

## Form A – IGG Design Discussion Request

Discussion Request Number	Title	Priority
DR 0128	Increase in tolerance levels for NQH Meter Reading validation	High

Name of Requesting Organisation	Retail Market Design Service
Contact name	Colm Gaffney
Date Request sent to RMDS	6 <sup>th</sup> February 2007

Date	Version	Reason for Change
6 <sup>th</sup> February 2007	0.1	Initial draft of the DR document. This document has been created as a result of Change Requests issued through the Design Forum.
17 <sup>th</sup> January 2008	1.0	Distributed to market for approval.

Detail of Discussion Request
<p>This Discussion Request has been raised to discuss increasing the tolerance levels for NQH meter reading validation</p> <p><b>Detail:</b>            Currently, the NQH Data Collection team manually handle several hundred meter readings a day that have been outsourced, because the indicated register consumption is outside the established thresholds for plausibility. The tolerance levels are applied to <b>all</b> NQH consumptions (calculated taking account of the Register Factor (Multiplier), where applicable). Readings where this consumption is outside the stated tolerances, are deemed implausible, and require manual intervention. In the business process for handling these outsorts, readings within a wider band are accepted and those outside this band are rejected. This change to the market design proposes to include these de facto tolerance bands in the automated validation process. This means replacing the current automated tolerance bands with these proposed limits. This will reduce the number of implausible meter readings outsourced on a daily basis, thereby speeding up the billing and issuing of these readings to the market, via market messages. Note the consumption applies to actual readings and not estimates.</p> <p><b>Proposed Solution:</b>            It is proposed that the tolerance levels be increased marginally to allow certain NQH meter readings to be automatically plausible, thereby reducing the number of implausible readings which require manual intervention. The table below indicates the 'Current Tolerance Levels' and the new 'Proposed Tolerance Levels'. The first two columns indicate the expected consumption (after the Multiplier has been applied).</p>

**Detail of Discussion Request**

**Table 1. Register Consumption Tolerance Bands for reading plausibility**

Current Tolerance Levels				
Expected Consumption on Register (kWh/kVArh)	Absolute Tolerance (kWh/kVArh)	Relative % Tolerance	Resulting consumption range for plausibility (kWh/kVArh)	
0	199	500		Expected Consumption + 500
200	499	200		600 to 1500
500	799	150		1250 to 2000
> or = 800		100		1600 to ∞
Proposed Tolerance Levels				
Expected Consumption on Register (kWh/kVArh)	Absolute Tolerance (kWh/kVArh)	Relative % Tolerance	Resulting consumption range for plausibility (kWh/kVArh)	
0	199	1000		Expected Consumption +1000
200	499	250		700 to 1750
500	799	200		1500 to 2400
> or = 800		100		1600 to ∞

**Example 1. Band 1.** If the expected consumption were 177 kWh (in the 0 to 199 kWh range), and the calculated consumption were 680 kWh, the expected consumption would be added to the absolute value i.e.  $177 + 500 = 677$ . The reading which gave rise to this value would therefore be outsourced as an implausible meter reading. It is now proposed that this maximum allowed consumption figure be increased from 500 to 1000.

**Example 2.** The range of readings to be released for **Band 2** (Current and Proposed, as indicated by the arrow) can be calculated as follows:

Current Lower Range (kWh/kVArh)

$$200 + (200\% \times 200) = 200 + (2 \times 200) = 200 + 400 = 600$$

New Proposed Lower Range (kWh/kVArh)

$$200 + (250\% \times 200) = 200 + (2.5 \times 200) = 200 + 500 = 700$$

**Example 3.** The range of readings to be released for **Band 3** (Current and Proposed, as indicated by the arrow) can be calculated as follows:

Current Upper Range (kWh/kVArh)

$$500 + (150\% \times 500) = 500 + (1.5 \times 500) = 500 + 750 = 1250$$

New Proposed Upper Range (kWh/kVArh)

$$500 + (200\% \times 500) = 500 + (2 \times 500) = 500 + 1000 = 1500$$

**No change to Band 4.**

<b>Detail of Discussion Request</b>	
<b>Reason for Discussion Request</b>	
This change would reduce the number of implausible NQH meter readings	
<b>Market Design Documents impacted by Request</b>	
Change to supplementary information that has been baselined at 5.1 and will be published in 6.1	
<b>Date of IGG where discussed</b>	
<b>Change Request xref (if applicable)</b>	

<b>PART 2 MARKET ASSURANCE:</b>				
<b>Applicability</b>				
ESB Networks	Suppliers	TSO	SSA	Generators
<b>Scope of Test</b>				
Connectivity	DTT	MSA	IPT	Other
			No. Of Scenarios	

<b>Scope of Discussion Request</b>							
Correction to Documentation	Business Process	Market & MP Systems	MPCC	Readings Processor	Market Gateway	Schema	Web Forms
X							