Implementation of the fuel disclosure provision (Article 3(6)) of EU Directive 2003/54 on the Internal Market in Electricity

1. Introduction

- 1.1. This is the Final Regulatory Impact Assessment for the implementation in GB of the fuel disclosure provision (Article 3(6)) in EU Directive 2003/54 on the Internal Market in Electricity.
- 1.2. There are separate arrangements for implementation in Northern Ireland.

2. Purpose and Intended Effect of the Proposal

2.1. Objective

- 2.1.1. The aim of this proposal is to put in place a means of implementing Article 3(6) of Directive 2003/54/EC that complies fully, and minimises costs to consumers and businesses and allows maximum flexibility to adapt the arrangements as circumstances change.
- 2.1.2. The proposal is to put in place a framework that will require suppliers to provide information to all consumers on the fuel mix of their electricity supply and its environmental impact.
- 2.1.3. The intention was that the provision of information on the fuel mix of electricity should enable consumers to make informed choices about the environmental impact of the electricity they buy. Consequently, the implication is that, once furnished with the information, consumers may select more efficient and environmentally friendly power sources.
- 2.1.4. Parties affected directly will be electricity suppliers and consumers in the UK, Ofgem, and the Department of Trade & Industry, while generators, transmission companies and traders will be affected more indirectly.

2.2. <u>Background</u>

2.2.1. The 2003 Electricity and Gas Directives are part of a package of legislation intended to create a liberalised and fully competitive single market. The key elements include an obligation on Member States to ensure that industrial and commercial customers will be able to choose their supply by 1 July 2004 and all customers by 1 July 2007. It also requires the legal unbundling of electricity and gas transmission system operators by 1 July 2004 and of distribution system operators by 1 July 2007. Each Member State is required to establish independent regulatory authorities that will publish tariffs for access to grids and pipelines, and there should also be a regulated third party access regime to existing LNG terminals and gas

interconnectors, although exemptions may be granted for new infrastructure.

The text of Directive 2003/54/EC can be found at: http://europa.eu.int/eurlex/pri/en/oj/dat/2003/l_176/l_17620030715en00 370055.pdf.

- 2.2.2. The central aim of EU Directive 2003/54 is the liberalisation of European electricity markets. The market in the Great Britain is already fully liberalised, but to date no system in place for the provision of fuel mix information to consumers. It is therefore necessary to introduce the requirement in GB in order to achieve compliance and avoid infraction proceedings in the European Court of Justice. The fuel mix disclosure requirement will have cost implications for electricity suppliers.
- 2.2.3. Paragraph 6 of Article 3 of EU Directive 2003/54 requires Member States to:

'ensure that electricity suppliers specify in or with the bills and in promotional materials made available to final customers:

- (a) the contribution of each energy source to the overall fuel mix of the supplier over the preceding year;
- (b) at least the reference to existing reference sources [...] where information on the environmental impact, in terms of **at least emissions of CO2 and the radioactive waste resulting from the electricity produced** by the overall fuel mix of the supplier **over the preceding year** is publicly available.

With respect to electricity obtained via an electricity exchange or imported from an undertaking situated outside the Community, aggregate figures provided by the exchange or the undertaking in question over the preceding year may be used.

Member States shall take the necessary steps to ensure that the information provided by suppliers to their customers pursuant to this Article is reliable.'

- 2.2.4. There is currently no requirement in Great Britain for suppliers to provide information on the fuel mix of their electricity supply.
- 2.2.5. Flexibility is a priority in order to deal with an evolving market and changing regulatory arrangements, both in the UK and throughout the EU. The best way to minimise cost and disruption is to make maximum use of existing arrangements.
- 2.2.6. Extensive formal and informal consultation with market players who would be affected by this provision, in particular via seminars arranged by Ofgem, have been undertaken. Many of the estimates for costs and timings in this RIA have therefore been provided by industry, either at these seminars or in correspondence with Ofgem or the DTI.

2.2.7. In general, the directive is about establishing minimum standards rather than harmonisation. It should also be recalled that the main purpose of the Electricity Directive is to promote liberalised markets.

2.3. Risk Assessment

2.3.1. Inadequate implementation of Directive 2003/54/EC could lead to infraction proceedings at the European Court of Justice.

3. Options

3.1. Option 1: Do Nothing

3.1.1. Under EC Law we are obliged to implement Directives of the European Council and European Parliament addressed to Member States. If we do not properly implement legislation then we leave ourselves open to infraction proceedings, the result of which would be a proportionate financial penalty.

