

## **Single Electricity Market**

# **Interim Arrangements: Fuel-Mix Disclosure in the SEM**

## **Decision Paper**

**20<sup>th</sup> July, 2009**

**SEM – 09 – 081**

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# 1 Introduction

## 1.1 Background

On Wednesday 20<sup>th</sup> May, 2009 the Regulatory Authorities published a consultation paper<sup>i</sup> outlining the options and preferred approach of the Regulatory Authorities to the interim fuel-mix disclosure arrangements. The preferred approach was for a methodology based on the average pool-mix and bi-lateral purchases. Having reviewed the responses the SEM Committee<sup>ii</sup> has decided to adopt this approach as the basis for the interim arrangements.

Interim arrangements for fuel-mix disclosure are required in order to calculate supplier's fuel-mix until the enduring arrangements are fully implemented. To date a fuel-mix calculation has not been carried out in Northern Ireland and the current methodology for Ireland used to calculate the 2007 disclosure figures is no longer applicable with the introduction of the Single Electricity Market (SEM).

Therefore new arrangements are required to calculate suppliers' fuel-mix disclosure in the SEM. The SEM Committee has issued a decision<sup>iii</sup> in March of this year outlining the high level methodology for these arrangements. However, the implementation of these arrangements will require additional consultation on the detail of the methodology, the establishment of a system for the administration of Guarantees of Origin and Generator Declarations, and the transposition of Directive 2009/28/EC. Accordingly the interim arrangements are likely to apply until at least 2010.

It should be noted that the fuel-mix disclosure calculation and related information detailed in this paper are applicable to the Interim Period and are without prejudice to the transposition of the new Renewables Directive and future EU and Member State legislation relating to REGOs and fuel-mix disclosure.

## 1.2 Legislative Background

Article 3(6) of the Internal Market Directive (Directive 2003/54/EC) requires Member States to ensure that the contribution of each energy source to the overall fuel-mix of the supplier over the preceding year and related environmental information are provided in or with bills sent by suppliers to final customers. This Article also stipulates that Member States must take the necessary steps to ensure that the above information provided by suppliers to customers is reliable.

Article 3(6) of Directive 2003/54/EC has been transposed into national legislation in Ireland by Regulation 25 of S.I. 60 of 2005<sup>iv</sup>. This requires the Commission to ensure that all suppliers provide, on or in bills and promotional materials, reliable information regarding the contribution of each energy source to their overall fuel-mix and related environmental impact information over the preceding year.

Article 3(6) was transposed in Northern Ireland under the Electricity Order 1992 (Amendment) Regulations (Northern Ireland) 2005. Article 5 inserts a new Article 11A (8) in the Electricity (NI) Order 1992 under which electricity licences, issued by the Utility Regulator, shall include conditions to ensure compliance with Article 3(6) of the Directive 2003/54/EC.

There is no connection between the calculation of national targets and the calculations for the purposes of fuel-mix disclosure under Directives 2003/54/EC and 2001/77/EC respectively. The new RES Directive (2009/28/EC) published on 5<sup>th</sup> June, 2009 makes clear this distinction between the calculation of national targets and of fuel-mix disclosure.

The SEM Committee has determined that the disclosure of information to customers by suppliers in the All-Island Market is a responsibility of the SEM Committee within the meaning of the relevant legislation<sup>v</sup>.

### **1.3 Structure of the Paper**

Section One of this paper provides the background to the issue. The SEM Committee's decision is set out in Section Two. The responses to the consultation paper, SEM/09/052, are summarised and responded to in Section Three, the responses are published in full alongside this paper. Section Four discusses the timeline for implementation for this year and subsequent calculations. The appendices set out the presentation format for disclosure on bills and the requirements for environmental information.

### **1.4 Consultation Process**

The consultation paper SEM/09/052 was published on 20<sup>th</sup> May, 2009 the deadline for comments was the 19<sup>th</sup> June, 2009. The Regulatory Authorities met bi-laterally with several parties who requested such a meeting during this period, and received nine responses from the following:

- Airtricity
- ESB Customer Supply
- ESB International
- Firmus Energy
- NIE Energy – Power Procurement Business
- NIE Energy Supply
- The Consumer Council (Northern Ireland)
- Viridian Power & Energy
- One confidential response

