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Dear Hannah

**“RPI-X@20: Output measures in the future regulatory framework”; a report prepared for Ofgem by Frontier Economics and Consentec**

### **Response from National Grid**

National Grid owns and operates the high voltage electricity transmission system in England and Wales and as National Electricity Transmission System Operator (NETSO) operates the Scottish high voltage and offshore transmission systems. National Grid also owns and operates the gas transmission system throughout Great Britain and through its gas distribution business distributes gas in the heart of England to approximately 11 million homes, offices and schools. The issues addressed in this report directly affect National Grid.

This response sets out National Grid's high level view of Frontier Economics and Consentec's report. National Grid welcomes the report as making a significant contribution to moving the development of output measures forward. Whilst National Grid agrees that an outcomes-led price control is desirable, we have some reservations about the practicality of implementation and are pleased that a number of these have been highlighted in the report.

The structure of this response is consistent with the structure of the report.

### **Are the proposed output categories the right ones?**

The report concludes that the six output categories identified by Ofgem are appropriate and provide sufficiently complete coverage; it also notes that no network activities that cannot be mapped to one of the six output categories have been identified.

Whilst National Grid does not disagree with this conclusion, it would have been useful to see the exhaustive matrix of network activities implied by Figure 3, rather than just the consequential 'long-list' of potential output measures that have been derived and included as Annex 1.

This would have allowed network operators to compare their activities and identify any gaps. When considering our activities, National Grid would include a market facilitation category which would cover our role in providing resources to support the operation of the market and its development in GB and Europe. Whilst the outputs long-list for “Conditions for connection” appears to provide some coverage for this activity, it does not appear to be comprehensive.

## **The package of high-level outcomes and primary outputs**

National Grid broadly agrees with the approach outlined for the definition of high-level outcomes and primary outputs.

In particular, National Grid agrees with the issues associated with missing outputs and outputs which cannot solely be achieved with output-based incentive arrangements. National Grid also agrees with the need for a cautious approach to these circumstances to avoid slipping into opportunistic input-based regulation.

Whilst National Grid agrees that any application of input-based regulation needs to be credibly prescribed to avoid this risk, the issues noted later in the report with an “ever lengthening rulebook” need to be considered. An effective solution will therefore need to strike the appropriate balance between prescriptive rules ex ante and the opportunity for networks to argue their case, when their performance is being reviewed, that pursuing a particular output became inconsistent with the overall network outcomes because of changed circumstances.

## **Generic features of the package**

### ***Environmental outputs***

The proposed approach to environmental outputs appears to be pragmatic.

The significant impact that the pattern of generation has on losses is backed-up by our own analysis, which demonstrates that the installation of lower loss assets has a much less significant effect than the forecast future generation pattern. This supports the conclusion contained in the report that incentives to minimise losses have to be set cautiously to avoid perverse outcomes.

The examples of “other emissions” that are given are noise and dust. Whilst National Grid appreciates that this is not intended to be an exhaustive list, contaminated land and assets (e.g. with asbestos) is a notable issue. The issues raised about the measurability of these items are valid, although ex ante engagement on the appropriate performance and the associated efficient costs will be required in addition to the application of a qualitative ex post assessment of performance.

### ***Conditions for connection***

National Grid welcome the proposed “time to connect” primary output and the acknowledgement that this may need to be broken down to remove exposure to events beyond the network operator’s control.

Rather than having a “minimise the time taken to connect” output category, it may be more appropriate to stress the need to provide a time to connect which is consistent with the network user’s aspirations. It would clearly not be efficient to incur additional expenditure in order to minimise the time to connect a network user that was not in a position to make use of the earlier connection.

In our “Potential Enhanced Electricity Transmission Owner (TO) Incentives”<sup>1</sup> document issued on 18 September, 2009, National Grid explored a potential enhancement of National Grid’s investment incentives on the delivery of ‘local works’. The proposal provided uplift to the relevant unit cost allowance if the time to connect was reduced below 48 months. The intention was that this uplift would provide an incentive for National Grid to innovate to achieve connection dates that network users desire.

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<sup>1</sup> <http://www.nationalgrid.com/NR/rdonlyres/FB4A9925-15AB-462A-B516-33543A44B460/37082/PotentialEnhancedElectricityTransmissionOwnerIncen.pdf>

The responses to this consultation were summarised in a follow-up note<sup>2</sup> published on 7 May, 2010. In general, some respondents suggested that the proposed arrangements may be appropriate and desirable, but that further analysis should be undertaken to fully assess the likely impact of the changes. Some respondents also expressed concerns regarding the application of a generic uplift level, whether the aims were already met by licence conditions and the risk that incentivising local works would skew priorities and divert resources away from wider system works.

### ***Customer satisfaction***

The suggestion to develop and rollout the broad measure of customer satisfaction developed for the distribution companies at DPCR5 to all four network sectors appears to be pragmatic. As noted in the report, the specific form will need to be adapted for each sector.

Given the concerns about coverage and our market facilitation activities mentioned above, National Grid notes that this could be included with an extension to the proposed scope of the customer satisfaction output measures.

### ***Safety***

In general, National Grid agrees with the conclusion that safety performance should sit outside the outputs regime. National Grid would certainly not be willing to compromise on our strong commitment to safety performance.