3.2. Option 2: Contract based tracking system

- 3.2.1. This option is based on the development of a system that would 'tag' electricity, so that the identification of the fuel source and its related characteristics would be permanently tied to the energy. It differs from the third option only in terms of the data sources used to verify the information provided.
- 3.2.2. The conclusion on the basis of responses to the DTI Consultation of 06/02/2004 was that this option would have very high implementation cost, would be unnecessarily burdensome on industry, and could have a potentially negative impact on the liquidity of the liberalised markets that the Directive is intended to promote.

3.3. Option 3: The Minimalist Approach

3.3.1. This approach takes the view that only the minimum requirements of the directive would be obligatory, but that best practice guidance would be available for further measures, and that it is preferable to use existing data sources until other systems are developed.

Publication, Content, Environmental Information and Presentation

3.3.2. Suppliers would be required to prepare a label covering their fuel mix over the preceding year and, at least, a reference to information on the environmental impact of the fuel mix. Customers would receive information about fuel mix on an annual basis on or with their bill and the information would be included with written materials intended to promote sales of electricity. The Fuel mix will be divided into 5 categories: coal, gas, nuclear, renewable and other. Specifically fuel that makes up more than 0.5% of the suppliers portfolio or UK average should be included and the information should be provided to the nearest 1%.

Data Sources

3.3.3. It is intended to provide useful and meaningful information to consumers using a combination of a number of already existing data sources. As and when new data systems are established, these may be incorporated.

3.3.4. Data sources include:

- REGOs (Renewable Energy Guarantees of Origin) this a new certification scheme established in compliance with the Renewable Energy Directive 2001/77/EC guarantees are to be used as the primary source of evidence for renewables, as they will not have a negative impact on specialist "green" suppliers. Also, it will help to separate the aims from this provision to that of the Renewables Obligation. 1
- Generator declarations simple self-certification declarations
 assigning the output from generators to suppliers is the proposed
 source of evidence to be used for non-renewable generation; in
 addition in the interim stages of the fuel disclosure provisions (see
 section on timing for more details) generator declarations can be
 used as an alternative to REGOs by suppliers.
- Generation that cannot be assigned to categories by REGOs or generator declarations should be assigned according to a **Residual** mix as calculated and published by the DTI.

Timing

In order to tie in with GB accounting practices and to ensure consistency with other schemes the proposed compliance year will run from 1 April to 31 March. All labels would therefore relate to the fuel mix of the financial year ending the previous March. Suppliers would be allowed 6 months to calculate the new data, meaning new labels should be available from 1 October each year.

The implementation of this proposal is expected to occur in two stages. The first stage will be an interim measure and will apply to labels produced from October 2005 to September 2006 (based on electricity supplied April 2004 to March 2005). The second stage will operate thereafter.

For bills issued between 1 October 2005 and 30 September 2006, as an interim measure, suppliers will use the same approach for accounting for their renewable sources as for conventional ones. Thus, where suppliers are in possession of verified generator declarations, these may be used to calculate the fuel source's contribution to the overall fuel mix. Where there is no such declaration available, i.e. for the residual mix, suppliers should use the data from the national averages provided on Energy Trends. If suppliers are in possession of REGOs, these may also be declared, but in the interests of avoiding double counting, all generator declarations regarding renewable energy sources will need to state that a REGO has not also been issued. It is hoped that this will enable suppliers and generators to become accustomed to the REGO scheme in preparation for 2006.

From 2006, i.e. in the long term, the following system will apply.

¹ See the section on "Timing" for details on how the evidential requirements are likely to change over the timing of the implementation of the proposal.

- For electricity from renewable energy sources generated in GB, the
 evidence should be based on Renewable Energy Guarantees (REGOs)
 issued by Ofgem for the relevant compliance year and held by the
 supplier at a fixed date, unless a suitable redemption facility is available
 in the REGOs register.
- For electricity produced by other generators (including CHP until such time as a system of guarantees of origin for CHP (CHP-GOs) is established under the European Cogeneration Directive) (2004/8/EC), disclosure may be based on verified generator declarations assigning the power from particular power stations to suppliers.
- Suppliers may include in their label any electricity sourced outside Great Britain that can be certified as above (or by equivalent certification schemes established under the Renewables or Cogeneration Directive) provided they can show contractual evidence that the relevant electricity was consumed or is to be consumed in GB.
- For supply that cannot be certified as above, suppliers will use the residual mix as calculated by the Department and updated quarterly on Energy Trends in a separate table.