**1.5 Terms Used –**

Average fuel-mix	means the fuel-mix associated with the total generation on the island of Ireland plus net imports;
Certificates	refers to both REGOs and Generator Declarations unless otherwise stated;
Generator Declaration	means a document (electronic or otherwise) which has the sole purpose of proving to final customers that a given share/quantity of electricity was produced from certain non-renewable sources;
Interim Period	means the period in which the arrangements outlined in this paper will apply that is until the full implementation of the arrangements set-out in SEM/09/033;
Relevant Arrangement	for the purpose of this paper Relevant Arrangement is as defined by Article 34(7) of the Renewables Obligation Order (Northern Ireland) 2009. As defined by this order no more than one such arrangement may exist in relation to each unit of energy; and
Renewable Energy Guarantee of Origin (REGO)	means a document (electronic or otherwise) which has the sole purpose of proving to final customers that a given share/quantity of electricity was produced from renewable sources. The legal basis and function of 'guarantees of origin' are set out in Article 5 of Directive 2001/77/EC.
Residual Pool-Mix	means the average fuel-mix of energy in the SEM pool excluding energy attributed to suppliers in accordance with this decision;
Interim Arrangements	means the arrangements, as outlined in this decision, that will apply for the Interim Period;
Intermediary	has the meaning given to it in the Trading and Settlement Code;

## 2 SEM Committee's Decision

### 2.1 Introduction

In the consultation paper SEM/09/052 the Regulatory Authorities set out both the general objectives of fuel-mix disclosure and the requirements of the Interim Arrangements.

The objectives of fuel-mix disclosure are to:

1. increase market transparency by providing open and easy access to relevant information;
2. comply with consumers' right to information regarding purchased products;
3. enable consumers to make informed choices about suppliers based on the generation characteristics of the electricity they supply; and
4. educate consumers and stimulate electricity generation that contributes to a secure and sustainable electricity system.<sup>1</sup>

Additionally, the requirements for the Interim Arrangements are that it must:

1. be possible to implement in a speedy and cost-effective manner that does not place a significant administrative burden on suppliers;
2. be in accordance with governing EU and Member State legislative requirements related to fuel-mix disclosure; and
3. facilitate ease of comparison by customers on the island of information provided by suppliers in accordance with the disclosure requirement.

The responses to the consultation generally gave qualified support to the Regulatory Authorities' proposed approach, with the prevailing view being that it is acceptable as an interim arrangement given that the enduring solution cannot be implemented immediately. Having considered the responses to the consultation the SEM Committee considers that option three of the consultation paper, bi-lateral purchases and the residual pool-mix, to best meet the requirements of the Interim Arrangements while fulfilling the objectives of fuel-mix disclosure.

This approach can be implemented quickly and by permitting use of bi-lateral purchases by suppliers acting as intermediaries it facilitates suppliers who wish to differentiate themselves by their fuel-mix. Another option which was raised during the consultation process, allowing individual generators to attribute their generation to a supplier, was discounted for several reasons which are discussed later in the paper. Primarily the SEM Committee considers that such a proposal creates a system somewhat similar to the certificate system envisaged under the enduring solution and that it is not possible to implement in a sufficiently short time

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<sup>1</sup> These four objectives are set out in the Note of EU Commission on Directives 2003/54 and 2003/55 on the Internal Market in Electricity and Natural Gas (Non Binding) entitled 'Labelling provision in Directive 2003/54/EC'.

frame in addition to raising many of the issues that will be the subject of further consultation and consideration in the development of the enduring arrangements for fuel-mix disclosure.

All respondents either agreed with the proposal that the Single Electricity Market Operator (SEMO) be appointed as the calculating body or did not comment. Accordingly the SEMO is appointed as the calculating body for the Interim Arrangements.

Some respondents raised issues in relation the practicalities and costs associated with the Regulatory Authorities' proposals on the presentation of information, in particular regarding specific tariffs related to a certain fuel-mix. In response to these concerns the requirements have been modified slightly to provide a pragmatic solution which still ensures customers receive accurate and reliable fuel-mix information.

Several respondents requested that the Regulatory Authorities provide for independent verification of suppliers' tariff offerings where a set percentage of renewable energy is guaranteed. The requirements for fuel-mix disclosure should help towards this purpose. However it should be noted that fuel-mix disclosure information will be ex-post while suppliers may offer "green" tariffs on the basis of what they will supply in the future. A comprehensive consideration of green-tariffs is outside the scope of this decision. However, this is an issue the Regulatory Authorities will be examining in the near future.

