



Aris Kalogeropoulos Ofgem 9 Millbank London SW1P 3GE

Ursula Bryan
Strategic Asset Manager
ursula.bryan@nationalgrid.com

Direct tel +44 (0)7899 062034 www.nationalgrid.com

21st September 2015

Dear Aris Kalogeropoulos,

Notice of proposal to direct modifications to the Distribution Network Operators Common Network Asset Indices Methodology under Part C of SLC 51

We welcome the opportunity to provide comments on the DNO Common Network Asset Indices Methodology. We have set out our specific comments for this methodology on the following page.

The three Electricity Transmission Operators are also developing our Joint Network Output Measures methodology in conjunction with Ofgem. The main focus of this work being undertaken is to develop our existing joint methodology to enable the evaluation of risk 'trade-offs' between asset categories. This has involved the development of monetised risk.

The Electricity Transmission Operators have engaged with members of the Distribution Network Operators working group and also with the Gas Distribution Networks working group with the aim of sharing our respective approaches. The Electricity Transmission Operators are currently organising a joint workshop where the three groups can share their respective approaches and identify common areas, and where differences may exist due to the nature of the networks under consideration. This workshop is being planned for October 2015.

Given the discussions that have taken place with Ofgem and the three Electricity Transmission Operators, we would particularly welcome the opportunity to participate in discussions related to the "comparisons of expected risks removed in £ against forecast expenditure".

Yours sincerely,

Ursula Bryan Strategic Asset Manager.

Comments on the Distribution Network Operators Common Network Asset Indices Methodology

- 1. Whilst we understand why the Distribution Network Operators will re-base their Network Risk targets using re-aligned processes and practices, it should be noted, as agreed with Ofgem, that the three Electricity Transmission Operators will not need to re-base their targets because the focus of their work is risk 'trade-offs' based around the existing agreed targets.
- 2. As identified by Ofgem, we would welcome the inclusion within the methodology of how the document will be updated and how future innovations in operation and maintenance will be taken into account. In addition, we would also welcome understanding if the Distribution Network Operators see methodology updates and innovations requiring a re-base of the targets. This is particularly important as capital investments can have long lead times and changing targets throughout the RIIO-ED1 period would almost certainly impact on delivery of the capital plan if uncertainty existed on the outputs to be delivered.
- 3. Based on our understanding of the methodology, we would welcome the Distribution Network Operators explaining how they are dealing with high impact, low probability events. This is particularly relevant as high impact, low probability events are not statistically well described by 'probability multiplied by consequence' calculations which have been used in the methodology.
- 4. Having studied the methodology, we would welcome further explanation of the incipient and degraded failure definitions. As the definition distinction between 'degraded' and 'incipient' is related to the asset management intervention undertaken following the failure, these two types of failures could overlap. In particular, we would welcome the distinction between these two types of failure in terms of calculating the probability of failure based on the statement "The national failure rate figures used were the sum of all DNO functional failures (5 year annualised average) in accordance with the Condition Based Functional Failure definition" from page 32.
- 5. We would welcome further explanation on occasions where factors or values are chosen to be used in the methodology without the reader being able to gain a clear understanding of why that factor or value was chosen. Some examples of this are:
- Choice of 5.5 for Initial Health Score on page 22
- The C-Value being ten times higher for assets in the worst state of asset health on page 32
- The Modified Maximum and Increment (MMI) Technique in Section 6.7.2
- 6. Having studied the methodology we are not clear how probability of failure is derived for linear assets given sections of a linear asset may deteriorate at different rates. We would also welcome the tables of probabilities of failure including their associated descriptions (e.g. duration over which the probability is defined, length over which the probability is defined for linear assets).
- 7. Page 35 identifies "For assets under 10 years old, the current Ageing Rate shall be set to the initial Ageing Rate. This is to prevent an unrealistically high rate of deterioration being applied to relatively new assets where reliability issues have been identified early on in their life." Given this statement we would welcome further explanation of how this treatment in the methodology relates to 'burn-in' / infant mortality.
- 8. To aid with understanding, as identified by Ofgem, we would welcome worked examples for this methodology.
- 9. As identified by Ofgem, we would also like to see the following explained in the Distribution Network Operators common methodology
- How total network risk will be calculated from the individual asset risks
- How the risk 'trade-off' between asset categories will work
- How the risk 'trade-off' will feed into the regulatory process