020s will need to see huge increases in the capacity of renewable generation on the electricity network as electrification requirements increase. Government ambitions are to deploy 40GW of offshore wind by 2030 and, with the reintroduction of the Contracts for Difference (CfD) mechanism for onshore wind and solar, this RIIO period is critical to ensure that transmission investment can keep pace with renewable sector developments. It is in this regard that we have concerns regarding the proposed package of outputs, incentives and uncertainty mechanisms which risks delaying the speed of deployment needed in the next 10-year period. We highlight some of the issues in our answer to 'Core Question 2.1' but would add a further point below with respect to 'pre-construction funding'.

### **Pre-construction funding**

We understand that the majority of revenue requested for pre-construction has been disallowed, which we consider to be contrary to how Uncertainty Mechanisms are intended to work. We would expect pre-construction work to be a fundamental requirement for the TO if it is to provide the evidence and certainty that Ofgem will look for in order to approve a scheme.



- ***We would seek clarification from Ofgem as to how TOs are expected to provide sufficient certainty for projects that form part of the Uncertainty Mechanism in cases where preconstruction funding has been disallowed.***

**Core Question Q23. Do you have any views on our proposed approach to a Net Zero re-opener?**

We understand that the intention for the Net Zero re-opener is to support Ofgem's Decarbonisation Action Plan and to enable RIIO price controls to be flexible to adapt to changing requirements. However, we were unable to find clarity on the design of the re-opener or as to how the allocated £10bn<sup>9</sup> spend would be considered and accounted for.

In addition to the decarbonisation of heat, we would like to highlight the work in the offshore sector that has been emerging as a result of a lack of progress in this area and the apparent need for a significant amount of reform<sup>10</sup>. It is crucial that development of the offshore framework and regime moves forward at pace without delay to ensure targets 10 years from now can be realised. As noted already, clear criteria (e.g. a materiality threshold, timings and assessment stages) for projects that would fall into the scope of the net zero re-opener need to be identified.

- ***We would welcome more detail on the specific design of the net zero re-opener in the run up to the final determination by the end of the year.***

We are aware of Ofgem's recent announcement to establishing a Net Zero Advisory Group to inform decision and timing of large strategic investments. While this appears like a positive step, the meeting frequency of the group will not facilitate decision making at the pace required to progress timely investment determinations.

While we recognise the positive step in introducing a net zero re-opener, a key part in achieving an overall successful methodology will be the design of the uncertainty mechanisms in how they interface with real-world decisions (e.g. best view assumptions and the requirement to consider speculative proposals) and timescales (e.g. how and when the 'chain' of investment decisions from generator through supplier through network operator needs to be taken) and indeed how the overall process is administered. Processes that are designed to ensure uncertainty is managed must not be the cause of further uncertainty such as decision delays or push back due to a lack of clarity over submission criteria and/or requirements. We would reiterate that these elements are critical to ensuring that the net-zero reopeners do not create new barriers to much needed investment, jeopardising the connection of new renewable generation needed to stay on track for net zero.

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<sup>9</sup> Consultation-RIIO-2 Draft Determinations, Core Document (Addressing changes to legislation, policy and technical standards), 5.11

<sup>10</sup> The ESO has recently commenced assessment of the Integrated Offshore Transmission review within their Offshore Coordination Project.



## **2.2 Electricity Transmission Question Responses**

### ***ETQ10. Do you agree with our proposed eligibility criteria for the LOTI re-opener and do you agree with the assessment stages, and their associated timings?***

No. We have concerns over both the timing and criteria. Equally, while Ofgem notes that specific cases may be made for exceptions to the stage timing, Ofgem also makes clear that these instances will be “very rare”. Ofgem notes that it is learning from developing the Strategic Wider Works arrangements. However, under the SWW scheme, TOs had the opportunity to apply at any time and a decision could be made within 6 months, depending on the scheme complexity. This is clearly a more favourable timeline for developers who require certainty to be able to take investment decisions in time to meet requirements for routes to market such as the current CfD timelines. The proposed design and suggested timings could significantly delay decision making up to 30 months, should Ofgem reach a decision based on Final Needs Case. This proposal does not align with the CfD timelines and could delay projects connecting in mid-2020s by 2.5- 5 years.

Further, we believe projects in these categories require more certainty from Ofgem on the ability of TOs to recover pre-construction costs because of their scale. Such costs are fundamental to ensuring a needs case is robust.

### ***ETQ13. Do you agree with our proposed scope of, associated eligibility criteria for, and timing of the submission window under the MSIP re-opener?***

No, we have concerns that the timing of the submission window under the MSIP reopener is proposed to be as late as 2024. It is critical to note that such projects will form part of customer connection agreements as enabling works, and delays to their progress will ultimately compromise developers’ ability to secure routes to market in a timely manner and will, at a minimum, delay those connections.

As in our response to ETQ10 above, we believe MSIP projects require more certainty from Ofgem on the ability of TOs to recover pre-construction costs because of their scale. Such costs are fundamental to ensuring a needs case is robust.

