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# Single Wholesale Electricity Market

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## Final Regulatory Impact Assessment

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Northern Ireland (Miscellaneous Provisions) Bill

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**February 2006**

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# NORTHERN IRELAND (MISCELLANEOUS PROVISIONS) BILL

## Final Regulatory Impact Assessment

### Single Wholesale Electricity Market

#### 1. Title of proposal

Single Wholesale Electricity Market

#### 2. Purpose and intended effect

This RIA sets out the strategic focus and intended effect of the enabling power for the new wholesale electricity trading arrangements which is being sought through the Northern Ireland (Miscellaneous Provisions) Bill. This is outlined as follows:

- **Objective:** The establishment of a Single Wholesale Electricity Market for Northern Ireland and Ireland (commonly known as the Single Electricity Market or SEM) aims to: enhance Northern Ireland's security and diversity of supply; provide greater competition and investment opportunities from a stable market with transparent and equitable trading arrangements; and encourage market efficiencies and economies of scale.
- **Background:** Creation of the SEM flows from work underway since 1999 to enhance energy cooperation between Northern Ireland and Ireland where such action would bring mutual benefits. This can best be achieved within a larger all-island marketplace. It takes forward Northern Ireland and United Kingdom energy policy, set in the context of the drive to create an EU-wide internal market for electricity.

The new Market will provide for a common set of trading arrangements that will apply to both Northern Ireland and Ireland. These will be set out in licensing and contractual arrangements agreed with market participants. Day-to-day trading will be managed by a Market Operator that is established by the two Transmission System Operators (SONI and ESB NG) as a contractual joint venture. The two Regulatory Authorities, in keeping with their existing domestic duties and functions, will be primarily responsible for the development and governance of the SEM.

- **Rationale for government intervention:** The focus of Northern Ireland energy policy since 1999 has been to cooperate with Ireland where such collaboration can bring mutual economic and social benefits. This led to agreement of an All-island Energy Market Development Framework in 2004 that identified the single wholesale electricity market as a key priority. The policy reflected UK and EU energy policy and was supported by the energy industry.

The development of the SEM has been led by the Regulatory Authorities but it will require action by both Governments to provide parallel legislation in Northern Ireland and Ireland. This will amend existing domestic regulatory provisions in both jurisdictions to enable the governance and

management of the SEM by the two Regulators.

### 3. Consultation

This Assessment will be developed in the light of further work on the costs and benefits of the SEM. It will be subject to full public consultation later in 2006 as part of the process of consultation on the draft OiC prior to final publication.

Consultation on the policy background to the legislative action has been as follows:

- **Within government:** The SEM policy was set out in the joint DETI/DCMNR All-island Energy Market Development Framework. This took forward the energy strategy that had been agreed in the Strategic Energy Framework for Northern Ireland (2004) and which was subject to a process of governmental and public consultation. The policy and the SEM has also been considered within the British Isles Intergovernmental Conference process.
- **Public consultation:** The All-island Energy Market Development Framework (2004) was subject to its own consultation process. It received the broad support of the energy sectors in both Northern Ireland and Ireland, including key industrial stakeholders and the CBI NI and IBEC - CBI Joint Business Council. The two Regulatory Authorities have also undertaken extensive and ongoing consultation within the Electricity sectors, North and South on the details of the SEM proposals.

The consultation process has helped to refine the overall policy development and documentation and did not result in significant changes to the original proposals on cross-border harmonisation of energy matters.

### 4. Options

The need to replace the current wholesale trading arrangements in the Republic of Ireland and progress a key all-island energy market policy priority presented the Regulatory Authorities with the chance to maximise the opportunities presented by a larger single market. Four potential options that would meet the Northern Ireland Authority for Energy Regulation's (NIAER) obligation to protect the interests of consumers were considered, i.e.:

- **Option 1:** maintain the status quo (the 'do nothing' option);
- **Option 2:** revise existing trading arrangements to facilitate and maximise the cross border opportunities flowing from the introduction of a new and separate wholesale market in the Republic of Ireland;
- **Option 3:** seek to move to a 'British Isles' wholesale trading system separately or in conjunction with Ireland and probably based on BETTA; or
- **Option 4:** move to a single all-island wholesale trading arrangement now.

**Option 1:** the ‘do nothing’ option, was discarded as unfeasible due to the need for the Northern Ireland market to respond to any new market arrangements in Ireland and its impact on existing cross border trading agreements. Industry had expressed a range of concerns publicly about the likely negative impact of having two very divergent market regimes North and South.

**Option 2:** the ‘revision’ option, was also discarded as it would not have realised the benefits that could be achieved from moving to an all-island wholesale market, in line with Government and EU policy.