## **2.2 Calculation of a Supplier's Fuel-Mix**

The fuel-mix information for a given Disclosure Period as required under Article 3(6) of Directive 2003/54/EC will be based on evidence of the source of energy as follows:

- 1) bilateral contracts for electricity generated on the island and traded outside of the SEM pool<sup>2</sup>;
- 2) Power Purchase Agreements for energy sold into the pool where the supplier, who acted as Intermediary for the sale of the energy into the pool, subsequently purchases an equivalent amount of energy from the pool;
- 3) Relevant Arrangements in Northern Ireland for energy sold into the pool where an equivalent amount is subsequently purchased from the pool by the supplier who is party to the agreement;
- 4) bilateral contracts<sup>3</sup> and related REGOs for electricity imported to the island of Ireland, accompanied by assurances that the REGO has not and will not be used as evidence of fuel-mix for disclosure purposes outside of the island of Ireland and by evidence to the satisfaction of the Regulatory Authorities that physical energy of an equivalent volume was imported over the interconnector by the supplier in question;

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<sup>2</sup> For the avoidance of doubt this does not include contracts for differences. Such contracts shall not be considered for the purposes of fuel-mix disclosure.

<sup>3</sup> Where there is no bi-lateral contract for imports the supplier must have a verifiable means, acceptable to the Regulatory Authorities, of proving the supplier in question physically imported the energy.

- 5) the UK residual fuel-mix will be applied to energy imported to the island of Ireland that is not covered by any of the above evidence. This residual fuel-mix is available on the website of the Department of Business, Enterprise and Regulatory Reform<sup>vi</sup>; and
- 6) the Residual Pool -Mix for the Island of Ireland will be applied in the absence of the above evidence.

For the avoidance of doubt, this proposed methodology is an interim measure for the Interim Period and will be superseded by the enduring methodology (as outlined in SEM/09/033).

## 2.3 Disclosure Period

The Disclosure Period is the calendar year, beginning 1<sup>st</sup> January and ending 31<sup>st</sup> December each year. All data is considered in aggregate over this period and not in smaller time intervals for the calculation of fuel-mixes.

## 2.4 Information to be provided to the Calculating Body

The following parties are required to provide the information outlined below to the Calculating Body. This information is required to be provided to the SEMO as soon as possible in order to allow the calculation to be completed in a timely manner.

### System Operators:

- Total amount of electricity (MWh) that entered the SEM pool for the Disclosure Period by all generating stations (and Intermediaries) by fuel type and adjusted by appropriate Loss Adjustment Factors.
- Total generation purchased from the SEM pool by each supplier (MWh) for the Disclosure Period.
- Total demand (MWh) by supplier for the Disclosure Period.
- Imports and exports (MWh) to/from the island of Ireland for the Disclosure Period (interconnector flows).

### Meter Operators:

- Total amount of generation (MWh) associated with all out-of-market purchases for the Disclosure Period (taking into account dual fuel generators) and adjusted by appropriate Loss Adjustment Factors.

### Suppliers:

- Evidence in relation to generation associated with out-of-market purchases must be provided by suppliers.
- Evidence of bilateral contracts and physical flow in relation to imports over the relevant disclosure period.



- Details of generation associated with Relevant Arrangements<sup>4</sup> in Northern Ireland
- Details of generation and PPAs associated with a supplier's Intermediary arrangements and subsequent pool purchases.

This information must be provided to the calculating body by the supplier

#### Others:

- Residual GB fuel mix figures applied to imported generation across the interconnector from the Department of Environment and Climate Change.
- Emissions figures will be sourced from the Environmental Protection Agency in Ireland and the Department of Enterprise, Trade and Investment in Northern Ireland. The Regulatory Authorities will facilitate the provision of this information.

## **2.5 Loss Adjustment Factors**

The transmission loss factors for each generating station will be applied to relevant output data before being used in the fuel-mix calculation. Transmission Loss Adjustment Factors (TLAFs) are calculated by EirGrid and SONI every year on a harmonised all-island basis for each individual generator participating in the SEM. Full information on TLAFs is set out on the EirGrid website.<sup>vii</sup> The latest factors for generation in Ireland and Northern Ireland in 2009 are available on the All Island Project website.<sup>viii</sup>

## **2.6 Calculating Body**

Having taken into account the relevant legal obligations and tight timelines involved, the SEM Committee considers that the most suitable body to carry out the interim calculation of suppliers' disclosed fuel-mix and the average fuel-mix for the island of Ireland is the Single Electricity Market Operator (SEMO). The SEMO will utilise the data available to it in addition to information provided by other parties as discussed in this paper.