Verification

3.3.5. The verification of accuracy and reliability of the information provided will be the responsibility of suppliers. Ofgem may also perform audits of suppliers' fuel mix disclosure systems.

Risks

- 3.3.6. Untimely information because of the difficulty of compiling and verifying evidence from a variety of data sources.
- 3.3.7. Best practice guidance only could mean too great a variety of formats and information provided for consumers to be able to compare data effectively and make an informed choice.

4. Costs and Benefits Assessment

4.1. Business Sectors Affected

4.1.1. The UK electricity supply market is the business sector affected by this proposal.

4.2. Assumptions

- 4.2.1. The Directive requires suppliers to "provide their customers with reliable information on their fuel mix. They must also provide at least a reference to existing reference sources where information on the environmental impact of the electricity produced by the overall fuel mix is available."
- 4.2.2. This information is to be provided at least once a year to all existing consumers and in or with promotional materials upon request for potential consumers, and is either to be attached to the bill or provided separately.
- 4.2.3. The responsibility of authenticating the information provided falls on the suppliers.
- 4.2.4. Ofgem has developed the cost estimates in the RIA in 2002-04. The purpose of the exercise is to provide order of magnitude estimates of the costs of implementing electricity disclosure in Great Britain, and to provide a general assessment of the variation in costs among alternative implementation models. While the best estimates of costs available have been used, there is considerable uncertainty, especially in regard to suppliers' costs.

4.3. Costs of Options 1 and 2

- 4.3.1. Option 1: To Do Nothing can be ruled out as the cost implications of ECJ proceedings and subsequent claims for Frankovich damages are an unacceptable risk.
- 4.3.2. Option 2 was rejected by all respondents to the DTI Consultation as being unnecessarily burdensome on the industry. Annualised costs per customer were estimated to be in the range of £0.309 £0.941, more than three times the cost of Option 3.

4.4. Option 3: Minimalist Approach

4.4.1. Under this minimalist option chosen in light of consultation responses, we assume data that is already available for other purposes is used, therefore the only costs that would be incurred are the costs of compliance by suppliers and the regulator/system operator. The efforts of suppliers to get the information together for presentation (even if it exists already) imposes some costs on other market participants e.g. generators

may have to provide declarations to support suppliers' assertions. These costs are unlikely to be very large. The costs to suppliers are assumed to consist of collation, calculation of relevant factors etc and preparation of information for customers, auditing the information and preparation of a return to the regulator. These are estimated to be around £100,000 per supplier. With 20 suppliers in GB, the aggregate non - recurring cost to suppliers is estimate to be £2 million. Maintenance costs are estimated at £1 million per annum. The two-stage implementation process is thought to generate only minimal additional costs as the use of generator declarations for renewables in the first year uses information that is already available.

- 4.4.2. Suppliers are assumed to provide this information to their consumers at least once a year.
- 4.4.3. There is considerable debate as to the real additional cost to suppliers of providing this information. It could be argued that suppliers frequently revise bills, advertising and other marketing material and that the inclusion of additional information in such material at the time of revisions would be negligible. This is particularly true as it is proposed that requirements are to have a long lead time. An estimate of £0.03-0.05 per customer is used based on a supplier's estimate of information that could be incorporated into existing billing arrangements. This suggests an annual cost of £850,000-1.4 million (based on 28.4 million customers).
- 4.4.4. Regulators/operators will bear the cost of establishing a methodology for the calculation, presentation and verification of the information provided by the suppliers to customers of their fuel mix. This is estimated to cost around £150,000 in design costs and £40,000 per year for establishment and maintenance of the software systems.
- 4.4.5. The aggregate costs of this option are therefore estimated to be:

1. Aggregate Costs for this Option	
Component	Cost (£)
Total Cost	
Non - recurring	2.256 million
Recurring	2.197 million
Annualised Cost*	£2.7 million
Annualised Cost per customer*	£0.097

Source: Ofgem * Over five years. **Per annum

4.5. Relative Benefits

4.5.1. This provision will aid in the attainment of a more transparent and efficient market for electricity, by increasing the flow of information about the generation of electricity.

