



To NGET, SPTL and SHETL

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value for all customers*

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### **Decision under Electricity Transmission Standard Licence Condition B17 Network Output Measures, Part B**

Under Electricity Transmission Standard Licence Condition B17 (SLC B17) the three licensees (NGET, SPTL and SHETL) are required to develop a joint methodology designed to produce measures that evaluate:

- Network condition;
- Network risk;
- Network performance; and
- Network capability and utilisation.

The licensees must develop these output measures to facilitate the objectives specified in the licence condition. These objectives are:

- to enable monitoring of the licensee's performance as transmission asset owners;
- to enable the assessment of historic and forecast capital expenditure;
- to enable comparative analysis between UK transmission and distribution and with international networks;
- to provide relevant information on the transmission system to the authority and the wider industry in a transparent form; and
- to enable the assessment of consumer satisfaction from services provided by the transmission licensees.

The measures of network condition, risk and performance are intended to help Ofgem better assess the efficacy and efficiency of historic replacement capital expenditure (non-load capex) and the need for future investment. The measures should also provide a more constructive basis for discussion on network investment requirements with the transmission licensees in the future.

### **The licensees' proposed network output measures methodologies**

As required under SLC B17 paragraph 2, the licensees submitted the joint methodology (with licensee specific appendices) to the Authority for approval on 31 May 2008. As part of the process of developing the methodology, the licensees held an open workshop to receive views from interested parties on 8 May 2008. The licensees noted that there was ongoing work to develop measures of network risk to establish common definitions and measurement of individual criticalities i.e. safety, environmental and system this work is scheduled for completion in January 2009,. Taking this work into account the licensees believed that the outputs methodology would facilitate the licence objectives.

As required under SLC B17 paragraph 6 the Authority must review the submitted methodology and where appropriate consult other interested parties we appointed consultants (PB Power) to assist the Authority with this review. Their key conclusions were:

- the licensees need to calibrate their asset condition grading to ensure consistency between their reported outputs. The licensees are already working on this. In addition, they should also provide more detail on the rate of deterioration of assets, which as this is the key assumption behind the remaining useful life measures.
- wherever practicable the licensees should record and provide more fault and failure information data ideally correlated to asset condition and age.
- the measure of network risk should be broken down to provide greater transparency of its constituent elements, i.e. system criticality, environmental and safety etc. In the longer term, the licensees need to consider measures that reflect network-wide risks so that the licensees can demonstrate they are managing within acceptable limits.
- in addition to collecting boundary capacity and flow data under the capability and utilisation measure, the licensees should provide similar information for zones of the transmission network to capture the impact of changing generation mix in a given area e.g. wind, nuclear etc.

On 17 October 2008 Ofgem published an open letter<sup>1</sup> seeking views on the gas and electricity licensees' proposed methodologies<sup>2</sup>. A copy of PBP's report<sup>3</sup> of their findings was published with the open letter. The consultation closed on 26 November 2008.

### **Views of respondents**

In all, four responses were received with two solely commenting on the gas transmission output measures. One respondent an electricity distribution network operator (DNO), focussed on the potential to compare the electricity transmission output measures with those being developed for electricity distribution. The respondent felt that the measures proposed were appropriate for use in transmission but not necessarily applicable to distribution, notably measures to assess network risk and capability/utilisation.

The other response was from the transmission licensees, they commented on PBP's recommendations and said they were working on most them and included timescales for achieving ranging from January 2009 (e.g. network risk) and going on beyond April 2009. On the issue of providing more detailed fault data they wanted to discuss the usefulness of such information given the low frequency of such events on transmission networks.

### **Ofgem's views**

We believe the licensees have accomplished a great deal in terms of developing the network output measures methodology to date. Nevertheless as the licensees acknowledge, there areas for further development and more generally we would expect all the measures to be continually refined as the underlying data and our understanding of it improve over time.

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<sup>1</sup> Transmission Network Output Measures – Open Letter (144/08)

<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=17&refer=Networks/Trans/RegReporting>

<sup>2</sup> <http://www.ofgem.gov.uk/Networks/Trans/RegReporting/Documents1/Licensees%20proposed%20joint%20NOM%20methodology.pdf>

<sup>3</sup> <http://www.ofgem.gov.uk/Networks/Trans/RegReporting/Documents1/PB%20Power%20Review.pdf>

With regards to the usefulness of actual fault rates we accept that the low frequency of incidents may limit the interpretation of such data. However such measures should have more use on a forecast basis given the licensees' understanding of asset deterioration forecast fault rates (or some other measure of network reliability) and should help all stakeholders understand the implications of different investment scenarios. We intend to discuss this further with the licensees.