## **2.7 Presentation**

It should be noted that the SEM Committee's foremost concern is the presentation of reliable and accurate disclosure information by suppliers to all of their customers, as set out in Article 3(6) of Directive 2003/54/EC. The following requirements shall apply to the presentation of fuel-mix disclosure and environmental impact information:

1. the fuel-mix and environmental impact information must be provided by all suppliers in the format set out in this paper (see Appendix A) and must be supplied on either the front or back of all bills to customers (or communicated at least annually where bills are not used). This information can be augmented with the approval of the relevant licensing Regulatory Authority. The Regulatory Authorities may augment this information requirement as a result of other work streams which may take place

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<sup>4</sup> For the avoidance of doubt in the event that any arrangement in addition to a Relevant Arrangement relates to a given amount of energy only the Relevant Arrangement will be taken as evidence for the purposes of fuel-mix disclosure.

during the Interim Period. Where this information is provided on the back of bills to customers, clear reference must be made to this on the front of all such bills. The form and detail of such information on bills will be subject to approval by the Regulatory Authorities, prior to its issue to final customers;

2. the default format for presentation of fuel-mix and associated environmental information to final customers includes; a) the average fuel-mix; and b) information regarding CO<sub>2</sub> emissions and radioactive waste for both the supplier and the All Island Market for comparative purposes. The labels are set out in Appendix A of this paper and should be used by suppliers for the Interim Period;
3. where a supplier wishes to further sub-divide a fuel category, this may be done provided that a total percentage is included for each fuel category that the Regulatory Authorities require to be included in bills sent to final customers;
4. where a supplier offers a product(s) to specific customers on the basis of a particular fuel-mix or a given level of CO<sub>2</sub> emissions the supplier must present both the supplier's average fuel-mix and the fuel-mix supplied to the customer. The information must be reflective of the fuel-mix product sold to the customer and there should not be any double counting of fuel sources. So for example while one group of customers' fuel-mix will show a higher portion of renewables relative to the supplier's average other customers' fuel-mix will consequently show a lower portion of renewables relative to the supplier's average. Separate emissions figures should similarly be represented. Figures may be audited to ensure compliance with this requirement;
5. the categories of energy sources that may be used for the purpose of fuel-mix disclosure are coal, natural gas, peat, renewables, oil, nuclear and 'Other'. Energy sources (including those listed) which represent less than 2.5% of the total contribution to meeting the island's demand shall be listed as 'Other'; and
6. for consistency purposes, and in line with the EU Commission guidelines on this matter, the definition of 'renewable energy sources' set out in Directive 2001/77/EC shall apply for disclosure purposes i.e. '*renewable non-fossil energy sources (wind, solar, geothermal, wave, tidal, hydropower, biomass, landfill gas, sewage treatment plant gas and biogases)*'.<sup>ix</sup>

Suppliers may seek derogation from requirement four in the event that to provide such individualised information on bills regularly is technically and financially onerous. In granting such a derogation the relevant Regulatory Authority shall take into consideration the practical circumstances of the supplier. In any event the Regulatory Authority shall require that a sufficient amount of standardised information is on the bill in the format set out in Appendix A and that where a customer's fuel-mix is not represented on or with the bill<sup>5</sup>, at least once a year, including at any change in tariff or change of supplier<sup>6</sup>, the supplier shall send out to the customer fuel-mix disclosure information which details the fuel-mix of their supply accompanied by an explanation that the fuel-mix disclosure relates to historic

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<sup>5</sup> Or other communications for those customers who do not receive bills

<sup>6</sup> Where the supplier in question is the incoming supplier

information while other information they may have received in relation to their supply relates to the fuel-mix guaranteed by the supplier for that period. Where no historic information exists for a given customer's tariff, information on a similar tariff should be provided where available. The format of this communication shall be subject to the approval of the relevant Regulatory Authority.

Where a supplier operates as a single business but holds separate licences (such as a supplier that operates in both jurisdictions) that supplier may, subject to the approval of the Regulatory Authorities, present the company's all-island fuel-mix on bills and promotional material. However, to assist with verification of data and jurisdictional requirements<sup>7</sup> each licensed entity must separately submit the required information to the calculating body.

## **2.8 Environmental Impact Information**

The requirements relating to environmental impact information and promotional materials set out in the Decision Paper SEM/09/033 will apply to the interim methodology.<sup>8</sup> These requirements are reproduced for information in Appendix B.

## **2.9 Implementation**

This decision takes effect immediately. Suppliers should include the 2008 figures on their bills as soon as is practicable upon the publication of the figures but no more than two months from the date of publication of these figures. Where a supplier has identified they will have difficulty meeting the requirements of the Interim Arrangements for fuel-mix disclosure in a timely manner they must notify the Regulatory Authorities as soon as possible to agree a timeframe for the full implementation of these arrangements and alternative arrangements for that period.

The Regulatory Authorities will enforce this decision by way of licence conditions<sup>9</sup> and may verify and audit compliance from time to time.

## **2.10 Interim Period**

The Interim Arrangements set out in this decision will be superseded fully by the enduring methodology as outlined in SEM/09/033. As such these arrangements will remain in place until the full implementation of the enduring arrangements.

