

## P219 TRANSMISSION COMPANY ANALYSIS AND IMPACT ASSESSMENT – RESPONSE PRO-FORMA

In accordance with paragraph F 2.8 of the Code, please respond to the following questions concerning P219 (including the rationale for each response):

Q	Question	Response
1	Please outline any impact of the Proposed Modification on the ability of the Transmission Company to discharge its obligations efficiently under the Transmission Licence and on its ability to operate an efficient, economical and co-ordinated transmission system.	The Transmission Company does not envisage any direct impact on the ability of the Transmission Company to discharge its obligations efficiently under the Transmission Licence.
2	Please outline the views and rationale of the Transmission Company as to whether the Proposed Modification would better facilitate achievement of the Applicable BSC Objectives.	<p>Provision of more consistent and transparent demand outturn and forecast information should improve self-balancing by the market participants which should, in turn, improve the efficient, economic and co-ordinated operation of the GB transmission system (Applicable BSC Objective (b)).</p> <p>Increase in information transparency and availability of improved market information to all participants should promote effective competition in the generation and supply of electricity (Applicable BSC Objective (c)).</p> <p>Improvements to the definitions of demand terms could remove ambiguity in the BSC thereby reducing the number of queries to Elexon and promoting efficiency in the implementation and administration of the balancing and settlement arrangements (Applicable BSC Objective (d)).</p>
3	Please outline the impact of the Proposed Modification on the computer systems and processes of the Transmission Company, including details of any changes to such systems and processes that would be required as a result of the implementation of the Proposed Modification.	<p>The new data will be made available to National Grid's BM system where not already in existence. To accommodate P219 BM will be required to:</p> <ul style="list-style-type: none"> <li>• Amend the BM design documentation to reflect this change.</li> <li>• Amend the BMRA-BM interface documentation to reflect the changes to the interface.</li> <li>• Construct a fixed-format ASCII flat file of a format to be defined</li> </ul>

		<p>in the BMRA-BM Interface Specification document. Data may be provided in a separate file from the existing INDO and demand forecast files or as additional items within the files – these details have not yet been decided.</p> <ul style="list-style-type: none"> <li>• Transmit this file at set intervals to the BMRA over the existing BM – BMRA circuits.</li> <li>• Undertake unit, system, integration and User Acceptance testing.</li> </ul> <p>It is assumed that Central Services will make the additional TSD values available to the market through both revised Tibco messages and BMRA-I005 flows.</p> <p>National Grid systems do not load/receive the BMRA-I005 so this would incur no additional cost to National Grid. However our Commercial Monitor (CM) system does receive INDO data through Tibco messages. CM will be required to:</p> <ul style="list-style-type: none"> <li>• Amend the CM design documentation to reflect this change.</li> <li>• Modify the Tibco software for the modified message structure</li> <li>• Modify the CM database to include tables/columns/constraints for the TSD values.</li> <li>• Undertake unit, system, integration and User Acceptance testing.</li> </ul> <p>Our energy trading advice system (Trading Support) is based, in part, on the CM system. Trading Support will be required to:</p> <ul style="list-style-type: none"> <li>• Amend the Trading Support design documentation to reflect this change.</li> <li>• Modify the Trading Support database to amend views/tables/columns/constraints for the TSD values.</li> <li>• Modify Trading Support applications which utilise this data.</li> <li>• Undertake unit, system, integration and User Acceptance testing.</li> </ul>
4	Please outline any potential issues relating to the security of supply arising from	The Transmission Company does not envisage any issues relating

	the Proposed Modification.	to the security of supply arising from the Proposed Modification.
5	Please provide an estimate of the development, capital and operating costs (broken down in reasonable detail) which the Transmission Company anticipates that it would incur in, and as a result of, implementing the Proposed Modification.	<p>National Grid's BM, CM and Trading Support systems will require modifications to accommodate P219.</p> <p>BM is the cornerstone of National Grid's involvement in the Balancing Mechanism market. Changes are not made lightly to the system and a significant degree of analysis, design, careful implementation and regression testing will be necessary. Similarly several other systems we use in managing the transmission system (NED, CM and Trading Support) will require a program of managed change.</p> <p>The following is an estimate of the development, capital and operating costs for the P219 modifications to the BM and other systems:</p> <p><b>Initiation Stage</b> = £100k, part of which cost has already been incurred by National Grid in undertaking feasibility assessment work for improvements to information provision. We have initiated this work because of strong feedback from our customers and other stakeholders in order to be able to estimate the impact of the change more completely, given much of the changes are to our core operational security of supply critical systems and to enable us to move to a delivery phase more smoothly.</p> <p>Our high level activities in Delivering this project include: -</p> <ul style="list-style-type: none"> <li>• Project Management</li> <li>• Analysis/Design</li> <li>• Build the Solution</li> <li>• Test the solution</li> <li>• System Testing</li> <li>• Regression Testing</li> </ul>

		<ul style="list-style-type: none"> <li>• User Acceptance Testing</li> </ul> <p>We have estimated the costs for changes as follows: -</p> <p>Total for BM changes = £80K  Total for CM/Trading Support changes = £70k  Risk Margin = £50k  Initiation Phase = £100k  <b>Total Estimated Cost for P219 = £300k</b></p> <p><b>Total Estimated Time From Mod Approval = 3-4 months</b></p> <p>It is assumed that developments will take place on existing applications and infrastructure. Further, it is assumed that the existing infrastructure and support arrangements can support this incremental increase in functionality without incurring additional capital or operating costs. We have also assumed that the costs above reflect placing P219 functionality into a planned release of our key Balancing Mechanism system, which takes place approximately every 6 months and for this reason the costs above do not include any element of general Balancing Mechanism release costs. We expect that a planned release will take place at a time consistent with our ambition to deliver P219 for Winter 2008.</p> <p>National Grid has already incurred a portion of the £100k initiation costs for both P219 and P220 and continues to be incurring initiation costs at this time.</p>
6	Please provide details of any consequential changes to Core Industry Documents and/or the System Operator Transmission Owner Code that would be required as a result of the implementation of the Proposed Modification.	The Proposed Modification either utilises existing terms that are already defined in other Codes, or defines new terms within the Proposed Modification. Consequently, the Transmission Company does not envisage any consequential changes to Core Industry Documents and/or the System Operator Transmission Owner Code.
7	Please provide any estimates in cost savings, if P219 were to be implemented	A development cost saving of £200K from the total summated costs

	together with P220.	<p>for P219 and P220 as estimated independently can be made provided that the delivery date for both modifications is synchronised.</p> <p>We also estimate the combined delivery timescales for P219 and P220 to be 6 months. The individual delivery timescales should not be added together.</p>
8	Any other comments on the Proposed Modification?	No

Please send your response by **5pm on Monday 10 December 2007** to [modifications@elexon.co.uk](mailto:modifications@elexon.co.uk). Any queries regarding the analysis should be addressed to Sherwin Cotta on 02073804361 or email address [sherwin.cotta@elexon.co.uk](mailto:sherwin.cotta@elexon.co.uk).