



Single Electricity Market

Proposed Conditions of System Operator Licences

First Consultation Paper

9th January 2007

AIP/SEM/232/07

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1 INTRODUCTION

1.1 General

The scope of matters that fall within the definition of electricity system operation differs from jurisdiction to jurisdiction, but may include, for example, activities such as scheduling and dispatch of generation, transmission system configuration, operational planning and transmission investment planning. Within the electricity system of each of the Republic of Ireland and Northern Ireland, the local transmission system operator (SO) currently carries out a role which includes some of these activities. Following the implementation of the Single Electricity Market (SEM), it is envisaged that a separate SO will continue to exist in each jurisdiction, but the scope of the functions of each, and, in some cases, the way in which these functions are to be carried out, will be modified to reflect the characteristics of the new market.

At present, the SO function is performed:

- (a) in the Republic of Ireland by EirGrid plc (EirGrid), under a “licence to operate the transmission system to transmit electricity” issued to it by the Commission for Energy Regulation (CER); and
- (b) in Northern Ireland largely by Systems Operator for Northern Ireland Limited (SONI), under a “licence to transmit electricity” that is held by its parent company, Northern Ireland Electricity plc (NIE).

It is proposed that as part of, and to reflect, the implementation of SEM:

- (a) EirGrid’s SO Licence will be amended; and
- (b) a new, separate SO Licence with appropriate scope will be issued to SONI by the Northern Ireland Authority for Energy Regulation (NIAER) (with the approval of the Department of Enterprise, Trade and Investment), and the provisions of the existing NIE transmission licence that relate to SO matters will be discontinued. It is anticipated that due to the nature of the statutory prohibition that will be enacted as part of SEM implementation, this will be framed as a licence to “participate in transmission”.

CER and NIAER (together the “Regulatory Authorities”) are currently drafting these new and amended SO Licences as part of the SEM programme.

This document constitutes the first public consultation on these draft licences.

It is noted that this consultation relates to the proposed SO Licences insofar as these documents will endure following SEM implementation. It is expected that additional and/or amended conditions will need to apply in the period leading up to SEM “go-live” due to the need to effect a controlled transition from the current arrangements to the SEM arrangements. We intend to issue a public consultation in relation to these amendments/additional conditions at a later date, when the detailed arrangements for transition have been further developed.

Following a general discussion of certain provisions of the SO Licences and their underlying assumptions, we attach – in full – the current drafts of the two proposed enduring SO Licences.

1.2 Request for Comments

The Regulatory Authorities request comment from interested parties in relation to the proposed conditions of the SO Licences that are set out in this paper.

The Regulatory Authorities intend and prefer to publish all comments received, but are prepared to facilitate those respondents that wish that certain sections of their submission remain confidential. Accordingly, respondents that so wish should submit these sections in an appendix that is clearly marked “confidential”.

Comments on this paper should be forwarded, preferably in electronic form, to Donna Hamill in Ofreg either by email or by post to:

donna.hamill@ofregni.gov.uk

Ofreg
Queens House
14 Queen Street
Belfast
BT1 6ED

The deadline for the receipt of comments is 1700h on 30 January 2007

2 DISCUSSION

2.1 Assumptions

In each of the Republic of Ireland and Northern Ireland, the SO function will be discharged pursuant to an SO licence. In Northern Ireland, this licence will be issued on foot of a local prohibition against participating in the transmission of electricity. Whether a similar prohibition will be enacted in the Republic of Ireland is still under discussion.

Each SO Licence will be issued by the local Regulatory Authority (with, in the case of the Northern Ireland SO Licence, the approval of the Department for Enterprise, Trade and Investment). Legislation in both jurisdictions will be available to allow the new SO licensing arrangements to be introduced in a timely manner.

The SO Licences issued in contemplation of SEM go-live will be issued:

- (a) in the Republic of Ireland, to EirGrid; and
- (b) in Northern Ireland, to SONI.

This consultation refers only to the enduring provisions of the SO Licences, and does not cover any temporary provisions that may be required – whether set out in the SO Licences or imposed upon the SO licensees through other avenues, including the intermediate amendment of existing licences – in order to govern the transition between current arrangements and SEM arrangements. An example of such a transitional condition would be an assignment of responsibility for the run-off of settlement arrangements under the existing Trading and Settlement Code in the Republic of Ireland. We intend to issue a public consultation on conditions of this nature at a later date, when the detailed arrangements for transition have been further developed.