Nothing in this decision should be taken to set a precedent for, anticipate or in anyway influence the development of the enduring arrangements.

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<sup>7</sup> Such as Relevant Arrangements

<sup>8</sup> See sections 4.2.5 and 4.2.6 of the Decision Paper SEM/09/033

<sup>9</sup> The Commission also has powers of direction in relation to fuel-mix disclosure under Regulation 25 of SI 60 of 2005.

### **3 Consultation Responses**

The respondents were generally supportive of the Regulatory Authorities' proposed approach. With the prevailing view being that it is a suitable solution for the Interim Period but that industry participants would like to see the enduring solution implemented as soon as is possible. In particular two respondents proposed additional evidence that they felt should be permitted for the purposes of fuel-mix disclosure, these are discussed separately below.

One respondent noted that as there is currently limited competition in Northern Ireland, and so there is limited opportunity for customers to benefit from disclosure information. Some respondents noted that the implementation of fuel-mix disclosure should be cost-effective. The Regulatory Authorities agree that the Interim Arrangements should be cost effective and consider that the arrangements set out in this decision are fit-for-purpose and cost-effective. In addition the Regulatory Authorities acknowledge that competition is at an early stage of development. However, fuel-mix disclosure serves to promote competition by allowing suppliers to differentiate themselves and provide customers with greater choice.

#### **3.1 "Green Tariffs"**

Several respondents expressed a wish for regulatory guidelines or formal verification of suppliers' renewable or low-carbon tariffs. In particular suppliers were concerned how such tariffs may be marketed to customers and how some customers could be lead to believe that a given fuel-mix was directly abating CO<sub>2</sub> emissions.

##### **3.1.1 Regulatory Authorities' Response**

While the requirements for fuel-mix disclosure go some way to addressing this issue a comprehensive consideration of the issue is outside the scope of this paper. However, the Regulatory Authorities agree that this is an area that warrants further attention and will engage with industry on this issue in the near future. The Regulatory Authorities may as part of this work augment the requirements relating to the provision of information to customers.

The Regulatory Authorities would like to add as a general point that while such green tariffs do not necessarily directly reduce CO<sub>2</sub> emissions, they do promote the use of renewable and low-carbon energy which is ultimately beneficial to the environment.

#### **3.2 Presentation requirements**

One respondent considered that the requirement to include fuel-mix disclosure and environmental information on bills was onerous and suggested the use of a bill insert for fuel-mix and a website for environmental information instead. Respondents also expressed some concern that this requirement may complicate customers' bills.

One respondent asked for clarification as to whether suppliers would have to disclose their fuel-mix jurisdictionally.

In relation to the proposals on presentation for renewable products, one respondent supported the proposal, the confidential response requested that suppliers be given some discretion in presenting such information and two respondents offered similar alternative proposals. One alternative proposal was for standard tariff information on the back of the bill

with the customer's contracted renewable share of supply on the front. The other that average supplier and all-island information be on the bill with additional customised information sent or made available separately to the relevant customers.

### **3.2.1 Regulatory Authorities' Response**

The Regulatory Authorities consider the requirement for fuel-mix disclosure and environmental impact information to appear on the bill to be desirable in meeting the objectives of fuel-mix disclosure. Experience to date in Ireland and other European countries suggests that this is not an unreasonable or unduly onerous requirement and can be complied with without the bill appearing overly complicated. However, where a supplier has identified they will have difficulty meeting the requirements of the Interim Arrangements for fuel-mix disclosure in a timely manner they must notify the Regulatory Authorities as soon as possible to agree a timeframe for the full implementation of these arrangements and alternative arrangements for that period.

The Regulatory Authorities confirm that suppliers may present their all-island fuel-mix. To assist with verification of data and jurisdictional requirements suppliers operating in both jurisdictions are required to submit evidence separately. The requirement for approval to present information jointly (i.e. between two licensed suppliers) is to ensure an appropriate level of regulatory oversight.

In relation to the separate disclosure of different tariff offerings the Regulatory Authorities are cognisant that this is an interim arrangement and wish to be pragmatic while still ensuring that customers receive accurate and reliable information in relation to their supply. The Regulatory Authorities consider providing the "standard tariff" and supplier's average fuel-mix separately as a good compromise solution. The Regulatory Authorities wish to ensure that accurate and reliable information is provided to customers on tariffs relating to a specific fuel-mix at least once a year. The Regulatory Authorities will develop on this position further in considering the general issues relating to green tariffs.