Paragraphs 7 to 9 of SLC B17 set out the options for the Authority with regards to approval of the proposed outputs measures methodology. The Authority has the choice of approving the methodology, approving the methodology provided the licensees make amendments specified by the Authority (conditional approval), or disapproving the methodology. Taking account of the respondents' views and the findings of PB Power the Authority has decided to grant a "conditional approval"

### **Way forward**

In accordance with the Authority's conditional approval (see below) all three licensees will work on the specified amendments and will be expected to have completed them to Ofgem's satisfaction by December 2009. This will enable all changes to be incorporated into the regulatory reporting arrangements from 1 April 2010. In order to ensure that licensees meet this deadline we will meet them at regular intervals to discuss progress.

In addition to ongoing developments as mentioned above the work on the definition and measurement of individual network risk criticalities (see amendment iii below) will be completed in January 2009. Where appropriate these will be incorporated into the Electricity Transmission Regulatory Reporting Packs (TRRP) which the licensees will record against from 1 April 2009. A timeline is detailed in Appendix 1

#### *The electricity transmission reliability incentive*

As we discussed in the open letter there is an interaction between the electricity transmission reliability incentive and the output measures. At present the incentive scheme is symmetrical with upside and downside sharing factors. Special Condition D5 for NGET and Special Condition J5 for SHETL and SPTL (Incentive Payments) allow the upside sharing factor to be set to zero from 2009/10 onwards, effectively making the incentive penalty or downside only, if the licensees fail to implement the output measures methodology.

In this context the Authority would regard the licensees to have "failed to implement the methodology" if they have not resolved all required amendments (set out below) to our satisfaction by December 2009. The present incentive scheme runs until 31 March 2012 and therefore consultations on the form of future incentives schemes would take place nearer this date.

#### *The Authority's decision*

For the purposes of SLC B17 Part B paragraph 8 the Authority approves the transmission network output measures methodology proposed by NGET, SHETL and SPTL subject to the following to the following amendments

- i. the licensees should ensure consistency between their remaining useful life scales
- ii. each licensee should provide sufficient detail of their rate of deterioration assumption to demonstrate the validity of the remaining useful life categorisation. The licensees should provide worked examples that illustrate how for a given asset category how the rate of deterioration policy for that asset category has been applied to derive the categorisation of the asset population by remaining useful life.

- iii. the proposed measure of network risk should also be broken down and reported against its three constituent criticalities; safety, environmental, system in each case the derivation and application of the criticality grading should be clear.
- iv. the licensees should develop a measure of longer term network wide risk
- v. the licensees should report on measures of network reliability that can be correlated with asset condition and age including on a forecast basis e.g. expected fault and failure trends
- vi. the licensees should develop further measures of capability and utilisation that measure factors other than thermal capacity at boundaries e.g. voltage and stability performance which could be impacted by changes in generation connecting to the network.

These amendments should be resolved to the Authority's satisfaction by 1 December 2009 otherwise for the purposes of Special Condition D5 paragraph 3 of NGET's Electricity Transmission Licence and Special Condition J5 paragraph 3 of SHETL's and SPTL's Electricity Transmission Licences, the licensees will be deemed to have failed to implement the network output measures methodology.

Yours sincerely



**Stuart Cook**  
**Director of Transmission**

Signed on behalf of the Authority and authorised for that purpose by the Authority

**Appendix 1 Timeline for work on transmission network output measures**

<b>2009</b>	
January	Licensees submit revised methodology with any amendments being implemented for 1 April 2009
February – March	Output measures tables/proformas for 2009/10 published and incorporated into the TRRP
April to December	<p>Licensees continue to work on amendments directed as part of the Authority's approval to the deadline in December.</p> <p>Subject to the licensees resolving the reliability incentive remains symmetrical or becomes penalty only</p> <p>Licensees record data for 2009/10 outputs measures</p>
<b>2010</b>	
January to March	Incorporate developments in output measures after April 2009 into the TRRP for 2010/11
July	Licensees submit report on 2009/10 output measures