- 4.5.2. By disclosing the fuel mix, both current and potential consumers will now be in a position to make a more informed choice when choosing an electricity supplier/source and may also encourage consumers to be more economical in their use of electricity. For suppliers, it provides them with an opportunity to differentiate their product from other suppliers.
- 4.5.3. In addition, there are further benefits that may potentially arise by disclosing the fuel mix of electricity supply. Consumers may increase their demand for low carbon/renewable sources of energy that in turn may increase the scope, and therefore capacity, of investment in renewable energy² and other low carbon technologies such as CHP. This offers two main benefits:
- 4.5.4. On the one hand there may be economic benefits to be reaped as renewable technologies can be labour intensive and therefore increased renewable demand may provide scope to increase regional employment
- 4.5.5. Another benefit could be the attainment of a greater level of security of supply. As increased renewable investment and capacity reduces the dependence on fossil fuels, therefore an increase in the share of renewable electricity generation could reduce the scope of supply shocks and their associated detrimental effects e.g. Price swings and transportation disruptions.
- 4.5.6. The use of REGOs instead of ROCs carries over another benefit to 100% renewable suppliers. Under a scheme where ROCs are used, it is not possible for a Green supplier to declare itself as 100% green whereas under a scheme with REGOs this will be possible. Furthermore, it is important to separate the aims of the Renewable Obligation and those of the Fuel Mix Disclosure provision. Suppliers' contribution to renewable generation is already recognised by the ROC system itself, and the fuel mix disclosure provision in the directive is not intended to provide any further form of recognition. Nevertheless, suppliers would still be free to state the size of their financial contribution to renewable generation through the purchase of ROCs in promotional material or on/with the bill.

4.6. Small Firm Impact Test

4.6.1. The proposal applies to all electricity suppliers in the UK. While suppliers vary greatly in size, none is sufficiently small to fit the definition of small firm. The chosen implementation route will place the lowest burden on the smaller suppliers as it makes the greatest possible use of data that is already available to firms.

4.7. Competition Assessment

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² Based on 4CE consumer research, it is estimated that there will be an increase in the capacity of renewables, of around 25TWh per year within the EU.

- 4.7.1. The proposed legislation applies to electricity suppliers, with a linked obligation on electricity generators to provide information to suppliers.
- 4.7.2. Although the proposed regulation strictly constitutes a barrier to entry in the UK electricity supply market in that suppliers' operating costs would be higher than otherwise, it is not anticipated that the adverse impact on industry competition would be substantial given that the fuel disclosure requirement would apply to all UK electricity suppliers and the cost per customer is minimal.
- 4.7.3. The proposed regulation will assist market competitiveness in that its goal is to better inform consumers about the electricity that they are purchasing; this is positive for competition and will better enable consumers to change supplier.

4.8. Enforcement and Sanctions

4.8.1. The licence condition dealing with fuel mix disclosure will be a "relevant condition" under the Electricity Act 1989. Therefore, non-compliance with the licence condition will be an enforcement matter for the Gas and Electricity Markets Authority.

4.9. Monitoring and Evolution

4.9.1. Implementation will be by tabling regulations under Section 2(2) of the European Communities Act (1972) to insert an additional condition in suppliers' licences. Monitoring and evaluation would therefore occur as a part of the regulator's responsibility for monitoring licence conditions. In addition, Article 28(1), in particular subparagraph (h), of Directive 2003/54/EC requires that the Commission monitors and reviews the application of the Directive across Member States, submitting an annual review to Council and the European Parliament

5. Consultation

- 5.1. The Department has consulted on the implementation of the fuel mix requirement as part of its wider consultation on EC Directives 2003/54 and 2003/55. In addition, there has been extensive informal consultation with Ofgem, suppliers and other interested parties, including British Energy, Centrica, Innogy, EdF, AEP, Powergen, 4CE.
- 5.2. All respondents to the consultation agreed with the Department's preferred Option the 'Minimalist' route as described above. The majority also provided convincing arguments against choosing Option 2, the contract-based tracking approach, particularly regarding the costs of such a scheme. The clear consensus among respondents clearly determined the direction of the Department's subsequent decisions.

6. Summary and Recommendation

- 6.1. The department, having closely consulted with the industry, can recommend the minimalist implementation option for fuel mix disclosure. It offers the security of implementation, while avoids the costs of the tagging system also considered.
- 6.2. Fuel mix disclosure is in the interests of electricity consumers whose purchase decisions will be better informed in the future, and while the financial implications of this measure will fall on the electricity suppliers, the implementation route recommended aims to minimise the burden on industry.

7. Declaration

I have read the Regulatory Impact Assessment and I am satisfied that the benefits justify the costs.

Signed by

Mike O' Brien Minister for Energy Date: 24th February 2005

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