- ***We are not aware of any means by which such projects can be progressed before 2024 and would seek clarity from Ofgem on how NOA projects and load-related projects removed from the TO’s totex baseline will be progressed in a timely manner.***

## **2.4 Question Responses covering NGET, SPT and SHET**

### ***NGETQ3. Do you agree with our proposal to reject the Accelerating Low Carbon Connections ODI-F?***

No. While we share some of Ofgem's concerns regarding the authenticity of original contracted timescales, we believed this incentive to be a genuine effort to encourage flexible processes that shorten lead time for connections. We would therefore strongly encourage any incentives or propositions directly linked to reducing carbon or accelerating its reduction to be worked through to a positive solution. Validation could be provided either by the ESO and the developer with the connecting customer agreement in order to mitigate the risk.

### ***SPTQ5. Do you agree with our consultation position to reject the "RIIO-T2 System Outage Management Proposals to Reduce Constraint Costs"?***

### ***SHETQ2. Do you agree with our consultation position to reject the 'RIIO-T2 System Outage Management Proposals to Reduce Constraint Costs'?***

### ***NGETQ4. Do you agree with our consultation position to reject the 'RIIO-T2 System Outage Management Proposals to Reduce Constraint Costs'?***

All three TOs and the ESO proposed a number of ODIs relating to outage and constraint management that have been rejected by Ofgem. They included a process in response to feedback received from industry at OC2 forums, individual and group stakeholder feedback and at least one successful pilot project. We would note that the pilot project clearly demonstrated the opportunities available to reduce outages, highlighting the limitations of both the existing arrangements and the natural drivers that the TOs and the ESO have.

Ofgem notes that it doesn't understand why such incentives are required. However, the absence of an incentive that creates the appropriate drivers for outage and constraint management has been an issue since the introduction of BETTA when it was left unresolved. TOs will naturally place a focus on the TO component in terms of lowest cost design solutions without accounting for a customer's consequential impact. SOs place focus on the constraint costs versus the TO's outage proposals required for the design in question (including timescale, safety, security etc.) The ESO does not look at whole system costs (i.e. that include generator loss) and the generator must therefore drive this (as has been demonstrated by at least one scheme who successfully navigated a pilot<sup>11</sup>).

Usually, the generators most affected by (often very long) unpaid outages are those on single circuit non-firm connections which by default will predominantly be onshore windfarms. Examples exist where large generators have been switched off for 9 months<sup>12</sup> with no recompense and no option to consider any alternatives, and where neither the TO or the SO considered the additional O&M costs incurred by the generator or the loss of production. Solutions exist that can reduce outage times thereby reducing O&M costs, grid system BSUoS costs, generator reliability<sup>13</sup> and therefore security, but it has been proven (through the carrying out of pilot schemes) that appropriately placed incentives are required to create the appropriate outputs.

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<sup>11</sup> SP Renewables can provide information on the pilot project.

<sup>12</sup> The Grid Code has no limit on a reasonable length of outage

<sup>13</sup> Generators (particularly windfarms in high altitude climates) subject to lengthy outages, endure abnormally long hibernation periods that can cause unpredictable operation once redeployed.

- In the absence of the ODIs which were proposed by the TOs and the SO in response to industry feedback and a successful pilot programme, we would seek clarification from Ofgem as to how this area can be resolved.***

***SPTQ11. Do you agree with our proposed allowances in relation to load related capex? If not, please outline why.***

***SHETQ6. Do you agree with our proposed allowances in relation to load related capex? If not, please outline why.***

***NGETQ11. Do you agree with our proposed allowances in relation to load related capex? If not, please outline why.***

We have concerns about the proposed allowances.

There are a number of projects across the DDs that Ofgem has removed from the TO proposals' baseline that are Load-Related Expenditure (LRE). Ofgem has explained that these have fallen short of justification around the needs case, including their timing. LRE projects are designed to cater for additional load (generation/ demand connections) and will therefore be included in bilateral connection agreements entered (or being entered) into with customers and therefore scheduled to be constructed and completed in order to meet the contracted timescales.

We also note that infrastructure is vastly generation-driven and likely predominantly driven by the renewables industry. E.g. Branxton (in SPT's area) is required to hub the east coast HVDC and also the Firth of Forth zone offshore wind connections. Pushing such projects toward the operators' 'Uncertainty Mechanism' creates uncertainty for applicants and those parties with existing connection agreements, which increases risk and in turn has a negative impact on cost reduction and therefore competition.

- We would ask Ofgem in conjunction with the TOs to provide a full review of connection projects that are dependent on the various LRE schemes and to consider restoring projects to the baseline' where this would reduce risk for connectees.***
- We would seek comfort from Ofgem that they are working with TOs to ensure they are aware of all non-baseline load-related projects that are already or will be expected to form enabling or critical path works in connection agreements and how their potential for delay could impact customer connections.***