### ***Network related social obligations***

National Grid agrees that any transmission obligations appear to be covered by other categories and that the third package may introduce Public Service Obligations (PSOs) which would need to be included in the future.

The most immediate example is the work undertaken by DECC on “Improving Grid Access” and the proposal to embed the key features of the new regime as a PSO on transmission licence holders. Clearly, this proposal, if implemented, may also impact on other electricity transmission outcomes.

### ***Reliability***

Whilst National Grid broadly agrees with the three high-level reliability outputs, the importance of ensuring that they are complimentary should be stressed. For example, it is crucial that measures for maintaining reliability performance and anticipating new patterns of energy injection work together such that network operators are not penalised for delivering the overall capital programme in an efficient manner.

### ***Reliability – maintaining reliability performance***

National Grid agrees that the application of penalties for non-delivery could lead to a collapse to input-based regulation, with a significant customer detriment.

Our experience of developing asset health measures in transmission reinforces the views stated in the report. Whilst it may be possible to measure the underlying health of the transmission system at a point in time, projecting this forward will always be subject to significant statistical uncertainty and will therefore never be an “exact science”. National Grid therefore also supports the view that these calculations can never be so definitive as to enable a mechanistic revenue penalty to be applied.

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<sup>2</sup> [http://www.nationalgrid.com/NR/rdonlyres/33E9E2A1-2C2F-4E31-9704-C23987EB34F4/41079/SO\\_TO\\_Web\\_Summary\\_Issue1.pdf](http://www.nationalgrid.com/NR/rdonlyres/33E9E2A1-2C2F-4E31-9704-C23987EB34F4/41079/SO_TO_Web_Summary_Issue1.pdf)

National Grid also agrees with the issues raised in the report about the risk of slipping into input-based regulation and the potential for customer detriment as a result of reduced innovation by network operators. The “ever-lengthening ex ante rulebook” already appears to be in evidence with the recently published “Regulatory Instructions and Guidance for Network Asset Data and Performance” for DPCR5.

As described above, our view is that an effective solution will need to strike the appropriate balance between prescriptive rules ex ante and the opportunity for networks to argue their case ex post. This balance will be essential if the simplicity and transparency objectives of the review are not to be lost.

In electricity transmission, the need to replace large volumes of assets over a lengthy period to maintain safety and reliability is clear and National Grid believes that the arrangements would benefit from the inclusion of an agreement on long-term volumes, similar to that proposed for electricity transmission constraints. National Grid currently has a concern that Ofgem may choose to sculpt volumes over time (for example to help with short-term affordability concerns) meaning that we tend to see each five year period as a separate negotiation with considerable uncertainty about what will be funded. While National Grid have a clear idea about what would be an optimal approach we do not have the same confidence to implement a long-term plan to deliver it. In this case, a credible commitment (by Ofgem) to long-term reliability (output) measures or replacement volumes (input measures) would allow us the confidence to be more flexible in the short-term (for example, in managing the overall capital expenditure programme) in order to achieve an efficient longer-term outcome.

National Grid broadly agrees with the proposals for gas transmission, although we note that the contemporaneous measure of reliability proposed is likely to need an update following the implementation of enduring exit reform from 2012.

#### ***Reliability – adapt to the consequence of climate change***

National Grid broadly agrees that the outputs associated with this outcome appear to be sufficiently covered under the other two reliability outcomes.

#### ***Reliability – anticipate new patterns of energy injection and offtake to accommodate the decarbonisation of the energy sector on the network and its planning and investment decisions***

National Grid supports the introduction of a reliability outcome for networks to anticipate through their planning and investment decisions new patterns of energy injection and offtake. The report states that this is “primarily” to accommodate the decarbonisation of the energy sector, and it is important to ensure that the wording of the outcome is not unnecessarily restrictive.

National Grid agrees with the need for a framework to legitimise investing ahead of need. The high-level process outlined in the report which involves presentation by the operator of “investment ahead of need” scenarios followed by regulatory evaluation and agreement of a plan, associated expenditure and monitoring appears to represent a pragmatic way forward. In terms of monitoring, achieving the appropriate balance between ex ante rules and the opportunity for networks to argue their case ex post will again be crucial.

National Grid also agrees that the focus should be on the establishment of regulatory framework and that the cost to consumers associated with wrong decisions with respect to this framework are likely to be much higher than those associated with operators not quite doing what was expected.

#### ***Incentivising the efficient level of constraints in electricity***

National Grid broadly agrees with the analysis of the current arrangements and the options to incentivise an efficient level of constraints.

Of the options considered, the hybrid of input-based and output-based regimes appears to provide the most pragmatic way forward. However, National Grid is concerned that uncertainty regarding future constraints may mean that the development of a meaningful Transmission Owner incentive is impractical without wider market reform. National Grid would be happy to work with Ofgem to explore these issues in further detail if required.

The discussion of incentives for losses under the environmental measure stressed the need for caution to avoid inappropriate incentives to prevent or delay new generation connections and clearly this discussion is also relevant to the consideration of incentives on transmission constraints.

National Grid looks forward to working proactively with Ofgem to develop output measures for use in the future regulatory framework and would welcome further discussion on any of the points raised in this response if required.

Yours sincerely

*[By e-mail]*

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