**Option 3:** The ‘British Isles’ option explored the potential for the Northern Ireland market to be subsumed into the British Electricity Trading and Transmission arrangements (BETTA) to create common UK trading arrangements. Concurrent or subsequent discussions could then focus on a possible future merging of the UK and Irish market to create a ‘British Isles’ market in line with the EC’s strategic thinking.

Great Britain, however, has only recently completed the very substantial BETTA market reforms and the appetite for another reform of the GB market will be very limited for the time being. There is a general view that a period of stability and settling down is needed in the GB market, which has been preoccupied with dealing with residual issues associated with merging the England and Wales market with that in Scotland. By contrast, there has been a push for reform within the Irish market.

Another reason why it was decided not to pursue this path at present included the long history of cooperation and joint working in the electricity sector between Northern Ireland and Ireland. Institutionally, structurally and geographically, there is a natural willingness on behalf of electricity regulators, system operators and market participants to look towards reform in the context of an all-island solution. There is also a very significant difference between the size and commercial makeup of the GB and Northern Irish and Irish markets. Consequently, Northern Ireland market reforms have been set in the context of developing an all-island market while maintaining commercial links with GB, rather than pursuing a wider ‘British Isles’ market now.

Lastly, the development of the SEM (Option 4) does not rule out the subsequent creation of some form of market across the UK and Ireland. Indeed plans are being considered for the construction of a West – East undersea electricity interconnector between Ireland and GB. This is a relatively long term project and for the time being there will continue to be insufficient interconnection capacity to consider any merging of these markets.

**Option 4:** a single all-island market, was therefore chosen by NIAER as providing the most effective way of continuing to deliver an efficient level of sustainable prices to all customers from a supply that is reliable and reasonably secure, while also maximising the competitive and other economic opportunities afforded by the new arrangements. If the choice had not been made, NIAER would still have been faced with updating its trading arrangements and forming a closer working relationship with CER on all-island electricity issues in due course. This was due to the all-island energy policy agenda, growing action to integrate European markets, and a future requirement to modernise the NI wholesale trading system.

The decision to choose Option 4 led to consideration of a further two consequential options, namely:

- **Option 4a:** to plan for a SEM that would be regulated under existing statutory duties aided by memoranda of understanding and managed on the basis of revised licensing and contractual and other industry arrangements and documentation; or
- **Option 4b:** plan for a SEM with revised trading arrangements that would be underpinned by common legislative powers and duties in Northern Ireland and Ireland.

Following consideration with each Government's and the Regulatory Authorities legal advisers it was agreed that the legislative Option 4b would be needed in both jurisdictions. As with the introduction of BETTA in GB, the conclusion was that the first option's contractual and consensual approach would not provide the necessary legal surety and commercial confidence that the SEM arrangements could be introduced and operated successfully.

## 5. Costs and benefits

The costs and benefits that are expected from the creation of the SEM have been subjected to an independent analysis by NERA Economic Consulting. Work to refine the analysis is underway following further development of the market rules and trading arrangements. The costs and benefits are summarised as follows:

- **Sectors and groups affected:** The business areas directly affected by the SEM and its legislation are limited to those energy sector companies engaging in wholesale electricity generation and supply. There are currently seven active generation licenses and six active supply licenses. Four other companies hold licenses but are not using them. In addition, the SEM will facilitate the growing involvement of renewable electricity generating companies.
- **Benefits:** The enabling power and its related OiC will enable the benefits of the larger single Market to be realised, in particular through the exploitation of efficiencies and economies of scale in areas such as generation reserves, plant mix and fuel usage. The SEM will also ameliorate the market power that comes from the dominant position of the two main operators in each market –Viridian in NI and ESB in RoI.

Further cost benefit analysis is being undertaken to refine the existing analysis but early indications are that the new Market has the potential to bring quantifiable benefits to Northern Ireland from areas such as those referred. The benefit to Northern Ireland for both Option 4b is currently estimated at £62m.

The benefits are expected to be felt most significantly by Northern Ireland due, in part to the level of fuel savings, generation reserve efficiencies and reduced system costs accruing from the new market over the ten years from July 2007. It takes into account the cost of necessary future changes to the NI market that would be needed in the absence of the SEM. Failure

to meet the 2007 implementation date would reduce these savings by each year's delay.

Other more strategic and qualitative benefits which are currently being analysed are expected to come from improved security and diversity of supply, competition opportunities, market power mitigation mechanisms, installed reserved savings, better coordination across a range of operational arrangements, future loop flow benefits from integrated transmission management, and environmental benefits from fuel efficiencies and renewable generation.

- **Costs:** The total cost of implementing and operating the SEM consists largely of: design costs; regulatory implementation and consultancy costs, industry consultation and extra staff costs of SEM governance; market operator implementation costs and capital and operational costs of new systems; market participant implementation costs; TSO implementation costs with duplicate systems to allow each TSO to dispatch on an whole island basis. There is no requirement for Government funding of the SEM.