### **3.3 Contracts for Differences**

One respondent argued for the use of Contracts for Differences (CfDs) as evidence of a supplier's fuel-mix disclosure. This was argued on the basis that green energy will pass into the pool that could otherwise be claimed by a supplier with a CfD, that both PPAs and Relevant Arrangements are somewhat similar to CfDs and that it is in line with the enduring solution in that certificates will be tradable up until the end of the disclosure period.

#### **3.3.1 Regulatory Authorities' Response**

The Regulatory Authorities have previously discounted the use of CfDs for the purposes of fuel-mix disclosure<sup>x</sup> on the grounds that it was an overly complex methodology that made it difficult to trace the generation to the final holder of the contract. As previously stated a key requirement for the Interim Arrangements is that they can be quickly and cost-effectively implemented. While Relevant Arrangements and PPAs associated with intermediaries are permitted the Regulatory Authorities are satisfied that a clear connection between the generator and the supplier can still be seen and the methodology is not unduly complicated by their inclusion in the Interim Arrangements.

### **3.4 Generator Declarations**

One respondent proposed the use of agreements between suppliers and generators whereby a generator would agree to attribute the energy it generated (or give its “declaration”) to that supplier. The respondent argues that this approach is more compliant with the directive than the Regulatory Authorities proposal, is in keeping with the enduring solution and better allows customers to differentiate between suppliers.

#### **3.4.1 Regulatory Authorities’ Response**

While it is recognised that, for the Interim Period, suppliers will not be able to differentiate on the basis of oil, coal and gas this will be a feature of the enduring solution. The Regulatory Authorities do not agree with this proposal primarily on the basis that it seeks to introduce some elements of the enduring solution without having the appropriate regulatory framework in place. Many of the issues and complexities of the enduring solution arise with this proposal and the Regulatory Authorities consider it incompatible with the requirements of the Interim Arrangements; namely that the methodology is easy and cost-effective to implement.

The proposal would create a form of quasi-certificate system as envisaged by the enduring solution without the framework in place for the issuing, transferring and verification of certificates. The Regulatory Authorities do not consider it appropriate to introduce such an instrument without due consideration of the appropriate regulatory framework and necessary legislation in place. It would not be possible to implement this proposal, including the necessary consultation on its implications, within the required timeframe.

The Regulatory Authorities consider that the proposed arrangements comply with the requirements of the directive, and do not accept the argument that the SEM pool’s mandatory nature changes how the provisions of Article 3(6) of the directive apply.

### **3.5 TLAFs**

One respondent raised an objection to the use of TLAFs for the calculation and questioned the accuracy of the TLAF methodology.

#### **3.5.1 Regulatory Authorities’ Response**

The Regulatory Authorities have considered this issue and are of the view that TLAFs should be applied to the calculation. Losses should be accounted for in the fuel-mix calculation and this is currently the methodology to estimate system losses. As regards the accuracy of the TLAF methodology itself, it should be noted that the TLAF methodology is currently under review and the Regulatory Authorities shall consider any such issues as part of that review.

### **3.6 Clarifications**

- Generator Declarations will apply to non-renewable generation. It is envisaged that for the enduring solution renewable generation will be able to avail of GOs and non-renewable generation will be able to avail of Generator Declarations.
- Information on radioactive waste will be sourced from the relevant environmental agencies in Ireland, Northern Ireland and Great Britain. It is a requirement of the

directive that this information is cited. In practice such information will apply only to imports and so provided by DECC.

- Where an Intermediary is not a supplier, who purchases an equivalent amount from the pool, any energy sold into the pool will be included in the pool mix. In the case where a ring-fenced business acts as Intermediary and the supply business from which it is ring-fenced independently makes purchases from the pool the energy sold by the Intermediary will not be attributed to the supply business. The supplier purchasing energy from the pool must be the registered Intermediary who sold into the pool in order to claim the energy for the purposes of fuel-mix disclosure.
- The phrasing in relation to imports and exports has been changed to make clear that imports and exports will have to be separately included in the calculation and not a net figure as was implied in the consultation paper. Imports will be taken to be the residual GB fuel-mix where there is no evidence provided by a supplier. Exports will be taken to be the residual pool-mix.
- There is a difficulty with the central system's data in relation to dual-fuel generators as there is no flag on the system to capture what fuel is being used when. So the System Operators must infer the fuel source. However, the environmental data provided by generators do contain information relating to the types of fuel used over the period. This data will be used to ensure the accuracy of the calculation. The Regulatory Authorities are working with the System Operators to introduce such a flag on the system.
- The average fuel-mix is the average fuel-mix for the island. The residual pool-mix is the average fuel-mix of energy traded in the SEM pool excluding energy attributed to suppliers in accordance with this decision. For clarity the term "residual pool-mix" is used in this paper and not "average pool-mix" as was used in the consultation paper.
- Suppliers will not be required to apply loss adjustment figures.
- The SEMO will be required to verify the data provided against available information.
- As outlined in the decision customers who do not receive bills, such as keypad or pre-payment customers, will receive fuel-mix and environmental impact information at least once a year.