As part of SEM implementation:

- (a) SONI will be separately licensed as a market operator (MO) under SEM, and for this purpose will be issued a licence to undertake electricity market operation; and
- (b) EirGrid will be separately licensed as an MO under SEM.¹

¹ SEM design requires that there be a single MO. It has been decided that this single MO function will be discharged by EirGrid and SONI pursuant to their respective MO licences. Each

NIE will continue to be licensed to participate in transmission as the transmission asset owner (TO) for the transmission system in Northern Ireland, and the Electricity Supply Board will continue to be licensed as TO for the transmission system in the Republic of Ireland.

At and following SEM go-live, it is assumed that SONI will, as now, be a wholly-owned subsidiary of NIE, although the combined group's market operation, system operation and transmission asset ownership activities will be ring-fenced from any generation or supply activities. It is also anticipated that NIE will subsequently be required to separate SONI from any generation or supply activities, prior to a date that is to be determined by the Northern Irish authorities.

The regulatory issues faced by each SO will include both all-island matters and matters related only to the jurisdiction in which that SO is based. It has been recognised that as part of the SEM design process, consideration needs to be given to the introduction of arrangements for joint regulation of all-island matters. These arrangements are being developed by the two governments and the Regulatory Authorities as part of the package of legislative changes that will accompany and facilitate the introduction of the SEM. For the purpose of drafting the SO Licences, it has been assumed that all-island matters associated with the SOs will, from a regulatory perspective, be dealt with through joint regulatory arrangements that are to be established between the Regulatory Authorities. These joint regulatory arrangements will deliver consistent and co-ordinated decision-making by CER and NIAER in their dealings with the respective SO licensees on all-island matters, which is why the draft licences refer to NIAER and CER, rather than to a joint regulatory body. A discussion of the detail of the proposed joint regulatory arrangements is outside the scope of this document.

Each SO licensee will be subject to charging and revenue restrictions, and where appropriate, licence conditions relating to these restrictions are still to be drafted.

SEM design does not require that the legal framework governing the electricity industry be identical as between the two jurisdictions. At and following SEM implementation, some legal instruments will, as now, apply in one jurisdiction but not the other. An example is the NI Fuel Security Code, with which the Northern

of these licenses will include a condition requiring that the MO function be discharged in a way that provides market participants with a single point of contact for the MO. Further details of the proposed MO licences may be found in the Regulatory Authorities' consultation paper "Single Electricity Market: Proposed Conditions of Market Operator Licences - First Consultation Paper" (AIP/SEM/159/06), available at www.allislandproject.org.

Irish SO licensee will be obliged to comply by virtue of a specific licence condition. This document will not apply to the Republic of Ireland SO licensee.

2.2 Drafting Practices

At present, the electricity industries in both the Republic of Ireland and Northern Ireland are subject to regulation, and have been for some time. Distinct regulatory practices have developed, with the result that – as might be expected – a number of formal (as opposed to substantive) differences exist between the methods by which licensing is carried out in each jurisdiction.

In the interests of continuity in the administration of the SO Licences, we intend to maintain these jurisdictional differences, to the extent that this is consistent with the attainment of SEM policy objectives. The major implication of this approach for SO licensing is that the Northern Ireland SO Licence is longer than the Republic of Ireland SO Licence, reflecting:

- (a) a more prescriptive approach in the Northern Irish drafting of explicit licence conditions; and
- (b) a tendency, in determining whether obligations should be set out in legislation or licence, for Northern Irish authorities to place a greater emphasis on the licence than is typically done in the Republic of Ireland.

In the Republic of Ireland, a number of the duties of the SO are set out in legislation as well as (or instead of) in licences. In developing the licences which form part of this consultation, it has been assumed that appropriate changes will also be made to this legislation in ROI as part of the introduction of the SEM.

3 SO LICENCE PROVISIONS

3.1 General

We now discuss the principles behind selected specific provisions of the draft licences.

It should be noted that any discussion or explanation herein as to the terms of either SO Licence, or the principles upon which they are based, is presented for information only and does not constitute:

- (a) a legal opinion as to the meaning or effect of these provisions; or
- (b) an expression (binding or otherwise) of the regulatory policy that will be applied in interpreting and enforcing these provisions.