The cost to Northern Ireland is currently estimated at £16m. A full breakdown of the costs falling to business, as well as those falling to the system operator, regulatory authority and the Department will be set out in the RIA that will be published alongside the draft Order. These will be developed in the light of further refinement of the cost benefit analysis.

It was not considered feasible to undertake a detailed examination of the costs and benefits of all four options due to the difficulty and expense of analysing such costs and benefits. Costs and benefits were therefore estimated based on a comparison between the selected option and a 'business as usual plus' (BAU+) scenario, which was effectively the 'do nothing' Option 1. This scenario assumes Northern Ireland would have incurred half the costs of SEM implementation under BAU+, because Northern Ireland needs to make fundamental changes to its existing systems independently of whether it adopts the SEM. This is due in large part to the need to modify the wholesale trading systems to facilitate full adoption of the EU's market liberalization under Directive (2003/54/EC) and Regulation (1228/2003).

The costs of implementing and operating the market were based on one third (NI) and two thirds (RoI) and the benefits split depending on where they arise.

## 6. Small Firms Impact Test

Small businesses operating in the electricity sector will be affected by the SEM. In broad terms it is anticipated that enlarging the wholesale market will improve the prospects for smaller companies to participate in the new market, facilitating those engaged in generation and trading of renewable electricity and combined heat and power installations.

More generally, it is expected that the vast majority of small businesses in NI will be affected only to the extent that the new market leads to changes in the prices they pay for electricity. It is not as yet possible to estimate the impact that the

SEM will ultimately have on retail prices for customers. Although the impact is likely to be small, the efficiencies and competitive opportunities of the SEM are expected to exert a downward pressure on prices. They should also benefit from enhanced reliability and security of supply from the larger market and associated improvements to the transmission and grid infrastructure.

## **7. Guidance**

The legislative measures and associated trading arrangements needed to establish the SEM will require compliance by a small number of licensed electricity companies. The necessary guidance is being prepared by the Regulatory Authorities in consultation with market participants as part of the development process. The aim is to ensure that compliance requirements are both understood and acted upon. The work on this issue will be outlined in the more detailed RIA that will accompany the draft Order in Council for the SEM.

## **8. Competition assessment**

The SEM is expected to improve competition and investment opportunities for generation and transmission companies by providing common and transparent trading arrangements which will feed electricity into an all-island market of 2.5m customers (NI market has about 0.7m customers). This is consistent with action by the European Commission to encourage open and transparent competition within larger regional markets as part of the development of the EU-wide Internal Electricity Market.

## **9. Enforcement, sanctions and monitoring**

The SEM will be implemented in practical terms through changes to licences and contracts and other industry documentation by which market participants must abide. Day-to-day trading will be managed by a Market Operator working to rules agreed by the Regulatory Authorities. They will work together to ensure that enforcement and sanctions can be imposed on the basis of consistency and fairness, in keeping with national and EU competition laws.

The Department and the Regulatory Authority (NIAER) will put in place monitoring procedures consistent with their statutory responsibilities to ensure that the SEM is implemented and operates in the prescribed manner.

## **10. Implementation and delivery plan**

The implementation of the SEM is being led by the two Regulatory Authorities, working closely with the electricity industry. This is based on a delivery plan that covers a range of workstreams, which are subject to ongoing discussions with industry stakeholders. The SEM is subject to oversight by the All-island Energy Market Joint Steering Group which reports regularly to Ministers.

## **11. Post-implementation review**

A review of the RIA and the impact of the SEM on the commercial sector and small businesses is planned for 2007/08.

## 12. Summary and recommendation

The fourth option - move to a single wholesale trading arrangement now - was chosen by NIAER and the Department and has been recommended as providing the most effective way of continuing to deliver an efficient level of sustainable prices to all customers from a supply that is reliable and reasonably secure, while also maximising the competitive and other economic opportunities afforded by the new arrangements.

The costs and benefits were based on a comparison over ten years of the chosen option against the 'do nothing' scenario which recognised the need to take into account future costs of modernising the Northern Ireland market arrangements.

The outcome was that the overall net present benefit for NI is £62m excluding costs. The net present cost for NI under Option 4b is £16m. The overall net present value (NPV)<sup>1</sup> using the Treasury Green Book discount factor of the SEM for Northern Ireland is given below:


Scenario	2005-2016		
	Net Present Benefit	Net Present Cost	Net Present Value
SEM vs. 'business as usual+'	£61.5m	£16.2m	£45 m

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<sup>1</sup> NERA, the independent economic consultants that undertook the initial CBA used a 5% discount factor due to the commercial nature of the SEM. With this discount NERA calculated an NPV for NI under Option 4b of £41m.

**13. Declaration**

*I have read the regulatory impact assessment and I am satisfied that the benefits justify the costs*

**Signed:** .....  18/2/06

**Date:**

**Angela Smith MP**

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