## 4 Timeline for Implementation and Subsequent Calculations

The SEMO will utilise emissions data for the 2008 Disclosure Period provided by the EPA in Ireland and DECC in the UK for data relevant to Northern Ireland. The SEMO will then endeavour to have all relevant supplier data compiled and all necessary calculations complete in September in order that 2008 fuel-mix and environmental impact information can subsequently be produced on all customers' bills by suppliers.

The SEMO will also ensure that a calculation for the 2009 Disclosure Period is carried out utilising the agreed interim methodology in June 2010. It is envisaged that the enduring methodology will be developed and implemented during 2009 and 2010 so that it may be implemented in 2011/12. It should be noted that the implementation of the enduring solution is dependent on the introduction of new legislation. The interim methodology will be employed until such time as the enduring arrangements are fully implemented.

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<sup>i</sup> SEM/09/052 Interim Arrangements: Fuel-Mix Disclosure, Consultation Paper

<sup>ii</sup> The SEM Committee was established in Ireland and Northern Ireland by virtue of section 8A of the Electricity Regulation Act 1999 as inserted by section 4 of the Electricity Regulation (Amendment) Act 2007, and Article 6(1) of the Electricity (Single Wholesale Market) (Northern Ireland) Order 2007 respectively. The SEM Committee is a Committee of both CER and NIAUR (the Regulatory Authorities) which, on behalf of the Regulatory Authorities, takes any decision as to the exercise of a relevant function of CER or NIAUR in relation to a SEM matter.

<sup>iii</sup> SEM/09/033 High Level Methodology for the Calculation of Fuel-Mix Disclosure in the SEM

<sup>iv</sup> S.I. 60 of 2005 European Communities (Internal Market in Electricity) Regulations 2005

<sup>v</sup> Electricity Regulation (Amendment) (Single Electricity Market) Act 2007 amending the Electricity Regulation Act 1999 and Article 6(1) of the Electricity (Single Wholesale Market) (Northern Ireland) Order 2007.

<sup>vi</sup> <http://www.berr.gov.uk/energy/markets/electricity-markets/fuel-mix/page21629.html>

<sup>vii</sup> This is available at -

<http://www.eirgrid.com/EirgridPortal/DesktopDefault.aspx?tabid=Transmission%20Loss%20Factors&TreeLinkModelID=1445&TreeLinkItemID=47>

<sup>viii</sup> <http://www.allislandproject.org/en/transmission.aspx?article=9bf9c6de-7d64-4c38-9448-2b3501e069ea>

<sup>ix</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2001:283:0033:0040:EN:PDF>

<sup>x</sup> SEM/08/006



## Appendix A: Presentation of Information

**Figure 1: Default Presentation of Information**

<b>Supplier Z Disclosure Label</b>		
<b>Applicable Period: January 20xx to December 20xx</b>		
<b>Electricity supplied has been sourced from the following fuels:</b>	<b>% of total</b>	
	<b>Electricity Supplied by Supplier Z</b>	<b>Average for All Island Market (for comparison)</b>
Coal	X %	X %
Natural Gas	X %	X %
Nuclear	X %	X %
Renewable	X %	X %
Peat	X %	X %
Oil	X %	X %
Other	X %	X %
<b>Total</b>	100 %	100 %
<b>Environmental Impact</b>		
CO <sub>2</sub> Emissions	X g per kWh	X g per kWh
Radioactive Waste	X g per kWh	X g per kWh
<p>For more information on the environmental impact of your electricity supply visit <a href="http://www.SupplierZ.ie">www.SupplierZ.ie</a> or call 00XXX X XXX XXXX</p>		

**Figure 2a: Presentation of Information with Individual Product Information**

	<b>Supplier Z Disclosure Label Applicable Period: January 20xx to December 20xx</b>		
<b>Electricity supplied has been sourced from the following fuels:</b>	<b>% of total</b>		
	<b>Your Electricity</b>	<b>Average for Supplier Z</b>	<b>Average for All Island Market (for comparison)</b>
Coal	X %	X %	X %
Natural Gas	X %	X %	X %
Nuclear	X %	X %	X %
Renewable	X %	X %	X %
Peat	X %	X %	X %
Oil	X %	X %	X %
Other	X %	X %	X %
<b>Total</b>	100 %	100 %	100 %
<b>Environmental Impact</b>			
CO <sub>2</sub> Emissions	X g per kWh	X g per kWh	X g per kWh
Radioactive Waste	X g per kWh	X g per kWh	X g per kWh
	For more information on the environmental impact of your electricity supply visit <a href="http://www.SupplierZ.ie">www.SupplierZ.ie</a> or call 00XXX X XXX XXXX		