3.2 SO Role

In the Republic of Ireland, it is anticipated that the functions of the SO will – as now – be set out in legislation, although it is envisaged that these functions will be amended as part of the SEM legislative change to make them consistent with the operation of the SEM. In Northern Ireland, the functions of the SO will be defined by the detailed application of conditions in its licence.

At present, the responsibilities of each SO licensee are generally expressed to extend only to the transmission system in the local jurisdiction. By way of example, EirGrid's current statutory responsibilities relate to (among other things):

- (a) the operation and maintenance of a safe, secure, reliable, economical and efficient electricity transmission system;
- (b) the procurement of all necessary ancillary services or system support services;
- (c) long term planning of the transmission system;
- (d) the operation of interconnectors; and
- (e) the provision of rights to connect to and use the transmission system,

insofar as these apply to the electricity transmission system in the Republic of Ireland.

It is proposed that these obligations will be amended to reflect the expanded territorial scope of the SEM, in one of two ways:

- (a) the territorial scope of the function remains unchanged, but in performing the function, the licensee is obliged to co-operate with the other SO where necessary (e.g. to achieve consistency between plans and forecasts) and to take account of “all-island” considerations such as:
 - (i) securing the operation, maintenance and development of a safe, secure, reliable, economical, efficient and co-ordinated local electricity transmission system as part of an efficient, economical, co-ordinated, safe, secure and reliable electricity transmission system on the island of Ireland as a whole;
 - (ii) facilitating the local transmission system being made available to persons authorised to supply or generate electricity, on terms which neither prevent nor restrict competition in the supply or generation of electricity on the island of Ireland as a whole; and
 - (iii) promoting the security and efficiency of electricity generation on the island of Ireland as a whole – in addition to promoting the security and efficiency of electricity distribution in the local jurisdiction; or
- (b) each SO licensee is obliged, in conjunction with the other SO licensee, to perform the function once, on an all-island basis.²

It is proposed that approach (b) will apply to scheduling and dispatch and the review of the System Operator Agreement (SOA), and approach (a) will apply to the remaining SO functions – including all those that require direct interaction with market participants. This is intended to preserve the current position whereby market participants are, in relation to SO matters, required to deal with the local SO licensee only.

² Note that this is similar to the proposed drafting approach for all MO obligations – see “Single Electricity Market: Proposed Conditions of Market Operator Licences - First Consultation Paper” (AIP/SEM/159/06).

3.3 System Operator Agreement

Both SO licensees are obliged to enter into, maintain in force and comply with a SOA. The purpose of the SOA is to:

- (a) enable each SO licensee to obtain from the other SO licensee such things as are required by the first SO licensee in order that it may comply with its licence and statutory obligations, but that lie within the control of the other SO licensee; and
- (b) oblige each SO licensee to provide to the other SO licensee such things as are required by the other SO licensee in order that it may comply with its licence and statutory obligations, but that lie within the control of the first SO licensee.

The SOA also provides a contractual mechanism through which the SOs and the MO licensees can make provision for any interactions that are deemed to be necessary between them.

Other than in relation to the inclusion of connection and use of system rights, the SO Licence conditions relating to the SOA do not attempt to prescribe, or circumscribe, in detail, the obligations that should be covered in the SOA. It is not required that the SOA be approved by the Regulatory Authorities, as the Regulatory Authorities take the view that the content of the SOA is a matter for agreement between the SO licensees and it is the responsibility of each SO to ensure that the SOA includes appropriate provisions enabling it to procure necessary services from the other SO such that it can meet its SO licence obligations

For the same reason, and in accordance with general principles of contract law, the parties are free to amend the SOA by agreement from time to time. However, it is proposed that disputes between the licensees over proposed amendments to the SOA should be capable of being determined by the Regulatory Authorities. Ultimately therefore, the Regulatory Authorities could, in determining a dispute over a modification to the SOA, approve an amendment suggested by one of the parties, without the agreement of the other.

One issue of particular importance is the way in which the SOA is required to be designed. In particular, the SOA is required to be designed to promote:

- (a) the efficient discharge of the obligations imposed on the each licensee under its licence and applicable laws and regulations;

- (b) the development, maintenance and operation of each of the transmission systems as part of efficient, economical, co-ordinated, safe, secure and reliable All-Island Transmission Networks (which is an expression defined specifically in each of the licences to refer, in aggregate, to the transmission systems in both jurisdictions);
- (c) effective competition in the generation and supply of electricity on the Island of Ireland; and
- (d) the promotion of good industry practice and efficiency in the implementation and administration of the matters covered by the SOA.

Similar provisions may also be found in the conditions of SONI's licence that govern the development of a Grid Code, and the entry into transmission interface arrangements with the owner of the Northern Ireland transmission system.

In developing the draft licences, the Regulatory Authorities have given particular consideration to item (b) in the list above. It should be emphasized that this provision is **not** intended to imply that a single transmission system will exist on the island. It will remain the case that, legally, two transmission systems exist, separately owned with separately-licensed owners and operators in each jurisdiction. The obligations are instead intended to ensure that each of these individual systems will form part of a network of transmission lines that, when viewed on an "all island" scale, is efficient, economical, co-ordinated, safe, secure and reliable.

The Regulatory Authorities believe that this is appropriate, as it is the only reasonable basis on which the transmission systems can be developed and operated against the backdrop of a single all-island electricity market. For example, it would not be appropriate to plan, develop or operate the transmission systems without having regard to the introduction of the single wholesale market. Hence, the Regulatory Authorities are of the view that it is appropriate that the interfaces between (i) the two SOs, (ii) each SO and the users connected in its jurisdiction, and (iii) each SO and its local TO, are designed to ensure that each local transmission system is planned, developed, operated and maintained as part of an efficient whole.

3.4 Connection and Use of System

Under the SEM arrangements, it is envisaged that each SO will confer upon “local” users the rights to connect to and use the all-island transmission system in aggregate. While an SO licensee will, due to its relationship with the local TO, be in a position to provide these rights in relation to the local transmission system, it will need to obtain from the other SO licensee the rights to grant rights over the “foreign” transmission system, in order to be in a position to be able to confer rights in relation to the all-island system in its entirety.

The licensees are required to set out in the SOA the arrangements between them in relation to the connection to and use of the all-island system in aggregate.³ It is anticipated that the matters covered in the SOA in this regard will include:

- (a) the mutual provision of “back to back” rights, to enable each SO licensee to grant connection and use of system rights over the all-island transmission system to local users; and
- (b) arrangements between the SOs for the specification of connection conditions where connection in one jurisdiction is deemed to require works to be carried out on the transmission system in the other jurisdiction.

Conditions on the foreign system may mean that an application for local connection gives rise to the need for contingent reinforcement works on the foreign transmission system, which will need to be reflected in a user’s offer of terms as well as being covered in the SOA.

3.5 Central Dispatch and Merit Order

Under the draft SEM Trading and Settlement Code, it is intended that unconstrained system marginal prices will be determined on an all-island basis using an ex-post unconstrained schedule. The same bid prices used by the MO for the production of the unconstrained schedule and in the system marginal price calculations will be used by the two SOs as the basis for real-time generation scheduling and dispatch.

In order to minimise costs under the SEM, ideally the two SOs should work together in order to minimise the production costs (based on bid prices) in real

³ See the discussion at 3.3 above.

operation of the transmission systems. This objective has been reflected in harmonised central dispatch and merit order conditions in the two SO Licences.

The Regulatory Authorities recognise that as part of the SEM arrangements, the two SOs will each retain a separate control centre from which dispatch instructions to generators connected in the local jurisdiction will be issued. Furthermore, the Regulatory Authorities understand that whilst the two SOs will be working together in operational planning timescales to identify appropriately co-ordinated all-island control actions in response to system incidents and will be co-ordinating policies on the holding of reserve (including frequency response), there will be practical limitations on the extent to which full all-island optimisation will be achieved in all timescales, in particular in dispatch timescales.

For example, in some instances in which a generation shortfall arises (as compared to the generation schedule) in one of the two jurisdictions, the replacement power may be dispatched from another generator in the same jurisdiction even though there may be less expensive plant available for dispatch in the other jurisdiction. Hence, whilst generation scheduling for control purposes may be reasonably well optimised on an all-island basis, in dispatch timescales, where there are deviations from the all-island schedule, a full all-island re-optimisation may not always be practical.

Nevertheless, given that:

- (a) an all-island optimised generation schedule will be used as a reference for dispatch;
- (b) some post-fault actions will have been jointly planned in the operational planning phase; and
- (c) elements of reserve/response holdings will be based on all-island optimisation,

it is anticipated that even though most dispatch decisions will be made locally, the overall dispatch solution will be substantially optimised on an all-island basis.