**Figure 2b: Presentation of Information with Individual Product Information<sup>10</sup>**  
 (where supplementary information is sent at least once a year)

	<b>Supplier Z Disclosure Label Applicable Period: January 20xx to December 20xx</b>		
<b>Electricity supplied has been sourced from the following fuels:</b>	<b>% of total</b>		
	<b>Standard (non-renewable) Tariff</b>	<b>Average for Supplier Z</b>	<b>Average for All Island Market (for comparison)</b>
Coal	X %	X %	X %
Natural Gas	X %	X %	X %
Nuclear	X %	X %	X %
Renewable	X %	X %	X %
Peat	X %	X %	X %
Oil	X %	X %	X %
Other	X %	X %	X %
<b>Total</b>	100 %	100 %	100 %
<b>Environmental Impact</b>			
CO <sub>2</sub> Emissions	X g per kWh	X g per kWh	X g per kWh
Radioactive Waste	X g per kWh	X g per kWh	X g per kWh
<b>Unless you have chosen [a green-tariff] the standard tariff information is applicable to your supply</b>			
For more information on the environmental impact of your electricity supply visit <a href="http://www.SupplierZ.ie">www.SupplierZ.ie</a> or call 00XXX X XXX XXXX			

<sup>10</sup> Minor changes to the presentation as shown may be required to account for a given supplier's circumstances

**Figure 3: Presentation of Information with Additional Fuel Sub-Categories<sup>11</sup>**

<b>Supplier Z Disclosure Label</b>		
<b>Applicable Period: January 20xx to December 20xx</b>		
<b>Electricity supplied has been sourced from the following fuels:</b>	<b>% of total</b>	
	<b>Electricity Supplied by Supplier Z</b>	<b>Average for All Island Market (for comparison)</b>
Coal	X %	X %
Natural Gas	X %	X %
Nuclear	X %	X %
Renewable:	X %	X %
• Wind	X%	X%
• Hydro	X%	X%
• Other	X%	X%
Peat	X %	X %
Oil	X %	X %
Other	X %	X %
<b>Total</b>	<b>100 %</b>	<b>100 %</b>
<b>Environmental Impact</b>		
CO <sub>2</sub> Emissions	X g per kWh	X g per kWh
Radioactive Waste	X g per kWh	X g per kWh
For more information on the environmental impact of your electricity supply visit <a href="http://www.SupplierZ.ie">www.SupplierZ.ie</a> or call 00XXX X XXX XXXX		

<sup>11</sup> Renewables breakdown is for illustrative purposes only. The supplier may sub-divide any fuel source in any manner at the supplier's discretion, in accordance with the requirements set out in this paper.

## **Appendix B: Environmental Impact Information**

### **Environmental Impact Information**

1. In order to determine the applicable environmental impact data, CO<sub>2</sub> emission factors will be provided to suppliers based on data obtained from generators, from the EPA in Ireland and from the Department of Energy and Climate Change (DECC) in the UK for data relevant to Northern Ireland. NIAUR are currently in discussions with the DECC on this issue.
2. Suppliers will multiply their fuel disclosure percentage per energy source by the associated CO<sub>2</sub> emission factor, as provided to them, to give the required information, i.e. CO<sub>2</sub> emissions in kg/MWh, by energy source.
3. This information will be updated, with respect to the relevant periods, by suppliers in each subsequent year on the 'Disclosure Date'.
4. The publication of fuel-mix and environmental impact information on either the front or back of bills must be concluded within two months from the date on which the required information is made available to suppliers.

### **Promotional Materials**

1. Promotional material is material handed out or sent directly to customers, excluding newspaper, magazine, bill-board and television advertisements. It includes welcome packs for new customers, materials provided by doorstep sellers seeking to attract new customers and material sent to households encouraging them to sign up to a supplier.
2. Information provided by suppliers on promotional materials regarding fuel-mix and associated environmental impact information should use the same basic format as that required to be made available in or with bills to final customers. References to such information provided on promotional material should refer to information provided in this format also.
3. The Regulatory Authorities will adopt a proportionate approach to the enforcement of this matter. The Regulatory Authorities' foremost concern on this matter is that customers are given accurate and reliable information on suppliers' fuel-mix.