In light of this, the Regulatory Authorities have developed draft licences which include merit order and central dispatch licence obligations that require the system operators to act in conjunction with one another to deliver all-island efficient scheduling *and* dispatch solutions.

3.6 Forecast Statement/System Capacity Statement

Each jurisdictional SO is currently obliged to report to its local regulator in relation to estimated circuit capacity and forecast power flows, loading and fault levels, across its local transmission system for the next seven years. These specific substantive requirements are set out on the face of the Northern Irish licence, and in both statute and licences in the Republic of Ireland.

These reporting obligations are carried over into the new SEM regime, together with the respective jurisdictional approaches to the location of the substantive requirements. The all-island extent of the SEM is reflected in a requirement that the two SO licensees co-operate in the preparation of these reports. Although the territorial extent of each report is confined to the local jurisdiction, co-operation is important to ensure that both reports are based on a consistent view of (for example) demand forecasts and cross-border flows.

3.7 System Security and Planning Standards

Whilst in Northern Ireland the TO will be primarily responsible for planning and developing the transmission system, it is proposed that interactions between the TO and users of the Northern Ireland transmission system will be channelled through the Northern Ireland SO.

In addition, it is intended that from both a planning and operating perspective, the standards will, following the introduction of the SEM, be implemented on an all-island basis. This does not necessarily mean that the standards themselves need to change, although leaving the standards “as is” would suggest that the way in which they are applied will need to change.

Consideration and discussions over how best to give all-island effect to planning standards – including the extent to which the two SOs are to be required to interact – are ongoing.

3.8 Economic Procurement

Both SO licensees are required to procure necessary assets and services from the most economical sources available. This is generally consistent with similar obligations that currently apply to a number of electricity industry licensees in both jurisdictions. Under the SEM, each SO would be required to make

arrangements for contracting to procure the relevant services in co-operation with the SO in the other jurisdiction.

3.9 SO Separation

In order to maintain the confidence of the electricity market participants and energy users that the all-island transmission systems are being operated in an independent and non-discriminatory manner, it is necessary to ensure that the SO function is kept separate from other activities within the all-island electricity industry that might be perceived to give rise to a conflict of interest, such as generation or supply. Hence, the requirement for the SO (and MO) activities to be undertaken by an organisation that does not itself undertake the activities of generation or supply in Ireland or Northern Ireland, is a core part of the SEM arrangements. It is also understood that the SEM legislation in Northern Ireland will include powers for an appropriately functioning SO (and MO) to be carried out by an organisation that will not be affiliated with any company that carries out the activity of generation or supply in the SEM. Given that it is intended that SONI will carry out the SO and MO activities, in practical terms this means that the legislation will include the powers to require the divestment of SONI from NIE, should that prove necessary.

For practical reasons, however, it is not anticipated that such separation will take place by November 2007. Consequently, at initial SEM implementation, the SO and MO activities in Northern Ireland will be undertaken by SONI as a subsidiary of NIE and SONI will therefore have affiliates that carry out the activity of generation and supply within SEM. Nevertheless, it is also understood that legislation in Northern Ireland will provide for changes to be made to the licensing and contractual framework to ensure that SONI carries out the appropriate SO and MO functions from initial SEM implementation.

In light of the foregoing the draft SO licence includes a proposed condition (12A) which would apply from such time as SONI is separated from affiliates who carry out generation or supply. A similar condition for the MO licence has also been developed for consideration and comment. To the extent that any licence conditions are required to give effect to the subsequent separation in Northern Ireland these would be included in one or more of NIE's licences (rather than SONI's licence).

3.10 Confidentiality

The functioning of the SEM in accordance with its design relies on the distribution of commercially-sensitive information being limited to those persons that require it for the performance of their duties under agreed market procedures, and market participants being confident that these limits are being observed. The importance of these requirements is accentuated by the corporate relationships that will exist, at SEM go-live, between SONI and certain generation and supply businesses.

To this end, each SO Licence includes a provision requiring the licensee to preserve the confidentiality of any commercially-sensitive information that is held or obtained by it in the discharge of SO functions, and to limit the distribution of this information to persons that require it for the proper performance of their obligations.

APPENDICES: DRAFT SO LICENCES

If you are reading this consultation paper on the internet, the draft SO Licences may be found on the same web page.

If you have received this consultation paper by mail, the draft SO Licences are enclosed separately.

ENDS